

COLLEGE OF ART, HUMANITIES AND EDUCATION

CHALLENGES IN TEACHING GIFTED STUDENTS WITH SPECIAL LEARNING DIFFICULTIES:

Using a strategy model of 'Asking, Analysing and Answering Questions' (AAA) to improve the learning environment

Nurit Salem Student I.D. 100120268

Supervisors: Dr. Val Poultney

Dr. Mike Flay

Dr. Vivienne Walkup

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ABSTRACT

This study focuses on developing teaching strategies for teachers who teach in classes for students identified as Gifted and Talented with Special Learning Disabilities situated in Israeli secondary schools. The focus is on the challenges teachers meet while teaching Humanities Subjects (HS) to these students and the strategies they need in addressing their dual exceptionalities. The main purpose of this study is to examine how specific strategies may contribute towards both to quality of teaching and to a better learning environment. Research has shown that gifted students who are diagnosed with learning disabilities in writing skills (2ELs) have difficulties especially in HS and achieve less academically than may suggest their high abilities. The combination of giftedness with learning disabilities and underachievement creates special challenges for their teachers to counter, and for which they need specific Continuing Professional Development (CPD) programmes. In my study, I developed a model of teaching strategies which combines three strategies from the field of teaching gifted students and from the field of special education which are helpful in the humanities disciplines. I created a manual for teachers' CPD that includes this model and I conducted a seminar using this manual for the participant teachers in my research. This was followed by an implementation of the manual by these teachers in their classrooms that includes 2ELs. My qualitative research was based on the case studies of two teachers teaching HS in two high school classrooms, totalling sixty 2ELs. The information was collected through observations, interviews, and open questionnaires. I then analysed the information using an inductive approach as pattern recognition and inclusion into categories. The research findings of this study describe the difficulties that teachers may face with 2ELs and my claim to knowledge is the AAA Model of Strategies and the manual for teachers and their contribution to teachers of 2Els and their students. The recent research fills this particular gap in the literature, in the Israeli context, and the findings of this study bear policy implications and indicate the need for the tailoring of relevant teachers' CPD' programmes to include strategies to better address the needs of 2ELs for optimal success in fulfilling their potential and overcoming their difficulties. Future research may achieve a deeper understanding of how to prepare teachers to use adjusted strategies that meet 2Els teachers in various disciplines in order to improve learning environment.

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GLOSSARY OF ACRONYMS

1.WBP	Work Based Project
2. GT	Gifted and Talented
3. SpLD	Special Learning Difficulties
4. 2E	Dual Exceptionalities – GT students who also have SpLD
5. 2ELs	Students with Dual Exceptionalities – Gifted with Special Learning Difficulties especially in Humanities Disciplines
6. HS	Humanities Subjects - multi-words disciplines such as History, Literature and Bible Studies which demand writing skills.
7. CPD	Continuing Professional Development
8. HOT	High Order Thinking skills
9. AAAMS AAA Model of Three Strategies including: Asking, Analysing and Answering Questions Strategies.	AAA Model of Three Strategies (Salem, 2014). The model was developed by the researcher for this WBP combining three strategies: Strategy 1: From the field of GT, the Asking Questions Strategy (AQS) (questions that involve HOT); Strategy 2: From the field of Special Education, the Analysing Questions Strategy (ANQS); Strategy 3: From the field of Special Education: Answering Questions in a Template (AQTS), is taken from the field of Special Education. Strategies two and three aid in answering questions (assignments) in Humanities Subjects, using disciplinary templates as The Israeli Educational Department demands.

9.1. AQS	Asking Questions Strategy
9.2. ANQS	Analysing Questions Strategy
9.3. AQTS	Answering Questions in a Template Strategy
10. Negative Behaviour Strategies	"Negative Behaviour Strategies" (Einat, 2004:151): these are strategies that allow students with SpLD to avoid the difficulty they face while coping with learning difficulties. They avoid the challenges by using various behaviours such as absenteeism from school when they invent health excuses, disruption during the lessons to get them sent out of the class and not doing homework or written assignments for a variety of excuses. These are also accompanied by symptoms of emotional problems, dropping out of school and/or avoiding the creation of social ties.
RQ	Research Question

CHAPTER 1: INTRODUCTION

1.1. Rationale and Focus

This study focuses on the challenges that teachers face whilst teaching gifted students who also have learning disabilities (2Els). The study took place in an Israeli high school and offers a continuance professional development (CPD) programme for these teachers in order to assist them to cope with their 2ELs, especially in Humanities Subjects (HS). The research took place in this Israeli high school that runs a project of special separated classes for gifted students who also have learning disabilities (2Els). The research's topic arose from my practice as a vice principal and a literature teacher. I specialised in Learning Support Strategies and I have experience in teaching students with special difficulties. I wrote 'Continuing Professional Development' (CPD) programme and have trained teachers at my school using these programmes. I am also lecturing in Teachers' Colleges in Tel-Aviv about Special Learning Disabilities (SpLD) and Attention Deficit Hyperactivity Disorder (ADHD). In recent years, I have been teaching in my school the students in the project of special classes in which are studying these gifted students that were assessed by the Israeli Educational Department as gifted and also as having learning disabilities. In doing so, I have noticed that many of these students have extraordinary abilities in High Order Thinking skills and extensive knowledge but they have difficulties to express it in writing assignments, even though they are competent in mathematics and sciences. Manor-Benjamini (2005) argues that the gap between their potential and their low levels of achievements are currently not understood, thus creating, within teachers and students, a deep sense of frustration and despair that reduces their self-esteem and motivation.

I was dissatisfied by the complexity of teaching students with dual exceptionalities: gifted but also having learning disabilities. This experience had been transformative process for me. I had to rethink about my pedagogical approach and methods and my role as a teacher. It encouraged me to draw a theory in order to question my assumptions and to develop an alternative pedagogy for 2Els teachers. I decided to conduct research focused on exploring teachers' learning processes in my professional field. My dual role as a vice principle, a teacher and a researcher in my school gave me privileged access to 2Els teachers and their challenges and to run the intervention in the classes in my school. Also, the findings from my study can be implemented in my school and make immediate change. On the other hand, my role as an insider-researcher might trigger ethical issues. I was aware that I should take means to separate my role as a researcher from my role in school and to assure that no harm will happen to me or to the teachers participating in this research. Also,

I should take means to bypass the risk of over-burdening teachers with extra demands especially in a longitudinal research.

This trigger led me to learn about the issue of 2Els and teachers' learning processes. Although this research is focused in Israeli context I was informed by Israeli and international literature about the existing knowledge in the domain of 2Els teachers' learning processes. I was informed by authors such as Bourne (2005) in New Zealand, Montgomery (2013) and Winstanley (2005) in the U.K., and they all discuss the challenges of teachers who teach gifted students with SpLD and the learning processes of their teachers. Also, Freeman (2001) researches the challenges of gifted students and how teachers deal with them. Brody and Mills (1997), Kay (2002), Lovett and Sparks (2011), Nielsen and Higgins (2015) in U.S and Manor-Benjamini (2005) in Israel also research the field of gifted with SpLD. Skaked (2007), Kaniel (2007), Salomon (2000) in Israel research the field of strategies that meet the needs of gifted and of students with SpLD. The main concepts that were the basis of my conceptual theory of this research which I learned from the literature were principles of effective CPD for 2Els teachers, characteristics and needs of 2Els as a basis to the knowledge their teachers need, teachers' learning processes, changes in pedagogical approaches and methods of teachers as a result of a CPD focused on teachers' needs. Also, my leading concepts were alternative strategies for enhancing High Order Thinking skills and supporting strategies to cope with learning disabilities. The theory that was created in my mind was about what should be the theoretical basis in preparing a CPD for 2Els teachers: in the beginning, I should inquire their attitudes towards 2Els, their visions and their specific needs and what tools could be helpful. Also, which way is relevant and effective for them to learn. Then I will offer to 2Els teachers a CPD programme that meets these requirements and I will test this programme in an intervention in 2Els classes. In this way I will turn the theory into praxis and test if this CPD made a difference in teachers' learning processes as La Velle, (2015) discussed the term translational research or knowledge mobilisation and refers to the way in which knowledge is gathered from practitioners who are engaged in researches and is translated to professional areas as I did in this research. Also, Melitz and Melitz (2002;20) supported my way by saying:

"Teaching teachers to apply strategies is the main part of translating the theoretical aspect into a practical aspect".

The framework of this research was a case study built on two teachers who teach Humanities Subjects as History and Bible, in the separated classes of 2ELs in my high school. This research was designed as a longitudinal research in order to inquire in depth a phenomenon (Yin, 2009) that interested me and I was passionate to inquire into this issue of 2Els teachers' learning processes.

My epistemological and ontological perspectives in my professional as well as my personal life guided me to choose the qualitative approach that is based on the naturalistic constructivist paradigm because it perceives the world from viewpoints and experiences of individuals and their interpretation of reality (Savir, 2005). According to Yosifon (2001) when it deals with processes in social and educational issues; there is not one truth and it suits my goal to inquire in depth (Yin, 2011) 2Els teachers' challenges and what makes a difference in their learning processes and then to offer ways to assist them in this domain. I am guided by the humanistic approach that places equality in educational system in the top of principles as declared in the World Education Forum (UNESCO, 2015) and also, I place the individual's needs in the centre of society's interests as was claimed by OECD (2014) that teachers should be provided with specific information and strategies for their students' needs, so that they become more self-confident, and improve their self-efficacy. The anticipated contribution of this research is that 2Els teachers will professionally benefit from this research findings and insights and also, I hope to contribute a knowledge about preparing an effective CPD for teachers in this domain.

An important point to mention here is that in the literature, I found many definitions used to describe 2ELs, such as "has high ability but underachieves" (Kay, 2002), "Dual Exceptionalities" (Winstanley, 2005), "Multiple Exceptionalities" (McCallum et al., 2013) or gifted students with Learning Disabilities (GLD) (Bourne, 2005). As all the terms refer to the same group of students, I will use the following terms in this research: GT students with SpLd (2Els), Dual Exceptionalities (2E), In Israel, the term "learning disabilities" is used to refer to "learning difficulties." (Heiman, 2011). The next section discusses the definition and assessment of 2Els in order to learn how to integrate this knowledge in teachers' CPD.

1.2. Definition and assessment of gifted students with Special Learning Disabilities (2ELs)

The Israeli Department of Education (2016:2) defines GT students as:

"Those with exceptional talent who demonstrate the potential to achieve significantly higher levels of accomplishment compared to their peers. All areas of children's life must be considered: academic, athletic, artistic, and social-life".

The Division for Gifted and Outstanding Students in the Israeli Department for Gifted and Excellent Students (2016) has established criteria for the assessment of gifted students that teachers and parents identify as having high abilities in various skills and directs them with a formal assessment at the age of eight. There is about one percent (1%) of gifted students in each grade. Some of these gifted students have also learning disabilities. There is a debate in the area of

definitions and characteristics of GT Students with special learning disabilities (2ELs). Lovett and Sparks (2011), Manor-Benjamini (2005) and also Montgomery (2013) emphasises that there is an ambiguity about the definition of this minority group of students and it have implications on the way they are treated and on the lack of CPD programmes for their teachers.

Bourne (2005) claims that definitions of this subject must describe the conflict that arises from the dual exceptionalities that combine giftedness with learning difficulties. According to Baum (1990) and Brody and Mills (1997) this conflict is reflected in the huge disparity between the high abilities of these students and their inability to express these abilities in practice. According to McCallum et al. (2013), Nielsen (2002) and Winstanley (2005) there is no consensus on what 2ELs really are but in the professional field I realised that the gap between these students' potential and their law achievements, especially in written assignments, is an effective tool to detect these students. The Israeli educational regulations allow schools to conduct special classes for 2Els within the regular schools in order to provide accelerated programmes especially in mathematics and sciences, and in the same time to assist them in their challenges and difficulties.

1.3. Impact of the Israeli Ministry of Education Regulations on the area of gifted students in Israeli schools

There are several possibilities of academic environment offered to students who are assessed as gifted. One option is to study in a special separated class for gifted students with an accelerated curriculum, yet in a regular school setting as recommended by David (2000). Another option as suggested by Manor-Benjamini (2005) and also Zeinder and Schleyer (1999) is to fully include the gifted students in regular classes with various enrichment activities in the afternoon during the school year or to give them special accelerated programmes of one-day out-of-school activities held at universities for example, in Mathematics. Sciences, Art. The students and their parents can choose the framework most suitable for them. In addition, city mayors can decide either to set up separated classes for gifted students in their schools or to include gifted them in regular classes.

1.4. Impact of the Israeli Ministry of Education Regulations on CPD programmes for 2Els teachers

The lack of CPD programmes for 2Els teachers in Israel encouraged me to try to make my own contribution to this field. During my time as an educator and administrator, I came to believe that the educational system in Israel has not provided adequate CPD programmes for these teachers that should include specific strategies to cope with the difficulties that 2ELs present. There is not a special reference to 2Els teachers' learning programmes. It is important to clarify that the nature of

Israeli Education system has an impact on teachers' teaching methods and thus on the answer the recent research elicited because teachers are required to teach their students how to write texts and how to write answers in templates according to the curriculum, especially in humanities subjects (for example: Literature, History, Bible). I realised that there is a need to provide these teachers with knowledge about 2Els characteristics and needs in order to prepare them to cope with them. They need to learn strategies that are necessary to impart writing skills, especially to students, within this study, with deficiencies in writing skills at the same time, 2Els teachers need to learn how to nurture the High Order Thinking skills (HOT) of their students. The 2Els are characterised by their prominent high order thinking skills but on the other hand they have deficiencies in writing skills and their outcomes in humanities subjects are poor. The teachers should learn about these characteristics and challenges and how to cope with their role as teachers with these students.

1.5. Inclusion Versus Segregation in Israeli Education

Inclusion versus segregation in Israeli education is outside the scope of this thesis but it accompanies the discussion about teaching in 2Els segregated classes. The trigger to my research arose from the experience I had while teaching Literature in 2Els segregated classes. I conducted my intervention with teachers who teach in these classes in order to explore what they need to learn in order to meet their 2Els special needs. There is a debate in the Israeli education system about the choice between full inclusion and segregation. Though inclusion is the favoured approach by Israeli Education Department (2016), at the same time segregation into special classes is possible according to the needs of students with special needs or gifted. In the issue of inclusion versus segregation I was informed by Israeli authors like Feldman (2009) Heiman (2011), Margalit (2000), Avissar (2010) and Reiter (2004) who support the inclusion approach and also by David (2000) who supports the segregation approach. From a personal perspective, as a teacher and as a teacher of teachers, the full inclusion is the approach I lead in my professional life and it fits my epistemological and ontological points of view about the importance of the humanistic approach that places equality in educational system in the top of its principles as declared in the World Education Forum: "Leaving no one behind" (UNESCO, 2015:7). In practice, the policy in Israeli schools is towards inclusion but on the same time, to make considerations about which of these two approaches, inclusion or segregation, best suits students' needs. This argument is also important as I place the individual's needs in the centre of society's interests.

1.6. Background in Other Countries

The main focus of this study is in Israeli context but I consulted international literature to inform my study. The unique difficulties experienced by 2ELs has been noted in places other than Israel,

by Bourne (2005) in New Zealand, Freeman (2001) and Montgomery (2013) in the U.K., Kay (2002) and Nielsen and Higgins (2015) in U.S, who argue that teachers do not know how to deal with the gap between the high abilities of these students and their poor outcomes as evidenced in their work. On one hand, they demonstrate in class, rich vocabulary and extensive knowledge and also, they succeed in sciences and mathematics disciplines, yet they have difficulty in expressing these abilities in writing assignments, especially in HS subjects. According to Brody & Mills (1997), teachers and students need to be given appropriate solutions to bridge this gap and enable them to experience success. According to Freeman (2001), Kay (2002) and Manor-Benjamini (2005), one of the explanations for this confusion is that the diagnosis of 2ELs derives from the combination of their characteristics as gifted with concomitant evidence of writing disabilities. This contributes to a situation in which achievements at school may be average or even below average. Learning disabilities in some areas can sometimes obfuscate high abilities in others, and conversely, sometimes high abilities compensate for the difficulties caused by learning disabilities; thus, these students can demonstrate only average abilities or less.

Biggs and Colley (2006), Kirby et al (2009), Wearthmouth et al (2003) explain difficulties in writing as one of the phenomena of a developmental dyspraxia, a neurological disorder that affects people in different ways and to different degrees. One of the most common types is symbolical dyspraxia which is characterised by difficulty in writing, preventing students from expressing their cognitive ability and causing them frustration and emotional problems. Mamen (2007) explains the difficulties in writing as a prominent symptom of Nonverbal Learning Disabilities (NLD) and the 2ELs find it challenging to write down what they know in spite of their high verbal abilities.

In searching for a consensus definition of the phenomenon of 2ELs, I found that there is little evidence to support an explanation of this phenomenon. Bourne (2005), Kay (2002), Landau (2001), Manor-Benjamini (2005), Lovett and Sparks (2011), Montgomery (2013), Nielsen and Higgines (2015) and Winstanley (2005) all agree that the difficulty in formulating a common definition is derived from the reversal phenomenon of persons with extra ordinary abilities who find it difficult to express their abilities in writing and who thus become under-achievers. McCallum et al. (2013) describe 2ELs as a paradox because of the discrepancies between their strengths and weaknesses. Teachers will often identify this discrepancy, but do not have the means to cope with it. Bourne (2005) posits that this is a situation that is a blessing and a curse at the same time given that high skills and learning difficulties cancel each other out and prevent the fulfilment of students' potential.

Kay (2000), Manor-Benjamini (2005) and Nielsen (2002) point out that the definitions of special populations often do not apply to this minority group and, rather, use separate classifications for GT students and SpLD students which can be clearly differentiated given the characteristics specific to GT students (Landau, 2006) and the characteristics specific to students with SpLD (Heiman, 2011). However, as previously stated, there is little evidence supporting a consensus definition of the phenomenon of 2EL. On the other hand, as Winstanley (2005) and McCallum et al. (2013) argue, since 2ELs represent just about 1% of their age group in general, it becomes harder to identify them and to create the specific needed strategies to help them. Therefore, it is important to formulate a common definition and a set of accepted characteristics for this group, as it has implications for how these students are treated. I intend to clarify this issue in this study in order to contribute to the practical field.

1.7. What makes a difference to 2Els teachers' CPD

As the premise of this research establishes, it is extremely important to prepare the relevant knowledge and to generate strategies to help teachers cope with 2ELs by learning how to identify them and then how to teach them in a way that empowers them and enables them to empower their self-efficacy and to improve their professionalism. Day and Gu (2010) argued that teachers' professional learning must include knowledge, teaching practice and emotional processes. Also, Heiman (2011) and Reis and McCoach (2000) emphasise that teachers need to be empowered during the process of learning in their CPD. They need to acquire tools to cope with their needs and thus to be able to contribute to an improvement in the way students learn and to their outcomes. This can only happen if teachers receive proper educational preparation that suits their own needs, especially when it comes to students with special needs such as 2ELs. Margalit (2002) and Plotkin (2008) indicate that such CPD can strengthen teachers' own sense of capability, as well as their motivation to learn a variety of strategies and new methods and to change their pedagogical attitudes. Also, David (2011) emphasises that re-thinking teachers' attitudes has an impact on nurturing and educating gifted students.

I had my professional experience in teaching literature to separated classes of gifted students where gifted students are grouped according to their high abilities after they were assessed as gifted by the Israeli Department of Education. I gleaned from my professional experience that this is an area with a paucity of professional information, understanding and knowledge that needs to be filled for the teachers especially in Humanities Subjects. I teach Hebrew and international literature to separated classes of gifted students and I am therefore exposed to the phenomenon of gifted students with SpLD in these Humanities subjects as Poultney (2017) argues that usually the trigger

for teachers to start a research arises from a concern from their practical field, and then the research enables teachers to gain knowledge about the subject they inquired. Practitioner researchers have the opportunity to employ this new knowledge directly in their own schools.

I discovered that many of the gifted students, who are highly successful in mathematics and science, fail to express their high abilities and wide-ranging knowledge when they are required to write and answer questions about what they have learned, and thus become under-achievers in Humanities subjects. Bourne (2005) contends that the gap between their successes in other fields and their low levels of achievement in these subjects is surprising and, as of yet, not understood. Plotkin (2008) claims that this creates for teachers and students a deep sense of frustration and despair with a decreased self-esteem and motivation to learn. Manor-Benjamini (2005) points out that teachers are also surprised by the phenomenon of 2ELs and teachers are deeply frustrated, as their lack of knowledge and proper training prevent them from knowing how to deal with these students' difficulties, and especially how to help them realise their potential and overcome their deficiencies. Bourne (2005) described this situation:

"As a paradox in terms, because of the discrepancies between these students' strengths and weaknesses. Teachers might often accurately identify the discrepancy between one area and another, but not know what to do about it" (Bourne, 2005;1).

My experience encouraged me to research this topic within the Israeli and world-wide professional literature and reinforced my desire to contribute new ideas to this field. I combined my knowledge and practical experience from two domains: teaching students with SpLD and teaching gifted students. I have also realised that the problem is intensified by the highly-varied nature of the group of GT students. There is the complexity of giftedness existing side-by-side with SpLD. This complexity increases the difficulty for teachers confronting the dual challenges of 2ELs (Baum, 1990), especially in HS, and particularly when teachers have not obtained the necessary strategies to teach them. Feuerstein (1997), Heiman (2011) Kay (2002), Manor-Benjamini (2005) and also Winstanley (2005) sharpened my comprehension of the need to develop teachers' CPD programme for this group of 2Els' teachers and to propose a CPD for teachers that according to Walter and Briggs (2012) can make the most difference to teachers.

During the intervention, I planned to ask teachers to rethink their pedagogical approaches to 2Els and to see if the knowledge about 2ELs and a set of special strategies can make a change in their professional attitudes and in the methods, they employ in their lessons. I was passionate to learn about the change processes that teachers experience through CPD programmes and which are the relevant principles that can lead to an effective CPD in this area.

It is important to mention that my professional experience has been with 2ELs and their teachers, therefore this research is focused solely on CPD for teachers of 2ELs specifically in Humanities Subjects. Nevertheless, as Winstanley (2005) mentions, there are other difficulties that can accompany gifted students besides SpLD, such as Autism, ADHD, and disruptive pathological behaviours which may cause GT students to miss school and reduce their chances of success. Through this knowledge, I realised that teachers need a set of focused strategies to cope with 2ELs and the current gap in the professional CPD programmes motivated me to develop an intervention to investigate this situation with the expectation of filling the void in the practical field.

1.8. The Model of Three Strategies (AAAMS)

In order to create a functional intervention, I needed to identify and formulate a set of needs and characteristics of teachers who teach 2ELs, as well as needs and characteristics of their students that could be helpful for me in creating a model of strategies. With this in mind, I created the AAA Model of Three Strategies (AAAMS) (Salem, 2014). This model is a combination of three different strategies that provides tools that meet the needs of gifted students with deficiencies in writing assignments in Humanities subjects with large textual content, and simultaneously foster their extra ordinary abilities as GT students.

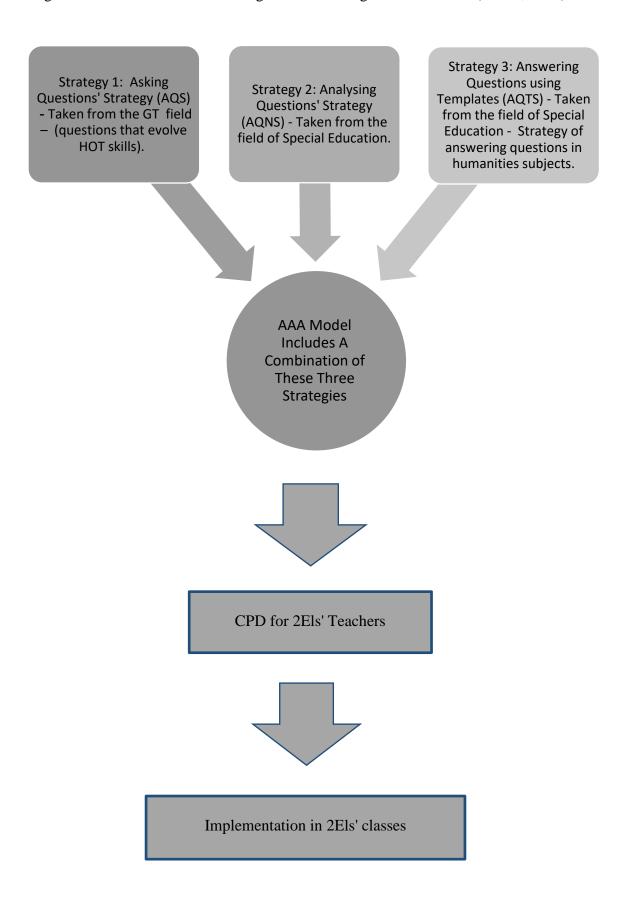
The first strategy is taken from the GT field. It was proposed by Kaplan (2007), Melitz and Melitz (2002) and also Shaked (2007) and it is characterised by asking questions directed to students by teachers with the purpose of developing students' Hot skills, such as critical thinking and nurture their curiosity. The second strategy suggested by Kaniel (2007) was taken from the field of Special Education. This strategy is characterized by the analysis of questions, for example, in assignments in Humanities Subjects such as History and Literature, in order to teach students with deficiencies to focus and to understand all the parts of the questions and to organise the learning materials before writing assignments. And finally, the third strategy submitted by Kaniel (2007), is also taken from the field of Special Education, and it focuses on improving writing skills.

By merging these three strategies, the main goal of the AAAMS model is to provide teachers with the necessary strategies to aid their 2ELs to overcome their cognitive and affective difficulties. I investigated in this study the contribution of the simultaneous use of these strategies to provide a productive and supportive learning environment and how it might help students to optimise their cognitive achievements and performances. It is important to note that each one of the three strategies of the AAAMS is well-known in the practical field and is in daily use by many teachers as recommended by Kaniel (2006), Melitz & Melitz (2002) and Shaked (2007). My innovation in

this recent study is a new fusion of these three strategies in order to see if it would provide an adequate response to the dual needs of the teachers and, through them, to their 2ELs.

The second aim in my research was to write a manual for teachers that includes AAAMS, my model of strategies, based on the literature proposed by several authors, such as Kaniel (2006), Shaked (2007) and Melitz & Melitz (2002) and my professional experience as teacher of teachers. To test this theory, I conducted a CPD seminar for teachers who teach these students. Through this seminar, my intention was to investigate the effect of AAAMS on these teachers and their 2ELs in order to discover if the whole intervention responds to their needs as I described above (See Figure 2.1. in the following page).

Figure 1.1 - Model of Three Strategies for Teaching 2Els - AAAMS (Salem, 2014)



1.9. The Research Aims and Research Questions

In this study, I investigated responses to the needs of teachers who teach Humanities Subjects to 2ELs with the aim of contributing new ideas for teaching these students. My aim was to assess the contribution of the intervention to both teachers and students. It is my hope that the findings of this study may offer to school /education policy makers a new perspective for planning CPD for teachers and to provide a training manual incorporating these new methods. My aim is to explore how to respond to these teachers' specific needs in various areas.

The Research questions are:

- 1. What are the critical components of teaching humanities subjects to a class of GT students with SpLD?
- 2. What are the characteristics of GT students with SpLD studying Humanities Subjects?
- 3. What is the contribution of each of the AAA model of three strategies (AAAMS) to teachers and students?
- 4. From the perspective of values and pedagogical aspects, what is the contribution of the intervention as a whole programme: CPD programme for teachers and implementation of AAAMS in classes?

The objectives of this study are in three aspects; affective, cognitive and organisational, in order to find responses to these aspects that apply to teachers' and students' needs. In the cognitive area, my objective is to offer teachers a CPD that increases their knowledge about the characteristics and needs of 2ELs in order to develop their ability to identify such students. In addition, I want to teach them about using special strategies and to equip them with a range of alternative teaching methods. For this reason, I conducted a seminar for teachers that included the manual I wrote. In the affective area, my objective is to raise teacher awareness of the needs of 2ELs and to foster in these teachers a positive attitude towards their students, as well as to increase teachers' professional commitment and responsibility towards these students. With regard to the organisational aspect, my objective is to enhance teachers' abilities so they will be capable of meeting their 2Els' needs, while taking into consideration the expected programmes of their educational systems.

1.10. Conclusion

The motivation to conduct this research came from the challenges I had experienced in my school in Israel amongst teachers and students in the domain of 2Els. The major concepts on which my

study depends and that led my conceptual theory are CPD programmes and learning process of teachers, what makes a difference in teachers' CPD and self-efficacy, 2Els (gifted and talented students with special learning disabilities) characteristics and needs, teachers' attitudes and stigmas to 2Els and strategies that meet 2ELs needs. The literature informed me about the knowledge and strategies the teachers need especially when there is a lack of clarity in Israel in identifying these students and it has implications on teachers' practical work. The conceptual theory leading this research is based on the literature and my experience as a senior practitioner that when teachers are provided with information and strategies focused on their 2Els special needs it will make a difference to their attitudes, self-efficacy and professionalism. The teachers during this study, learned to address 2Els according to their characteristics and thus they could re-think their attitudes and they were able to be more inclusive and to show empathy to 2ELs difficulties and needs in the employment of the strategies in classes during the intervention. Also, the teachers learned a set of strategies (AAA Model of three strategies, Salem, 2014) that enabled them to teach in a way that made a difference in their learning environment and their 2ELs outcomes. The CPD programme proved itself as effective because it was focused on relevant needs of 2Els teachers and was conducted in a theoretical and experimental way. The anticipated contribution of this research is to offer new knowledge about preparing a CPD for teachers in this domain that makes a difference in teachers' learning processes. The next chapter looks at the literature relevant to this research issue, information, policies, debates, approaches and strategies.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

This literature review examines the existing knowledge in fields relevant to the topic of this study about the challenges of teachers who teach gifted students with learning disabilities and explores what makes a difference in teachers' learning processes. Although this research is focused on Israeli context I was informed by Israeli and international literature about the existing knowledge in this domain. The literature informed me about the major consents that together provided a theoretical framework to base this study on. It starts with the definitions, characteristics and needs of 2ELs students, as a basic knowledge to learn about this group of students. Then it goes on to a question: what challenges teachers face and their needs while teaching gifted students with special learning disabilities (2ELs) in humanities subjects (HS: History, Literature, Bible) such as rethinking attitudes to 2Els, stigmas and labelling of them, and what can make teachers change these attitudes. Also, the literature pointed out the main principles that make teachers' learning processes effective and the various alternative models of teaching strategies that teachers need to learn in order to improve the learning environment and learning outcomes of their students.

The criteria for selecting sources centred on their relevance to the research and in order to inquire in depth about different types of literature: theoretical models, professional sources, research findings and policy regulations. A further consideration was to choose sources that presented main debates relevant to the topic. An additional criterion was to include up-to-date sources. An effort was made to ground the study in recent research, although there were older, crucial sources that contributed to the topic and were not from within the last 5-10 years. The knowledge acquired from this literature review has reinforced, expanded and sharpened the understanding of this research topic and led to the planning of an intervention designed for the teachers of 2Els (See Appendix 2.1 about: Two Research Domains). This review presents and examines a number of methods and strategies that have been tested in the practical field and could be useful to these teachers and students. There are a number of authors who have been particularly influential such as a key figure in U.K., Freeman (2010), Montgomery (2013) and Winstanley (2005), and Israeli key figures in Special Education such as Einat (2004), Feuerstein (1997), Harpaz (1998), Heiman (2011), Kaniel (2006), Landau (2001), Margalit (2000), Melitz and Melitz (2002), Salomon (2000) and Shaked (2007). Also, central to this study have been U.S. authors such as Kay (2002), Neilsen (2002) and Bourne (2005) from New Zealand.

2.2. Background

The examination of resources revealed a lack of clarity regarding the definitions and characteristics of 2ELs and this lack of clarity has an impact on the way their teachers detect their difficulties and treat them. Lovett and Sparks (2011) reviewed 46 empirical research studies about 2ELs. Their major finding was that the characteristics of this group of students have not been defined, which leads to a lack of clarity in the strategies used by teachers of these students. This resource deepened my knowledge about this issue but it does not propose a solution but only reflects the complexity of this issue of identification and characteristics of these students. It is necessary to formulate a consensus definition of this phenomenon as Manor-Benjamini (2005) and also Winstanley (2005) have emphasised that such a definition is crucial since it will determine the specific strategies that can be used effectively by teachers. A Review of Bourne (2005), Kay (2002), Landau (2001) and Nielsen (2002) reveal that there are no generally accepted definitions of this phenomenon and they do not offer a focused CPD programmes for 2Els teachers nor an existing research in this domain.

Manor-Benjamini (2005) has stated that, in the past 25 years since the research has begun to address 2Els, still the focus is either on gifted students or on students with learning disabilities and there is a lack of research into this unique group of 2Els who have dual exceptionalities. Also, Winstanley (2005) and Kay (2002) agree that there is a lack in this domain. In addition, I did not find any direct reference concerning the needs of teachers who teach Humanities Subjects (HS) to 2ELs. As observes by Winstanley (2005) and Montgomery (2013) one of the explanations put forward for ignoring the special needs of 2ELs is a lack of resources for research because it is a small group and thus this topic has not been carefully considered. Yet, according to Baum (1990) and McCallum et al. (2013) this phenomenon is often not treated because schools do not know how to face this type of challenge as Brody and Milles (1997:290) described:

"A reversal phenomenon of people with high abilities who find it difficult to express themselves in writing to fulfil their potential".

Also, Bourne ((2005) claims that teachers find this phenomenon confusing and need definitions and tools to cope with these challenges. These explanations have deepened my understanding of how the phenomenon of 2ELs creates confusion among teachers, like me and my colleagues, that without focused information and methods we find it impossible to believe that students with giftedness might also have learning difficulties. It seems to be as a contradictory phenomenon. Therefore, it is very important to describe, explain and document the existence of this phenomenon in order to make teachers enable to understand it and to learn how to cope with it. Kay (2002), Manor-Benjamini (2005), Nielsen (2002), and Winstanley (2005) all offer to focus on the disparity

between the high abilities and low achievements of 2ELs in order to establish a common definition for these students. I was informed by these authors and I adopted the above-mentioned definition as a key definition as a basis to start the drawing of a CPD programme for 2Els teachers for this study and I felt it is right from my practical experience. I agree with the recommendations of Einat (2004), Feuerstein (1997), Harpaz (1998) and Kay (2002), that the educational system should make more efforts towards a shift in attitude regarding 2ELs and plan tailored programmes for their teachers to better meet their needs. From my professional perspective, t The most important challenge facing schools today is developing a learning environment that would encourage all levels of talent, and also could provide teachers with tools to cope with the difficulties and needs of various populations of students. So, this information encouraged me to keep on learning about the issue of teachers' learning processes and to draw my own offer of CPD for 2Els teachers.

From 1999 to 2003, the U.K. Department for Education (2003) expanded the criteria defining GT students, establishing high standards of achievement as an important factor in the criteria for defining GT students. However, 2ELs with their learning difficulties did not meet the criteria of high achievements (such as defined by the U.K. Department of Education) and therefore such students could not be defined as gifted at all. Subsequently, these students are treated neither as GT students nor as students with SpLD. Nowadays, the new policy of the U.K. Department for Education (2016) was announced in a white paper about the government commitment to ensure that every child has an excellent education which allows them to achieve their full potential. In addition, the U.K. government focuses on those schools most at risk of failing students and encourages "good" and "outstanding" schools. This policy is based on equality but still as Manor-Benjamini (2005) claims, there is a need for focused consideration on special groups of teachers and students in order to meet their special needs and there is a prominent need among teachers to focus on their needs as teachers of special populations as of 2Els.

In 2001, the U.S. Department of Education started an effort to locate gifted students through a special program called "No Child Left Behind" (NCLB). While there are, special programmes designed separately for GT students and for students with SpLD, but there is no special programme for 2ELs. NCLB represented a significant step forward for students needing additional support, regardless of race, income, disability, home language, or background. In 2015, the U.S. Government started a new programme "Every Student Succeeds Act" (ESSA), which includes provisions that will help to ensure success for students and advances equity by upholding critical protections for disadvantaged and high-needed students. ESSA takes action to effect positive change in lowest-performing schools and where graduation rates are low focused initiatives in CPD programmes for 2Els teachers. Also, Bourne (2005) informed about the New Zealand Ministry of

Education that is in favour of full inclusion for gifted students and is aware of the need to provide teachers with tools to help them meet all students' needs in regular classes but this source did not offer special programmes for 2Els' teachers.

In this section, I was informed about the existing research and information related to my research domain and my main insights were about the lack of a uniformed definition of 2Els and especially about the lack in focused models and researches of 2Els teachers' CPD. This information encouraged me to keep on learning in-depth the issue of teachers' learning processes and especially of 2Els teachers' CPD. The next section clarifies the impact of the Israeli Education Department regulations (2016) on gifted students' and 2Els education. This further explains why I was eager to research the issue of these teachers' CPD, as I realised, from personal experience, that there is a lack in this domain in Israeli schools.

2.3. Impact of the Israeli Ministry of Education Regulations on the domain of gifted and 2ELS education

The Israeli education system is responsible of the detection and assessment of gifted students within the schools. The Division for Gifted and Outstanding Students in the Israeli Department for Gifted and Excellent Students (2016) has established criteria for the diagnosis of gifted students and directs them with a formal diagnosis at the age of eight. There are several possibilities of academic environment offered to students who are diagnosed as gifted. One option is to study in a separate class for gifted students with an accelerated curriculum, yet in a regular school setting. Another option is to include the gifted students in a regular class with various enrichment activities in the afternoon during the school year. There is also a special boarding school for these students. The students and their parents can choose the framework most suitable for them. In addition, city mayors can decide either to set up separated classes for gifted students in their schools or to integrate gifted students in regular classes. Though inclusion is the favoured approach by Israeli Education Department (2016), at the same time segregation into special classes is possible according to the needs of students with SpLD or 2EL. Avissar (20100, Feldman (2009) Heiman (2011), Margalit (2000) and Reiter (2004) support the inclusion approach, but there is a debate in the Israeli education system about the choice between segregation and full inclusion.

From my personal perspective, I support full inclusion but however in practice, I am teaching in the separated classes for gifted students who also have learning disabilities (2Els) because my school decided to run one 2ELs separated class in each grade. On the other hand, I am leading inclusion of these students in the social activities of their grade. I learned from my professional experience that teachers need to learn more about teaching special populations as 2ELs especially

in humanities subjects. I am teaching Hebrew and international literature in 2els separated classes and I discovered that many of the gifted students, who are highly successful in mathematics and science, fail to express their high abilities and wide ranging knowledge when they are required to write and to answer questions about what they have learned, and thus become under-achievers in HS, as also Bourne (2005) contends that this happens also in New Zealand. The gap between their successes in other fields and their low levels of achievements in HS is surprising, and not understood. Plotkin (2008) claims this creates for students a deep sense of frustration and despair with a decreased self-esteem and motivation to learn. In Israel, these underaching gifted students are directed to psycho-didactic tests that diagnose them as having learning disabilities. Still, as I know from my professional field, the Israeli government does not provide focused CPD programmes for their teachers.

Manor-Benjamini (2005) points out that these teachers are also surprised by the phenomenon of 2ELs and are deeply frustrated, as their lack of knowledge and proper training prevent them from knowing how to deal with these students' difficulties, and especially how to help them realise their potential and overcome their-deficiencies. Bourne (2005;1) described this situation:

"As a paradox in terms, because of the discrepancies between these students' strengths and weaknesses. An astute teacher will often accurately identify the discrepancy between one area and another, but not know what to do about it".

My experience encouraged me to research this topic within the Israeli and world-wide professional literature and reinforced my desire to contribute new ideas to the 2Els teachers' learning domain. I have also realised that the challenge is intensified by the complexity of giftedness existing side-by-side with SpLD. This complexity increases the difficulty for teachers confronting the dual challenges of 2ELs (Baum, 1990), especially in HS, and particularly when teachers have not obtained the necessary strategies to teach them. The reading of authors like Feuerstein (1997), Heiman (2011) Kay (2002), Manor-Benjamini (2005) and also Winstanley (2005) sharpened my comprehension of the need to develop CPD programme for this group of 2Els' teachers. The fact that these teachers teach in 2Els separated classes was a basis for me to draw an intervention that includes an offer of CPD focused on these teachers' needs and then to test it their classes.

The next section looks at definitions and characteristics, not only in Israeli context, of 2Els because it served my aim to learn about these issues so it will be helpful in my research to plan the CPD programme for their teachers.

2.4. Definitions and Characteristics

I realised from the literature that there is a debate in the literature about the definition and characteristics of the 2Els. And the literature uses the definitions of gifted and of special learning disabilities in order to place this minority group of students.

2.4.1. Definition of gifted students

The definition of gifted students used by the Israeli Department of Education (2016) is based on U.S. Department of Education (2016) that defined GT students as those with exceptional talent who demonstrate the potential to achieve significantly higher levels of accomplishment compared to their peers. All areas of children's life must be considered: academic, athletic, artistic, and social-life. In Israel, at the age of eight the students are assessed, resulting in about one percent (1%) of the students being defined as gifted. Also, The U.K. Department for Education (2016) defined GT students as having exceptional abilities in subjects such as Mathematics, Sciences, Literature, History, Art, Sports, and Music and who are in the top 1% of these respective groups. Freeman (2010) claims that the most significant characteristic that defines GT students is their exceptionally high intelligence.

These students' High Order Thinking (HOT) skills, include abstract levels of thinking, exceptional memory, and an inventive and creative approach to solving complicated and sophisticated problems. Kay (2002) and Winner (2000) point to other characteristics, such as great inquisitiveness in various subjects, an autodidactic acquisition of general knowledge and a reach vocabulary. Landau (2000), Millman (2012), Montgomery (2013) and Ziv (2000) add boredom as a prominent characteristic of gifted students during classes which might lead to disruptive behaviours. In summary, these definitions should serve the educational departments to detect these students and to prepare accelerated programmes for them. But most important is to use these definitions and characteristics in preparing CPD programmes for their teachers.

2.4.2. Definitions and characteristics of students with special learning disabilities (SpLD)

SpLD is a general term covering different disorders (DSM-V, 2013) and includes several definitions for the term 'learning disability'. The common definition claims that learning disabilities represent a group of intrinsic neurological-development disorders with varying characteristics, each needing its own treatment (Einat, 2004; Heiman, 2011). It includes difficulties in developing capabilities in speech, listening, writing, understanding and difficulties in Mathematics. These problems manifest themselves especially in Spelling and Mathematics, in acquiring new languages, and in mental processes like symbolisation, memory and perception (Dahan & Meltzer, 2008; Einat, 2004; Manor-Benjamini, 2005; Sharoni, 1998). Those with SpLD

experience difficulties in performing cognitive tasks, which results in slow reading and writing. The latest DSM-5 (2013:1) broadened the category of learning disorders:

"To increase diagnostic accuracy and effective care. Specific learning disorder is now a single, overall diagnosis, incorporating deficits that impact academic achievement".

This definition indicates that academic performance should be at a level appropriate to their intelligence and age. The diagnosis requires persistent difficulties in reading, writing, arithmetic or mathematical reasoning skills during formal years of schooling. For example, difficulties in writing have "long-term impact on a person's ability to function because so many activities of daily living require mastery in writing skills" (DSM-5, 2013:1) .

According to Biggs & Colley (2006), Kirby et al. (2009) and Wearthmouth et al. (2003), difficulties in writing can be a phenomenon of a developmental dyspraxia. This disorder occurs because of a motor difficulty present from birth and is believed to be a result of an immaturity of the motor cortex in the brain that prevents messages from being properly transmitted to the body. Dyspraxia can affect people in different ways and to different degrees. One of the most common types is symbolical dyspraxia which is characterised by difficulty in writing words, analysing a question or problem, solving it and integrating knowledge from which to develop an answer. Kirby et al (2009) points out that 2ELs who have dyspraxia waste too much energy thinking about a simple question and it disturbs them from doing what they are able to do cognitively and it may cause them frustration and emotional problems. Another explanation is given by Mamen (2007), a psychologist and expert in SpLD, who explains that writing difficulties are a prominent symptom of Nonverbal Learning Disabilities (NLD). The students find it challenging to write down their knowledge in spite of their high verbal ability and thus achieve low grades. Also, Einat (2004), Heiman (2011) and Mamen (2007) argue that students with SpLD experience emotional difficulties characterised by insecurity, low self-image, and behavioural problems, such as lack of self-control and aggressive behaviour. The main reason given for these students' greater emotional and behavioural problems is their experience of failure.

Another issue with which I am professionally familiar is the measurement of significant deficiencies and their impact on social functioning (Heiman, 2011; Northfield, 2004). A psychometric test can be used to measure levels of intellectual functioning and intelligence (IQ). The Wechsler Adult and Children's Intelligence Scale (Kaplan et al., 2003; Wechsler, 1955; 2003) is a common tool used to measure general intellectual functioning for children and adults. The presence of a learning disability is suggested if students have an IQ of less than 75. However, one must interpret the results of the tests concurrently with the student's background information, as

the results can be open to misinterpretation. Factors that could affect the tests are psychiatric states or conditions, drug use, or cultural gaps, especially among immigrants (Manor-Benjamini, 2005). Formal assessments, too, must be viewed contextually within the students' circumstances, including the variants of age, gender, religion, socioeconomic status, and cultural background.

Department for Special Learning Disabilities in the Israeli Ministry for Education (2016) defines learning disabilities as a heterogeneous group of interruptions, with significant and continual deficiencies in learning, writing, reading, concentration, performance and mathematic skills. The interruptions are intrinsic, and their sources are malfunctions of the central nervous system which can occur at all stages of life. Severe diseases and behavioural interruptions can be a side effect, but not the source of a learning disability. Students who have SpLD will have difficulties in understanding, learning, and remembering new things, as well as in generalising, transferring knowledge, or learning strategies by themselves. Margalit (2000) defines students as having learning disabilities when there is a gap between their intelligence and their levels of achievement, and also between the students' age and their abilities compared to the level of the same age peers.

According to Heiman (2011), students' difficulties are usually demonstrated in three domains: cognitive, affective and behavioural. The cognitive domain includes visual, motor and auditory perceptions; deficient orientation in space and time, language disorders, difficulty moving from task to task. The affective domain includes difficulty in functioning in various social situations, in confronting failure, in postponing gratification, and in low self-image. The behavioural domain includes restless and rebellious behaviour, difficulty accepting authority, and aggressiveness. Vohl et al. (2002) add side effects such as depression or dropping out of school. Kershner (2007) and also Plotnik (2008) argue that the cognitive domain impacts the affective domain and learning difficulties and the way students function in their everyday life domains as argued by DSM-5 (2013), Mamen (2007), Einat (2006), and Heiman (2011). I realised, like Almog and Schachtman (2008) claim, that such students struggle to solve problems requiring high order thinking skills (HOT), such as analysis and synthesis, metacognition, and transfer and implementation of strategies and knowledge by themselves. Kusminsky (2006) claims that a prominent characteristic of students with SpLD is to hesitate in asking for help. It is the duty of the education system to diagnose these students' difficulties and to provide solutions, while, at the same time, teaching them to ask for help and to stand up for themselves. Although my investigation of the literature showed me that there is no uniform definition for the term 'learning disability', I did find that a consensus does exist, in that a learning disability always involves a gap between the students' capabilities and their achievements. According to Heiman (2000), it is usually a gap of about two years between

the students' achievements and their age level. Although the latest DSM-5 (2013) opposed this approach, I support Heiman's findings as I experience them in my practice more often than not.

The "Margalit Committee" (1997) on behalf of the Israeli Ministry of Education, estimated that 10 to 15% of the students in Israeli schools demonstrate learning difficulties. From this it is deduced that diagnosis and adjusted teaching are recommended to help these students. Plotkin (2008) claims that cognitive solutions should be supported simultaneously with emotional treatment in order to strengthen and rebuild the students' feelings of efficacy as well as to boost their self-image, which may have been damaged by the failures and difficulties they may have experienced. I agree with Kay (2002) and Neilsen (2002) who demand an accurate diagnosis of students with SpLD and the tailoring of individual teaching programmes that fit students' needs in order to help them in various phases of their development. Feurstein (1997) suggests that intermediating strategies and methods to enhance learning taught by a person familiar to students might reduce feelings of distress and enable them to better fit within society, making the most out of their abilities. The information gathered in these sections on the characteristics and needs of gifted students and students with learning disabilities painted for me the picture of 2Els and started to clarify what do 2ELs teachers need to learn in order to meet these students' dual needs.

The next section reviews definitions and sets of characteristics of 2Els in order to clarify this domain and to use the existing knowledge as the basis to the design this research's plan.

2.4.3. Definitions and Characteristics of GT Students with SpLD (2ELs)

Bourne (2005) claims that definitions of 2ELsmust describe the conflict that arises from the dual exceptionalities that combine giftedness with learning disabilities. According to Baum (1990) and Brody and Mills (1997) this conflict is reflected in the huge disparity between the high abilities of these students and their inability to express these abilities in practice. McCallum et al. (2013), intelligence (IQ) tests of 2ELs show a pattern of disparity between high and low achievements in different sub-tests. The average of these results is far below their real potential which can mean that they should receive supportive lessons to fulfil their potential. Silverman (1989:37) calls this phenomenon: "Invisible gifts, invisible handicaps". My conclusion was that this can make it difficult for teachers to define and treat these students as gifted at all because of their deficiencies and this should be an issue for teachers to learn about in CPD programmes.

There is a debate in the literature about the correct approach to use with this minority group of 2ELs. One approach treats them as a very heterogeneous group, with a variety of talents and deficiencies and recommends that they should be integrated in regular classes (Brody & Mills,

1997). The second approach sees these students as a group with unique characteristics and difficulties. Kay (2002), Lovett and Lewandowski (2006) and also Lovett and Sparks (2011) argue that they should be given special consideration and a response according to their needs. I have adopted the second approach because from my experience, this is a specific group that needs specific treatment. I find that in all the literature I had read there is a lack of an acceptable definition for this group of students and it has resulted in insufficient CPD for teachers in this area. Freeman (2001) argued that in UK five to ten percent of students at every grade level in high school is gifted, but there are no diagnoses of GT students with SpLD. Nielsen (2002) suggested that ten percent of the student population in the US is gifted and other researchers found that two to five precent of all the SpLD population is gifted (Manor-Benjamini, 2005; McCallum et al., 2013; Nielsen, 2002; Winstanley, 2005). These examples show that there is no consensus on what 2ELs really are. The void in this area has encouraged me to try and make my own contribution to this field. From my practical experience, the ambiguity in this domain has direct implication on the teachers' capability to meet these students' needs and I was still looking in the literature but did not find a focused CPD programme for 2Els teachers.

One of the prominent characteristics of 2Els is described by Kay (2002) and also Winstanley (2005) as the discrepancy between their strengths and weaknesses, their high potential and low attainment. A teacher may identify this discrepancy without knowing what to do about it. According to Millman (2012) most 2ELs fall through the cracks in the education system, despite the knowledge accumulated in the field because there is a lack in practical programmes and preparation for teachers. The New Zealand Ministry of Education (2016) refers to 2ELs and has recommended preparing specific accelerated programmes for them within regular classes; however, as Bourne (2005) argues, this is not working in the practical field. According to Ries et al. (2000) these students are underachievers in school and a prominent group of these students has difficulties especially in the humanities subjects where a lot of writing is demanded and it becomes more conspicuous during high school. Robinson (1999) explains it as a result of hiding their deficiencies during their early years at school, or of success in using their high abilities to bypass them. Winstanley (2005) argues that teachers are challenged to better examine the learning environment and to take into account the combination of learning difficulties and high skills (See Appendix 2.2 - "The Story of Ron" a description I wrote of 2ELs is an example that illustrates 2Els' characteristics and challenges).

According to Millman (2012) it is difficult for teachers to detect 2ELs because they are divided into 3 subgroups and their characteristics create ambiguity: the first group is composed of 2ELs that are identified as GT and also as having SpLD (2ELs), but since they are underachievers at

school, they are not treated as GT at all, but solely as students with SpLD. I was informed by Manor-Benjamini's (2005) argument that even when teachers know that their students are detected as 2Els, they still need more focused knowledge about these students' needs and characteristics. They also need specific strategies to apply to 2ELs' dual exceptionalities but she did not offer a practical solution about it. According to Millman (2012) there is a second group of 2ELs that are identified only as having SpLD. This happens because their high order thinking skills (HOT) are shaded and not identified, therefore they often get support just for their deficiencies, but not for their GT qualities. Finally, the third group is the largest of 2Els. According to Brody and Mills (1997) this 2ELs group is not identified as such because their HOT skills compensate for their deficiencies and these deficiencies act to block their HOT skills. These students perform reasonably with average achievements without references to their high skills or deficiencies. Brody & Mills (1997), Millman (2012) and also Silverman (1989) say that none of these three groups of students receive appropriate responses to their needs and suggest involving school counsellors in order to support teachers in detecting and promoting these students. But none of these authors offered a CPD programme or a research about this issue which triggered me more and more to seek for a practical solution and to draw an intervention in my research that includes a CPD focused on 2Els teachers' needs in humanities subjects. The following table presents these 2Els three groups and it is important to mention that this research focuses solely on the first group of 2Els students that are identified as GT and also as having SpLD because the study took place in an Israeli high school who runs separated classes for 2Els and the students who were already assessed as gifted and also as having learning disabilities. Still their teachers struggle while they teach them as a result of a lack of enough preparation.

Table 2.1. Three groups of 2Els

Group 1	Group 2	Group 3
Students identified as GT and also as SpLD (2ELs).	Students identified as having SpLD but not as GT because their HOT skills are shaded.	HOT skills compensate for their deficiencies thus blocking their HOT skills. They perform–reasonably with average achievements without references to their high skills or deficiencies.
2ELs are included in regular classes and have support, but not support	2ELs are not identified as also GT and do not have	2ELs are not identified not as GT nor as SpLD and do not have support at all (Brody & Mills, 1997).

for their HOT skills (Millman, 2012).	accelerated programmes (Millman, 2012).	
Teachers need focused strategies to meet the dual needs of 2ELs (Manor-Benjamini, 2005).		to identify these students and focused eds of 2ELs (Manor-Benjamini, 2005).

Kay (2002), Neilsen (2002), Winstanley (2005) and also Manor-Benjamini (2005) informed me about a coherent set of 2Els characteristics that can be an integrative part in planning CPD programmes for 2Els teachers and it is divided into three categories: cognitive, affective, and behavioural. Cognitive characteristics are demonstrated by the dysfunction of their basic skills, such as acquiring reading, writing and mathematics skills, memory, auditory and visual perceptions, thinking ability, organisational skills, and compensation abilities. It is important to emphasise that the strengths of some GT students with High Order Thinking skills enable them to compensate for their weaknesses. Einat (2004) claims that difficulties emerge when the ability to compensate is not consistent, which can result in low achievements. The predominant characteristic of these students in Shaked's (2007) opinion is the gap between their great abilities and their low performances. Zorman et al. (2004) say that GT students have a rich vocabulary, good verbal ability, high order thinking skills (HOT), and many also have high mathematical abilities, but they also have difficulties in that they are SpLD, for example, in expressing themselves in writing. Also, Kay (2002) and McCallum et al. (2013) argue that this gap is prominent in humanities subjects such as History and Literature, and makes it difficult to identify students as gifted because their difficulties in these subjects disguise their abilities. Einat (2004) emphasises that it is important to nurture the cognitive skills of these students and to strengthen their feelings of accomplishment. From my personal perspective and as Einat (2004) argued, too often teachers focus on the weak points of these students. For example, focusing on the reading difficulties of dyslexic students or demanding written assignments from students with dyspraxia (deficiencies in expressive skills in writing) contributes to low levels of achievement, despite their excellence in HOT abilities or Mathematics.

Affective characteristics are the second category of 2ELs. Plotnik (2008) claims that students with SpLD may experience failure in school and this affects negatively their feelings and behaviour during their years of schooling as well as in their social lives. Heiman (2011) suggests providing these students with providing positive learning experiences while simultaneously mentoring them in order to improve their social skills helps to overcome their affective difficulties. Ries & al. (2000)

points out that 2ELs commonly set themselves unrealistic self-expectations because of their very high abilities and then become very self-critical when they fail causing them to feel that they are losing control over their lives. Plotnik (2008) reports that such students exhibit low self-esteem, lack of motivation, and low self-confidence and this affects their social lives. Manor-Benjamini (2005) claims that both students and their teachers find it difficult to understand how it is possible that students who are so talented in the sciences or mathematics can be in fact underachievers in high school. According to Kay (2002) and also Winstanley (2005), when teachers lack appropriate knowledge and training, it leads them to accuse the students of laziness, which only contributes to the students' sense of frustration and failure. Kuzminski (2006) posits that an additional characteristic of 2ELs is their difficulty in asking for support due to their low self-esteem and previous experiences of failure and recommends teaching them strategies to defend themselves. Manor-Benjamini (2005) indicates that there has not yet been enough research into the emotionalsocial domain of 2ELs. From my experience, this situation intensifies their teachers' challenges and these teachers do not receive appropriate preparation to deal with the 2Els cognitive and affective characteristics. Behavioural characteristics are the third category. Winstanley (2005) describes GT students with SpLD as suffering from behavioural disorders, such as boredom, exaggerated criticism, cynicism and negativity. They also avoid tasks such as homework or writing answers. Thus, as experienced, they are trapped in a vicious cycle in which their learning difficulties increase their behavioural problems which in turn blocks their development of skills.

The literature review together with my professional experience has strengthened my belief that 2ELs should be treated as a unique group and that appropriate programmes should be prepared for their teachers to provide responses to their distinctive needs and characteristics. Millman (2012) points out that it is necessary to bridge the gap between the needs of teachers and students and the lack of practical tools to cope with their challenges. Insights I acquired from reading the literature until this point, guided me to centre my study on teachers' learning processes in the domain of teaching 2Els and I kept on inquiring about which ways are effective for teachers to learn and teach 2Els.

2.5. Teachers' learning processes – what makes a difference to teachers' CPD

One of the goals of my study is to offer a manual for 2ELs teachers based on the principles and criteria drawn from the relevant literature. The review, until now, has strengthened my belief that there is a need to learn more about what makes a difference in teachers' CPD. I was informed by Day and Gu (2010) that teachers' professional learning must include knowledge, teaching practice and emotional processes and I realised that in this issue there is a need to plan a CPD in two

domains: first, to re-think teachers' attitudes about their 2Els by learning the relevant knowledge about these students and secondly, to equip teachers with a set of strategies that meet their 2Els needs (Kaniel, 2006). This kind of learning process can empower teachers' self-efficacy as Bandura (1997), Kershner (2007) and OECD (2014) claim that when teachers are able to provide appropriate solutions for their students' needs, they become more self-confident, and improve their self-efficacy. According to Walter and Briggs (2012) the professional development that makes the most difference to teachers' learning includes several principles as:

"Making it concrete and classroom-based, involves teachers in the choice of areas to develop activities, this enables teachers to work collaboratively with peers, provides opportunities for mentoring and coaching, is sustained over time and is supported by effective school leadership" (Walter and Briggs, 2012:1).

As my professional experience taught me, all these principles are vital to effective teachers' learning processes and I implemented them in the CPD I prepared for 2Els teachers in this research. Also, I was informed by Walter and Briggs (2012) about the effectiveness of CPD directed by internal leaders from schools and this empowered me to plan an intervention that included a CPD in my school. Thus, I will be able to turn my conceptual theory to a praxis as was claimed by Melitz and Melitz (2002) and I can offer a CPD to my practical field. The next sections discuss teachers' learning processes in the domains of rethinking pedagogical attitudes and relevant strategies to 2Els teachers in order to use them in preparing a CPD for 2Els teachers.

2.5.1. Rethinking teachers' attitudes towards 2Els - knowledge

Robinson (1999) claims that 2ELs pose a challenge for teachers: a re-examination of the learning environment. Also, Manor-Benjamini (2005) points out that teachers in 2ELs classrooms were not trained to identify deficiencies or high skills, and they are not prepared to use special strategies to teach such students. Nielsen (2002) indicates that most teachers dealing with GT and/or SpLD students have not received appropriate knowledge about their special characteristics and most of the teachers use the tools and strategies that they acquired during their CPD about teaching in regular classes. These tools do not meet their needs when they teach 2ELs students and teachers often become frustrated, which may damage their self-efficacy, as Bandura (1997) claims. This may adversely affect their contribution to their students (Kay, 2002). Also, Kaplan et al. (2001) argue that teachers usually learn to teach in regular classes and there is a widespread belief that teachers can provide the appropriate education to students with special needs as 2Els by differentiating the teaching levels and matching the material learned to the students' needs. Yet, in practice, the teachers do not possess the knowledge about these students but instead rely on the

tools of teaching in regular classes. Also, Kaniel (2006) added that teachers are not taught to teach with differentiation strategies, and in practice they are busy preparing the students for national or matriculation exams. United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2015) declares on the need of rethinking education and the first step is learning knowledge:

"Knowledge is central to any discussion of learning and may be understood as the way in which individuals and societies apply meaning to experience. It can therefore be seen broadly as the information, understanding, skills, values and attitudes acquired through learning... learning is understood here to be the process of acquiring such knowledge" (UNESCO, 2015:16).

In addition, The Teachers' Guide to Teaching and Learning International Survey (TALIS) (OECD, 2014) argues the issue of a lack of knowledge in teachers' learning that results in their attitudes towards their students:

"Teachers walk into a classroom with an established set of beliefs on how students learn. These beliefs, developed in teacher training programmes and/or through teachers' own classroom experience, shape how teachers teach" (OECD, 2014:7).

Also, Perković Krijan and Borić (2015) claim in their research about teachers' attitudes towards gifted students that teachers have ambivalent attitudes towards gifted students and they influence teachers' practice, which can eventually determine the development of the gifted. They recommend investing in teachers' learning in CPD that includes re-thinking of their attitudes. The educational policies and the schools' leaderships should rethink this issue and invest in CPD for teachers in order to provide them with the relevant knowledge about their students and thus to make a difference in their attitudes. I was also informed by Gross (2016) that showed in his research that teachers' attitudes towards gifted can be changed by means of professional development when it is focused on their specific needs and also David (2011) emphasises that re-thinking teachers' attitudes has an impact on nurturing and educating gifted students.

As a senior practitioner and one of the leaders in my school I decided to conduct this research in my practical field and to prepare a CPD that is focused on 2Els teachers in order to contribute to their knowledge and to make them rethink their attitudes and strategies when they teach students with dual exceptionalities. la Velle (2015) argued that the translation of knowledge from academic research to professional areas is known as knowledge mobilisation and it refers to the way in which practitioner researchers employ in their schools the new knowledge they gathered. I translated the new knowledge I gathered in my research to my practical field and thus I contributed to my colleagues.

2.5.1.1. Teachers' Stigmas and labelling of 2Els

According to Bar-El and Noymayer (2013) some of the components that attitudes are created from stigma and labelling of people. Freeman (2011) and also Shaked (2007) argue that teachers enter classrooms of gifted students with a set of stigmas about these students such as teachers think that gifted have excellent abilities and extensive knowledge but they are arrogant and critical and know better than the teachers and also, they are easily bored so often teachers feel intimidated to teach such students. Also, Montgomery (2013) and also Bourne (2007) argue that teachers' stigmas are intensified when the students have dual exceptionalities as 2Els because they do not have enough knowledge about their needs and often teachers find it difficult to believe that gifted have also learning disabilities. Talmor (2007) explains that stigmas are created as a result of experiences or what teachers heard from their peers or in their cultural context. Then these stigmas lead teachers to label these students usually in a negative labelling and teachers develop antagonism and fear to teach these students. When it comes to 2Els, my colleagues in Israel have negative stigmas and it effects their attitudes towards 2Els. Often teachers are not content to teach in 2Els classrooms. Talmor (2007) claims that teachers' attitudes have an impact on their motivation and commitment in their classes and the leaders of the education in Israel should consider means to change this situation.

2.5.1.2. Changes in teachers' attitudes

A prominent debate in literature is about what can make a difference in teachers' stigmas and labelling of gifted students. Bar-El and Noymayer (2013) offer to make a change in teachers' stigmas by learning about their special students' characteristics, needs, their behaviour and then the knowledge and experience with these students can lead to a change in teachers' attitudes. Also, the OECD (2014:13) reported that:

"Teachers would like more professional development activities related to teaching students with special needs".

Tov-Li and Frish (2008) support the connection that exists among teachers between the acquisition of knowledge about the characteristics of their students and the increase in awareness and change in their attitudes towards those students. They claim that veteran teachers (20 years or more in teaching - who are as fifty per cent of Israeli's high school teachers) were trained to teach in regular classes, but they need to rethink their attitudes to students with special needs and to learn new strategies. They demand that the Educational Ministry rethinks the CPD for these teachers in order to lead such a change. Mutton et al (2011) claim that experiences of successes in employment of

new strategies lead the teachers to greater openness towards new experiences in teaching. Also, Fox (1998) and Levy (2008) claim that when a process of change is successful and there is evidence of improvement, the people involved in this process develop professional commitment and it makes a difference in their attitudes. Fox (2002), Levi (2000) and Reiter (2004) emphasise that the development of processes of changes in organisations can start from the micro to the macro when one of the practitioners initiates a change that affects the other organisation's circles. According to Korn and Yogev (2004) processes of learning take place in organisation when there is reference to information gained in the learning processes and this information becomes, in time, organisational information. In addition, the learning will be relevant to a wide range of activities and not only to the improvement of the individual:

"Learning processes become rooted in the organisational existence and the members of the organisation internalise the understanding that they need to learn continuously to improve the basic knowledge of the organisation and the performance derived from it" (Korn and Yogev, 2004:1)

Fox (1998) explains that often there is a resistance to change. Teachers can feel threatened by unknown strategies and resist it. Koter (2003) and Levy (2008) describe it as a part of the learning process that begins with a sense of disturbance and wasting time. Gross (2016) argues that changing teachers' attitudes to gifted students can be achieved through providing teachers with training in their schools. Then Perković Krijan and Borić (2015) claim that although veteran teachers of gifted students (five years and more) find it more difficult to change their attitudes and strategies then new teachers it is necessary to initiate processes of learning to lead changes in this area. Reis et al (2000) offered to use systematically new strategies over time so it might minimise teachers' feelings of resistance and empowers their self-efficacy.

2.5.1.3. Empowering teachers' self-efficacy

Yosifon (2004) claims that teachers' self-efficacy is empowered when they learn how to improve their professionalism and when they can make a difference in their classes by meeting their students' needs. 2Els teachers feel the lack of enough preparation and it effects their self-efficacy as OECD (2014:16) also reports:

Teachers who teach classes where more than one in ten students are low academic achievers or have behavioural problems also report significantly lower levels of self-efficacy".

I was also informed by Day and Gu (2010) that teachers' self-efficacy can be enhanced by enriching teachers' knowledge and improve their teaching skills. Self-efficacy of teaches is based on learning relevant knowledge and a set of strategies that prepare them to teach their students. Then they enter classrooms and their experiences of successes empower them. Also, OECD (2014) report about the importance of CPD in this issue:

"The professional development activity that focused on teachers' knowledge and understanding of their subject and on their pedagogical skills had a moderate or large positive impact on their teaching" (OECD, 2014:13).

My main conclusion from the literature on empowering teachers' self-efficacy is that it is crucial to prepare CPD programmes that focus on teachers' needs especially with special populations as 2Els teachers. It has a positive impact on teachers' self-efficacy and then on their teaching skills and their attitudes. The Professional Development Outline Policy Paper prepared by Dorner in the Israeli Ministry for Education (2009) stated that the main purpose of professional development for teachers is to consolidate professional identity as means of maximising professional commitment and expertise. The Israeli Department for Gifted Students (2010) has developed a special CPD programme for gifted students' teachers. But in practice, few teachers learn there. Shaked (2007) explains that teachers report that it is expensive and not focused and practical enough for their needs. Still, there is a lack in CPD focused on knowledge and strategies for 2Els teachers in Israel. The next section discusses the strategies teachers need in order to be prepared to teach 2Els.

2.5.1.4. Rethinking teachers' learning processes - special strategies for 2Els teachers

My aim in this research was to turn my conceptual theory to a praxis as Melitz and Melitz (2002:20) said:

"Teaching teachers to apply strategies is the main part of translating the theoretical aspect into a practical aspect".

My aim was to prepare a CPD for 2Els teachers that includes a relevant knowledge about these students' characteristics, as I previously mentioned, and a set of strategies that can fit these teachers' needs. Margalit (2000) issued a comprehensive report on behalf of the Israeli Ministry for Education concerning teachers' learning programmes especially for students with difficulties and recommended to train all teachers in the use of strategies that will provide the appropriate responses to their students in heterogeneous classes and also, Manor-Benjamini (2005), Melitz & Melitz

(2002), and Robinson (1999) think it is necessary to provide 2Els teachers with strategies so they can address their students' needs.

There is much research about employment of special strategies for teaching gifted students and for students with learning disabilities (Landau, 1990; Manor-Benjamini, 2005; Melitz & Melitz, 2007; Robinson, 1999; Ziv, 2000) but Kay (2002) and Nielsen (2002) strengthened my practical experience that there is a lack in special sets of strategies for 2Els teachers in US and in Israel and it is needed in this area. Nielsenn (2002) also suggests developing programmes for training 2Els teachers to be experts in teaching 2ELs and they should be equipped with suitable strategies and tools because these students have high chances of success, yet unfortunately within the regular education system in US they can become underachievers, as their teachers usually focus on their deficiencies and feel frustrated and helpless due to a lack of strategies. I was informed by Reis et al. (2000) that examined a large group of college students diagnosed as GT with SpLD (2Els) that were studying in special accelerated programmes for gifted, and also were supported by special education teachers that help them to cope with their deficiencies. Their aim was to find out which compensation strategies would help them to succeed in studies. The findings demonstrated that these students were more successful in their college studies than they had been in high schools. Most of the students reported that in high schools they received support only to address their learning disabilities and that the focus on this did not help them to develop their HOT skills as they do now in college. The students reported that they learned to reconcile the conflict between their high capabilities and disabilities by means of the compensation strategies such as developing their strong points as HOT skills side by side with setting goals, designing schedules, consistency in reaching goals and acquiring strategies that were focused in assisting them to bypass their disabilities. This information inspired me in preparing a manual for 2Els teachers' CPD.

Kaniel (2006) was very influential in his suggestion of a model of learning for teachers that takes into account both teachers and students: the first step is to both identify the difficulties and needs, and the second step was to develop strategies that meet these needs. Kaniel's approach fits in well with my experience and beliefs as a senior practitioner and I used this as a basis for the CPD programme I developed: first, to inquire into both teachers' and 2Els' needs and then to develop a model of strategies that can adress their needs. It is important to teach teachers when and how to use strategies in their lessons. Also, Manor-Benjamini (2005) argues that one recurring problem in teachers' learning is the lack of a follow-up to support teachers during the implementation of training programmes. I took it into account when I developed a training programme for teachers and I planned to mentor them during the implementation of strategies in their classes.

One prominent claim mentioned in the literature is that most of CPD are dedicated to the content of the discipline, rather than on the strategies needed to improve the learning process. As a result, the teachers neither know about, nor are they trained in the use of, these strategies in their classes (Kaniel, 2006; Manor-Benjamini, 2005; Melitz & Melitz, 2002). Among the reasons for this is the assumption that the students will acquire strategies by themselves and that the teachers' role is to impart knowledge not strategies. But students, and especially those with learning deficiencies, have difficulties in acquiring and implementing strategies by themselves. It demands significant effort and time from the teachers to teach and practise the strategies with the students and to focus on individually oriented teaching methods (Kaniel, 2006). The time needed to teach strategies in regular lessons is usually scarce because teachers have a planned programme and a required schedule to meet and are required to demonstrate results to the schools' inspectors (Kaniel, 2006; Melitz & Melitz, 2002). Kaniel (2006) defines a strategy as a set of activities aiming at achieving a goal in the most optimal way. According to Harpaz (1998) and Renzulli et al. (2007) the most efficient learning strategies are those that influence thinking skills because the quality of learning is a function of the quality of thinking skills, and therefore the focus should be on teaching and practising strategies in this domain. According to Melitz & Melitz (2002), the learning process is a form of finding solutions to problems that includes the tailoring of an appropriate strategy. Different situations in the learning process require different strategies, because some are effective for solving one situation while not necessarily good at solving another. Melitz & Melitz (2002) describe the learning strategy as a complete plan that includes different skills and tactics.

There are certain criteria for selecting the strategies to be taught in CPD programmes and to be implemented in class. The integrative approach presented by Kaniel (2006) stresses that strategies should be implemented simultaneously as an integral part of the discipline's content, so that it will be relevant and useful for the students as well as increase their motivation to learn. Harpaz (1997) opposes the integrative approach and recommends teaching the strategies as an independent subject. From my professional experience, I realised that the integrative approach is more practical and effective, and especially to teachers of students with special needs such as 2ELs. These students struggle to learn the content of the disciplines and have difficulties in transferring strategies by themselves from one domain to another. The literature indicates that it is important for these students to be able to develop the ability to transfer knowledge and strategies from one domain to another (Salomon, 2000). Heiman (2011) argues that students with learning difficulties struggle to develop this ability by themselves, and therefore it should be taught and practised together with teachers and students. Kaniel (2006) emphasises that the strategies that students find difficult to apply independently should be taught in the teachers' CPD programmes, so to enable the teachers

to acquire the strategies and the ability to implement them in classes. Melitz & Melitz (2002) suggest that CPD programmes should include only those strategies which are easy to teach and apply and that will have practical results in the short run.

According to Heiman (2000) criteria that assess the efficacy of the strategies should include how fast the students improve their performance and whether or not the students can use these strategies in the long run, without requiring additional training. Kaniel (2006) suggests that teachers teach the strategies methodologically using explicit explanations and systematic exercises until the students master the strategy. Explicit and methodological explanation is very significant for students with learning difficulties, because they struggle to acquire the strategies without assistance. Kay (2002) points out that an important criterion for choosing the strategies is to meet students' specific needs. These strategies should be tailored to the target population and it is imperative to have the programme continually assessed and improved. According to Freeman (2001) and Ziv (2000), one of the prominent characteristics of GT students is their High Order Thinking (HOT) skills. Therefore, an important criterion in planning CPD for their teachers is to choose strategies that develop and nurture these skills. Shaked (2007:2) argues that GT students may think differently and sound 'weird' and 'crazy' to their teachers and continues by saying that teachers need to be taught how to allow GT students the freedom to ask questions and express unconventional ideas thus assisting them to be original yet sceptical, as she calls it, 'knowledgebased scepticism'.

Maman (2007) argues that GT students invest much time and effort in the first stage of understanding and defining a problem or a question to be solved. Their flexibility and capability of seeing the problem from different perspectives encourages them to be in this stage longer than needed, whereas other students usually accept the questions as given and immediately move on to the next stage of answering the question. The second stage of problem solving or answering the question is very problematical for 2ELs in the HS; they have problems in writing and expressing their knowledge, and thus demonstrating their abilities. For this reason, Maman (2007) and Shaked (2007) agree that it is important to instruct teachers about the characteristics of their students and to teach them the relevant strategies that might assist them in meeting the special needs of their students so that they can create an environment that respects different ideas and original, creative thinking. According to Kershner (2007), brainstorming during lessons is recommended for meeting GT students' needs in order to nurture their HOT skills and minimise their boredom. Therefore, teachers should be taught how to manage lessons with this in mind. Kay (2002) emphasises that, first of all, teachers should be taught to identify 2ELs characteristics and then to acquire appropriate strategies to assist them in their learning processes. I also believe that if teachers will learn about

these students and their needs it will bring about a change in teachers' attitudes towards them and in the way teachers address their students. There are models of teaching strategies that assist students with difficulties in their studies.

According to Kaniel (2006) each strategy has a theoretical background as well as practical methods of application. Theoretical background explains why the strategy is vital in learning. The theoretical explanation is an important step in the process of learning strategies and includes explaining the strategies' elements and the importance of teaching them. Melitz & Melitz (2002) add that then come practical explanations of how to use and to measure strategies' efficiency and success. By explaining these points, the strategy can be transferred from theory to practical implementation. Melitz & Melitz (2002) recommend 'The Two-Stage Model' of teaching strategies that consists of input and output stages regarding which strategies are important to learn and how to implement them in practical fields. In the input stage, firstly, teachers should learn the theoretical background of strategies, defining the goals, planning the learning schedule, organising the materials, and then learning how to use the strategy to solve problems or to prepare assignments. Some strategies are similar in all disciplines such as a strategy of organising the schedule and material, to teach how to plan the schedule before an exam and to assure that all the learning materials are in hand, but in various disciplines there is a need of differentiation of strategies. For example, strategies in mathematics differ from those needed for writing texts or answering questions in the humanities subjects. The second stage is the output stage in which teachers implement the strategies in their classes. For example, implementing a strategy of following a template in writing an assignment is one of the strategies that assists students to develop their writing skills and meet the discipline's demands (in Israel). Teachers are taught to teach according to these demands, hence when teachers are provided with strategies that assist their students' needs, they will be able to transfer these strategies to their students and mentor them in the process of implementing these strategies in their assignments. 'The Two-Stage Model' (Melitz & Melitz, 2002) is a systematic model of teaching strategies that inspired me in planning the manual for teachers in this study. Then I wrote the model of three strategies (AAAMS, Salem, 2014) and I included my model into the manual. From my practical experience, teachers can adopt these strategies and utilise them in their 2Els classes because they are efficient and simple to employ and it is important to teach the teachers how to employ strategies as Heiman (2011) and Margalit (2000) claim that teachers should learn and experience strategies by themselves and then they can intermediate (Feurstein, 1997) them to their students.

Shaked (2007) developed a set of strategies for teachers who face the challenge of teaching GT students. These strategies provide tools for developing High Order Thinking (HOT) skills and for

acquiring a deeper level of learning; however, this requires that teachers be trained in these strategies. One of the most important strategies in Shaked's model is "Asking Questions". This strategy aims to enhance an understanding of the subject from various perspectives, to recognise the language and patterns of each discipline, and to develop critical and sceptical thinking in each subject. This strategy suits the characteristics and needs of GT students, such as their passion for knowledge, curiosity, and ability to think abstractly, the capability as well as their ability to ask intelligent questions and to examine things from different angles. Using this strategy helps in developing HOT skills and might prevent the boredom which is so common with GT students (Freeman, 2001). Asking questions strategy uses different types of questions posed by teachers to their students, such as clarifying, directing, or asking critical questions which challenge, expand and enrich the students with knowledge. Clarifying questions challenge the knowledge that the students already have. Directing questions stimulate thinking, inquiring about the students' opinions on specific subjects, and also enables them to learn about the opinions of others. Critical questions aim to develop critical thinking, to teach the students to look at a subject, and to ask questions about it from various angles. From my experience, this strategy is powerful and beneficial and enables a learning environment that stimulates and develops students learning.

According to Kaplan (2007), it is important to diversify the curriculum for GT students by planning specific enrichment clusters in different subjects. In diversifying, teachers assume the role of a mentor and by transferring the responsibility for inquiring and being creative onto the students, they become facilitators of learning. Renzulli & Reis (2007) think that learning based on inquiry provides various ways for the students to experience some control over their learning process. Ziv (2000) claims that vital tools needed by teachers who work with GT students include strategies such as analysis and synthesis, asking questions, and developing critical thinking and communication skills. Kay (2002) describes research that took place in the US and found that teachers who received training in appropriate teaching methods to meet the needs of GT students tended to be more supportive of the students and their special programmes. Teachers who did not receive this training tended to be indifferent and even hostile towards the needs of their GT students. Shaked (2007) and also Kaplan (2009) contributed to my knowledge about the type of strategies that nurture HOT skills especially with GT students and the importance of training teachers to internalise in their curriculum these strategies.

As mentioned before, Freeman (2001) as well as Ziv (2000) claim as one of the significant characteristics of GT students their High Order Thinking (HOT) skills which include a variety of capabilities and ways of thinking. Costa (2006) compares this thinking to a powerful focused laser beam that directs the teaching and evaluation of the learning processes. HOT is the ability to make

an analysis of ideas or concepts and then to synthesise this knowledge in order to find answers to complex problems (Iger, 2009). According to Resnik (2001), HOT skills are neither clear nor predefined and very often the thinking process involves multiple thinking skills such as solving problems, and asking questions, making assumptions and developing theories. Facione (2000), Guay et al (2010), Harpaz (1998) and Renzulli et al (2007), include in HOT skills the capacity for critical thinking such as searching for and assessing information from different sources, making decisions, weighing various solutions and selecting the best, searching for alternative points of view, and focusing on the main issues. Halpern (1998) and Salomon (2000) described HOT skills as having the capability of self-reflection and metacognition.

Beyer (2001) and Guay et al (2010) argue that the overall goal should be to enable the students to advance beyond acquiring knowledge, to a level where they can understand and solve problems, make decisions, and evaluate their judgments. They based their argument on Bloom's Taxonomy (1956) that describes a hierarchy of six thinking levels (knowledge, understanding, application, analysis, synthesis, and evaluation) and argues that development through all these levels is crucial to the learning process at every age and for each subject. In order to develop the students' capabilities, the learning process should be planned according to these thinking levels because skills develop from the basic levels of gathering information to the HOT levels. From my professional experience, when it comes to 2ELs it is important to assist them in low skills and accelerate their high-level skills, especially if they have learning disabilities as Heiman (2011) points out that 2ELs need assistance while struggling with multi-word writing assignments. Passig (2001) added to Bloom's Taxonomy a seventh level of thinking that he called Melioration (See Appendix 2.3.). This level is a High Order Thinking skill that requires synthesis of the information, ideas, and/or strategies from various sources in order to develop new ideas and apply them in new situations. At this level the students access their existing knowledge and use their thinking skills in order to solve new problems. Pasig's idea of melioration was a trigger for me in the process of designing my study. It challenged me to develop a model of three strategies, the AAAMS model (Salem, 2014), in order to apply it to the needs of 2ELs and I included it in the intervention programme of the recent research. In the AAAMS (Salem, 2014) I combined my two domains of professional knowledge and experience: the domain of teaching students with SpLD and the domain of teaching gifted students. My interpretation of Passig's seventh level of thinking: melioration, involved the synthesis of knowledge and strategies from the literature and from my professional experience, in order to develop a new model of strategies and to implement it in classes as a specific response to the needs of 2ELs. Utilising the AAAMS could equip teachers with tools to assist their 2ELs to overcome their difficulties and nurture their High Order Thinking skills. An

important point to be included in 2Els teachers' CPD is what Lombardi (2007) emphasises about the importance of developing 2Els students' thinking skills to the point of being experts because it is appropriate to the characteristics of these students. Teachers should learn strategies to develop within their students' various skills such as explaining, convincing, negotiating, working in a team, analysing and organising information. These thinking skills would enable students to identify and solve complicated problems which will be crucial to the students' future career in the 21st century.

A debate exists regarding two approaches about the way to integrate HOT skills in the process of learning in school. Iger (2009) represents the integrative approach and argues that developing HOT should be incorporated into the education programme for all levels and ages so that the students will persistently and consistently develop and implement their thinking skills. Resnik (2001:48) claims that developing HOT enhances the students' intelligence and refers to it as 'intelligence in action'. Perkins (2004) stresses the importance of integrating HOT skills into everyday life, for example; it is important that students should learn how to think critically when confronting various sources of knowledge on TV or in the newspapers. Also, Shaked (2007) insists that it is important to integrate the development of the capability to solve problems by questioning and checking alternative possibilities. Salomon (2000) argues that the students find it difficult to transfer strategies from one domain to another by themselves so it is necessary to integrate strategies to develop HOT skills together with the learning materials. I was informed by Elder and Paul (2009) and Heiman (2011) that the integrative approach is more effective for students with SpLD because they find it is difficult to transfer strategies from one field to another by themselves. It is important to teach HOT skills within the curriculum, in order to enable the students to develop tools for coping with the great amount of information of our era and critical thinking should make learning relevant to the students (Weiss, 2010; Weiss & Kreindler, 2011). The education system should nurture-independent and critical thinking, seeing knowledge "as a means rather than a goal" (Harpaz, 1998:14). Lipman (1988) represents the opposite approach and believes that HOT skills are an independent subject that students need to learn the tools and then they will implement them in the disciplines and in everyday life. As a teacher I integrate strategies in my curriculum to nurture HOT skills and I find it effective to teachers' and students' learning processes. The next section reviews one of the predominant skills of HOT: critical thinking, that should be nurtured and teachers should learn about its characteristics and about the strategies to employ to nurture this skill in their 2Els classes.

2.6. Critical Thinking

Critical thinking is one of the predominant skills of High Order Thinking (HOT) (Enis, 1989; Elder & Paul, 2009; Harpaz, 1998; Paul, 1992) and is the ability to analyse and assess arguments logically and with reflective thinking. Critical thinking is about casting doubt on worldviews and beliefs and has been defined as the intelligent use of attainable knowledge to solve a specific problem (Facione, 2000; Renzulli et al, 2007). Critical thinking is demonstrated in both cognitive and affective skills as I will detail later on this section. Cognitive skills include dialogue thinking - considering the points of view of peers (Elder & Paul, 2009; Harpaz, 1998), thinking in terms of assumptions (relating to opposite points of view), searching for accurate and reliable sources of information, and having the capacity to change position and to avoid judgement when there is not enough information. Shaked (2007) argues that cognitive thinking skills include being able to clarify questions and problems, ask questions and draw conclusions. According to Iger (2009:16):

"Critical thinking is possible only when the learner understands and recognises the principle of relativism by which the information is not unequivocal and must be linked to previous knowledge and specific context. The process takes place specifically in teaching by means of researching problems and of solving authentic problems."

Iger (2009) has suggested a list of cognitive strategies characterising critical thinking as a component of HOT, such as comparing and opposing ideas, evaluating and examining assumptions and arguments, making distinctions between similarity and dissimilarity and between primary and secondary, examining outcomes and consequences, identifying contradictions, critical reading of sources, asking questions and having doubts. It is most important to develop these skills within students and especially with GT students because they have high capabilities that need nurturing.

Zohar (2000) posits self-management as one of the skills characterising critical thinking. It is composed of meta-cognitive thinking (which is the reflective capability of understanding the processes of thinking and behaving) and controlling the thinking processes. Manor-Benjamini (2005) refers to affective strategies of critical thinking, such as developing meta-cognitive thinking skills through introspective capability. It is important to develop the capability to acquire insights during the process of learning and to examine the emotions that guide the students in this process as also Iger (2009) points out that critical thinking includes self-examination and the maturity to disregard interfering emotions such as pride, dominance and excess criticism which are some of the characteristics of GT students. Renzulli et al. (2007) argue that it is very important for GT students to develop a degree of humility.

An additional affective aspect is raised by Shaked (2007) who argues that critical thinking involves asking sceptical questions and raising doubts which are relevant to the subject matter of the lesson, and though it may seem like a rebelling behaviour against the norms of the school or society, it may only involve free thinking and teachers should encourage it. Harpaz (1998:231) suggests "developing the critical thinking within the framework of the education system". His guiding principle is to help students develop flexible, open and autonomous personalities which will stand by them in good stead for their future. Harpaz (1998) regards the difficulties of applying strategies to develop HOT skills in schools. The difficulties arise mainly because schools rely on a planned schedule and curriculum in order to achieve results that meet the criteria of the education system. Teachers are trained to impart knowledge, not to mentor or develop critical thinking skills, and they complain that they do not receive training for developing HOT skills. For example, an additional skill to be developed in schools is the ability to transfer insights and strategies to new situations. The next section reviews this skill.

2.7. Transfer Skills

The skill of transfer of insights and strategies to new situations is also important in developing HOT skills. It is especially vital in learning processes and in its consequences on teaching (Keren, 2007; Salomon, 2000). Swartz (2007) reviewed several research studies which concluded that the difficulty of teaching thinking strategies as a separate subject arises from the difficulty of transferring the strategies from one subject to another. When HOT skills are taught separately from the content of the subjects, the students find it difficult to transfer the strategies by themselves to other disciplines or areas of knowledge. Salomon (2000) argues that it is very important to develop these skills and that students cannot learn easily by themselves with concise and methodical training. Kaniel (2006) categorises the transfer process in three stages. The first stage is the acquisition of knowledge or strategy. The second is the transfer stage in which the students learn how to transfer the knowledge acquired to a new situation, and the third stage - preservation involves preservation of the knowledge as well as the ability to use it in different areas. He distinguished between positive and negative transfers. A positive transfer is when principles or strategies are transferred correctly from one area to another and the students' achievements improve. A negative transfer occurs when transferring the principles worsens or does not improve performance in other areas. Kaniel (2006) emphasises that teachers need to learn about transfer and how to teach students how to develop it. In this way teachers, will develop awareness and improve their transfer skills in order to use them with their students. I also adopted Salomon (2000) and Swartz's (2007) suggestion about the infusion method which includes infusing systematically strategies and methods, such as transfer, into the curriculum of each discipline. I have adopted this

method to my intervention programme due to its practical efficacy. The next section reviews an important principle in learning processes, learning from success, as one of the HOT skills that should be nurtured at school.

2.8. Learning from Success

According to Koren and Yogev (2004), learning from success is a powerful developmental tool for people, teams, and organisations. This kind of learning encourages searching for the factors that bring about success and the structured and conscious use of these factors in order to continue being successful. Also, Rozenfeld et al. (2002) and Seiks and Goldman (2000) agree with this approach and add that it is built on finding success stories from academic or professional activities and identifying factors of success by focusing on the principles that led to that success. Success stories should be documented so that they can be reconstructed and used as examples in order to increase the chances of also achieving success in the future and in different situations. From this it can be deduced that learning from success is an important principle to be incorporated in CPD for teachers. As Einat (2004) argues and also Kusminsky (2006) stresses, the sense of success allows both teachers and students to confront challenges and enhance their self-image, sense of capability, and motivation to improve their teaching methods. Harter et al (1992) and Piirto (2002) say that learning from success bestows a sense of success and minimises the sense of failure and it is especially important for students with learning difficulties who suffer from a low self-image and low motivation to learn as Plotkin (2008:16) described them: "They (the students with SpLD) live in the shadow of negative experiences, feelings of inferiority, shame and guilt" and therefore teachers should be trained to include the principle of learning from success in their teachings methods in classes.

2.9. Active Learning

Active learning is a method of teaching that Salomon (2000) suggested in order to develop HOT skills. It is a process of acquiring knowledge with an active involvement of the students in solving a challenging problem. This is a method in which the students are involved in designing their learning environment. Salomon strengthens my opinion about the effectiveness of this method. I use active learning methods in all my classes, and particularly in the class of GT students. I found it to be a very effective way of countering the boredom that characterises GT students as Freeman (2001) says by developing an atmosphere of interest that satisfies the curiosity of the students. In addition, Salomon (2000) suggests the interdisciplinary principle, which means confronting a problem or acquiring knowledge by using different disciplines simultaneously. An example would be teaching a chapter in history together with a relevant piece of literature, art or music. This is

based on the knowledge that the students already possess and enables them to search for and acquire new knowledge in different ways. I implemented this principle of Salomon in the teachers' CPD programme, because it is best suited to the characteristics of the GT students as I described previously in this review. Salomon (2000) also claims that teachers should be trained to see their roles as mentors rather than a conduit for passing on knowledge. I agree with Salomon (2002) that a role of a teachers being facilitators is also greatly beneficial to the teachers, because they teach but also learn from their students at the same time.

The manual, which I decided to produce for CPD for 2Els' teachers in HS, is based on the literature review and on my professional experience. I studied different strategies from the domain of critical thinking (a significant component of High Order Thinking) and from these I selected the strategy of Asking Questions (Shaked, 2007) as one of the strategies that aim to develop critical thinking. I also selected two strategies from the domain of special education in order to treat the deficiencies in writing skills. I developed the AAAMS combining strategies from these two domains. I included the model in the manual for the teachers' CPD seminar as well as the methods I adopted from the literature such as infusion, active learning, transfer, learning from success, peer-learning and use of technology. The manual is accompanied by face to face training sessions in order to make sense of how they can improve their practice. In the next sections I will review the strategies and methods that are relevant to my manual and their implementation in the teaching process.

2.10. AAA Model of three strategies for 2Els (Salem, 2014)

2.10.1. First Strategy – Asking Questions Strategy (AQS)

Kaplan (2007), Melitz and Melitz (2002) and Shaked (2007) suggest different strategies that can be employed by teachers in separate classes of 2ELs and they recommend on the strategy of Asking Questions as an efficient and useful strategy for all disciplines. Melitz and Melitz (2002) believe that there is a direct connection between asking questions and developing thinking:

"There is no thinking that was not born by a question. A question is a basic condition for the development of cognitive and metacognitive processes" (Melitz and Melitz, 2002;145).

Manor-Benjamini (2005) says that AQS develops the students' metacognitive capability (awareness of thinking processes), memory and acquisition of knowledge, scepticism and curiosity and it helps all students, but especially the GT students because of their highly-developed thinking capability. Nicpon et al (2011) argue that meta-cognitive capability needs to be developed with

intellectual stimulation and challenges, because gifted students are naturally curious and often have an extensive general knowledge. AQS nurtures these characteristics and develops their critical thinking. According to Shaked (2007) the assumption behind this strategy is that the question asked is the source and initiator of the thinking process. Students who do not ask do not develop their thinking. A question leads to inquiring and learning. It creates curiosity and motivates thinking. It helps the students to classify, to choose between various options, to add knowledge and examine situations. Harpaz (1989) argues that nowadays teachers' role is to teach knowledge and ask the questions. This is based on the idea that teachers own the knowledge and knows the questions but to his opinion this attitude needs to be changed, and teachers should be trained for their role as mentors especially when teaching GT students. Shaked (2007) suggests involving students in searching for unsolved questions and thus stimulate them to behave as experts. Kaplan (2009) points that AQS is well fitted to the characteristic behaviour of GT students who ask complicated and intelligent questions, and view things from different and creative angles.

In the literature, there are different models for teaching the strategy of asking questions in humanities subjects. For my WBP I needed a model which would be practical, efficient and simple to teach and learn, and which would be suitable for all humanities disciplines. I selected two models that meet these criteria and integrated them into the manual I prepared for the seminar in order to train the teachers. The first model is Rafael's model (1998) of Asking Questions. The model is built from three types of questions that can be used when learning texts in various disciplines. The model classifies the questions as a tool for developing HOT skills, such as critical thinking, transfer, analysis and synthesis (in; Melitz & Melitz, 2002). The first type is questions with the answer in the text. The second type requires thinking and searching in the text and demand higher cognitive abilities. The third type of question uses the general knowledge of the students. According to Ziv (2007) asking questions strategy satisfies the students' curiosity and their desire to carry out independent research and to acquire knowledge and is especially suitable for GT students (See Appendix 2.4).

Singer (1978) offered a different Model of Asking Questions. This strategy is intended to train the students to ask questions in three stages while learning texts (cited in; Melitz & Melitz, 2002). The first stage is asking questions before reading the text, the second stage is asking questions while reading the text and the third stage is asking questions after reading the text. It should be pointed out that this model of asking questions is focused on asking questions about texts that the students have not yet read (See Appendix 2.5). This model helps to develop HOT skills, and to connect students' previous knowledge with the new information they have gained in this process. The purpose of applying AQS according to Singer's model is to produce an active learning as Salomon

(2000) suggests when students direct their thinking and become autodidacts and the role of teachers is to be mentors and to intermediate the knowledge as Feurstein (1997) recommends.

2.10.2. Strategies from the Area of SpLD in Humanities Subjects

Another principle that led me in choosing specific strategies is that they must make a contribution towards students who face difficulties within the subjects of humanities. According to Bourne (2008) the predominant learning difficulty of 2ELs is manifested in writing. These students are challenged by deficiencies in expressing their knowledge and abilities especially in writing skills. The strategies I chose are Analysing Questions (ANQS) and Answering Questions in a Template (AQTS). From my experience as a teacher and as a teacher of teachers in special education and supported by Heiman (2011) and Kaniel (2006), I know that combining these two strategies contributes towards improvements in the performance and achievements of students with learning difficulties. Combining the strategy of AQS (that deals with HOT skills) together with the strategies from special education (that deal with disabilities in writing) can meet the dual needs of students with SpLD. According to Neilsen (2002) 2ELs have the same characteristics as students who are not GT but have only SpLD, because when it comes to their struggle in humanities subjects such as History or Literature, their deficiencies are escalated. Heiman (2002) says that students who have SpLD find it difficult to develop strategies automatically. Therefore, they need teachers' assistance to acquire the strategies. Manor-Benjamin (2005) claims that very often there is a deep gap between these students' abilities and their low achievements in writing assignments. Nielsen (2002) points that 2ELs can demonstrate orally their wide general knowledge and high capabilities but their significant difficulties will be demonstrated in writing and they need to be taught the strategies by their teachers methodically stage by stage. My opinion is supported by Kaniel (2006) and Melitz & Melitz (2002). They emphasise that students with SpLD need to practise the strategies in HS in order to be able to assimilate the strategies and transfer the applications of the strategies to different subjects.

2.10.3. Second Strategy in AAA model – Analysing Questions (ANQS)

According to Kaniel (2006) the purpose of ANQS is learning to break up the question into its various parts in order to help students understand the question and focusing students on the subject and the instructions in the question and thus preparing them to take the next step and answer the question properly. This strategy must be taught methodically with constant practice if the students are to be able to assimilate the strategy and apply it whenever they need to understand questions. ANQS meets my criteria in choosing strategies for my intervention in my WBP because it is easy for teachers to implement in their classes and also it is suitable for all disciplines and can help

students with SpLD in HS to overcome the problem of understanding the question and to focus on the assignments.

2.10.4. Third Strategy in AAA Model – Answering Questions in a Template (AQTS)

According to Kaniel (2007) AQTS is an important tool for improving writing skills, especially for students who have difficulties with writing assignments. The purpose of this strategy is to learn how to write answers in the appropriate patterns according to the requirements of various disciplines especially in the Israeli Department of Education (2016) that has clear demands of templates in writing assignment in each discipline as I previously explained in this review. Both the literature and my experience have illustrated to me that using this strategy helps students to bypass their difficulties and demonstrate their capabilities as well as their knowledge in writing assignments.

There are various models and strategies for the development of writing skills. After searching in the literature for such strategies that meet my criteria (like the strategies suggested by Kaniel, 2006; Tov-Li, 2000; Vohal et al, 2002), I decided to use the four-stage model of Melitz & Melitz (2002) for improving writing skills. The four stages are Planning, Translating, Reviewing and Revision (See more details in Appendix 2.5) and is built stage-by-stage in a logical and methodological way and is a good basis for training teachers. This model meets my criteria because it is simple and efficient to teach and can be used in all disciplines. AQTS helps students who have with difficulties in finding words and sentences to express their knowledge in writing assignments because. It enables them to start answering questions, to formulate the information they have, to relate to the subject of the question and to organise the material and knowledge they possess in order to write an answer. The strategy of writing in a template helps the students to understand clearly and methodically what they need to do stage-by-stage, and to focus their energy on the various stages of writing answers instead of struggling with the assignment (Heiman, 2002). Therefore, teachers should teach this strategy to the students and practise it with them so that they will internalise the strategy and use it in their studies. It is especially important in the Israeli education system that demands a unique pattern of answering questions in each discipline, but this strategy can be suitable for all writing assignments.

From the literature review and my experience in the field I conclude that combining the two strategies (AQS and AQTS) will give teachers the tools to teach their 2ELs how to overcome their difficulties and to fulfil their high levels of ability. All three strategies mentioned are useful for all students as Kaniel (2006) and also Melitz and Melitz (2002) say but even more so for 2ELs because

these strategies are focused simultaneously on their characteristics and needs arising from their high level of abilities together with their SpLD in HS.

2.11. Conclusion of Review

The literature review examines the existing knowledge in the fields that are relevant to the topic of this study about the challenges of teachers who teach gifted students with learning disabilities (2Els) in an Israeli high school and inquiring what makes a difference in teachers' learning processes. Although this research is focused in an Israeli context I was informed by Israeli and international literature about the existing knowledge in this domain. The review investigates the policy of the Israeli educational department where this research was conducted and its impact on the teachers' challenges in teaching Humanities Subjects in separated classes of 2Els. The Israeli policy has implications on the way teachers are teaching and on the CPD they need in order to learn how to meet their 2Els needs. The review also inquiries the educational policies in several countries in the issue of 2Els and CPD for their teachers. The main argument in this area is about the lack of enough focused CPD for these teachers and its implication on teachers' self-efficacy as Day and Gu (2010) argued. The review informed me about the main themes and debates in this issue and empowered me to research this area from the point of view of the teachers. In the beginning, I was more interested in the students' points of view but the more I learned from the literature about the void in 2Els teachers' CPD programmes I realised that I am passionate to research the subject of 2Els teachers' learning as Poultney (2017) argued that teachers' research usually arises from their natural field. The major consents that were the basis of my conceptual theory: definitions, characteristics and needs of 2ELs as a crucial knowledge to be learned by their teachers (Manor-Binjamini, 2005). I was also informed about alternative models of teaching strategies that teachers need to learn in order to improve the learning environment and their students' outcomes.

Reviewing the literature has strengthened my conceptual theory that the learning process should include issues like mapping teachers' visions, needs and re-thinking their attitudes and methods. Then the CPD programme should meet these needs and it should include also specific strategies that can answer 2Els dual needs. I realised that the more teachers receive information and practical experience in using strategies during CPD' programmes, the more they will be able to implement them in their classroom as Melitz & Melitz (2002) said that the translation of theory to practise achieves praxis. If teachers will acquire the relevant knowledge and methods they will take an active part in their learning processes and they will be more able to face and deal with their challenges. It is a long process of learning and it will take time to change teachers' attitudes and methods but a continuingly process of learning and practicing new methods can start such a process.

One main theme coming out of the literature is about the ambiguity and disagreement concerning the definitions, characteristics and needs of 2Els which has implications on the lack of adapted CPD programmes for their teachers and it is especially prominent in teaching HS. This lack led me to learn and investigate about this issue in the literature and to offer a CPD focused on 2Els teachers' needs for example, to provide teachers with specific strategies so they will be capable to tutor their 2ELs and to lead them to enhance their points of strength and simultaneously to bypass their points of weakness. In this review were questioned several models of teaching strategies that are employed in the practical field in order to learn if they could be effective to utilise them in this research CPD. The literature assisted me in selecting the strategies that were the basis of the CPD of this research. In addition, this review has informed this study on the debate about what makes a difference to teachers' learning programmes in order to employ in the recent research's CPD for 2Els teachers. For example, it is crucial to involve teachers in the processes of planning their CPD and especially it is effective when the CPD take place in their schools. Additional principles that I adopted from the literature in this research were that effective CPD should focus on teachers needs and then teachers should experience and train the strategies they learn before teaching in their classes. Then it is crucial that they will be mentored in the process of employment of these strategies in their classes.

An additional debate that lies in the background of this research is about inclusion versus segregation in education and especially in Israeli schools as this research took place in separated classes for 2Els in an Israeli high school. The leading approach in education is full inclusion as manifested by UNESCO declaration (2016) and also by the OECD (2014) and also in Israeli education. The humanistic principles are the guidelines of this researcher's ontological and epistemological points of view and it is most important to give to all kinds of students the same options to develop and to succeed. As presented in the review, some Israeli authors emphasise full inclusion as their approach in the area of 2ELs, and others encourage separated classes for 2Els in order to accelerate their studies. My professional beliefs point inclusion of these students in the regular schools but also there is a real need to see their special needs and to prepare their teachers to provide them with tools to develop both their high abilities and to support their disabilities in writing skills and to improve their outcomes. As one of my school's leaders, I lead inclusion of 2Els in all social activities with their peers although they study in a separated class. Thus, we make efforts to provide these students with accelerated programmes and supportive strategies but simultaneously to include them in regular society.

The aim of this research is to provide responses to four research questions that grew from the literature in order to develop a new body of knowledge in the field of teachers' learning especially

in the area of teaching HS to 2ELs. As for the first RQ, the research looks for challenges 2Els' teachers face while teaching HS that demand writing skills and the second RQ investigates characteristics of 2ELs in HS in order to detect their needs. As for the third RQ, it inquiries into the contribution of each one of the three strategies of AAAMS (Salem, 2014) to improve teachers' learning of differential methods of teaching and thus to assist them to nurture and develop their 2ELs high capabilities while at the same time overcome the barriers and difficulties that make these students underachievers. As a response to the fourth RQ, the study inquired the effect of the whole intervention of this study to the processes of changes in teachers' learning and in employing of the model of three strategies (AAAMS) in 2Els classes during the academic year. This research intended to inquire the effectiveness of a CPD programme that provides teachers with appropriate knowledge and strategies that meet their focused needs and thus it can excite enthusiasm and joy in the learning process and empower teachers' self-confidence and self-efficacy.

The innovation of this study lies in the original combination of knowledge and strategies that were taken from different domains (from the domain of accelerated teaching for gifted students and from the domain of supporting strategies for students with SpLD) that provide teachers with a focused CPD that meet the needs of 2ELs. Not only teachers and students will benefit, but the entire school will be enriched as a result of processes of changes in teachers' learning, attitudes and methods. Teachers will be able to transfer their new teaching methods to all the classes they teach in school which will improve the learning environment of the whole school.

The review informed me about the main information that was the basis to my conceptual theory and the intervention of this study and guided me in the process of designing this study and the next section will look at the philosophical underpinnings that guided the research design, the research approach and methods that were used in data gathering, data analysis and the ethical principles that guided this study.

CHAPTER 3: METHODOLOGY

3.1. Introduction - Rationale and Focus

This chapter discusses and clarifies the philosophical underpinnings of this study that guided me in the process of designing the research, research paradigm, approach and methods that were used in data gathering, analysis and the ethical issues for this study. This study focuses on teachers teaching in separated classes of GT students in Israeli high school and inquiries the challenges teachers face while teaching 2ELs in their classes. The study investigates how learning relevant knowledge about 2Els and specific teaching strategies might help teachers in this field and make a difference to their learning and to their professionalism and improve their self-efficacy as teachers.

The most common trigger for educational research is the concern of practitioners that arises as a result of an issue or a challenge in their field that they want to investigate and thus to gain knowledge about this issue and then to improve it in their practical field (Poultney, 2017). I was triggered to plan this research because I realised that most of the Israeli 2Els teachers like myself need specific CPD in order to teach these students and there is a lack in this area. According to Kay (2000) and Manor-Benjamini (2005) the US and Israeli education systems do not give enough answers to 2ELs teachers' needs. So, the aim of this study is to discover new knowledge in this field in order to help these teachers and their students. From my experience as a teacher and as Manor-Benjamini (2005) also argues I realised that the specific strategies that fit the needs of GT students and those strategies that fit the students with SpLD can be integrated into a comprehensive model of strategies (see AAA Model, p, 5). I developed this model for this study and I also wrote a manual for teachers (see Appendix 3.1) and my aim was to explore the needs of teachers and students in this field, plan and implement an intervention based on these needs in order to learn about the contribution of the intervention to teachers and students in this field.

The study took place in an Israeli high school and focused on the special project of separated classes of gifted students with SpLD, undertaken by two teachers as a case study over the course of a school year and intervention was conducted in two classes who included 60 students. This research inquired specific strategies that teachers can employ in order to implement them in their 2Els classes. The study suggests five objectives:

 To find a response to the affective aspects; to develop the teachers' awareness about gifted students with SpLD and to increase their professional commitment and responsibility towards these students.

- To meet the cognitive aspects by expanding the teachers' knowledge about the characteristics and needs of these students, about alternative teaching methods and strategies that can benefit the students and how to integrate these methods into the existing programmes for each subject.
- To meet the organisational aspects by improving the ability of teachers to plan and organise
 their time and the process of teaching in class. This helps teachers to meet the different
 needs of students taking into account the standards and outcomes expected by the
 educational system.
- To write a manual for teachers of 2ELs in order to train the teachers and to give them tools to cope with the needs of these students.
- To assess the contribution of the intervention of this study both to teachers and students in order to turn it to a recommended CPD programme for teachers in this area.

3.2. The Philosophical Approach of the Study

Studies are based on researchers' epistemological and ontological perspectives. Cohen et al (2011) argued that researchers' perspectives have direct implications for the methodological choices they make. Ontological perspectives refer to the nature of the social phenomenon being inquired and there are two contrasting paradigms: the positivistic paradigm that dominates quantitative research, and the interpretative naturalistic paradigm that dominates qualitative research, or as Cohen et al (2011) call it, the 'anti-positivistic' paradigm. Paradigms are aligned to a set of values and beliefs held by a group of researchers who agree about 'rules of engagement' for how research in their area should be conducted (Shalsky and Alpert, 2004). My epistemological and ontological perspectives in my professional, as well as in my personal, life guided me to choose the qualitative approach which is based on the naturalistic constructivist paradigm since it stresses the importance of the subjective experiences of individuals in the creation of their social life. I am guided by the humanistic approach that places equality in the educational system at the top of its principles as declared in the World Education Forum (UNESCO, 2015). Additionally, I place individuals' needs in the centre of society's interests as was claimed by OECD (2014) who said that teachers should be provided with specific information and strategies for their students' needs, thus they become more self-confident, and improve their self-efficacy.

As a practitioner researcher, I was conducting my qualitative research in my natural environment and I was interested in the viewpoints and experiences of individuals such as 2Els teachers and their interpretation of reality especially in 2Els classrooms in my high school as Cohen et al (2011:15) argued:

"The social world can only be understood from the standpoint of the individuals who are part of the ongoing action being investigated and their interpretation of their world".

The epistemological perspectives refer to the nature of knowledge and how it can be acquired and as Cohen et al (2011) suggest, I was involved in the research field looking for a unique, personal, and subjective knowledge from the research sample. I favoured this subjective approach because I see the educational world as being personal and humanly created and I selected qualitative methods like: interviews and observations in 2Els classrooms that suited my ontological and epistemological perspectives. In addition, Yosifon (2001) argued that when researchers deal with processes in social and educational domains, there is not one truth. Also, Shkedi (2003) points to the existence of several possibilities to look at the reality from the eyes of participants. As an insider researcher, I chose to conduct qualitative research that enabled me to do so. On the other hand, the positivists' approach believes in a structured reality that exists independently of our individual beliefs and interpretations (Breen, 2007). Thus, positivists' approach does not fit with my epistemological and ontological perspectives. As a researcher, I am aware that there are different paradigms and approaches to research; however, I have a constructive philosophy that leads me to constantly learn and construct my reality from my natural environment. I believe, as Yosifon (2001) claimed, that there is no absolute truth, but different possibilities to interpret reality. I selected the constructionists-interpretative paradigm and the qualitative research approach because they suit best my perspectives and my goals which are: to inquire in depth (Yin, 2011) about 2Els teachers' challenges, and about what makes a difference in their learning processes in order to be able to offer ways to assist them in this domain.

The following authors strengthened me in selecting the qualitative approach. Shkedi (2003) emphasises that it is important to investigate the phenomenon from diverse angles but to use all means to minimise the subjectivity that risks the trustworthiness of a qualitative study. In addition, Shai and Bar–Shalom (2003) advocated that qualitative research can take place when researchers are practitioners-researchers who carry out the research in their natural environment of the school and thus it opened new possibilities in observations, studying and understanding human phenomena and processes. Thus, it contributes to the ability of practitioners to develop new bodies of knowledge in their own fields (Brantlinger et al, 2005; Harper & al, 2007; Willing, 2004). Taysum (2007:285) calls them "professional educationalists...teachers who wish to develop their knowledge, skills and experience as researchers". Also, Bourner, Bowden & Laing (2001) supported this approach because of the distinctive nature of a professional doctoral study that arises from professional practice and Drake and Heath (2011:7) argue that:

"The practitioners are not undertaking research simply for their own sake, but with practice-oriented application in mind".

The qualitative theory is inductively obtained from the particular case and can be generalised to other populations (Travers, 2001). Also, Lee (2009) points that qualitative research is best suited for processes that develop over time and is therefore most suitable for education or social science research. The qualitative approach requires the researcher to become immersed in the field (Breen, 2007). This kind of study does not require laboratory conditions or large samples as would be needed for quantitative research (Savir, 2005) but as Sabar Ben-Yehosua (1999) points out, it requires taking special means to obtain reliability and validity.

Brantlinger et al (2005) emphasised that, in qualitative research, data is collected in the field and for that purpose informants are chosen based on their knowledge of the subject. Once the data is collected the researcher uses a process called induction to generate theories about the development of the processes being studied. This is an interpretive method that requires the researcher to observe and interpret the processes being studied. No hypotheses are tested but the research questions are formed during the process of the study (Shenton and Dixon, 2004). On the other hand, the quantitative research starts with a theory and postulates hypotheses that are based on the extension of that theory (Shkedy, 2003).

Usually a quantitative researcher will seek to do his work in a laboratory environment and experiments will focus on drawing a random representative sample, as large as necessary to allow generalisation of the findings to the population being tested (Sabar Ben-Yehoshua, 2001). This is one of the points of strength of this kind of study but in social sciences and in education the qualitative research is based mainly on observation of participants in their natural surroundings and gives voice to their needs (MucDuffie & Scruggs, 2008). Indeed, the recent study took place in my school in order to investigate the challenges of teachers and their learning processes, and to find solutions to their specific needs, solutions that might be applicable in different schools' contexts in Israel. In addition, qualitative research fits in well with the aims of this study because as a practitioner-researcher (Shai and Bar–Shalom, 2003) I can implement what I have learned in my school and apply the knowledge to empower effective teachers' learning processes and minimise non-effective ones and thus I can contribute to improve the learning environment (Inbar, 2000; Zeichner and Noff, 2001).

In Special Education, there is an additional importance to qualitative research because it can explore in depth the more complicated learning environment. The teachers as well as the students are challenged with several deficiencies (Kaplan et al, 2001) and the principles of qualitative

research enable this field to be studied and to explore appropriate answers for their needs. 'By focusing on a participant's personal meanings, qualitative research 'gives voice' to people who have been historically silenced especially in the Special Education classes' (Brantlinger et al, 2005:199). This allows the researcher to view the field in a holistic manner without the need to isolate and simplify variables (Pugach, 2001) and, as Breen (2007) suggests, the researcher can use the environment in which these participants perform in real time in order to learn about their processes and needs. Shkedi (2003) emphasised that the researcher in qualitative research should focus on the perceptions, beliefs, experiences and understanding of the interviewees concerning their processes during the intervention. Cohen et al (2011) argue that although in quantitative approach these concepts are not counted as objective knowledge, the qualitative research should be judged by different criteria to enhance its credibility.

In summary, the philosophical perceptions of this study are based on the researcher's epistemological and ontological beliefs (Sabar Ben-Yehoshua, 1999) but it is still important to consider a number of options before deciding which methodological approach to take. The nature of this study leaded towards the qualitative approach because it fits best the issue of my research that is taken from the special education field and as I was a practitioner-researcher I needed to carry out the research in my natural environment. Qualitative methodology provides deep studying of human and pedagogical processes (Yosifon, 2001).

3.3. A Consideration of Research Approach

Qualitative research can be undertaken as pure research for the sake of knowledge without necessarily applying the findings and it can also be an applied research with the intention of using the data gathered in the research in practical ways (Drake and Heath, 2011; MucDuffie and Scruggs, 2008). Applied research seeks to solve practical problems and may be used to find solutions to problems and to develop new methods of work in human organisations. The research is conducted in the participants' own environment with the intention of implementing the research findings and conclusions in the field (Shalsky and Alpert, 2007: Shkedi, 2003). The characteristics of applied research fitted the aims of my study: to explore the needs, to implement the intervention and to investigate its contribution to teachers of 2ELs. However, I needed to critically examine various research approaches before concluding which one best fits the nature of my study (Cohen et al, 2011) and I considered action research. Hayes (2003) points out that action research overlaps with professional doctorate in order to investigate practical issues and create insights with small-scale numbers of participants but can be generalised. Waters-Adams (2006:4) defines action research:

"A practical approach to professional inquiry in any social situation. In education, it is of particular relevance to teachers...and its purpose is to understand and to improve those actions".

These principles of action research suited the issue of my study but I decided not to follow this approach because the research I designed was conducted in my school with only two teachers and two classrooms in a limited time and a limited option to implement the intervention. Hachohen & Zimran (1999) and these limitations do not fit an action research as Waters-Adams (2006) emphasises that action research has practical goals with the need to repeat actions during the research in cycles and needs to be proceeded in an action-reflection cycle or spiral. These principles were not suitable to the process planned for my study.

I also considered ethnography approach because my study is about human phenomena (Sabar Ben-Yehoshua, 1999) but my main interest was not in insights and I planned an intervention as it was the heart of my study and in order to evaluate the impact of this intervention I chose the case study. The case study was the approach that best fitted the nature of this study because it aims to expand understanding of the topic being researched and to investigate the contribution of implementation of intervention and it focuses on understanding the dynamics within the particular organisational environment (Shalsky and Alpert, 2004) and can shed light on the complexity of this environment and allows us to see the issue from different angles (Yin, 2008).

3.4. Case Study

The case study is used in the social sciences, anthropology and education in order to study human experiences and activities in a certain time and place (Sabar Ben-Yehoshua, 2001; Simons, 2009). The case study deals with one case in depth and for a period of time and in natural settings (Bassey, 1999; Yin, 1994). This is in contrast to the quantitative research paradigm that relies on multiple and large samples and raises questions about the limitation of case study. Yin (2008) and also Pring (2004) argued this by pointing out that the main goal of a case study is to examine and provide understanding of unique and particular issues. In this study the research field is an Israeli high school and the issue is to study in-depth 2Els teachers' needs and what makes a change in their learning processes in order to offer responses to these needs. The case study is relevant if one seeks to explain in certain circumstances: "Who, how and why some social process works" (Yin, 2008:4).

The purpose is to understand the case in depth and all its components and to focus on one or two issues that are fundamental to understanding the issue being examined (Yin, 2011). Also, Shalsky and Alpert (2007:214) emphasises that: "The case study focuses in depth on one unit or on a few

units" and it is a Bounded System that deals with one figure or a group of figures in an institution or organisation and derives its strength from the depth of the investigation rather than from the number of investigated objects. Also, Brantlinger et al. (2005) and Yosifon (2001) argue that selecting case studies must be done so as to maximise what can be learned in the period of time available for the study. These characteristics of case study match my epistemological perception already outlined and strengthened my tendency towards this approach as Yin (2008) claims, the case study investigates a phenomenon that is a part of everyday life. Miles and Huberman (2015) define it as a type of phenomenon that occurs in a defined context; it is adaptable and inclusive and relies on multiple sources of evidence that enhances its validity and reliability. Stakes (1995) adds that it is important to maintain a proper chain of evidence in order to increase the validity and reliability of a case study and to overcome the limitations of this approach. In this research, I collected data from multiple methods such as interviews, observations and questionnaires at different points of time during the academic year in high school and I maintained a proper chain of evidence to ensure triangulation as Burton et al (2008) insisted on using all means to ensure the study remains reliable, valid and generalisable.

3.5. Selecting the Type of Case Study

Yin (2008) identified some specific types of case studies: exploratory, explanatory, and descriptive. Exploratory cases are preludes to research. Explanatory case studies may be used for doing causal investigations in which the goal is to explore a phenomenon, to find what causes it and suggest solutions. Descriptive cases require a descriptive theory to be developed before starting the project. Stake (1995) distinguished between three types of case study: intrinsic - when the researcher has an interest in the case for its own sake; instrumental - when the case is used to understand more than what is obvious to the observer about an issue; and collective - when a group of cases is studied. Considering these types of case studies, the nature of my study is not only of intrinsic interest as Silverman (2010) describes as a weak point, but mainly explanatory, following Yin's definition (2008), because it aims to explore the phenomenon, to offer insights and implement an intervention as a solution to the needs emerging from the research field. Therefore, according to Stake (1995), my study is instrumental because it enables understanding beyond the obvious and greater insights about the phenomenon but has in it the need to see the issue from different angles and broad view. As Yin (2008) emphasised, one can learn from the particular case to the general phenomenon. Certainly, my purpose is to use the case study to gain broad insights, as Bassey (1999) indicated and to learn from it to apply to the practical field beyond the specific case. Yin (2008) pointed to an additional consideration in all of the above types of case studies, that there can be single-case or multiple-case applications depending on the research aims. Yin (2008) recommends

the use of multiple cases but he points out that it demands replication and suits a more positivist approach, especially if the main aim of the case study is to investigate the uniqueness and particulars of individual cases and also Stake (2006) and Simons (1996) support this attitude.

I critically re-examined my research aims and decided to design this study as a single case study although there are two teachers who teach in two different classes of 2ELs. The main aim of this instrumental case study is to gain broad insights and to learn from the particular case to the general phenomenon and to apply to the practical field beyond the specific case (Bassey, 1999; Stake, 1995; Yin, 2008). My interest was in the insights these teachers can contribute to their colleagues' pedagogy during and after the process of this study rather than on the different individuals' narratives and comparison between them. As Stake (1995) advocates, the focus of a case study should be on understanding the phenomenon rather than on comparisons with other situations. So, I rejected a comparative case study approach for that reason.

In summary, I decided to design this study as an instrumental case study because it enables understanding beyond the obvious, gives insights about the phenomenon and enables the researcher to see the issue from different angles (Stake, 1995) and also, as an explanatory case study because it aims to explore the phenomenon of developing teachers' learning processes by the implementation of an intervention as a solution to the needs emerging from the research field. The unit of analysis is based on two teachers as a single case study according to Yin's (2008) principles and also, based on Shalsky and Alpert's (2007) principle that a case study can focus in depth on one unit that deals with one figure or a group of figures in an institution or organisation and derives its strength from the depth of the investigation rather than from the number of investigated objects.

3.6. Sampling Considerations of the Case Study

After I decided that the case study is a single unit and not multiple (Yin, 2008), I considered the criteria for sampling strategy. I followed Stake's (1995) suggestion to choose participants that have the best potential to have insights on the studied issue in order to maximise what we can learn. I chose the participants from the group of teachers who teach in classes of GT students in my high school. In this procedure, I was also guided by Yin (2008) who pointed to the importance of giving voice to the authentic representation of participants. It is very important to consider the weak points emerging here because there might be differences and a lack of consensus between the participants at times. A possible way to deal with this issue is to take Yin's (2008) approach and refer to it as a single case in which attention is given to subunits but being cautious not to focus excessively on them but focus specifically on issues arising from all the participants in the case as a whole.

I had to consider the issue of selecting the participants. I consulted the school principle and the director of the project of separated classes for 2ELs in my school. The choice of optional participants was limited because there are few classes like this in the school and my study was to focus on teachers who teach multi-words subjects as History, Literature and Bible in their classes. So, I followed Shkedi's (2003) suggestion and I invited the relevant teachers to a meeting and explained about my research and asked for volunteers, accompanied with the principal's consent. Drake and Heath (2011) strengthen my choice when they recommended researchers in their work-place to choose small scale and involve few people if this is the situation in the research field.

I had previously decided on the criteria for selecting the participants as Sabar Ben-Yehoshua, (2001) recommends that they should have been teaching for at least 3-5 years and at least 2 years in the GT classes. I thought that it is important that the teachers have some experience and will be able to map their needs, especially in this type of class, as McDuffie and Scruggs (2008) who emphasise that participants should be given the opportunity to make their voice heard. Secondly, the participants should volunteer and give their full consent after I explained the rational, demands and procedures of the research (Birenbaum, 1993) (See Appendix 3.1) and (See Appendix 3.2). I was looking for a sample group that would be able to recognise and map their needs but, as Brantlinger et al. (2005) said, I should be aware of ethical considerations and look after the wellbeing of both the participants and myself, as the research took place in the natural surroundings (Breen, 2007) of the teachers and myself as practitioner researcher (Taysum, 2007). At this point I should acknowledge that I was aware of the limitations emerging from the small selection of teachers that volunteered, so I finally chose two teachers that met the criteria I had decided upon for this case study. I also based my decision on Babbie (2001) that suggests a purposive sampling procedure to select participants because of the convenient proximity and accessibility to the researcher.

Another issue to be considered is how to minimise the risk of participants' withdrawal, especially in a longitudinal study design. Elliot et al (2008) recommend maintaining close touch, to be sensitive to their needs and doubts and cultivate relationships based on trust and cooperation. I already had this kind of relationship with these teachers as a colleague, but I insisted on clarifying the boundaries of this study and its demands as I was walking with them, side by side, all along the journey of this study. An additional method to minimise this risk was to conduct this study as a single case rather than multiple cases, so that even if one participant were to leave, a viable case unit would still remain (Yin, 2008).

To strengthen the limitations of this study I adopted Miles & Huberman's (1984) model of a framework for a case study and it guided me in designing my study. It includes four dimensions that were the boundaries of this case study and participants were well informed about these boundaries as a mean to minimise the risk of withdrawal:

- Conceptual nature of this study the teachers participating must teach multi-words subjects in separated classes for 2ELs.
- Social size of the sample is two teachers who teach in two different classes including 30 students per class.
- The location is a high school in Israel with 2000 students in grades 7-12. The school runs a project of separate classes for 2ELs. In each grade, there is one such class with 30 students. The classes participated in this study were in Grades 7 and 8.
- The time frame was from September 2011 to February 2013.

In summary, the process of the sampling was based on the case study approach and the main aim was to gain broad insights from the particular case to the general phenomenon and to inform the relevant practical field of teachers (Bassey, 1999; Stake, 1995; Yin, 2008).

3.7. The Insider Researcher

I was aware of the limitations evoked by my dual role as a teacher and as a researcher in the same school where my research took place, as Shenton and Dixon (2004) argue that the insider researchers are influenced by personal culture, personal biography, intuition, personal experience and ethical standards and perceptions. They suggested paying particular attention to this problem of insider researchers' bias during the research process, especially when researchers are exposed to the research field and participants for a long time, like I was for the duration of a whole academic year. Also, Drake and Heath (2011:23) argue that:

"In researching the one's own workplace, one is inevitably positioned by the prevailing political ideologies...to acknowledge research as a political act and to be aware of the powers working in the research field".

Birenbaum (1993) added that the bias could be both of participants and of researchers and that researchers should consider this issue. Shkedi (2003) argues that qualitative research does not pretend to prevent those biases in data collection but suggests strategies to reduce their influence as much as possible such as being consistent, correct and accurate in the application of research

methods and analysis of data. Shalsky and Alpert (2004) suggested to guard the research procedure in order to reduce the potential for bias to affect data. I followed Shai and Bar–Shalom's (2003) recommendations for the good researchers as having tolerance, patience, empathy and not being judgmental in relationships with the participants. Also, Shalsky and Alpert (2004:206) point on 'the abuses of subjectivity'. So, I was careful about the interpretations I gave to the processes and phenomena I found in the research field, or that will be reported to me by interviewees and recheck myself in the analysing process of data analysis.

Zeichner and Noff (2001) refer to the researcher as a flexible tool who is able to cope with the complexity of human existence and interprets the processes and changes people go through. Taysum (2007) suggests that practitioner researchers utilise in their research the knowledge they obtain from the daily reflective examination of their praxis and so I did. Through the research, I aimed to find themes, processes and forces that strengthen or weaken the outcomes for teachers and learning processes in their practical field. Shalsky and Alpert (2004) emphasise that the most common trigger for research in education is the need of practitioners to improve learning environment and outcomes. Indeed, this was the trigger for my research. I felt the passion to promote new knowledge to my colleagues by suggesting training and a set of strategies to cope with the challenges we have as teachers of 2ELs. Also, Breen (2007) said that according to the naturalist-constructivist paradigm teachers become researchers in their practical field and the research is carried out in the natural environment of the researcher, so my study took place in the high school that I am teaching in. As Sabar Ben-Yehoshua (2001) argues that every researcher has his unique points of view and gives interpretations to the processes and phenomena that he observes in the field. I felt that the interpretative naturalistic paradigm best fits my personal belief about searching for truth and how I build my reality (Keren, 2007: Savir, 2005).

An additional issue was the way my colleagues viewed me because of my dual role as a teacher and as a researcher in the same school and especially because of my role as a vice principal in school first (the teachers that participated in my research and also the rest of my colleagues in school). Drake and Heath (2011:32) say:

"The higher practitioner researchers are placed in the organisation, the better positioned they may be to do (their research) without compromising their practice".

I was aware of this issue and I succeeded in conducting my research without harming myself and also, I had, from the beginning, an open dialogue with the participants and as Elliot et al (2008)

suggest, I based our relationship on mutual respect, empathy and cooperation and all the research's process was transparent. Also, the teachers volunteered to participate in this study and as Shkedi (2003) suggests, I received their full consent (See Appendix 3.1) and (See Appendix 3.2). I tutored them during the seminar and intervention in classes and even after the end of the research we kept on meeting and discussing pedagogical issues.

Also, I employed an outsider observer in all the observations in classes in order to prevent the participants from feeling they were being judged or criticised by me if I was observing them. Other colleagues in school were very curious about this research and some of them, as their own initiative, learned from the participants and from me, the AAAMS and employed it in their classes, as can be seen in the Chapter of Findings. Thus, I fulfilled one of my intentions in this research to contribute new knowledge to my practical field. I was aware of the challenges in dealing with data that relates to colleagues (Drake and Heath, 2011) and to the conflicts between researchers' roles and practitioners' responsibilities. I followed their suggestion to look at my position as an insider researcher and to see that there is a merging of these functions so that both research and practice inform each other and thus I could keep my interest to conduct this research with ethical considerations.

3.8. The Research Design

This study was designed as an instrumental case study (Yin, 2008) and as an applied research to study the impact of an intervention (MucDuffie & Scruggs, 2008) and my aims were to inquire the challenges and needs of teachers who teach 2ELs especially in multi words disciplines. Another aim was to plan and apply an intervention in order to meet these teachers' needs. The study took place in my high school during one academic year and I designed it in six stages:

Table 3.1. Six stages of the research, timetable and qualitative methods used in each stage:

Stages of Research	Timetable	Stage of Research	Methods
1	March 2009 - June 2011	Gathering information on the issue of my study by reading relevant literature and conducting interviews with teachers who teach in the separated classes of 2Els.	3 Semi-structured interviews
2	July 2011	I wrote the AAAMS (Salem, 2014). I developed a manual for teachers, based on AAAMS (See Appendix 3.1), who teach 2ELs in multi words disciplines such as History, Literature, Bible.	
3	August- September 2011	I conducted an intensive teachers' training seminar (See Appendix 3.1 - Syllabus of teachers' seminar). On the same time, I developed the research methods for my study: interviews, observations and questionnaires.	
4	Three points of time during the year in school: October 2011 March 2012 May – June 2012	Implementation of the AAAMS in the GT classes by the participants during the school year. Gathering data by multiple methods (Yin, 2008).	8 Semi-structured interviews 4 open observations 12 Semi-structured observations 60 Open questionnaires
5	February 2013	I conducted one more round of interviews with the participants six months after the end of application in classes, in order to check the contribution of the intervention on the long term.	2 Semi-structured interviews
6		Analysing of data from all the methods of research based on the inductive analysis (Miles and Huberman, 2015)	

As Yin (2008) stated the complexity of case study research demands the use of multiple data sources so I offered the participants a range of options to express their views, in all the study's stages. Bassey (1999) and Miles & Huberman (1984) pointed on the importance of seeing the issue from different angles as a basis to triangulation of data and enhancing reliability and validity. Stake (1995) recommended maintaining a proper chain of evidence in order to increase the validity and reliability of a case study and to overcome the limitations of this approach. Inspired by this, I collected data from multiple methods as interviews, observations and questionnaires and maintained a proper chain of evidence through the six stages to ensure triangulation as Shkedi (2003) insisted on using all means to conduct the study to be reliable, valid and generalisable. Elliot et al (2008) pointed on the advantage of longitudinal design that contributes to develop dialogue and trust between researcher and participants. Hopwood (2004) warned about the disadvantage of a longitudinal study because the participants can become bored and less cooperative if the methods are repetitive. So, I decided on a longitudinal study but I insisted on using variety of methods during the research to cope with this challenge.

Lincoln & Guba (1985) inspired me to design my research seeing the naturalistic nature of it as a dynamic process in which the information gathered in one stage is used to refine the subsequent stages. In the first stage I detected and identified the issue of my study and I gathered information that was useful in planning subsequent steps, by conducting interviews with teachers who teach in the separated classes of 2ELs and I was mapping the characteristics and needs of teachers and students in these classes. At the same time, I continued reading relevant literature for example, strategies that give appropriate responses to the challenges teachers are facing with these students. In the second stage I wrote a manual for these teachers and a syllabus of a course for CPD seminar (see Manual and Syllabus in Appendix 3.3). The manual is based on three sources; the first source was findings from the interviews of the first stage, the second was the relevant professional literature and the third was my professional experience as a teacher of teachers (in Special Education and in gifted students' pedagogy). I wrote the AAAMS (Salem, 2014) that integrates three strategies and is the base of my manual. In the third stage I conducted an intensive teachers' CPD seminar using the above-mentioned manual, lasting for two months. I trained the two teachers that were chosen as the sample of my case study. In this stage I also developed the research methods I planned to utilise in this study following Shkedi (2003) and Sabar Ben – Yehoshua (2001). The fourth stage was implementation of the AAAMS in the GT classes by the participants during the school year. Data was gathered in 16 observations and 9 interviews with the participants in three points of time during the year (October 2011, March 2012, May - June 2012) and 60 open questionnaires distributed to the students in the end of the intervention in classes (June 2012). I

analysed the data gathered till this point and the fifth stage occurred six months after the end of application in classes (February 2013). I conducted one more session of interviews with the teachers in order to check the contribution of the intervention on the long term and to strengthen the triangulation of data (Stake, 1995). In the sixth stage, I analysed the findings that I had gathered from the multiple research methods (Yin, 2008).

In summary, I designed this research in six stages in order to conduct organised and systematic research and to collect data from different methods in order to maintain a proper chain of evidence and to ensure trustworthiness. The ethical principles were guidelines in designing and conducting this research.

3.9. Ethical considerations

Ethics in research relate to standards and ethical codes agreed by the membership of different professional associations in social research (Dushnik and Sabar, 2006). According to Fridman (2006) and Shefler (2006) ethics in social research relate to two main issues: responsibility of the researcher for the welfare of the participants and the researcher himself and the originality of the research (See Appendix 3.9 - Ethical Approval document). Sabar and Hashahar (2000) referred to the first issue and indicated that the nature of qualitative research demands that the researcher should be aware of and keep to ethical principles because it involves people and has ethical implications. My research, as an applied research and a case study, is deeply embedded in the school life within which it takes place and as Waters-Adams (2006:8) said: "The data gathering and analysis will inevitably impact on students or teachers lives". Also, Stake (2000) pointed that in case studies, especially with a small number of participants, the research needs to be conducted with high consideration of ethics issues. But Rossman & Rallis (2010) argued that principles of ethics should be also accompanied by personal judgement. Nevertheless, Waters-Adams (2006) pointed on that the object of the ethical principles is to ensure individual rights and to promote fairness in the interpretation of data. Drake and Heath (2011:49) offer three ethical standards to be kept:

"Respect for persons; beneficence for the research with minimal risks to research subjects and justice for participants".

I based my ethical principles on these guidelines and also on codes of the British Educational Research Association's latest guidelines (BERA, 2011) and I paid particular attention to keep a respectful relationship with the participants and make them feel secure, especially in a study embedded in the centre of an existing network of colleagues and students. I took some steps to

utilise these principles. I asked the participants to sign an informed consent form (See Appendices 3.1-3.2) indicating their agreement to the research procedures (AERA, 2002; BERA, 2011). In addition, I preserved their anonymity and prevented their identification by using pseudonyms for the participants and a letter instead of students' names (Fridman, 2006). All the information concerning them remains confidential and correct (Kusmisky, 2006) and as Simons (2009) said, I stored the information that I gathered in the research, such as transcripts and audio files that are stored in my computer with my private access to it, password protected and I used it for the purpose of research only and not in any other way (BERA, 2011). I followed Miles & Huberman's (1994) suggestion about informing the participants on the dissemination form and I obtained their consent. I was also aware of my responsibility to protect the participants' status at school by keeping an open dialogue with the headmistress and other colleagues in school (Shalsky and Alpert, 2007) and I kept on explaining about the impact such an intervention might have on the learning environment in school. Also, I showed that no harm was made to teachers or students and thus I maintained the confidentiality between the principal and me and the participants.

The issue of the relationship between me as an insider researcher and the participants was especially important because, as a vice principal, I was in a position of authority over my colleagues in school. As Thomson and Holland (2003) emphasised that the dual role of the insider-researcher and challenges of a longitudinal study in a qualitative research have a potential for complications by growing familiarity between the researcher and participants. Drake and Heath (2011) offer to place the practitioner researcher at a distance from the 'cosy shared understanding' that characterises professional life. To bypass this risk Elliot et al (2008) suggested basing the relationship in a longitudinal study on mutual respect, empathy and cooperation. The process of the study was transparent; the goals and methodology were made clear and I held an open dialogue with the participants from the beginning to the end of the research. In addition, they were able to leave the research at any time so, as Yin (2008) recommended, I decided on a single unit case study that included the two teachers in order to be able to keep on with the research if one of the participants leaved and my worries about this issue proved not real. In addition, I interviewed the participants and they shared their feelings, difficulties, thoughts and reflections at any time during the process of the research. Also, the participants gave their full consent to be interviewed, to be recorded and to be observed (Kusmisky, 2006). I was aware of Shalsky and Alpert's (2007) warning about developing involvement and close relationship, so I employed an outsider observer, a student without any prior connection with me or with the participants in order to reduce this risk. The students agreed to accept the outsider observer into their class. In addition, I had to look after my own welfare (Kusminsky, 2006) at the school in which I work so, I followed Shefler (2006) and I

obtained full consent from the School Headmistress to conduct this research after explaining the goals and the process of the intervention. The second ethical issue to be considered is the originality of the research. Shlasky and Alpert (2007:239) described it as:

"An additional ethical responsibility of the researcher which relates to the originality of the research report. In other words, plagiarism is prohibited".

I was guided by this principle as Fridman (2006) pointed that credit should be given when quoting another scientist or using a research tool developed by another researcher. Kvale and Brinkmann (2009) sharpened my awareness of the possibility in a case study that the participants can experience changes in their attitudes and views during the year of the study as result of the training and tutoring. But this concern was minimised by the data collected from the interviews that took place six months after the intervention ended. I found that their perceptions were consistent. In addition, the data gathered from the questionnaires strengthened this point because they were answered anonymously by the students.

In summary, conducting research demands considerations of ethical principles (AERA, 2002; BERA, 2011) and as Drake and Heath (2011) recommend that researchers engage their own resources of knowledge and think through the conflicts and dilemmas that arise and then determine what to do. I conducted my research on the basis of these principles in order to succeed in finding new knowledge and contribute to improvement of the practical field in my school and hopefully in another educational environment. The next section looks at the research methods selected to this study.

3.10. Research Methods

Yin (2008) said that one of the important principles when carrying out a case study is to collect data from multiple sources and that it is crucial to study the issue from different angles, Waters-Adams (2006) also indicates the importance of illuminating a different aspect of the issue in order to enhance the triangulation. Baxter and Jack (2008) used a metaphor in which each method contributes to complete a puzzle. Stake (1995) indicates that methodological triangulation is currently used in case studies by conducting observations and interviews. The qualitative research methods I employed included observations, interviews and an open questionnaire (Raider–Roth, 2004: Sabar Ben-Yehoshua, 2001: Shkedi, 2003). According to Travers (2001) and Yin (2008) it is effective to combine methods especially when dealing with case studies in education or social sciences in which complex and in-depth inquiry is required. Denzin and Lincoln (2000) suggest combining research methods in order to gather data and evaluate internal validity. For this research,

I realised that combining methods would enable me to collect data that would strengthen the triangulation of the findings (Sabar Ben-Yehoshua, 2001). This also helps to bypass the limitation that might emerge from my dual role as an insider researcher (Shkedi, 2003) and the participants' colleague.

3.10.1. Observation

Observation is an efficient qualitative research tool because it allows data to be gathered while processes are taking place. From observations one learns the needs, successes, difficulties and strategies of the teachers and the students in order to develop questions for continued research. Observation is one of the main tools of qualitative research and it can be an open observation or focused (Shkedi 2003: Travers, 2001). In this study, the earlier observations were open in order to obtain the best information about the processes being experienced by the teachers and the students during the intervention. Later observations were focused in order to gather information about the intervention (Sabar Ben-Yehoshua, 2001) (See Appendix 3.17, transcription of the observations). The researcher can be a pure participant who participates during the observation in the field but not as an active teacher (Sabar Ben-Yehoshua & Hashahar-Francis, 2000) or a total participant participating as a teacher. According to Yin (2008) the researcher has to choose in advance the type of participant that they will be. After carefully considering the two options, I decided to be a pure participant because the research was taking place within my work environment and I was involved in the research environment. I employed an outsider observer to minimise my subjectivity as an insider researcher and thus to increase the validity and reliability of this study (Lee, 2009). Also, Sabar-Ben-Yehoshua (2001) argues that the strategy of using outsider observer helps to reduce the possibility for bias and subjectivity. It provides the researcher direct access to what the participants think and feel without personal involvement. Silverman (2010) points out that this strategy exposes the researcher to different viewpoints and angles of the same issue without being involved. Other reasons for using an outsider observer included the avoidance of possible ethical issues that could have arisen in the research due to my dual role as an insider researcher as well as colleague and vice principal in the school. Using an outsider observer might also prevent the participants from feeling they were being judged or criticised by me if I was observing them.

For this study, I chose a student from the university who studies education in the SpLD domain and who is also working as an assistant at university. I prepared a guidebook for the outsider observer on how and on what to focus in the observations (See Appendix 3.13) based on Birenbaum, (1993) guidelines on how to write detailed protocols of the observations including documentation of conversations between students and teacher; episodes that occurred during the

intervention; documented the teachers' strategies and behaviour as well as interactions between students and teacher during the employment of the AAAMS. The data from the observations was needed for examining the similarities and differences in the teaching and learning processes throughout the intervention. To clarify, the employment of an outsider observer in the classroom was explained to the students and to the teachers-participants and they all accepted this (Shkedi, 2003). There were neither relations nor conversations between observer and participants. I instructed the observer to write down everything she heard and saw during the lessons and her insights, interpretations and personal reflections on the process.

The observations were taken during implementation of the intervention in two different classrooms of 2ELs. The observations were conducted at three times during the school year from October 2011 till May 2013. I followed Shkedi (2003) that suggested using an open observation at the start of the research as a pilot because it provided a large spectrum of themes and viewpoints and on this basis, I focused the other observations to meet the aims of this study. For example, I focused the next observation on the employment of the strategies of AAAMS. The outsider observer returned to me the protocols at the end of each lesson. First, for preliminary analysis and afterwards I used this data to focus the next observation and to refine the intervention process. Sabar Ben-Yehosua (2001) argued that the information collected by means of focused observation may be limited to the aspects defined by the researcher and important information could be missed. To circumvent this disadvantage, I used various research methods to gather data from different angles and strengthen the triangulation of the data (Yin, 2008).

The protocols extended my knowledge and were the basis to prepare the interviews' questions and for defining patterns and categories. The data that was collected by the outsider observer was cross-checked against the data collected through the use of interviews and questionnaires. I followed Shkedi (2003) that suggested a meaning-making process after each observation because it contributes to the better understanding of the learning environment, evokes themes, emotions, problems, ideas and helps in the process of defining patterns and categories.

3.10.2. Interviews

One of the goals of qualitative research is to describe and to interpret attitudes and behaviour of people from their own point of view (Travers, 2001). The interview is a tool that makes this possible by providing the researcher with deeper information about the perceptions, values, feelings, understandings and reflections of those who participate in the research. An interview has two processes that complete each other: gathering information and developing the trust and cooperation between the researcher and participants (Shkedi, 2003). Sabar Ben–Yehoshua (1999) argued that

interview is a complementary method that can help to examine patterns that were prominent during observations. Interviews can be open, structured or semi-structured. In the recent study, I adopted the recommendations of Smith (1995) about the benefits of the semi-structured interview. The semi-structured interview was best suited for my purpose because it allows me to ask focused questions while keeping open the option of asking follow-up, clarification questions and asking about issues that arose during the interview. The participant can direct the interview to issues that are important to him and in this way, enable the researcher to learn about aspects he had not thought about. This type of interview provides collecting information about two main processes in my study. The first one is information about the participants' needs in their professional development on the basis of knowledge and skills acquired for 2Els' teachers. The second one is collecting information about the processes these teachers went through during the stages of the research; training course and application of their knowledge and skills to real life situations in class, and how it contributed to their professional and personal lives.

Shkedi (2003) pointed that one of the important benefits of a semi-structured interview is that it allows a flexible interaction and empathy between the researcher and the participant and the possibility of gathering detailed information. Smith (1995) argued that there is a disadvantage in the semi-structured interview because the researcher might lose focus and control of the situation during the interview. In order to meet this limitation, I followed Shkedi (2003) guidelines and prepared the structure and questions of the interviews systematically and I was aware of its limitation throughout the interviews.

An issue to be considered was my dual role as an insider researcher and a colleague of the participants. So, when I decided to employ the interviews, I had the same dilemma as with the observations. But I decided to conduct the interviews by myself face-to-face, because I was familiar with the research field and I needed to inquire processes, themes and patterns such as the challenges of the teachers, coping strategies, contribution of the AAAMS to their professionalism and its influence on their motivation. The semi-structured interview allows the person being interviewed to express his voice, and then it enables the researcher to compare the statements of the interviewees and formulate patterns and categories. I was aware of Smith's (1995) argument that there is a risk of introducing bias when an insider researcher is involved in interviewing. So, I used some means to minimise this risk as well-prepared questions and pre-set time for each interview and I developed a set of questions but with the flexibility to allow more questions to be asked. In addition, the participants signed an informed consent form (Appendices 3.1-3.2) and the interviews were recorded and I wrote down their transcripts (Appendices 3.14) in order to increase the trustworthiness of the data (Sabar-Ben-Yehoshua, 2001).

I conducted a pilot with one of the participants in order to check the semi-structured interview and I learned that I should stick more to the prepared questions and to the pre-set time in the next interviews. During the process of this study the participants were asked the same questions in each interview (Appendices 3.7-3.8-3.10) and they were interviewed 4 times (Timeline in table 3.1., p. 62). The questions in the interviews were different at different stages of this research because each interview reflected the goals of each stage in the research process. The first interview took place before the intervention started in the classes and inquired about the characteristics, needs and challenges of the teachers who teach 2ELs. The other two interviews inquired about the processes the teacher experienced and the contribution of the intervention. The fourth interview was conducted six months after the end of the intervention with the goal of inquiring about the long-term contribution of the intervention (Appendix 3.11). Travers (2001) argues that there is no rule about the number of interviews in a research as it depends on the time available for collecting and analysing the data so, I decided to end the data collection in this point and to start the analysing process.

3.10.3. Questionnaires

The open questionnaire is an important tool of qualitative research. It helps the researcher gather deeper information about the issue being examined including perceptions, values, feelings, understandings and reflections of the research participants (Silverman, 2010). This method also helps to follow up patterns that were prominent during the observations and interviews (Sabar Ben-Yehoshua, 2001). In this research, I employed the open questionnaires after I ended with observations and interviews because this study was carried out in the natural surroundings of the participants in the school, and though the teachers were the participants of my study, also students were involved because of the nature of this case study with an intervention that took place in the classes. The observations and interviews dealt with the point of view of the teachers but also the voice of the students in the classes was heard and was important to the findings and conclusions. I realised that this method can help me achieve my goal as Shenton & Dixon (2004) say that it allows asking focused questions while leaving space for individual points of view, remarks and reflections about the topic under research and the use of open questionnaire can strengthen the internal validity of the findings when assessing the contribution of the intervention (Yin, 2011). I collected data also from the students by using the open questionnaire in the end of the intervention in June 2012. The questionnaires were anonymous as Sabar Ben-Yehoshua (1999) pointed that it might increase openness and frankness and my interest was in a cohort view and not in the individuals' opinions.

The open questionnaires asked about the implementation of the AAAMS, during the lessons of teachers who participated in the study. The open questionnaire contained three parts; in each part, there was a list of statements relating to one of the strategies of AAAMS. The students were asked to write their opinion about each statement and to add reflection and feedback. I followed Shkedi (2003) that suggested a meaning-making process and from students' answers, I derived repeated themes and patterns because it contributed to a better understanding of their learning environment, evoked themes, emotions, problems, ideas and helped in the process of defining patterns and categories. The information was cross-checked against the data collected through the use of interviews and observations. I was aware of the risks that can be in asking students to answer the questionnaire as Cohen et al (2011) argue because of the ethical issue and also problems of bias and complexity, so I asked them to volunteer and I was glad that all the students co-operated as a part of curiosity and not because of my position in school because I do not have direct relationships with these classes at all so my position in school did not influence them.

I refer to the method of open questionnaires as an additional tool and I conducted them in the end of the intervention after the interviews and observations ended in order to assist with the analysis of the main body data, as Shenton & Dixon (2004) argued that it might strengthen the themes, patterns and categories emerging from the data collected by the observations and interviews and enhance the triangulation of the data in this study. The post-interviews were conducted with the teachers six months later to inquire the contribution of the intervention in the long term.

3.11. Data Analysis

Data analysis aims to give meaning, interpretation and generalisation to the phenomenon being studied using inductive analysis (Miles and Huberman, 2015) as Gavton said (2001:195):

"The heart of qualitative research is data analysis. It is an inductive, intuitive, reflective process that reduces large amounts of raw data to patterns and relationships and transforms the evidence into criteria for synthesising ideas".

Data analysis in this research was carried out by an inductive approach as free as possible from prior categorisation (Shkedi, 2003) and the aim was to find main themes and patterns that appear in the data and to form categories. According to Shkedi (2003), when a group of people have similar characteristics and needs they will also have similar social and emotional patterns because these arise from similar experiences. Therefore, central themes and patterns can be found that could lead to the building of a theory to explain the general phenomenon being researched.

Data was collected throughout the study process using various methods such as observations, interviews and open questionnaires. The goal was to inquir the processes and to assess its success and/or weaknesses. According to Shkedi (2003) such an evaluation can be made at various stages throughout the process of teaching-learning. Yossifon (2001) pointed that data is likely to be reliable when collected by different research sources. The variety of tools enabled the same data to be checked from different angles (Yin, 2008) and thus to crosscheck the findings and enhance triangulation (Sabar Ben – Yehoshua, 2001). The categories were changed, redesigned and refined after initial analysis in a continuous focusing process and were chosen according to the four research questions. Formal analysis was completed after the data collection. Some categories are major ones within which there is a division into sub-categories, which constitute a uniform basis for sorting out the information (Sabar Ben-Yehoshua, 2001) (Coding and categories of interviews in Table 3.3. p. 73 and of questionnaires in Appendices 3.18-3.20).

In the first two research questions, I studied and traced the characteristics and needs of teachers and students and the information gathered was the basis of the intervention in classes. In the third and fourth research questions, I studied the process of the intervention and its contribution to teachers and students. According to Shkedi (2003), there is an internal aspect whereby each category is significant for the data and an external aspect whereby each category is significant for other categories. Hopwood (2004) emphasised that analytical procedures should be adapted according to the needs of the individual research. Also, Miles and Huberman (2015) agreed that there are no standardised approaches but the researchers need to design the study in steps. Inspired by this I divided the data analysis process into three stages: In the first stage coding was done by units of analysis. I read and checked the data from each method, looked for and identified themes and patterns that repeated themselves and also between methods.

The second stage was the process of searching for relationships between the themes and making groups among them. In the third stage of the data analysis I formulated the main categories and related the rest of the sub-categories to them. The main categories derived from the characteristics and needs of teachers and students as well as the processes that enable or accelerate the development of teaching strategies which might contribute to the learning environment (Manor-Benjamini, 2005; Kaniel, 2006). The following table summarises the three stages of data analysis's process:

Table 3.2. A summary of three stages of data analysis

N	Stages of Data Analysis
1	Coding was done by units of analysis and tracking repeated themes and patterns (Coding of interviews in Table 3.3. p. 67 and Coding of Questionnaires in Appendices 3.18-3.20).
2	Searching for relationships between the themes and patterns and making groups among them (Coding and relationships from interviews in Table 3.3. p. 67 and from Questionnaires in Appendices 3.18-3.20).
3	Formulating the core categories and relate the rest of the sub-categories to them (Table 3.3. p. 67).

The research findings from observations, interviews and open questionnaires were divided into four categories, which were also divided into a number of criteria. The categories were formulated from units of analysis. Miles & Huberman (1994) noted that it is important to clarify the units of analysis for coding purposes. These could be quoted from a word, a sentence or a paragraph according to the study's aims and regardless of sentence breaks or length (Thomas, 2006). So, in the process of inductive analysis, I was reading and cross checking the raw data. I marked the units that were repeating and made a list of themes. Then I was able to refine these themes, look for new ones or integrate them into existing themes. The next step was to form categories from the patterns emerging from this process (Miles & Huberman, 1994). The table summarises the 4 categories and coding words or sentences breaks that led to these categories:

Table 3.3. A summary of categories and coding words or sentences breaks (Thomas, 2006)

	Category	coding words
1	Characteristics, challenges and needs of teachers who teach 2Els.	Inhibit and enabled aspects in teaching/vision/challenges/needs/a lack of training/ a lack of diverse strategies in three aspects: cognitive, affective and organisational.
2	Characteristics and needs of 2Els.	Inhibit and enabled aspects in learning in three aspects: cognitive, affective and organisational/high order thinking skills/critical thinking/SpLD especially in writing skills/great gap/under-achievers/affective and behavioural challenges.
3	Contribution of each of three strategies of AAAMS (Salem, 2014) to the development of teachers and students.	Contribution to enhance HOT/ to bypass SpLD/ contribution of each strategy in three aspects: cognitive, affective and organisational/criticism of the strategies.
4	Contribution of the intervention as a whole both to teachers and students.	Contribution of the intervention as a whole programme in three aspects: cognitive, affective and organisational/motivation/learn from success/transfer/joy in learning/diverse strategies.

In each of the four categories there is evidence of enabling criteria and of inhibiting criteria that contribute to or detract from how the teachers cope with teaching HS to 2ELs. In addition, were found criteria that contribute to or block the development of cognitive and affective skills of these students and their products. The four categories are:

- 1. The first category is the characteristics of the teachers who teach 2ELs.
- 2. The second category is the characteristics of these pupils.

- 3. The third category is the contribution of teaching strategies to the development of teachers and students. There are three sub-categories containing the three strategies from the AAAMS (Asking Questions, Analysing Questions and Answering Questions in a Template) (Salem, 2014). Each strategy included enabling and inhibiting factors in the cognitive, affective and organisational domains (Tables of coding Questionnaires See Appendices 17-19).
- 4. The fourth category is the contribution of the intervention as a whole both to teachers and students. There are five criteria that were derived from the data. The first three included the contribution in the pedagogical, values and organisational domains. The fourth criterion is the implementation of learning from success and the fifth is adopting the method of transfer of knowledge as a cross curriculum strategy both by teachers and students.

3.12. Enhancing the Quality of Data

3.12.1. Trustworthiness and Triangulation

As a qualitative researcher, I was searching for evidence to enhance the quality of my data. In order to do this, it was essential to persuade the target audience: Israeli 2Els teachers, of the importance of my study in order for them to take it seriously and participate in it (AERA, 2002; BERA, 2011). There is a debate between authors in determining the quality of qualitative data. Yin (2008) recommended utilising criteria of internal validity, external validity, and reliability which are important in case studies to ensure high quality of data. Denzin and Lincoln (2008) suggest that the notion of trustworthiness sits more comfortably within an interpretivist paradigm and Lincoln and Guba (1985) argue that for quantitative studies, it is referred to as validity and reliability, but for qualitative researchers the term 'trustworthiness' is a useful framework to a naturalistic study:

"Qualitative researchers do not use instruments with established metrics about validity and reliability and it is pertinent to address how qualitative researchers establish that the research study's findings are credible, transferable, confirmable, and dependable. Trustworthiness is all about establishing these four things" (Lincoln and Guba, 1985:120).

As a qualitative researcher I chose to take measures in order to enhance trustworthiness and its four criteria because it fits best the nature of my study. The first criterion is credibility which refers to how confident, true, and accurate are the qualitative research's findings. For this reason, in my study I developed and employed multiple methods such as observations, interviews and questionnaires in order to gather different perceptions from teachers and students as Burton et al (2008) argued that gathering different perceptions from different individuals by the use of multiple

methods is a more accurate in qualitative researches' approach and it provides a more comprehensive picture of the findings. Also, I supported my findings in the discussion chapter with examples from all the methods in order to show that the study's findings are credible as Yin (2008) suggested that the use of multiple methods in case studies strengthens the triangulation of the findings as a useful measure of enhancing credibility. **Triangulation** refers to the application of several research methods in researching a phenomenon (Shalsky and Alpert, 2004).

The second criterion in trustworthiness is transferability which refers to how the study's findings are applicable to other contexts with similar phenomena and populations. In order to achieve transferability in my study, I conducted a detailed description of the findings (Shenton and Dixon, 2004) as well as an open dialogue with participants in order to allow relevant feedback as Friedman (2006) suggested. It was a crucial matter for me to conduct applied research that might have practical implications in Israeli educational contexts. In each stage of this study I checked with my colleagues, who teach Humanities Subjects in 2Els' classes, about the effect of employing my model of three strategies (AAAMS) in their lessons. I received a positive and encouraging feedback regarding my model given that it is easy to learn and to teach, and it contributes to a change in the learning environment, which consequently improves the students' outcomes. I was aware of the possible influence of my role as vice principal in my school but the teachers were eager to learn new strategies in order to feel more confident when they enter 2Els classes. Furthermore, it was crucial for me as a researcher to check my methods and to triangulate them to provide more evidence in support of my findings. As previously mentioned in the section about the interviews, I wrote each interview's questions after re-reading and re-checking the previous one in order to be able to change it. For example, after the first interview I realised that the interviews should be shorter, and that I should plan a semi-structured interview with more focused questions. In addition, after each observation I discussed the protocols with the outsider observer to assess how to be more focused in the next observations. For example, we discussed about the kind of descriptions or comments to write (Appendix 3.13). In this way, I was able to assess and to refine my research methods.

Confirmability is the degree of neutrality in the research study's findings (Lee, 2009). Findings should be based on participants' responses and not on a potential bias or personal motivations of the researchers to fit their certain narratives. So, as an insider researcher I was aware of the need to minimise subjectivity as Yin (2008) recommended and I recorded and transcribed all the interviews, the observations, and the questionnaires in order to provide an audit trail that could offer every stage of the data analysis (Shkedi, 2003). In addition, I took measures in order to minimise subjectivity and bias issues as an insider researcher (Shenton and Dixon, 2004) by

employing an outsider observer and I prepared guidelines to her observations in classes (Appendix 3.13) and after each observation I discussed the protocols with her to assess the kind of descriptions or comments she wrote and how to be more focused in the next observations (Appendix 3.13).

Finally, dependability is the extent in which the study could be repeated by other researchers. There should be enough information from the research report to obtain similar findings (Sabar Ben Yehoshua, 1999). For this reason, I conducted a systematic research report which is available to all readers in order to ensure that the findings are consistent and could be repeated. In summary, it was crucial to discuss the importance of trustworthiness and the measures I took to enhance this study's quality of data. In the next sections I discuss the internal and external validity and the reliability of my findings and the measures I took to enhance my findings in these aspects as Yin (2008) recommended.

3.12.2. Validity - Internal and External Validity

Validity refers to the credibility of the research findings (Shkedi, 2003) and it includes two aspects: internal validity and external validity. Yin (2008) defined internal validity as the procedures that are used in qualitative researches to measure what they were supposed to measure. In my research I have embedded triangulation of data as a useful measure of estimating internal validity. Yin (2008) recommended enhancing internal validity in case studies by adopting a triangulated research strategy by employing multiple methods. Triangulation refers to the application of several research methods in researching a phenomenon (Shalsky and Alpert, 2004). Also, Burton et al (2008) suggest triangulation as an effective way of enhancing the validity of research outcomes. They recommended gathering different perceptions from different individuals by means of multiple methods because it provides a more comprehensive picture of the findings. I adopted Burton et al's (2008) approach because it fits best the nature of my qualitative research. For example, I employed observations, interviews, and questionnaires in order to gather different perceptions from 2Els teachers and students. In addition, I conducted longitudinal research in order to inquire in depth a phenomenon (Yin, 2009) and rechecked the findings in different periods of time to enhance the internal validity. External validity refers to the extent that the research's results can be supported by the literature beyond the immediate study and as Shkedi (2003) suggested, I discussed a range of professional and academic theories, models, and debates regarding my research's subject that clarified and supported the findings of my research. In this way I was enhancing the external validity of my findings.

3.12.3. Reliability

Reliability in research refers to the possibility of redoing the research and arriving at similar conclusions. I was aware of the limitations of a case study in this aspect (Yin, 2008), thus, I collected the findings and kept them all written and recorded in order for the participants to have access to it all the time. In addition, in the appendices of my thesis, my sources are available to 2Els teachers from my high school, as well as in other Israeli high schools, and to all readers in order to ensure that the findings are consistent and could be generalised in Israeli context. Furthermore, Shalski and Alpert (2007) pointed out that reliability requires that the data is collected over a long period of time; therefore, my study lasted a year and a half, and the findings were rechecked in different periods of time. It can be argued that by taking all these measures I enhanced my research rreliability.

3.12.4. Generalisation

According to Sabar Ben Yeoshua (2001) generalisation is the ability to widen and extend research findings and inferences from one study to larger populations. I was aware of the limitations of the case study I conducted in my Israeli high school such as a small sample, that the study was conducted only in one high school, and the risk of bias and subjectivity that could arise from my dual role as an insider researcher. However, Yin (2008) argued that the findings of a case study can be generalised to other situations because a particular case can teach us a lot about a larger phenomenon. Furthermore, according to Shkedi (2003) when a group of people have similar characteristics and needs, they will also have similar social and emotional patterns since these arise from similar experiences.

The intervention proved that the AAA model of three strategies that was included in the teachers' seminar was simple and easy for the teachers to learn. It was also proved that it was easy for teachers to teach with the taught methods which contributed to the teachers' learning skills and self-efficacy. Also, it was proved that 2Els improved their writing skills and their outcomes in the humanity subjects. For these reasons, it can be assumed that this study can be generalised to larger populations of 2Els teachers and could be used to prepare CPD for 2Els teachers all over Israel.

3.13. Conclusion

In this methodology chapter I have discussed the philosophical underpinnings that guided me in conducting my qualitative research in the framework of a case study with two teachers' participants as the case study unit. I conducted a case study in my natural environment: a high school in Israel.

I designed this study in six stages during an academic year as an insider researcher, and I presented the issues coming up from my dual role as a vice principal and a teacher, and as a researcher at the same school. I detailed the measures I took to cope with ethical implications for me and my colleagues. Furthermore, I discussed the existing qualitative methods and the choices I made that best fitted my case study such as interviews, observations, and questionnaires. I gathered different perceptions from different individuals in order to provide a more comprehensive picture of the findings. I employed multiple methods and maintained a proper chain of evidence to ensure triangulation, as Yin (2008) suggested, with the purpose of guaranteeing the reliability, validity and generalisation of my study towards 2ELs Israeli target audience.

I discussed ethical issues concerning qualitative research and I presented the means I chose to enhance the quality of the data such as trustworthiness, validity, reliability and generalisation. I took measures to meet all these criteria to minimise the limitations and the ethical issues that might arouse from a case study. Furthermore, I also minimised the risks of longitudinal research's design such as withdrawal of participants. In addition, I considered the ethical issues of my dual role in the school as a vice principal and as an insider researcher (Drake and Heath, 2011). In order to avoid these risks, I had an open dialogue and took care of the participants' welfare as well as mine. In addition, I strengthen the generalisation of my study by conducting transparent processes in all the research's stages, as well as a systematic report that included the recordings of everything in order for it to be replicable to 2ELs teachers in Israel, and maybe also in international context. The data was analysed for each method, and between methods using the inductive approach (Miles and Huberman, 2015) that includes coding, pattern recognition, and inclusion of the four main categories. The literature discussed in this chapter assisted me in the process of designing this study, as well as in choosing the qualitative approach that fits best my epistemological and ontological beliefs. In addition, the literature helped me decide which methods to use for collecting data, such as interviews, observations, and questionnaires, as well as deciding to use the inductive approach to analyse such data. Then, I planned the intervention and employed it during the academic year in my Israeli high school. The next chapter presents the findings of this study.

Chapter 4: FINDINGS

4.1. Analysis of Data and Presentation of Findings

This chapter aims to structure and analyse the findings derived from the multiple methods I employed in my study: interviews, observations and questionnaires. Data analysis aims to give meaning and interpretation to the phenomenon being studied using content analysis (Gavton, 2001). The research questions asked about the needs and challenges of teachers who teach gifted students who have learning disabilities in writing skills (2Els) and about the contribution of the intervention to changes in teachers' attitudes to 2Els and in teachers' learning and also, to inquir what makes a difference to 2Els teachers' CPD. The intervention included a seminar for 2Els teachers that I wrote the programme and the manual and they included the model of three strategies that I planned for this intervention (AAAMS Salem, 2014) and then implementation of this model by the teachers in their 2Els classes. The RQs asked about the contribution of each one of the three strategies of this model both to teachers and their 2Els students and also, the successes and/or weaknesses of the intervention as a whole programme to teachers and 2Els.

4.2. Display of Findings

The research findings were divided into categories and each category was analysed and accompanied by quotes from the interviews with teachers, observations in classes and open questionnaires of students. There is an exception in the first category (which is: the characteristics and needs of teachers who teach 2Els) where the findings were analysed only from preliminary interviews and were the basis for the decisions of this researcher as to how to design the intervention in classes for this research. Data from the preliminary interviews made it clear to the researcher that among teachers there is a great lack of knowledge about these students and of didactic tools suitable for teaching such classes in Humanities Subjects.

The second category is the characteristics and needs of these students in order to gather information that can be useful for 2Els teachers to learn. The third category deals with the contribution of learning strategies that are adapted to 2ELs students' needs, both to their teachers and students. There are three sub-categories containing the three strategies from the AAA model: Asking Questions, Analysing Questions and Answering Questions in a Template. Each strategy included enabling and inhibiting factors in the cognitive, affective and organisational domains. The fourth category is the contribution of the intervention as a whole (Manual including AAAMS model, see Appendix 12.3) both to teachers and students.

In each category, there is evidence of enabling criteria and of inhibiting criteria that contribute to or detract from how teachers learn and then cope with teaching Humanities Subjects - multi-words disciplines (HS) to 2ELs. Also, how these criteria contribute to or block the development of cognitive and affective skills of these students. There are five more criteria that were derived from the data. The first three included the contribution in the pedagogical, values and organisational domains. The fourth criterion is the implementation of learning from success and the fifth is adopting the method of transfer of knowledge as a cross curriculum strategy both by teachers and students.

4.3. The First RQ

What are the critical components of teaching in a class of 2ELs especially in Humanities Subjects?

4.3.1. Inhibiting factors - teachers

The main findings of the first RQ are detailed in the category of "teachers' characteristics". In this category were classified statements indicating the characteristics and needs of teachers dealing with the challenges of teaching 2ELs. The goal in this analysis was to trace the features that could be identified before, during and at the end of the intervention. The two criteria that were derived from the data were the enabling factors and the inhibiting factors and the quotes in this section were only from teachers' interviews in order to detect their needs. These factors were analysed during the process of the intervention.

One main theme from the inhibiting factors arose during the analysis of the preliminary interviews. It was the lack of formal CPD for 2Els teachers that includes knowledge about these students and strategies that suit their needs. It can be argued that teachers need to be prepared before entering classes of students with special characteristics and needs such as 2Els in order to feel confident and to improve their self-efficacy. Also, it is to equip them with knowledge and tools to change their stigma and attitudes to these students and to fulfil their role as teachers. According to Roy: "First of all, training. To know what are gifted students? What do they need? What is learning disability? How to respond to this combination of needs? Does this require deeper thought? The teacher must know something about this" (Interview 68). Rick said: "I do not use special strategies. Maybe later after the seminar I will have tools, but at present I feel I do not have tools" (Interview 63).

From the teachers' point of view some of the training should provide learning strategies; "...about strategies and skills that are suitable for them. How to help them in organising the learning

material for a test, and how to approach students in the classroom who are very intelligent but underachievers? How should this be done?" (Interview 69).

The teachers claimed that in their studies they were not provided with knowledge and tools to teach these students: "I have no training in learning disabilities other than what I have trained myself. I asked for help from teachers who know more about the field of teaching gifted students or those in special education. I read and I interested myself in autodidactic learning" (Interview 74). "I was told...that there are no satisfactory courses in this field in the State... I have not received significant tools yet" (Interview 1).

Rick comments about the difficulties he encounters as a 2Els teacher without a proper preparation: "I do not have enough knowledge to talk about the Dual Exceptionalities and or to identify it" (Interview 62). Roy is referring not only to the cognitive aspect but also to the affective aspect: "If this is a class of gifted students what it means emotionally" (Interview 70). He also asks about the students' self-image; "Does being in a class like this raise their self-esteem? Does it improve their pride?" (Interview 186). In a meeting with a class of gifted students, Roy describes severe emotional problems for which he is not prepared: "...I did not expect that they would have severe emotional problems. I thought they would be gifted and curious..." (Interview 4). "They are carrying a burden which I do not understand, and at present do not know how to deal with, so it distances me emotionally" (Interview 66).

Roy's expectations before entering a class of gifted students is based on stigmas about these students, who are considered to be highly skilled. Roy describes his concerns; "...that they will know a lot, and they will, on purpose, try to start testing my knowledge..." (Interview 59). Roy is particularly concerned because he does not know about 2ELs; "...it's not clear to me. It always amases me. I keep asking myself: wait, how can they be diagnosed both as gifted and as having learning disabilities?" (Interview 65). Roy developed high expectations from the stigmas that he placed on the gifted students; "My expectations were that they would be at a higher level of writing because verbally they are at a high level" (Interview 61). These expectations were not fulfilled when he met the students and their difficulties. The consequence reflected in Roy's words: "I feel less good (in the gifted class) in comparison with other ordinary classes" (Interview 67). If teachers were prepared to meet 2Els it could make a difference in their attitudes, expectations and feeling.

The second theme that kept returning in the interviews was the teachers' needs to learn about the specific characteristics of 2ELs. It is important that teachers should be prepared so they will have tools to cope with these characteristics and it can contribute to their attitudes and to the way they treat 2Els; "I have taught in gifted classes for several years...there are features which recur in

classes of 2ELs and because of this it is important to train the teachers to cope with these challenges" (Interview 42); "The teacher must know the characteristics of gifted children" (Interview 43). Rick said that he wants to "...cope with the gap...of 2ELs...between their high level of ability and low level of achievement which do not reflect their capabilities and they will become very frustrated" (Interview 167).

Another inhibiting factor is the educational system. The educational system has its own requirements but does not provide teachers with the tools needed to manage a class of 2Els and to complete all the learning material required by the curriculum: "I need to fulfil the requirements of the system" (Interview 79). From Rick's point of view "...this sometimes prevents me of teaching in the way I believe. I would give up two lessons, for example, in order to develop critical thinking...but if I teach that way there will be a problem later with the test requirements" (Interview 80); "I am required to teach for the sake of achievements, but I prefer to teach on the basis of successes in order to help them cope with the gap they have" (Interview 81). In order to cope with these inhibiting factors, this research offered a set of strategies that are effective and easy to learn and to teach and most important they are easy to be integrated into the curriculum of the Humanities subjects such as History or Literature.

4.3.2. Enabling factors - teachers

One enabling factor is the sense of challenge that emerged from accumulation of evidence. Both teachers describe their work environment in GT class as challenging and as a trigger to learn. The challenges described are both at the cognitive and affective levels; "The lesson must be as interesting and challenging as possible" (Interview 5). In order to challenge his students Roy details his role as a challenging teacher: "...to get them to use as much of their intelligence as possible in the lesson, but at the same time to understand they are still children...some of them...are already learning at university..." (Interview 5). According to Rick the teacher should "...play their..."ping-pong (tennis) game" that can be created between teachers and students...you have to play their game and get them to recognise that they can lower their defences and fears during the lesson and to allow them to develop a sense of security" (Interview 11). At the mid-stage interviews, there were evidence that showed the evolution and maturity of the teachers after they learned about their students in the seminar: "I have understood that I enter my class of gifted students clearly aware that they need limits even more than the other classes and it works and helps" (Interview 16). Roy, after the seminar, was feeling more confident and some of his challenges were to develop the ability to mark boundaries. Roy refers to boundaries both at the interpersonal level and at the level of classroom discourse: "...to set boundaries to behaviour in their relationship and way of talking to me and to their friends" (Interview 18). Rick describes the challenge "...it is important to understand that there will be a lot of comments on whatever is said and the teacher needs to be aware of this and to understand that this is one of the characteristics which therefore requires patience" (Interview 32); "One needs a lot of patience and self-control because their stimulation threshold in particular is very low and they react so quickly to every detail and especially to a lot of associative things which do not seem to have any connection with the subject (of the lesson)" (Interview 29).

Rick believes in the realisation of his vision as a teacher who can face the challenges by learning about them and learning strategies that suit 2Els needs and thus he could be able to provide responses to 2ELs' characteristics and behaviours; "The characteristic of the teacher who uses a variety of teaching methods and also technology is especially important in this class. One has to turn to their high intelligence to stimulate them, to allow their curiosity to flourish and be nurtured" (Interview 36). The teachers emphasised that in order to face the challenges they should learn how to see these students with different eyes and appreciate their points of strength "A teacher should be able to manage discussions at a very high level, more than in other classes. The teacher is sometimes amassed by the opinions, reactions, the wide world knowledge and high level of debate" (Interview 38); "The teacher should be capable of giving legitimacy to different perspectives and opinions, gifted children...are very verbal" (Interview 39).

The teachers feel they should accommodate and promote the students in 2ELs classes in order to provide them the best learning environment "...to be open and not conservative in his perception of his role concerning investigation and asking questions...teachers must be able to guide as well as to teach, and to move dynamically between these locations" (Interview 47); "One can say that the students disturbs and one can say that the students has difficulties - these are two different ways of looking at the phenomenon" (Interview 48). Rick claims "Teachers must be as willing to learn from them (the gifted students) as well as to teach them..." (Interview 49); "... the teacher (in 2ELs class) needs interdisciplinary knowledge...and the ability to demonstrate his knowledge to the students. Like this they will earn dignity and respect from them" (Interview 51). The teachers need "...not to be intimidated by the associative thinking of the students..." (Interview 52). The teachers should; "...be flexible and to change the lesson that was prepared if a different need arises from the students" (Interview 53). In an interview at the end of the intervention Roy notes that: "...the teacher's perception of his role is important but preparation and professionalism are also important" (Interview 41). Roy said that as a teacher of these students he has to be willing to make a mental and emotional effort to be an inclusive teacher "In classes for gifted students (comparing to regular classes) there is a feeling that you start from scratch in every lesson, in terms of the

emotional and mental effort put into planning and management of each lesson. You need to invest, to be prepared and focused and patient - all the time, constantly" (Interview 44).

The vision of teachers refers to the way teachers see their role and goals teaching these students. Rick's vision about his role is to build trust between him and the students, to develop empathy and the ability to understand them "To build a sort of trust while empathising with their difficulties" (Interview 10). In the interviews conducted at the end of the seminar the teachers said that their vision is to go on teaching with the strategies they had learned during the intervention because it contributed both to them and to their students "My lessons' plans will in future be built according to the model that I learned at the seminar, to develop thinking ..." (Interview 427). In summary, findings of the first RQ were derived only from the preliminary interviews in order to track the 2Els teachers' learning needs and to base the intervention on this information. It is an important principle to plan CPD for teachers after mapping their needs and then meeting these needs in their training programmes.

4.4. The Second Research Question

What are the characteristics of 2ELs in Humanities Subjects?

The main findings of the second RQ are formulated in the category "students' characteristics". In this category were classified statements indicating the components of the students' strengths which were categorised as enabling factors and of the students' weaknesses which were categorised as inhibiting factors. These two categories were tested in their cognitive and affective aspects and quotes are taken from teachers' interviews conducted before, during and after the intervention, and also from the open questionnaires and observations in their classes. The importance of this category is to learn about the 2Els characteristics both from teachers' and students' viewpoints and to use this information in teachers' learning CPD programmes because this can make a difference to teachers' learning and teaching 2Els.

4.4.1. 2Els points of strength – enabling factors

2Els points of strength act as enabling factors that improve learning and teachers described them as 2ELs high order thinking skills, their high capabilities in oral expression and their extensive general knowledge. When teachers have the knowledge about what are HOT skills and how to nurture them it improves their teaching skills and they can feel more confident as teachers in these classes. According to Roy "I have two regular classes and one class of gifted students. As far as marks are concerned, the average marks of the regular classes are higher than that of the class

with gifted students, it shocked me in the beginning, but the gifted students have the capability for high order thinking skills and high oral expression skills. One can develop a discussion in the class on any subject at a high level and it seems they have huge general knowledge. They read newspapers and books and talk about them. It seems to me that there is no issue that they don't know about..." (Interview 93). More points of strength are their curiosity and open-mindedness "The students have great curiosity and wide horisons, with a high level of intelligence and impressive oral abilities" (Interview 94). There are also examples from observations: Many students wish to join in the conversation and share their extensive knowledge on this subject. Student R1. adds examples from the Bible. H. adds examples from the world of religion and claims that women themselves perpetuate inequality (Observation 17). There is evidence also from students' questionnaires "It enables one to think 'outside the box'. This is a critical thinking ...it is not the standard educational framework (Questionnaire 6); "This affected me in as far as it develops critical thinking and helped me to understand the subject from different directions and not just from the obvious and straight direction" (Questionnaire 15).

4.4.2. 2Els points of weakness – inhibiting factors

A theme that kept returning in data was 2Els points of weakness that act as inhibiting factors in their learning processes. The teachers described a number of characteristics that are relevant to this group of students. One prominent characteristic is the boredom that disturbs gifted students in their efforts to succeed. They demonstrate boredom during lessons when they feel they know it all or the subject does not interest them and it causes interruptive behaviours and threatens the teachers "They are bored" (Interview 108); Student Rt.: "It bores me to answer" (Observation 41); "It bothered me personally...I was bored" (Questionnaire 40). It is crucial to provide teachers with knowledge about this prominent characteristic and about more 2Els points of weakness because it makes a difference in teachers' behaviour towards 2Els and assists them in understanding and coping with their challenges in teaching 2Els.

Another point of weakness is a low level of performance and outcomes especially in Humanity Subjects (HS) that causes behavioural and emotional problems "There is a huge gap between their intellectual and emotional levels. On the one hand, they are grown-up students in their ability to express themselves and childish in their emotional and social behaviour..." (Interview 145). The teachers said that the gap between students' high capabilities and their difficulties in writing assignments and also their low outcomes affects their emotional behaviour "They analyse and synthesise ideas, draw conclusions and discover new insights (when they talk). But they find it difficult to focus on writing an answer to a question" (Interview 147); "...they are gifted and expect

to be bright and their failures are very extreme" (Interview 150). According to Roy their difficulties are both in understanding the question and in writing answers (appropriate to the lesson's topic and to writing answers at the level of their class). These students have difficulty understanding the question in all its parts because they are always sure that the question is complex and deeper than it really is and get confused trying to understand it "...they have great problems understanding the question" (Interview 98).

Also, they struggle in expressing their knowledge in writing. It is notable in HS which involves a lot of writing. They fail to express their impressive knowledge and high order thinking skills which widens the gap between their abilities and their achievements "Some of the students "fled" to making general and philosophical comments rather than focusing on the...main points..." (Observation 19); Rick "with a huge gap between intelligence and their (the GT students) ability to express it..." (Interview 121); "Students have difficulty doing anything involving writing" (Interview 107). Their achievements in writing assignments or exams are lower than in oral exams. Roy "...their written achievements are lower than when they are tested by heart" (Interview 101); "When I examine the students orally the marks are 97 and above, but in writing, they are unable to write a single line. They write a little and loses patience quickly" (Interview 104). There is evidence from observations: The teacher comments to student R2. that the ideas he explained verbally were excellent but it's not enough because he needs to write them down and answer questions that deal with the subject of the lesson. The students said he prefers explaining verbally because it's hard for him to describe so much in writing and anyway, why is it necessary to write all this? (Observation 24); "What is certain is that I prefer answering orally and then I explain best" (Questionnaire 20); "There is a huge gap between the verbal abilities of the students, for example, during discussions in class, and their low ability to express themselves in writing. In this they become underachievers and this gap causes them very great emotional damage" (Interview 148). Rick describes more points of weaknesses "disorganised...lacking in learning skills... there is a need to guide, work with and summarise the topic learned in the lesson together with them so that they can write an answer" (Interview 108); "It helps to organise the material..." (Questionnaire 42). Teachers who teach students with learning disabilities, gifted or not, need to learn specific strategies that assist these students to circumvent their deficiencies. It also contributes to teachers' confidence and self-efficacy as they feel they know how to improve their 2Els writing skills, outcomes and self-images.

One more theme that causes difficulties to these students especially in high school is described by Rick. He said that the background to the difficulties is that in high school they face greater academic requirements. 2ELs apparently managed to circumvent their difficulties in elementary school

without making special efforts thanks to their great abilities but in high school they find it difficult to utilise the same strategies. This is a good reason why teachers should learn about it and learn how to teach them to struggle with this issue "...but in high school this does not work" (Interview 111); "They cruised for six years in the education system (Elementary School) without much effort and reached a high level of achievement without building up learning skills. For those with learning disabilities it is difficult to face the demands of high school and they do not achieve good results as they were used to" (Interview 110).

One other cause of difficulties is that gifted students ought to be assessed as having SpLD already in primary schools but the teachers said it does not happen. This is because the students are gifted and often succeed in bypassing their difficulties at the elementary stage so that the teachers do not believe that they need to be assessed "There was no external reference system to assess the gifted students as having SpLD as it was unacceptable that gifted students can have also learning disabilities. Awareness of this has developed recently, and the attitude towards the gifted students is changing" (Interview 160). According to the teachers there are gifted students who do not get adequate attention to their needs because they were never diagnosed as having SpLD and they came to high school without receiving any help.

Also, 2ELs teachers need to learn about 2Els disruptive behaviours as is described in the following sections and about the reasons that triggered them. Thus, teachers will be able to support 2Els to cope with them instead of escalating these behaviours. Rick said "...their social acceptance in school was low and they were rejected socially. Therefore, their self-image was built on intellectual capacities and not on a sense of belonging and acceptance. They define themselves as exceptions "by definition". So now in high school when they receive low academic achievements they are in double crisis: social problems and low academic achievements. They are in a state of shock..." (Interview 116). Roy said "The gap is very conspicuous...and causes disruptive behaviour. For example, going outside often, cynical comments, laughing and chatting or not cooperating in written assignments in class" (Interview 133). There is also evidence from observation The teacher does not give up and insists that they write. Students R3. and A3. are chatting and not writing. They make faces at N2. and distract him so he also did not write. R2. and I.is not writing and pass the time chatting. Some of them ask all the time to go out to drink or to the toilet (Observation 42). Another point of weakness that characterises 2Els behaviour is their great argumentativeness on any subject. They think they know better and so they argue about any subject. Evidence from observation, Student Rt. "I prefer a discussion on the subject". Some other students agree with him. The teacher explains very patiently that they should stop arguing with the questions at this stage of the lesson because these are the questions that will be in the matriculation exams. The argument

continues and some students refuse to write and continue talking (Observation 41). They waste time on arguing about the questions of assignments or exams and also with the structure and content of the question and they do not start writing a focused answer "...there were difficulties because they were arguing about a question which did not seem to them to be "smart" enough and then they refuse to answer it because the question is "retarded"..." (Interview 197); "Most of them argued with me all the time...argumentativeness and arrogance and that they think they know very well how to do everything" (Interview 377).

In addition, Rick said that 2ELs developed cynical behaviours, wisecracks, argumentativeness and being very critical "...there is a lot of cynicism" (Interview 98); "This is a characteristic I discovered during the year, the students express a lot of negative criticism and also make cynical comments about each other. There is a lack of patience and tolerance towards peers in the classroom..." (Interview 99). There is evidence of these characteristics from observations, A3. interrupts and argues and makes comments that are derogatory, critical and cynical. (Observation 43); "Rick said "This is a defensive behaviour. The students use the best weapon they have from their high capabilities in order to defend themselves against failures and the highly unsupportive environment they encountered over the years, so one should understand where this comes from" (Interview 117). Evidence from observation 16: Student M1. Constantly makes cynical comments to all those who speak with negative and insulting criticism and stimulates anger and strong reactions from his friends. Teachers also should learn in their CPD that the lack of distinction between the important and less important is very typical to all students with learning disabilities and they should learn how to teach their 2Els to manage this. Roy finds that 2ELs clearly demonstrate this "They get stuck on small matters that are unrelated to the subject and they argue and philosophise about this issue regardless of the lesson subject" (Interview 132); "It helped in understanding what the teacher wants us to answer and what is not needed" (Questionnaire 55).

Another disruptive behaviour that characterises 2ELs was the phenomenon of these students who show a very great obsession with a concept/theme/comment or even a word mentioned during the lesson "... (Students) do not give up on making the response they wanted to give even if it happened an hour ago, and there is a completely different lesson...Some of them find it difficult to change the subject if they have not exhausted it from their point of view. They continue to deal with it during breaks. I learned that this is a characteristic of gifted students... and it makes it easier for me to see this phenomenon and to know that they need help to break free from this" (Interview 141). Findings showed that teachers found it easier to address these students because they learned about their disruptive behaviours and they were prepared and less intimidated. It assisted teachers in conducting in their lessons a better atmosphere and it improved their confidence.

In summary, 2Els cognitive and affective characteristics were mapped, both the characteristics that enable learning and those that inhibit learning for 2ELs. The findings that arose from the first and second research questions were the basis for the researcher in developing the manual for CPD teachers' seminar, including the AAAMS (Salem, 2014) in order to response 2Els teachers' needs. The teachers participating in the research were trained by the researcher and then they implemented the AAAMS in their classes. The following findings were collected for the third and fourth RQs during implementation of this intervention in 2Els classes with the purpose of studying their effectiveness to teachers and 2Els.

4.5. The Third RQ

What is the contribution of the AAA model of the three strategies for teachers and students? (AAA model includes: the strategy of Asking Questions, the strategy of Analysing Questions, the strategy of Answering Questions in a Template).

The underlying concept of data analysis for the third RQ is to study the contribution of the intervention from the aspect of each of three strategies of AAAMs that the teachers learned in the seminar and implemented during their lessons in classes. The analysis presents perspectives both of teachers and students. The categories were consolidated on the basis of locating critical components in common. The researcher tried not to allow overlap between categories, but one can discern some interaction between them indicating the complexity of the phenomenon as Gavton (2001) describes it. The term "numbers" in the table of frequency of the criterion (Appendices 3.18-3.20) refers to the number of times that the unit of analysis (word and/or phrase) appears in the category. Sometimes it is a number of sentences and sometimes a single word according to the context and meaning (Thomas, 2006). Data was collected from observations, interviews and questionnaires for each one of the three strategies.

4.5.1. The Strategy of Asking Questions (AQS)

4.5.1.1. Enabling factors – teachers

The two prominent criteria in this category were the enabling factors and the inhibiting factors in the use of this AQS by teachers and by students. This strategy was selected because it is easy to learn and to integrate in the curriculum. Also, it meets the 2Els needs to develop Hot skills and their curiosity and can minimise the boredom and disruptive behaviours. From teachers' perspectives AQS enables them to develop and expand their teaching methods. They felt that learning this tool helps them to plan the curriculum and to manage the teaching in the classroom.

Roy said "(the strategy) ...became a tool for introducing the subject of the lesson..." (Interview 382); "It gave me tools to teach in other ways and to see that it has value...the strategy makes them think, to show interest, to express their abilities..." (Interview 192). The teachers said that employing this strategy in class enables them to create interest, pleasure and curiosity among the students. Evidence from observation The students enjoy the diversity of teaching methods in the lesson (Observation 27). The evidence that emerged from the post-intervention interviews with the participants reveals the contribution made by the strategy of AQS also in the long term. Rick said "...learning by the strategy of asking question continues to be a very effective tool and allows diverse and enriching learning..." (Post-Interview 16). According to Rick "I can teach the subject in different ways and I think it will be interesting for me and for them" (Interview 208); "...It (the strategy) provides an excellent solution and response for teaching the subjects in a better and more interesting way..." (Interview 233); "...by using the strategy so many diverse possibilities of thinking and perception were opened that the students connected to it and became very interested..." (Interview 249). In addition, the teachers said that this strategy provides a response to gifted students' characteristics and needs. For example, this strategy enables the development of critical thinking, investigation, using their previous knowledge and being sceptical. Rick said " Now that the students are skilled in using this strategy I can ask the students to explore a topic in a text taken from the History or Bible curriculum, to check it from different angles and to create new definitions and interpretations of their own" (Post-Interview 9); Roy said "...and they have a great platform for proving and developing their high abilities and the extensive knowledge of the world that they have. They became involved learners" (Post-Interview 4).

The findings also revealed an improving atmosphere in the class during the lessons. The teachers, like the students, referred to the atmosphere of enjoyment in the learning process when they employed this strategy. There is a connection between an enjoyable and challenging learning atmosphere and the growth of teachers' and students' motivation to learn. According to the teachers this strategy was a way to improve students' motivation to learn and it improved the learning environment. Roy said "...And it really works and there is also an improvement in the classroom atmosphere, in participation" (Interview 203); Rick said "...Everyone, absolutely everyone participated, asked, answered and talked. There was enthusiasm and joy. There were no disturbances and they didn't even ask to go to the toilet. They didn't even go out to a break and continued the discussion around the questions..." (Interview 292); "The students responded enthusiastically and asked many questions and answered some of them using their prior knowledge and I could see the interest and curiosity..." (Interview 292). The teachers were asked about the inhibiting factors of this strategy. According to teachers there is nothing to indicate inhibiting

factors in this strategy. In summary, the analysis of data supports the significant contribution of the AQS both to teachers and students and it strengthens findings' internal validity (Gavton, 2001).

4.5.1.2. Enabling factors - students

As far as students are concerned there were various enabling factors for 2ELs. The students demonstrated pleasure and interest when using this strategy. They felt that integrating this strategy as part of their lessons' programme improves the process of learning. They said that it's "...fun and more interesting... (Questionnaire 29); "...much more pleasant learning atmosphere..." (Questionnaire 41); "Many students indicate that the lesson's topic and the asking of questions arouse great interest (Observation 13).

A second criterion was the promotion of critical thinking. The students described the contribution of this strategy as enhancing their critical thinking, being sceptical and critical in reading, writing and in the whole learning process "...it gives the possibility of critical thinking because you ask the questions ..." (Questionnaire 14); From the cognitive aspect the students feel that this strategy adds a layer to the development of their perspectives and enables them to expand their points of view "...different viewpoints... (Questionnaire 3); "...it develops critical thinking and helped me to understand the subject from different directions and not just from the obvious and straight direction (Questionnaire 15); "... it (the AQS) is thought-provoking..." (Questionnaire 47). In addition, the students reported that this strategy enables them to link prior knowledge to new knowledge: "In the lesson I use my prior knowledge and my perspective" (Questionnaire 13); "...connect with prior knowledge... (Questionnaire 34). There are more examples from observations "Student M2. brings examples from subjects she learned last year and compares these with recent examples concerning women's equality. Many students wish to join in the conversation and share their extensive knowledge on this subject." (Observation 16). They also found that AQS provides opportunities to investigate the issue and to learn about it in alternative ways "This strategy contributes to investigation and critical thinking. This strategy enables the class to look at the issue from the different viewpoint...and opens up for us different possibilities of thinking. This strategy also shows us a little of children's previous knowledge and helps to expand on the subject" (Questionnaire 3). It is noticeable that the students' motivation to learn is enhanced when they learn in a way that challenge their high abilities and curiosity.

4.5.1.3. Inhibiting factors - students

Few students pointed also at inhibiting factors in the employment of AQS. There are some students who opposed using this strategy and explained it as a waste of time and as causing delays to the

lesson and getting off the subject. It is important to note that to some of the students this is a disruptive factor which results in loss of concentration "this strategy takes up a lot of time...and then maybe we will be short of time for the material..." (Questionnaire 4); "It delayed the duration of the lesson...It took too long" (Questionnaire 33); "It bothered me personally, in these first 10 minutes I lost concentration" (Questionnaire 40). The findings showed that the teachers did not oppose the learning of new strategies because they felt a deep need for tools to cope with the challenges they had while teaching 2Els "Who is this population? There is a need to learn about strategies and skills that are suitable for them. How to help them" (Interview 69). The teachers argue that there is no organised training for the teaching of these students "I do not have enough knowledge...I did not receive practical strategies" (Interview 62). This void in CPD programmes for teachers has immediate implications on their practical work and they feel frustrated without being able to understand the situation and to know how to solve it and they were anxious to learn new strategies.

4.5.2. The Strategy of Analysing Questions (ANQS)

The two criteria in this category were enabling and inhibiting factors to students and to teachers. Analysis of quotes was from interviews, observations and questionnaires. Students wrote in questionnaires (Appendix 3.19) that using ANQS as part of lessons is an enabling factor because it improves their ability to understand the questions more precisely without missing out information and to focus on the main and important points "...extremely helpful for focusing on the question..." (Questionnaire 20); "... helps us not to forget parts of the question...and understanding all parts of the question (Questionnaire 51); " it helped me to focus during the test ((Questionnaire 52); "... an excellent strategy that helped to separate the main point from the less important..." (Questionnaire 53). Also, an example from observations I slowly learned how to analyse the questions (Observation 47). This strategy was selected because it is simple to learn and to integrate in the curriculum and it meets 2Els points of weaknesses. The findings showed that it was well accepted by teachers and 2Els because it was interesting and effective.

There are some students who indicated that there is an inhibiting factor in this strategy because the use of this strategy takes time in class and it is not useful for them. They informed me that some students said that he is "...wasting time..." (Interview 361); "They complained that they were bored. It was too easy for them..." (Interview 312). It can be seen in observations The questions are stupid and not interesting. It bores me... (Observation 41). Such difficulties in acquiring new strategies are very common among students with learning disabilities because it intimidates them and they are afraid to fail again. The teachers participating in the intervention were ready to learn this new

strategy because it was easy to learn and to teach and also it met their 2Els difficulties in separating the main issues from the less important and it assisted them to focus on all the parts of questions. The teachers believed that learning ANQS enabled them to develop learning and writing skills in students with difficulties. Rick gives an example "... students miss parts (in the question) but with this strategy they focus and can fully express their knowledge and ability... their increasing achievements challenge them..." (Interview 288). Teachers kept on saying that ANQS is simple and easy to implement. Rick said "The successful students was not usually one of the prominent ones in the class and it gave her great reinforcement (success in dealing with the question). Students applauded at the end..." (Interview 308). The teachers regarded this strategy as promoting focus on the issue and enabling the students to make a distinction between the important and less important when building an answer. In this way, the students can improve their performances and this contributed to their motivation and behaviour in class. Roy said "...suddenly their achievements are rising and then their self-confidence goes up and they dare to participate more in class both verbally and in written tasks. They don't sleep and less disturb and go out...this is a result of the process we have been through" (Interview 317). Evidence from post-intervention interviews reinforces findings from other research tools and strengthens the internal validity of data (Shkedi, 2003).

4.5.3. The Strategy of Answering Questions in a Template (AQTS)

Also, in this category, there are enabling and inhibiting factors in the use of AQTS for both students and teachers. From analysis of students' quotes from questionnaires and observations it can be seen that 2ELs found AQTS as an enabling factor because it is a tool to improve their writing skills. They felt that the strategy helped them to answer questions in HS where many words and structured answers are needed. The strategy helped the students to focus on the important and relevant issues in order to formulate an answer or text "...extremely helpful...it helps to write a full and detailed answer (Interview 333); "... helped me in wording my thoughts and ...writing the answer ...and not to miss anything" (Questionnaire 25); "really helps to focus on the main points" (Questionnaire 71). In addition, students expressed the pleasure they had using this strategy "...I really enjoyed it" (Interview 333). Also, from observation 46 "I learned that there is an answer template and I use this for my answer. I got 80 in the last test and for me it's a huge accomplishment".

There were also some students who argued that AQTS is an inhibiting factor because they felt like robots and it prevents them from being creative "I didn't enjoy the uniform template so much..." (Questionnaire 75); "... I feel a bit like a robot" (Questionnaire 73); "(the strategy) prevents... creativity..." (Questionnaire 63). Another inhibit factor can be seem in some students'

comments in the classrooms' observations, Student M4. "complains that it's difficult for him to write and he prefers the lessons that have discussion and conversation. He prefers the lessons in which questions are asked but without the need for writing after that" (Observation 40). Students with learning disabilities in writing skills feel intimidated to learn a new strategy that requires writing. Teachers need to learn about this issue in purpose to teach this strategy and to assist 2ELS to circumvent their disabilities.

From analysis of teachers' quotes from interviews it is apparent that the teachers saw the integration of AQTS as an enabling tool for producing cognitive changes in the students' attitudes to the questions and how to answer them. Rick said "I taught how to relate correctly to the question and how to answer...and the answers have greatly improved..." (Interview 236). Roy: "I see how critical it is to teach the gifted students how to answer questions" (Interview 196). This strategy assisted the students to focus on the important and relevant issues and how to write better texts and answers to questions, as Roy testifies "...how to get ready for the answers, not to wander off the point. There is an assignment and a way of carrying it out which will lead them to a high level of achievement and will improve their feeling and image" (Interview 314); "When I gave back the Bible exams after we had learned and practised the strategy, there was a significant improvement in the level of answers..." (Interview 234). Teachers said that by learning and teaching AQTS they experienced a change in their learning, motivation and enthusiasm, and obtained the same change in their students' learning and improvement in their outcomes, as Roy said "... they (students) answered the questions and they even did so with enthusiasm as someone in class said that it helps to answer more accurately and the mark will be higher..." (Interview 205). Rick adds; "... the answers have greatly improved... They were pleased and I was pleased. And I'm sure it will encourage them to write better next time" (Interview 236).

The teachers emphasised that AQTS is simple and easy to implement and also easy to transfer to other subjects, as Rick said "... they (students) taught her (another teacher) how to do it and she came to ask me about the strategy and since then she teaches in the same way as I do and she says it proves itself..." (Interview 396). According to the teachers they transferred this strategy to their lessons in other classes and not only in 2ELs separated class because it was useful and beneficial "I use all the tools and it works wonderfully and also the students' achievements are rising (Interview 392); "I base my lessons on the Manual and develop new ways of teaching according to what we have learned... (Interview 20). The evidence from the post-intervention interviews reinforces the findings which were collected from all the other research tools concerning the contribution of this strategy "It enables teaching; it is an example of an enabling factor in the programme for the teacher..." (Interview 7); "My lessons' plans will be built later according to the

model of strategies that I learned at the seminar..." (Interview 19). According to the teachers they did not find any inhabiting factors in this strategy "...all the components of the intervention are enabling factors, there's nothing inhibiting in it. The strategies only enable me" (Interview 7).

In summary, from teachers' and students' evidence from all the three strategies of AAAMS it can be argued that both teachers and students benefited from each one of three strategies. The teachers experienced a change in their attitudes to 2ELS and to their learning as a beneficial process. The views of the students changed to more positives ones and they perceive 'learning' differently as a result of engagement in this research. Both teachers and 2ELs has some 'transformation' taken place and experienced learning as a beneficial and joyful process. It can be argued that utilisation of multiple research methods in this study strengthened its internal validity (Gavton, 2001).

4.6. The Fourth Research Question

From the perspective of values and pedagogical aspects, what is the contribution of the intervention as a whole programme: CPD programme for teachers and implementation of AAAMS in classes?

The underlying concept of the fourth RQ was to examine the contribution of the intervention to teachers' learning processes as a whole programme (CPD seminar, implementation of alternative strategies in classes) from the aspects of pedagogy and values and the impact on 2ELs. Formulating the four categories was a process of repeated reading the data from all the research methods: interviews, observations and questionnaires. The first category is the contribution of the intervention in terms of values to both teachers and students. The second is its pedagogical contribution, the third is learning from success and the fourth category is the transfer of knowledge obtained by the intervention to other domains in school.

4.6.1. The first category

In the first category findings showed that the intervention made a change in their beliefs about their role as teachers. Roy said "From my personal perspective, I feel that I am a better teacher" (Interview 289) Rick said "The techniques that we learned in the seminar provide an excellent solution and response for teaching the subjects in a better and more interesting way" (Interview 233). Roy; "...the intervention contributed to a change in the perception of my role as teacher of a class of gifted students with SpLD. The programme contributed to my knowledge..." (Post-Interview 14). According to the participants they feel they improved their self-efficacy because they now know better about their students and they have more tools. They have a vision and personal beliefs about their role and the way to behave. When teachers are prepared with knowledge

and strategies adapted to their needs they improve their professionalism and confidence. For example, they have now more tools to provide their students with interesting and enabling environment, to develop thinking and learning skills. Roy describes the contribution of the intervention "It makes me feel good and stimulates me to continue to look for ways to improve my teaching" (Interview 192). Another role of the teacher according to Roy and Rick is to plan how to teach. For example "I learn and work in a systematic and clear way and there are objectives and goals..." (Interview 231); "I expect to continue in this way because it greatly improves the feeling I have as a teacher that I am developing and helping the students according to their needs" (Interview 25).

The teachers report on the improvement in learning climate as a result of the intervention "It's more pleasant for me to teach this class... I leave with a smile...it seemed that the students do so too" (Interview 310); "There is a good classroom atmosphere because the lessons are interesting..." (Interview 257). It can be seen in observations: a relaxed atmosphere in the classroom (Observation 48) "A much more pleasant learning atmosphere" (Questionnaire 41); "I really enjoyed this kind of learning - it is active and thought-provoking and helped me" (Questionnaire 47). Rick also reports on improving students' performance in terms of enthusiasm and joy "... there was enthusiasm and joy. There were no disturbances... they said they want to learn like this all the time because it was interesting" (Interview 292); Everyone wants to participate. There is enthusiasm and interest (Observation 36). "...the intervention helped me deepen my awareness of the matter and to implement my vision more easily at the level of providing answers to the needs of these students..." (Post-Interview 4); "Diversifying my teaching methods helped me a lot in my motivation to teach the class of gifted students. Both I and the students benefit from it and I enjoy it" (Post-Interview 4); "As far as my passion as a teacher in a class of gifted students, the intervention...caused both me as a teacher and also my students to be excited and to become engaged and partners in the learning process" (Post-Interview 11). Also, it can be seen from observation 27, Many students respond: lovely, fun, like The observer: there are enthusiastic responses. The students enjoy the diversity of teaching methods in the lesson; "This method is fun and interesting (Questionnaire 44). Learning in an interesting and beneficial way and improving outcomes results in improvement in students' performance in terms of enthusiasm and joy and also, in a better learning climate.

4.6.2. The second category

During the intervention, the teachers assisted the students to go through a process of development and implementation of learning skills to circumvent their disabilities and to develop their high capabilities. According to Rick it was very beneficial to him to learn and to be prepared to teach 2ELs and then to teach them about the importance of acquiring strategies and how to use strategies in order to close the gap and to experience success "...and now it suddenly works for them" (Interview 305). Evidence from observation: The observer: there are enthusiastic responses. The students enjoy the diversity of teaching methods in the lesson (Observation 27); "This strategy helped me to provide details in writing the answer and was very nice and helped me focus on the question..." (Questionnaire 17).

In the second category, the findings showed that the intervention made a pedagogical contribution to the teachers and they learned how to develop critical and creative thinking skills as parts of high order thinking skills. Also, teachers said that the implementation of the AAAMS contributed to nurturing the HOT skills of the gifted students. Roy reported that "I am pleased with the change which is what I was looking forward to ... I will continue to conduct classes in order to develop their critical thinking and to give space for their great abilities...also to address the difficulties of those with learning disabilities in writing the answers so we can close the gap between their knowledge and ability and their achievements" (Interview 400); "...using the strategies makes them think, to show interest, to express their high ability...also for the students with difficulties I have tools now to enable them to progress and succeed..." (Interview 192). Rick said "...an infusion of values helps also those who struggle with learning disabilities...they learn to cope, but they also receive creative assignments that allow them to reflect their capabilities and positive experiences (Interview 239); " Following the strategy of asking questions which stimulates thinking and interest, the students produce new knowledge...creating new perspectives" (Post-Interview 10). Also from observation 18 "I'm very proud of you for the good work...I saw that most of you referred to the strategies that I taught about writing and your marks went up by at least 20 points"; I feel that the three strategies together were integrated into the lesson in class to the point where I can see a change the way I am learning. If I compare to last year I can see a real difference... " (Questionnaire 45).

In addition, the teachers said that the intervention equipped them with a variety of teaching methods which enables them to lead students to progress and success and it resulted in a change in their way of teaching and it enhanced their self-efficacy. The evidence from observations show it: *Student A3.* "At first, I did not accept that I have difficulty in writing. I thought that I could write a masterpiece in two lines. I realised that this is not the case and slowly learned how to write better and so I got a better mark" (Observation 47). And from teachers' words "...it (the intervention) gave me tools to teach in other ways and to see that it has value...for the gifted students..." (Interview 192); "I am giving the correct response to my gifted students...who have many

difficulties..." (Interview 233); they have a great platform for proving and developing their high abilities" (Post-Interview 4). The teachers reported the improvement in students' achievements due to the intervention. Roy said that the improvement is significant among all the students "...they have acquired tools to deal with written assignments. They write and their marks are improving..." (Interview 192); "...the students' achievements are rising" (Interview 392); "...the knowledge is better reflected in writing despite the difficulties, not just verbally during lessons as it used to be. Among these students there was an improvement of up to 20 points...systematic implementation of the strategy has proved itself completely" (Interview 235); "My achievements in the last test really improved because I used the strategies" (Questionnaire 45).

Teachers said that the intervention caused them to adopt a leadership approach. They felt that they changed their attitudes and they are able to lead their students to improve their achievements through taking responsibility. They are able to lead with more patience, understanding and openness, to increase their motivation to learn and provide the tools for learning. Roy said "I walk more confidently into the classroom because I have clear and systematic tools. I come prepared to the lesson and do it much better because the training I received...and I go into e ach lesson with a great feeling...and succeed in it" (Interview 289). Also, it can be seen in observation 5: The teacher is pleasant but assertive, authoritative, directs the discussion in a culture of debate and allows expression of different opinions and also in observation 48: The teacher doesn't shout, his voice is pleasant but very assertive, and his comments about cynicism, argumentativeness and the way to talk are also pleasant but assertive.

In post-interviews with the teachers they both reported on the contribution of the whole intervention as beneficial to them in the long-term. The teachers employed the tools they acquired during the intervention in the planning of their curriculum and their teaching methods in all their classes after the end of the intervention. Rick comments "For sure I use what I have learned in the training programme last year, and even more effectively, because I am more experienced now. I learned whilst teaching what did not work and I especially learned from successes. I learned to use a variety of teaching methods...integrating (the strategies) is an organic part of my curriculum" (Post-Interview 5).

4.6.3. The third category

In the third category, the findings showed that the contribution of the intervention to the teachers was from 'learning from success' as leverage for affective and cognitive improvement. This category was formulated from the repeated teachers' expressions of the intervention's successes. According to teachers the intervention contributed to them and to their students in promoting their

learning skills and achievements on the basis of successes "...the experience of success is one of many that I have had so far in the class. Improvement in the ability to express themselves in writing and in giving answers in exams, improvement in understanding the requirements ... compared to the beginning of the year..." (Interview 299); "...academic success...reduces the difficulty of their self-image and they cope better with their studies and it motivates them to continue and to make progress" (Interview 346); "I prefer to teach on the basis of successes, in order to help them cope with the gap that some students with learning disabilities have..." (Interview 22); "Learning from successes contributes to their enthusiasm, to their cooperation and develops their learning and behaviour in the classroom..." (Interview 366a); I especially learned from successes..." (Post-Interview 5). Behaviour is improving under the guidance of the teacher (Observation 48).

In addition, according to Roy the students improved their outcomes due to the use of the AAAMS and this motivated them to go on using it "...I gave back (to the students) an exam they did and I gave them a feedback about the process we went through in order to see how the strategies helped them. I asked them if they used the strategies in their preparation for the exam and they said they did. The achievements are higher and better than before. The marks of the gifted students were always lower than the other regular classes I teach, but this year there was a great success... I started teaching in the new academic year (at school) with all the strategies, and I see already its contribution and the cognitive help it gives to students." (Post-Interview 1). "I asked you to write answers that give expression both to your knowledge and your opinion on the subject and that used the strategies in order to write the correct answer. Most of you did it well" (Observation 20). Rick described the success of the intervention as a result of the inclusion of AAA model of strategies to the curriculum of the discipline he is teaching (Bible) "I managed to build and customise a special programme that fits their (the students) needs. The model of the strategies is not included in *curriculum but it enabled me to add themes and adapted it to their cognitive needs"* (Post-Interview 4); "...it gave me a feeling of success..." (Questionnaire 56); "The new learning method and the transmission of information by the teacher gave me a feeling of success, self-fulfilment and achievement. Certainly, it is much better than anything I've been exposed to it until now" (Questionnaire 70).

Also, the teachers referred to the transfer they made of the new knowledge they learned in this intervention, from 2Els classes to regular classes and to their colleagues in high school. In addition, they continued to employ this model in their curriculum after the intervention ended and during the following year as well. Teachers were empowered and felt experts in teaching new strategies. This transformation in their self-efficacy led them to initiate a change in larger circles in their school. Rick said "...I use this process also in the other parallel classes of not gifted students" (Interview

394). Roy: "... I implement the AAAMS ... in all my classes and it works wonderfully. For example, the asking questions' strategy became a tool for introducing the subject of the lesson and for the development of critical thinking and the children very much like it" (Interview 382); "The other teachers who came into the classroom (the gifted class) liked this matter (AAAMS) very much and requested that I should share with them the way I teach" (Post-Interview 6). Rick and Roy said that the initiative to use transfer of knowledge came from the students that passed on the strategies to teachers who had not attended the training seminar, because they experienced success and it changed their views of learning to more positives ones. As Rick describes "They taught her how to do it...she says it proves itself in the achievements of the students in her literature class" (Interview 396); "It helped me a lot, I feel there is an improvement and I can transfer this to other subjects" (Questionnaire 62); "The students themselves are requesting the teachers to relate to my teaching methods, and so there is implementation of part of the strategies in the lessons of other teachers in the organisation..." (Post-Interview 19).

4.7. Summary of Findings

The findings were derived from the multiple methods I employed in my study such as interviews, observations and questionnaires. The research findings were divided into four categories and each category was analysed and accompanied by quotes from the interviews with teachers, observations in classes and open questionnaires of students during the intervention. The intervention included the Manual for 2Els teachers and the model of three strategies (AAAMS), and it provided answers to all RQs in three aspects: affective, cognitive and organisational. The findings in this chapter showed that the intervention contributed positively to the learning processes of both teachers and students and they perceived 'learning' differently as a result of the engagement in this research. Teachers experienced success when their students improved their learning skills, their outcomes, and their self-image. It was found that the teachers went through a 'transformation' in their attitudes and stigmas towards 2Els and also in their learning and employing new strategies. Teachers perceived learning as an empowering process that contributed to their self-efficacy, and improved their professionality.

Moreover, it was found that the teachers' 'transformation' impacted positively 2Els, whose attitude towards learning changed. Their behavior improved and their curiosity to learn new things increased. The students said that learning became joyful, and that they enjoyed that the teachers challenged their critical and creative thinking skills. The learning environment was more interesting and it minimised their boredom. Furthermore, they felt that their difficulties in writing assignments were addressed by these teachers, and their successes had an impact on their motivation to learn.

Both teachers and 2Els said they felt confident in employing the AAA model of three strategies and they were proud to pass on their new knowledge to other teachers and students in their school. The findings that emerged from all the research methods, strengthened the internal validity (Gavton, 2001) of this study. The next chapter discusses the findings in relation to the literature which will strengthen the external validity of this study (Shkedi, 2003).

Chapter 5: DISCUSSION

5.1. Introduction

This chapter discusses the study's findings in relation to the gained knowledge from the literature and presents the novelty of this study as related to other studies in the field. The research was based on the qualitative approach that allows examination of social phenomena through the perspective of the people who experience these phenomena (Denzin & Lincoln, 2008). Data were collected from different qualitative methods during an intervention process in my high school and was analysed through the inductive approach. The findings showed that teachers underwent processes of learning that changed their teaching attitudes and methods, and consequently benefited from the intervention. A combination of knowledge and strategies in the CPD programme in this study improved their teaching skills, minimised their opposition to employ new methods, and changed their stigmas and attitudes towards 2Els. These changes in teachers' learning had a positive impact on teachers' self-efficacy and improved the learning processes and outcomes of their 2Els students.

5.2. Discussion on Challenges of 2ELs Teachers: Inhibiting and Enabling Forces in teachers' learning processes

At the beginning of the intervention the findings were collected from interviews and observations in order to detect the factors that enable or inhibit the teachers to teach 2Els humanities subjects in ways that enhance their teaching skills and their self-efficacy. One prominent motive that prevents teachers' optimal teaching was the lack of adequate knowledge about 2Els, as well as the absence of specific strategies to teach them. Almog and Schactman (2004) argue that most of teachers' CPD programmes refer to specific disciplines and focus only on special groups such as students with SpLD, or separately to gifted students. However, there is no explicit reference in the literature to CPD programmes for teachers who teach 2ELs (Manor-Benjamini, 2005), or regarding Humanities Subjects. Hence, teachers find themselves in impossible situations as a result of this absence, thus failing to provide tools to their students to achieve appropriate performance. Evidence of this fact was found in the literature describing the lack of teachers' training tailored to the unique needs of the minority population of these students (Kay, 2002: Nielsen, 1994). Moreover, in the interviews conducted for the present study it was found that teachers did not even know who 2Els were "Who is this population? There is a need to learn about strategies and skills that are suitable for them. How to help them" (Interview 69). The teachers argued that there is no organised training for teaching these students "I do not have enough knowledge...I did not receive practical strategies" (Interview 62). The explanation provided in the literature for this void is related to the budgetary distribution within the educational system: minority groups do not receive adequate budgeting and suitable care (Nielsen, 2002).

An additional explanation concerns human perception. It is difficult to understand the phenomenon of Dual Exceptionalities among gifted students because there is a dissonance between their high cognitive abilities and their low achievements, therefore teachers find it difficult to understand this phenomenon (Freeman, 2001: Freeman, 2010; Kay, 2002: Manor-Benjamini, 2005). This void in CPD programmes for teachers has immediate implications on their practical work and they feel frustrated as they are not able to understand the situation or how to solve it. They have a sense of failure to guide these students towards achieving the best of their abilities in spite of their difficulties. There is evidence in the literature of the negative implications generated by the lack of CPD appropriate teaching skills on teachers' motivation. Teachers have difficulty teaching, consequently, they experience failure. This situation is even worse when it comes to teaching students with special, or different needs, such as 2ELs (Einat, 2004: Kay, 2002: Nielsen, 2002). Tov-Li (2008) talks about the importance of tailoring an appropriate training programme to provide a specific response to the needs of the teachers. Hence the importance of the recent research, that aims to represent this teachers' minority group, and to raise awareness of this issue in order to examine the specific needs and to develop a CPD programme accordingly.

An additional inhibiting motive was discovered during the intervention: teachers' expectations regarding 2Els were unrealistic "My expectations were that they would be at a higher level of writing" (Interview 61). There is a gap between the demands of the educational system and the students' low achievements derived from their difficulties in writing skills. Teachers feel caught in the middle because they want to lead students to success in their achievements, but they feel the need of more effective teaching tools. Rick said "I am required to teach for the sake of achievement, but I prefer to teach on the basis of successes, in order to help them cope with the gap that 2ELs have...the result of this gap is great frustration" (Interview 81). Manor-Benjamini (2005) explains this situation as the result of the high expectations that teachers develop when they think about teaching gifted students; however, when teachers discover that 2ELs are not succeeding as expected, they develop a sense of alienation towards their students, and have trouble creating a personal and emotional connection with them "I feel less attached to them. They are carrying a burden which I do not understand, and at present do not know how to deal with it, so it distances me emotionally" (Interview 66).

The teachers need to learn also about High Order Thinking skills that characterise gifted students. Rick said "The students have great curiosity and wide horisons, with a high level of intelligence

and impressive verbal abilities which they show in class's discussions" (Interview 93) Hot skills should be nurtured and teachers need tools to cope with them (Manor-Benjamini, 2005: Shaked, 2007). Also, teachers need tools to cope with SpLD that also characterise 2ELs. Harpaz (1998), Salomon (2000) and Shaked (2007) consider HOT skills as points of strength that are prominent features that can be used as a lever to success but the teachers should learn how to enhance these 2Els features. Also, the observations show evidence of this "The classroom discussion continues. Students give examples from different countries about inequality (the topic of the lesson) and various explanations about the development of equality for women. Student M2. brings examples from subjects she learned last year and compares these with recent examples concerning women's equality. Many students wish to join in the conversation and share their extensive knowledge on this subject. Student R1. adds examples from the Bible. H. adds examples from the world of religion and claims that women themselves perpetuate inequality (Observation 17). Also, there is evidence from students' questionnaire "This strategy contributes to investigation and critical thinking. This strategy enables the class to look at the issue from the different viewpoints of the children in the class and opens up for us different possibilities of thinking" (Questionnaire 3).

Furthermore, another inhibiting motive that arose from the findings was 2ELs' deficiencies in writing assignments which may cause them to fail academically especially in HS. Kaniel (2006) argues that their teachers need to be provided with strategies to assist them bypass these deficiencies. Kirby et al (2009) explain this characteristic as one of the phenomena of a Developmental Dyspraxia which is a neurological disorder (APA, 2000). Dyspraxia can affect people in different ways and to different degrees (Dyspraxiadults.uk. 2014). One of the most common types is A Symbolical Dyspraxia characterised by difficulty in writing function and integrating knowledge from which to develop an answer or text. Students waste too much energy thinking about a simple question and fail to organise knowledge for writing an appropriate assignment. This inability prevents students from expressing their knowledge causing them frustration, and emotional problems (Biggs & Colley, 2006; Kirby & al, 2009; Wearthmouth et al, 2003).

In addition, Mamen (2007) explains this difficulty and its negative implication as a prominent symptom of Nonverbal Learning Disabilities (NLD), specifically on writing assignments, in which the gap between students' knowledge and their high verbal ability is clearly depicted by their low achievements; "Much work is required to help them write and express themselves in a manner that will show their high level of knowledge and capabilities" (Interview 149). Kay (2000), McCallum et al (2013), and Nielsen (2002) claim that the problem is getting worse among 2ELs because their giftedness may overshadow their difficulties resulting in the students being mediocre or even

under-achievers despite their great abilities. According to teachers "About the gap among gifted students as an inhibiting factor - you discover a talented class, but with a huge gap between classroom discussions and its application in writing" (Post-Interview 15). For example, from the observations in 2EL class during the intervention (The following detailed example represents many other similar situations) Student N2. I still haven't figured out what to write. (A few minutes passed and he still did not start to write). O3. is not writing but is talking with others and scribbling in his notebook. N2. again, asks what he should do. What should he write? And he starts saying orally what he thought about the concepts (Observation 29). The teacher does not give up and insists that they write. R3. and A3. are chatting and not writing. They make faces...R2. and I. are not writing and pass the time chatting. Some of them ask all the time to go out to drink or to the toilet. N3. explains the answers verbally to his friends... he avoids writing his answers...; After 10 minutes, the teacher asks the students to read out their answers. N3. explains his opinion orally. He did write a short answer but wants to elaborate orally (Observation 30). The students who didn't write do not participate in reading the answers. One asks to leave the room, a second lies on the table, a third sort out his bag. N3. explains orally in detail and clearly. The teacher asks: Did you write this? N3. replies: I wrote only one sentence, but I can explain orally. Also, N2. wrote two lines but explained in detail verbally (Observation 42). The students Y. and A. participated in discussions on different topics, but once assigned a written task they use disruptive behaviours such as Einat (2004:150) describes finding excuses for not writing, leaving the class, arguing, or as Heiman (2011) adds, demonstrating antagonism and boredom.

More evidence arose from the students' own words during observation: Student A3. "At first, I, did not accept that I have difficulty in writing. I thought that I could write a masterpiece in two lines. I realised that this is not the case and slowly learned how to write better and so I got a better mark" (Observation 47). This description is typical of all students with SpLD, but it is even more pronounced among 2ELs for whom the gap is greater because of their high capabilities. Manor-Benjamini (2005) emphasises that this gap is very noticeable and disturbing for these students who are unable to prove their abilities, hence are perceived as lazy, problematic, and under-achievers. Kay (2002), and Nielsen (2002) support this argument and add that teachers should be taught about it, and also trained in order to have the tools to cope with it.

Another cognitive characteristic of 2ELs that was prominent in the findings was the students' difficulty in focusing on the main theme of subjects. Teachers demonstrated the need to learn about this before entering such 2ELs class. Students wander, are unfocused on learning, and tend to discuss things on a philosophical level unconnected with the lesson subjects "Some of the students "fled" to making general and philosophical comments rather than focusing on the ...main points ..."

(Observation 19); "Separating the trivial from the important is very typical of the difficulties...they excel in analyse and synthesise ideas, draw conclusions and discover new insights. But they find it difficult to focus on answering a question on the text. They are not focused, their minds wander..." (Interview 147); "During the discussion the students deviate from the subject of the lesson to other issues that come from their wide general knowledge and mainly because they find it difficult to focus on the subject" (Interview 113).

According to Heiman and Pretzel (2003) and Plotkin (2008), there are relationships among the inhibiting forces between the cognitive and affective aspects. These are by-products of the difficulties, failures, and frustrations in school that cause a reduction in self-esteem and motivation to learn. Einat (2006) adds that there is a danger of students being emotionally and socially harmed which might lead to disruptive behaviour, and even dropping out of school. Manor-Benjamini (2005) argues that the gap between low levels of achievements and high capabilities of 2ELs has implications on affective aspects and demonstrates the problematic learning atmosphere which acts as a deterrent to teachers' motivation and students' personal growth. Roy said "One of the students who received a low mark in a History test said about himself in sorrow: "When I was a little boy I thought I was gifted and now I have grown up and have become retarded" (Interview 97); "The gap is very conspicuous in class and causes disruptive behaviour" (Interview 133); "...this gap causes them very great emotional damage" (Interview 148); "Now (in high school) they are in double crisis: social problems and low academic achievements. They are in a state of shock" (Interview 116). There is evidence of these characteristics from observations A3. interrupts and argues and makes comments that are derogatory, critical and cynical. (Observation 43).

Concerning the affective aspect, there is evidence of few repetitive inhibiting motives that characterise 2ELs such as cynical and arrogant behaviours during lessons, therefore, teachers should be acquainted with this in order to be able to help them "This is a characteristic I discovered during the year, the students express a lot of negative criticism and also make cynical comments about each other. There is a lack of patience and tolerance towards peers in the classroom..." (Interview 99). These characteristics were very prominent also during the observations M1. constantly makes cynical comments to all those who speak with negative and insulting criticism and stimulates anger and strong reactions from his friends (Observation 16). Rick gave his own personal interpretation of the cynicism "... this is a defensive behaviour. The students use the best weapon he has from his high capabilities in order to defend himself against the highly unsupportive environment he has encountered over the years in regular school, so one should understand where this comes from" (Interview 117). Adad (2003) explains the cynicism as a reaction of students with

difficulties in learning skills that had bad experiences and failures in school and developed lack of trust and a negative approach towards learning.

Another inhibiting characteristic that arose from the findings that challenges teachers was an extreme competitiveness among gifted students. It was a repetitive motive but the writer could not find references about it in the literature "There is negative competitiveness between them, ambition that results in negative criticism towards each other and it's not positive at all" (Interview 139); "The dynamics of the competition in the class is very problematic..." (Post-Interview 18). An additional inhibiting motive was an obsessiveness that characterises these students "They become very compulsive about a concept or topic...they do not give up...they find it difficult to change the subject if they have not exhausted it from their point of view. It's not just from curiosity. I learned from experience that this is a characteristic of gifted students... and it makes it easier for me to see this phenomenon and to know that they need help to break free from this" (Interview 141). This characteristic is accompanied by another prominent feature which is their great argumentativeness on any topic. Evidence was found both from observations and interviews Student S2. argues: the questions are stupid and not interesting...I prefer a discussion on the subject. The argument continues and some students refuse to write and continue talking (Observation 41). Roy said "They argue with me all the time. About the method, the strategy, the subject, the questions... They argue about everything...in general their argumentativeness...is very prominent" (Interview 137); "My gifted class is actually more argumentative because they have something to say about every matter much more than others. This really stands out..." (Interview 131); "They get stuck on small matters that are unrelated to the subject and they argue and philosophise about this issue regardless of the lesson subject..." (Interview 132). These characteristics become inhibiting factors for their teachers and also have implications on these students' achievements. For example, 2ELs find it difficult to deal with the questions during the lessons or exams and they invest their energies in arguing or criticising the questions or the teachers, consequently, their results in writing assignments are poor. Kay (2000) and Nielsen (2002) explain that these difficulties may cause frustration and behavioural disorders, but the characteristics of obsessiveness, cynicism, being over-critical and argumentative were not included as causative factors. No research was found specifically dealing with these characteristics of 2ELs.

Parallel to the inhibiting forces, enabling forces that could be useful as a lever for teachers coping with the challenges in the field of 2Els, were also findings of this study. One prominent motive was teachers' desire to study and to be prepared for teaching this special minority group "I have no training in learning disabilities other than what I have trained myself...I read and I interested myself in autodidactic learning because of my need to learn" (Interview 74). The thirst for

knowledge and tools for teaching these students provided an advantageous lever for these teachers. Feuerstein (1997) encourages this motive because the teachers' task is to act as an educational role-model for the students and to intermediate the knowledge and strategies to their students. According to Landau (2001) and Ziv (2000) the need to learn becomes more important when it comes to gifted students, who have personal curiosity and investigative instincts.

One more enabling force was the purpose that teachers set themselves in providing high quality teaching, as well as stimulating the high intelligence of gifted students "The lesson must be as interesting and challenging as possible, to get them to use as much of their intelligence as possible in the lesson, but at the same time to understand they are still children" (Interview 5). When teachers enable this kind of method, they increase the ability to learn of these students through matching their unique characteristics as possessors of HOT skills, as well as their great curiosity for learning. Landau (2000) and Ziv, (2000) emphasise that in order for this to happen, teachers must permit a learning environment full of stimulation and tools for developing thinking skills.

Another enabling motive found was the teachers' necessity to become experts with these students' characteristics "The teacher needs to enable their curiosity and to nurture it" (Interview 37); "The teacher should be capable of giving legitimacy to different perspectives and opinions" (Interview 39). Teachers need to show flexibility and to have the ability to cope with changing situations when dealing with 2ELs "The ability of the teacher not to be intimidated by the associative thinking of the students ...to be flexible and to change the lesson that was prepared if a different need arises from the students" (Interviews 52 & 53). The teachers in these classes "must be as willing to learn from them as to teach them, and this is more pronounced in a class of gifted students because of the extremes" (Interview 49). Observation 5 showed that "the teacher is pleasant but assertive, authoritative, directs the discussion in a culture of debate and allows expression of different opinions." Heiman and Fretzel (2003) emphasise that it is important to teach teachers about the characteristics of these students in order to lead these students to success. Also, Nielsen (1994) and Kay (2002) strengthen this point when claiming that the teachers should have the knowledge about the uniqueness of this group of students. Teachers desire to study and prepare for the teaching of this special minority group was one of the enabling motives "I have no training in learning disabilities other than what I have trained myself...I read and I interested myself in autodidactic learning because of my need to learn" (Interview 74). The thirst for knowledge and acquisition of teaching tools for these students would provide advantageous leverage for a training programme for these teachers. Feuerstein (1997) argues that the teachers' task is to act as an educational rolemodel for the students and to intermediate the knowledge and strategies to their students.

Enabling forces were also found among 2ELs. Harpaz (1998), Salomon (2000), and Shaked (2007) claimed that HOT skills are points of strength of GT students. Examples of this were found in this study: Rick said "The students have great curiosity and wide horizons, with a high level of intelligence and impressive verbal abilities which they show in class's discussions" (Interview 93). Also, observations showed similar evidence: "The classroom discussion continues. Students give examples from different countries about inequality (the topic of the lesson) and about the development of equality for women. M2. brings examples from subjects she learned last year and compares these with recent examples concerning women's equality. Many students wish to join in the conversation and share their extensive knowledge on this subject. R1. adds examples from the Bible. H. adds examples from the world of religion and claims that women themselves perpetuate inequality (Observation 17). Landau (2001) identifies more enabling cognitive characteristics of gifted students such as curiosity and extensive knowledge of the world which they manage to acquire by themselves using their great abilities. Students express their knowledge in verbal activities in class and use a rich vocabulary "The discussion always becomes more philosophical. In the gifted class the level of discussion is very high and giving expression to very extensive world knowledge..." (Post-Interview 14). Another major characteristic of gifted students is boredom. Shaked (2007) explains that gifted students absorb the material quickly and become very easily bored. Also, Montgomery (2013) argues that this characteristic belongs to both the cognitive and affective aspects since the external symptoms of boredom are disruptive behaviours such as going out of the classroom many times during the lesson and disturbances "A prominent feature among gifted students that I recognised is that they get bored very quickly. In many lessons in the gifted class some students seem bored and claim they already understood the material and have no desire to hear more explanations..." (Interview 137). There is also evidence in the observations, Student *N3. - I'm bored. I have exhausted this topic. Maybe we can move to a new topic?* (Observation 44); "I lost concentration. I was bored" (Questionnaire 40). Freeman (2001), Landau (2001) and Ziv (2000) point out that boredom is a prominent characteristic of gifted students that inhibits learning. They claimed that it needs to be addressed during the planning of teachers' CPD programmes in order to provide teachers with tools to create an interesting, challenging, and accelerated learning environment that will inspire the gifted students to develop and make progress.

In summary, the findings showed that characteristics of 2ELs (gifted students who also have learning disabilities in writing skills) result in low to mediocre achievements and unfulfillment of students' potential. Teachers who teach these students need to be provided with adequate tools to be able to deal with these challenges (Kay, 2002: Manor-Benjamini, 2005: Nielsen, 2002). The discussion on the findings of the first and second research questions reinforced the need of the

researcher in this research to develop a manual for teachers' CPD that is tailored to the unique needs of teachers who teach Humanities Subjects as History, Literature, Bible to 2ELs and included the model of three strategies that the researcher wrote for this study, AAAMS (Salem, 2014). According to Nielsen (2002) 2ELs have to cope with various challenges, both in their cognitive and their affective aspects, therefore the lack of sufficient knowledge and strategies among their teachers about their characteristics works as an inhibiting force for both teachers and students. This research intended to explore the challenges of these teachers, as well as to discover the factors that could make a difference to teachers' learning, attitudes and stigmas that result in labelling 2Els and inhibit teachers to cope with them. Then, to create an intervention that might minimise the elements that inhibit both teachers and students, as well as to foster the elements that enable better teachers' learning, and to provide teachers with an appropriate response to 2Els needs. It served one of the purposes of this study which was to give adequate knowledge and tools to teachers so that they can deal with these challenges as Day and Gu (2010) suggested, while paying attention to the characteristics and specific needs of this unique minority group.

5.3. Discussion in Findings from Intervention in Classes

The findings from intervention in classes were gathered from interviews, observations and questionnaires and provided an answer to the third and fourth research questions. The intervention in this stage was based on the AAAMS, and on the strategies that teachers learned in the seminar that was conducted in the first stage of this intervention. The discussion focuses on the contribution of the three strategies of AAAMS that represent strategies that meet the needs of two different domains; one strategy that accelerates and nurture HOT skills, and two strategies that are from SpLD domain. This combination of strategies was the writer's personal interpretation based on Passig's Taxonomy of Future Cognitive Learning skills (2003) (Appendix 2.3). Passig added a seventh stage "melioration" to Bloom's taxonomy of Six Stages of Cognitive Skills (1956). According to Passig, in this highest stage people make up an integration of information and tools from various fields or sources and then they have their own interpretation and synthesis in which they implement the new knowledge in other situations or domains. In the present study, the writer adopted and interpreted the melioration stage as the stage in her study where she combined strategies and knowledge from various domains and implemented it in the manual for CPD seminar for teachers who participated in the recent research.

The discussion was based on the findings and supported by relevant literature and was carried out on two levels. One level was the contribution of each strategy to teachers in their cognitive, affective and organisational aspects. The second level was the contribution to students in their cognitive and affective aspects. Findings showed that each strategy of AAAMS (Salem, 2014) had its special contribution and answered teachers' needs as they emerged from findings and were described previously, but the combination of three strategies was a boost in learning processes to teachers and their 2Els "...these three methods together contributed more than any one of them individually" (Questionnaire 45). In addition, findings showed the impact of the seminar that was especially written for teachers' needs on the learning environment.

Referring to cognitive aspects the students indicated that the strategy of asking questions opened for them a world they yearned for "This strategy contributes to investigation and critical thinking. This strategy enables the class to look at the issue from different viewpoints of children in the class and opens up for us different possibilities of thinking. This strategy also shows us a little of previous knowledge and helps to expand on the subject" (Questionnaire 2); "...it develops critical thinking and helped me to understand the subject from different directions and not just from the obvious and straight direction" (Questionnaire 28). Kaplan (2009) and Shaked (2007) consider this strategy as an effective tool to develop thinking skills from different angles. The students said "We should continue with this strategy because it helps develop critical thinking..." (Questionnaire 30); "it enables one to think outside the box. This is critical thinking and it helps me in that it is not the standard educational framework" (Questionnaire 5). Also, Observation 13 showed that Many students indicate that the lesson topic and the asking of questions arouse great interest". Harpaz (1998) and Marzano (1998) explain that a learning environment of gifted students should foster HOT thinking skills in order for students to develop their bank of knowledge and thinking skills in the process of building meaning between prior knowledge and the new knowledge acquired during the lessons in class. According to most of the students, the strategy of asking questions "...creates interesting learning" (Questionnaire 40). Students indicate that using the strategy in their studies helps them focus on their learning material "I think it helped me focus ...and understand the topic...In the lesson I use my prior knowledge and my perspectives" (Questionnaire 9).

Roy describes the contribution of this strategy as helping the students in the long-term "Asking questions taught them that they can learn on their own without waiting for the teacher to give them the answers. They can investigate, check and learn and teach others..." (Post-interview 12). Also, Facione (2000), Guay et al (2010) and Renzulli et al (2007) support the effectiveness of AQS as developing critical thinking, different perspectives, casting of doubt, investigation and development of independent learning. These are stages in the development of higher levels of thinking according to Bloom's (1956) and Passig's (2003) Taxonomies.

The affective aspects can be seen from students' satisfaction with the implementation of this strategy as contributing significantly to their motivation and good feelings "I really enjoyed this kind of learning; it is active and thought-provoking..." (Questionnaire 45). An example from the observations Many students respond: lovely, fun, I like it. The observer: there are enthusiastic responses. The students enjoy the diversity of teaching methods in the lesson (Observation 27). From the testimony of the students, their pleasure from learning this strategy can be seen both from the aspect of content (what they learned) and the aspect of implementation (how they learned). In other words, the teachers' approach and the way they teach bring about understanding and acceptance of the learning content in a better way for the students. The students feel that barriers they had in the past have dropped. They feel meaningful and active. According to Harter et al (1992) the development of critical thinking promotes learning skills and contributes to the development of pleasure from learning and also to an interesting and fruitful learning environment.

These testimonies show that there are interactions between the cognitive aspect and its application to the affective aspect when using the strategy of asking questions. The literature also reinforces the existence of these interactions which contribute to increased motivation of the students. Guay et al (2010:712) emphasise that "Motivation refers to the reasons underlying behaviour. The notion of intrinsic motivation is closely related to intrinsic value. Intrinsic motivation refers to motivation that is animated by personal enjoyment, interest, or pleasure, and is usually contrasted with extrinsic motivation, which is manipulated by reinforcement contingencies". Einat (2004), Heiman (2011) and Margalit (2000) argue that there is a direct link between the way teaching and learning is carried out and the increase in joy, pleasure of learning, and motivation.

In the cognitive domain, one of the aims of the intervention was to expand the variety of methods of the teachers, tailored to the needs of 2ELs. The findings show that this aim was achieved. Teachers informed that the AQS is a tool that develops critical thinking in students in order to provide an appropriate response to their needs in three aspects the cognitive, affective, and organisational "We analysed concepts related to the lesson into different components and then we put them in a new general definition of the subject" (Interview 244); "...they have a great platform for proving and developing their high abilities..." (Post-Interview 4). Utilising this strategy enables the teachers to teach in a creative and interesting ways and to provide a response to curiosity and boredom (Landau, 2001; Ziv, 2000).

In the affective domain, teachers using AQS reported a sense of empowerment of their self-efficacy when they experienced success during the lessons. The feeling of success came from the fact that the students enthusiastically cooperated and showed great interest which persisted after the lessons

into the break "From my personal perspective, I feel that I am a better teacher. I feel that I'm a more confident teacher...I walk more confidently into the classroom because I have clear and systematic tools...I go into each lesson with a great feeling...and succeed in it" (Interview 289); "...Both I and the students benefit from it and I enjoy it" (Post-interview 4); "I was very excited and enthusiastic and I am continuing in this way to start lessons with new topics from the curriculum" (Interview 247); "...(AQS caused both of me as a teacher and also my students to be excited and to become engaged and partners in the learning process" (Post-interview 11). Einat (2004) and Hastler et al (2003) emphasised that it is important to train teachers in order to provide them with appropriate tools to teach 2ELs because it has a significant contribution to increase the sense of teachers' personal competence and self-efficacy which will raise their motivation to adopt new and varied teaching methods (Millman, 2012: Nielsen, 2002).

Teachers also reported a significant decrease in disruptive behaviour during the lessons. This finding reinforces the experience of success of the teachers and their willingness to continue implementing the new strategy "There were no disturbances and they didn't even ask to go to the toilet. They didn't even go out to break and continued the discussion around the questions..." (Interview 245). "I feel that it's more pleasant for me to teach this class...I leave (class) with a smile and it seems to me that the students do so as well" (Interview 260); "The intervention contributed to a change in the perception of my role as teacher of a class of gifted 2ELs. The programme contributed to my knowledge, the fact that I understand better how their brain works, and I adjust myself, for example where to put the emphases in the learning materials in order to make a curriculum suitable for them. There was a change in my awareness and attitudes. I understand their emotional difficulties better, which in the past I did not really understand" (Postinterview 14). This testimony reflects the success of the intervention in achieving one more of the objectives of the current study which is raising teachers' awareness of their perception of the characteristics and needs of these students, thus improving their teaching skills.

More findings prove additional attainment of an affective aim of the current research which was increasing professional commitment and taking responsibility on the part of the teacher "The strategies work very well for me in both the class for gifted students and in other classes and also in the current school year, I take with me what I learned and am implementing it in the field" (Postinterview 2). The teachers were inspired also by their students' parents that were excited that their children were at last enthusiastic about their studies. The parents called the teacher to share their feelings about this and talked about it during Parents' Day when they came to see the exhibition of the students' work which was held on that day "...The mother was happy that her daughter experienced success as a result of this learning..." (Post-interview 17). Heiman (2011) and Plotkin

(2011) reinforce this finding and commented that parents constitute a first-class support force in their children's lives learning and success. The second strategy, Analysing Questions (ANQS), was perceived by 2ELs as an effective and enabling strategy that promotes concentration on assignments' demands and separation of the more important elements from the less important. It enabled focusing on all parts of the questions in order to organise the relevant learning materials and to answer questions in the best possible way, thus helping them to bypass their difficulties "An excellent strategy that helped to separate the main point from the less important" (Questionnaire 53); "Marking parts of the question helps us to write answers without leaving out details and this seems to me important" (Questionnaire 48); "It contributed and helped avoid skipping parts in the answer" (Questionnaire 54). Heiman (2002) explains that students with SpLD are characterised by the need to be trained with strategies that assist them to bypass difficulties, especially because it is difficult for them to acquire strategies without help. In addition, Kaplan et al (2001) claim that learning disabilities can be comorbid and have various manifestations and complexities. Therefore, there are students whose disability is related to difficulty in focusing and clearly understanding questions, and there are those for whom the strategy is clear, but who have trouble in writing assignments. Kaniel (2006) and Melitz and Melitz (2002) support these findings and insist on the contribution of ANQS for the improvement of these students' performances and achievements.

In its affective aspect, the students who are helped by this strategy improved their achievements and both teachers and students experienced success "It helped me a lot, I feel there is an *improvement*" (Questionnaire 50). The improved performance of students struggling with questions encouraged the teachers to continue teaching in this way "I expect to continue in this way because it greatly improves the feeling I have as a teacher that I am developing and helping the students according to their needs...It also encourages me to continue to teach according to the methods I acquired because it works for me" (Interview 309). Harter et al (1992) and Piirto (2002) claim that learning from success reinforces the teachers' and students' self-esteem. This contributes to improving motivation, thus decreasing the level of students' resistance to learn and prepare assignments. In addition, Einat (2004) and Heiman (2000) reinforce the findings regarding the relationship between the acquisition of learning strategies among students with SpLD and the increase in their self-confidence and strengthening of their self-esteem. Shaked (2007), who is an investigator in the pedagogical field of gifted students, claims that it is important to foster the talents of these students in order to enable the expression of their abilities and to train them to be experts in the field of learning. Students who develop skills and adopt the strategies can later teach and help their friends. In this way, they continue to develop their high-level abilities and strengthen their self-esteem. Manor-Benjamini (2005) and Levi (2000) explain that 2ELs find it difficult to

accept that they need such a simple strategy like analysing questions because of the gap between their HOT abilities and their SpLD. It leads them to great frustration and sometimes they oppose the acquisition of strategies that force them to cope with their challenges.

The teachers found ANQS to be an enabling teaching tool. In its cognitive aspect, the teachers' findings indicated that ANQS is an enabling factor since it is an efficient tool for developing learning skills for addressing the difficulties of their students "...there was an improvement of up to 20 points...for example, they used to forget to answer parts of the question and would skip the instructions and give very general answers. They did not refer specifically to the question. During the second semester, I taught and practised the strategy over and over again at the beginning of each assignment...I required them to analyse the question and only then to answer. Systematic implementation of the strategy has proved itself completely" (Interview 235). Also in the interviews after 6 months the two teachers attest to the effective use of this strategy for promoting learning and improving the students' achievements "The strategies work very well...also in the current school year, I take with me what I learned and I am implementing it in the field" (Post-interview 2); "...I started this new year with the strategy and we see already its contribution and the cognitive help it gives to students" (Post-interview 1). Melitz & Melitz (2007) and Heiman (2011) argue that teachers need to learn such effective strategies that assist them in focusing and coping with assignments in order to be able to teach it to students with SpLD and support them in bypassing their difficulties.

The third strategy in AAAMS (Salem, 2014) is Answering Questions in a Template (AQTS) and it completes the goal of training teachers and students in writing assignments as required in HS disciplines by the Education System in Israel, especially in multi-words subjects (such as Literature, History, Bible). There is a special template to answer questions for exams. The students are taught by the teachers to write answers according to these templates and they are trained to teach in this way (Ed.gov.il, 2011). According to Kaniel (2006) the contribution of AQTS is to develop the capacity of students to write answers according to the demands of the discipline and to reach a level of achievement that reflects their abilities and knowledge. Heiman (2011) argues that it is most important for students with SpLD to adopt this strategy which helps them to organise learning materials and thoughts on the subject and to develop writing skills. With the help of all of these, students might improve their level of achievements which contributes to raising academic motivation. Students reported that they went through a positive learning experience following the implementation of AQTS and it helped them to focus better on the requirements of each question "The template really helps to focus on the main points" (Questionnaire 71). They felt they had barriers in writing because of their learning disabilities and after learning and applying AQTS, the

barriers began to be resolved and they could answer the questions successfully "This strategy sorts the things out that you want to note down and then it's easier for me to answer the question properly..." (Questionnaire 18).

It can be seen that this strategy helped the students to develop skills of organising their thinking "The strategy...helped me in wording my thoughts and enabled me to enjoy writing the answer and not to miss anything" (Questionnaire 25). The strategy contributed to a significant improvement in the level of writing and in the scope of the answer and thus improved the marks they received "... it helps to write a full and detailed answer and helps focus...my mark really improved since we learned this method" (Questionnaire 20). There is evidence for this also from the observations: Student A3. ...I slowly learned how to write better and so I got a better mark (Observation 47). Both Kaplan (2009) and Melitz & Melitz (2002) argue that a 2ELs' prominent feature is the deficiency in written achievements that does not reflect their capabilities and they recommend AQTS as an effective tool to bridge this gap by teaching teachers to implement it in their lessons.

In the affective aspect, findings show that using this strategy made a contribution to the students because it is a tool that generates a feeling of success "... once they succeed they feel confident and their mood improves...they take a rest from being argumentative..." (Interview 367). According to Harter et al (1992) improvement of achievements has implications for the affective aspects. Einat (2004:151) claims that teaching strategies to students with SpLD contributes to a change in their 'Negative Compensation Strategies' which they developed over the years because of their difficulties and failures. Kay (2002) and Nielsen (2002) argue that this is very conspicuous among 2ELs because there is a very large gap between their high capabilities and their low level of achievements. These students are characterised by disruptive behaviours such as avoiding writing tasks during the lessons or avoiding homework using different excuses. Also, it can be seen in incessant chatter, insolence towards the teacher, frequently going out from the classroom and falling asleep during the lesson. The ANQS and AQTS enable students to acquire skills that they lack in order to cope with the difficulties and improve their abilities, achievements (Melitz & Melitz, 2002) and their behaviour. Guay et al (2010) say that responding to the needs of students with SpLD increases students' enjoyment of learning and improves their motivation to learn as active students. It is the product of success in learning which followed the acquisition and application of new tools. Pleasure is one of the factors that build intrinsic motivation and this is what develops in man the vision and passion to advance, to be successful and to achieve his targets. Kuzminsky (2004) reinforces these findings and explains that experiences of success in learning increase motivation to cope with difficulties. The findings show it "The strategy enabled me to enjoy writing..." (Questionnaire 23); "The success of the students is that they continue to enjoy

History, and that their achievements are high ...they are more satisfied...this virtuous cycle creates enthusiasm and enjoyment of learning" (Post-interview 13); "...achievements are rising and then their self-confidence goes up and they dare to participate more in class both verbally and in written tasks. They sleep, disturb and go out less..." (Interview 317).

There were few more main themes that arose from the findings during data collection in all three strategies. In its cognitive aspects, the teachers testified that what made a difference in their learning processes was the acquisition and implementation of strategies in the intervention as Kaniel (2007) recommends, because it enabled them to teach the students how to focus on the requirements of the questions, on the organisation of learning materials, and also in writing answers that meet the requirements of HS disciplines. The students' outputs were greatly improved "Students...were helped firstly by the level of focus and preparedness for how to get ready for the answers, not to wander off the point. There is an assignment and a way of carrying it out which will lead them to a high level of achievement and will improve their feeling and image and will enable them to learn better" (Interview 314). Roy testifies that the use of strategies helped him to realise his vision as a teacher of gifted students "Learning skills was most important for these students. It was a target within my vision...because they are used to writing short and philosophical answers and everything else seems to them banal and obvious. They do not understand the need to provide detail, to give examples, to deal with all parts of the question....to focus on the main point which is hard for them. I see that I managed to pass on this skill to them. At the beginning of the year, their writing was all over the place...and if I check according to their achievements, their marks went up..." (Interview 359).

In its affective aspects, the findings show that the acquisition of new knowledge by teachers during the intervention helped them to feel better as teachers and to improve their self-efficacy because they were able to give significant responses to their students' needs. OECD (2014) reports that self-efficacy of teachers is based on learning a relevant knowledge and a set of strategies that prepare them to teach their students and then they enter classrooms with more confidence and their experiences of successes empower them. The participants experienced success when they realised that their students enjoy the lessons and their achievements rise "I expect to continue in this way because it greatly improves the feeling I have as a teacher" (Interview 309); "Diversifying my teaching methods helped me a lot in my motivation to teach the class of gifted students... Both I and the students benefit from it and I enjoy it" (Post-Interview 4). "... They were pleased and I was pleased" (Interview 236). Heiman (2011) and Manor-Benjamini (2005) argue that when teachers receive training specifically targeted to the needs of their students, especially students with different needs, they are able to give an appropriate response to their needs. Following the

acquisition of suitable learning strategies, the teachers improved their methods and felt more empowered and motivated.

An additional aspect is the contribution of AAAMS (Salem, 2014) to teachers in organisational aspect. Teachers informed, that teaching these strategies was effective, systematic and comprehensible. They said it assisted them in organising and planning their lessons in a more interesting way, while implementing active learning "Following the training...I now know how to organise, prepare and build lesson plans and to integrate the strategies within them in a much more efficient and good way. It changed a lot of things in me, for example I learned that it is better not to teach another chapter of the learning materials using the frontal method, and to divide the hours so that there will be time for teaching the strategies..." (Post-interview 10)."It helped me a lot preparing lesson plans that fit me as a teacher who wants to teach in an interesting way that develops thinking and creativity and to feel that I am giving the correct response to my gifted students..." (Interview 233). Einat (2004), Kay (2002) and Neilsen (2002) point to the great effective contribution that training can make to teachers when it is relevant to their needs "... The strategy is part of the lesson plan and shortens the processes as learning is focused and efficient" (Interview 252); "I think that the training significantly changed the way I build my lesson plans..." (Interview 283). Montgomery (2013) and Mutton et al (2011) support this finding because proper planning of teaching allows the teacher a space to create an optimal learning environment. Meyers (2012) who examined the components of effective teacher found that prior and relevant knowledge about the students and their needs allows teachers to organise and prepare so that their contribution to the students increases their sense of confidence in their capability. Rick said "The contribution of the training and the intervention from the personal and professional aspect - I feel it is a part of the construction process of me as a teacher. For example, the emphasis I put on learning skills in the classes I teach in a structured and systematic way..." (Post-interview 9); "The lessons are more efficient because of learning and experience... I managed to integrate the training content " (Postinterview 5); "I realise how important the strategies are and... I work in a systematic and clear way..." (Interview 231). The contribution of the intervention meets the goal of the current research in its organisational aspects, which is the improvement of the teachers' ability to plan and organise their work in order to meet the various needs of students.

It should be noted that there was also evidence of students for whom the strategies did not provide benefit and it was seen as inhibiting factor "It delayed the duration of the lesson and digressed from the subject. It took too long". "It was a waste of time..." (Questionnaire 31); "I didn't enjoy the uniform template so much, but this method is very focused - perhaps too focused" (Questionnaire 75). Fox (1998) explains it as a resistance to change. Students can feel threatened

by unknown strategies and resist them. Koter (2003) and Levy (2008) describe it as a part of the learning process that begins with a sense of disturbance and waste of time. Reis et al (2000) point out that in order to see a change, the strategy should be used systematically over time so it might minimise feelings of resistance and enables the development of critical thinking. Einat (2004) and Heiman (2011) explain the resistance to new strategies among students with SpLD as part of their difficulty in adapting the new strategies and implementing them. There is evidence of the ambivalent attitude of these students concerning this strategy. On the one hand, they do not enjoy using it, but on the other hand they see that its use helps them in writing and their achievements are improving, Student N2. I also don't like writing, but I am now trying to write in more details and I learned that there is a template for answering question and I use this for my answer. I got 80 in the last test and for me it's a huge accomplishment (Observation 46); "I do not like the system but I think the template really helps to focus on the main points" (Questionnaire 71); "The strategy very much helps in improving achievements but I feel a bit like a robot" (Questionnaire 59). Evidence from post-interviews reinforced the contribution in the long term to both teachers and students "The students in the gifted class like the course of the lesson which integrates the use of the Asking questions strategy and they find enjoyment in the lesson especially from the way of teaching...They are involved and show interest and go and investigate and develop the issues which arose in the lesson out of interest and personal initiative" (Post-interview 7); "Learning by the strategy of Asking questions continues to be a very effective tool and allows diverse and enriching learning...Students both enjoy it and develop...It strengthens them" (Post-interview 9). It was seen from the findings that the teachers did not oppose to learn new strategies because they felt they need new tools to cope with 2Els and they were open and anxious to learn " There is a need to learn about strategies and skills that are suitable for them. How to help them" (Interview 69). During the intervention the teachers' enthusiasm was enhanced when they realised that the strategies are effective and their students improved their behaviour and their outcomes.

In summary, from the findings and literature it can be argued that AAAMS (Salem, 2014) contributed positively to both teachers and students. These findings show the achievement of the objectives of the current study which were: providing teachers with diversified tools to answer their 2ELs' needs.

5.4. The Contribution of the Intervention

The discussion of the evaluation of the intervention as a whole programme was crucial to learn about the contribution in all its six stages including seminar and implementation in classes of knowledge and strategies. The interpretation of the values in the findings of the recent study was

in affective aspects and it accomplished two goals. One was to develop teachers' positive attitudes towards 2Els, and the second goal was to raise teachers' awareness of students' characteristics and needs. This lead to the increase in teachers' professional commitment and responsibility, thus improving teachers' professionalism. It can be seen that teachers had new attitudes towards these students after the CPD seminar. They were motivated to recognise the characteristics and needs of their students and to adjust their teaching methods. In addition, they said that it contributed to them in the long-term:

"Diversifying my teaching methods helped me a lot in my motivation to teach the class of gifted students...In the lessons I use the strategies I learned...Both I and the students benefit from it..." (Post-interview 4). Fox (1998) and Levy (2008) who investigated processes of changes in society claim that when a process of change is successful and there is evidence of improvement, the people involved in this process develop professional commitment that leads to taking of responsibility "...the intervention...caused both me as a teacher and also my students to be excited and to become engaged and partners in the learning process" (Post-interview 11). Feuerstein (1997) argues that teachers and students are partners in the process of learning and teaching and there is a need to listen to their voices in the process of setting up the challenges and to relate to their needs. All these enable a broad view of factors to be taken in planning CPD for teachers.

In addition, findings showed a change in the teachers' awareness towards their students; Roy said "there was a change in awareness and attitudes - yes. I understand more of their emotional difficulties, which in the past I did not really understand, and today I am aware of this even when they are misbehaving or other situations in the lesson and I relate to it accordingly" (Post-interview 2); "There was a change in my awareness and attitudes..." (Post-interview 14). Kay (2002) and Tov-Li (2008) support the connection that exists among teachers between the acquisition of knowledge about the characteristics of their students, and the increase in awareness and change in their attitudes towards those students. Mutton et al (2011) claim that methodical and systematic acquisition of strategies, as well as being successful, leads teachers to greater openness towards new experiences in teaching. It can be seen from findings "...it gave me tools to teach in other ways and to see that it has value..." (Interview 192). David (2000) claims that teachers fulfil their role better when they have tools to provide an appropriate solution to their students' needs and this situation empowers their self-confidence. Bandura (1997) emphasises that this process improves teachers' performances and personal efficacy. He defines it as belief about teachers' ability to gain control over events that affect their lives. From the findings one can notice a change in the teachers' perception of their role and of the place of the students in the centre "It changed a lot of things in me. Instead of teaching frontally and then preparing a test...the students themselves will organise

the learning materials and write the test questions" (Post-interview 10); "The lesson is divided into parts that only students did and they built the lesson" (Post-interview 11).

Timor (2011) refers to the socio-cognitive model that places the students in the centre. Students' self-image is built within the social environment and as a result of their relationships with others. Timor offers to meet the special needs of the students with methods tailored to their needs, thus providing a suitable environment to develop students' self-image. Meyers (2012) adds that simultaneously, teachers build their self-image as effective teachers "From my personal perspective, I feel that I am a better teacher. I feel that I'm a more confident teacher and person..." (Interview 289). "I was very excited and enthusiastic and I continue in this to start new topics..." (Interview 294). There is evidence in the observations, The observer: the teacher allows openness, the atmosphere in the classroom is pleasant, the discussion is calm and the arguments are neither aggressive nor cynical. There is a positive attitude to each other (Observation 15).

An additional theme was teachers' vision in classes of 2ELs. Findings showed that their vision was to succeed both in being professional according to the required curriculum, and also to conduct interesting lessons while meeting the needs of these students in order to improve the level of their achievements and behaviours "I want to continue on this path and reach the end of the year with improvement in all areas and that students will report that it was interesting and this will be reflected in the marks and then I will feel I've done my job in the way I believe" (Interview 207). Teachers are eager to enjoy teaching and to contribute to enjoyable learning environment for students. At the end of the intervention teachers felt highly motivated as a result of the development of their skills and abilities to teach 2ELs and foster their achievements and enjoyment of learning "...they said that is how they want to learn all the time..." (Interview 245). Tov-Li (2008) supports these findings claiming that teachers who received appropriate training for their needs demonstrate commitment, responsibility and enthusiasm. The values aspect from the point of view of the students can be seen from testimonies which indicated that the intervention contributed to their lessons being interesting and to positive feelings toward learning "This procedure is very nice and improves one's feelings during the lesson" (Questionnaire 9); "... it gave me a feeling of success..." (Questionnaire 56); "... helped me a lot in the test. I felt I knew what to do and it gave me a good feeling" (Questionnaire 59).

At the pedagogic level, findings showed that the intervention made a simultaneous contribution to both teachers and students. Teachers acquired wide and relevant knowledge about the characteristics and needs of the minority group of 2ELs and specific strategies that improved their teaching skills enabling them to become more systematic and to use more varied teaching methods

"The students enjoy the diversity of teaching methods in the lesson (Observation 27); "... The programme contributed to my knowledge, the fact that I understand better how their brain works..." (Post-interview 14). There is a significant influence on students on the development of critical and creative thinking and achieving an improvement in the learning output "Using the strategies makes them think, to show interest, to express their ability and to develop..." (Interview 192).

At the organisational aspect, findings showed that the contribution of the intervention to the group of teachers participating in the programme, influenced their fellow teachers and thereby began the process of change within the school staff. The teachers have become experts in the field and ambassadors in the organisation. They transferred the principles of the AAAMS and the knowledge they had acquired about 2ELs to their colleagues who also teach in similar classes "...there is implementation of part of the strategies in the lessons of other teachers in the organisation and the development of awareness in this field" (Post-interview 19). In this way, they helped to spread their knowledge and to develop a challenging and thought-provoking learning environment, while addressing the needs and difficulties of this population of students "I share my way of teaching with colleagues..." (Post-interview 8); "Teachers see how I teach, are interested, and take some of the methods for their own use" (Post-interview 8). Thus, the circles of change expand throughout the organisation from the individual level to the whole organisation. Fox (2002), Levi (2000) and Reiter (2004) describe the development of processes in organisations from the micro to the macro as a factor in the processes of change. The individual initiates a change that affects other circles that surround him. According to Korn and Yogev (2004) processes of learning take place in organisations when there is reference to information gained in the learning processes and this information becomes, in time, organisational information. In addition, the learning will be relevant to a wide range of activities and not only to the improvement of the individual:

"Learning processes become rooted in the organisational existence and the members of the organisation internalise the understanding that they need to learn continuously to improve the basic knowledge of the organisation and the performance derived from it" (Korn & Yogev, 2004:1).

An additional contribution at the organisational level that arose from the findings was the improvement of teachers' abilities to plan their lessons in a systematic way so that they can incorporate into the curriculum new strategies and methods. Montgomery (2013) and Mutton et al (2011) support this finding because proper planning of teaching allows the teacher a space to create an optimal learning environment. Roy said "... I now know how to organise, prepare and build

lesson plans and to integrate the strategies within them in a much more efficient and good way" (Post-interview 10). Meyers (2012) who examined the components of an effective teacher found that prior and relevant knowledge about the students and their needs allows the teacher to organise and prepare himself so that his contribution to the students increases as well as his faith in his abilities. Experience of success increases the sense of confidence in one's capability. Rick said "The contribution of the training and the intervention from the personal and professional aspect - I feel it is a part of the construction process of me as a teacher. For example, the emphasis I put on learning skills in the classes I teach in a structured and systematic way..." (Post-interview 9); "The lessons are more efficient because of learning and experience...I managed to integrate the training content" (Post-interview 5); "I realise how important the strategies are and... I work in a systematic and clear way..." (Interview 231). This contribution of the intervention meets the goal of the current research in its organisational aspects which is the improvement of teachers' abilities to plan and organise their work in order to meet their students' various needs.

One inhibiting factor that was repeated by teachers is about the educational system "...the very limited means of evaluation...all are tested by the same tests as required for the subject, instead of learning through investigative work...the race for matriculation examinations requires learning according to the book...it limits me and does not...enables significant learning..." (Post-interview 8). Millman (2012) and Montgomery (2013) support this motive and said that the demands that are placed on teachers by the educational system do not allow the development of HOT skills and prevent incorporating a variety of strategies. This makes it difficult for teachers to teach in a better learning environment.

The researcher included a few more methods in the manual for teachers and in the seminar as a part of the intervention. Active Learning is one of them. This is a method in which the students are partners and are involved in the process of learning. Teachers become mentors and escort their students during their learning processes. Bonwell & Eison (1991) reinforce the idea that active learning positively influences the attitudes of students and their achievements because they become involved learners and partners in the learning process. Findings clearly indicate that implementing this method in the intervention simultaneously with AAAMS (Salem, 2014) had an impact on improving the pattern of teaching "... I learned to activate the gifted students...so that they prepare the subject with personal or team work..." (Post-interview 10); "I really enjoyed this kind of learning – it is active and thought-provoking" (Questionnaire 47).

Infusion was an additional method that the researcher included in the manual. Harpaz (1998) and Zohar (2000) recommend to plan lessons by infusing strategies in the curriculum to support and

develop learning skills. The infusion and practising of strategies should become an integral part of the lesson of each teacher in each discipline. The teachers participating in the recent study learned and practised the infusion method during the seminar in the beginning of the intervention and they infused strategies designed to develop critical thinking and writing skills. They also infused the active learning in their lesson's plan (Appendix 2.9). Findings showed the effectiveness of infusion method "In the course I learned a new method - infusion. This is integration of learning content with various strategies and it was very effective in my lessons" (Interview 322); "...infusion of the strategy of asking questions..." (Interview 324). There was also evidence from the observations: The teacher introduces the subject of the lesson and the use of the AAAMS already taught in previous lessons (Observation 1). The teacher explains that the strategy of asking questions opens the door for personal expression and develops critical thinking (Observation 2) and from questionnaire 45 "I feel that the three strategies together were integrated into the lesson in class to the point where I can see a change the way I am learning".

Another skill acquired by the teachers during the training seminar is a transfer of knowledge. Salomon (2000) defines this skill as an ability to transfer knowledge from one field to another. According to Harpaz (1998) and Swartz (2001) transfer is considered to be a high order thinking skill which can be developed and has great importance in the expansion of knowledge and the use of learning strategies. Roy describes how he transferred learning skills in school from one environment to another "It works pretty well in the other classes I teach..." (Interview 190). Rick also indicates the contribution of the intervention to a broader spectrum of students in other classes in the school where he teaches and in the long-term "The strategies work very well for me in both the class for gifted students and in other classes and also in the current school year, I take with me what I learned and I am implementing it in the field" (Post-Interview 2). Evidence can be seen also in observations how the students internalise and implement the ability of transfer when the lesson structure allows active learning and development of thinking, The teacher reflects: you are doing transfer – from the principles of the Bible to our daily lives. R2. gives examples from football (Observation 33). N2., N3., O2. and A4. quote from songs they learned in Literature lessons connecting to the lesson's issue (Observation 38) and from questionnaire 62 "I'll use it in all subjects that I will learn and for tests in general".

Findings reveal that due to the intervention, gifted students felt experts and transferred the strategies to other teachers in school. Thus, the sphere of influence of the intervention expanded within the school "...students even told me that they asked the teacher of Literature to use the strategies I teach them in her lessons and they taught her how to do it and she came to ask me about the strategy and since then she teaches in the same way as I do and she says it proves itself in the achievements

of the students..." (Post-Interview 19). Shaked (2007) emphasises that this process is especially suited to the characteristics of gifted students because their HOT skills need to be given a platform and to be nurtured. In addition, she recommends training GT students to be experts in the strategies regarding their lessons so they can train other students. Freeman (2010) and Ziv (2000) add that it can simultaneously minimise their boredom which is a prominent feature when they do not feel challenged and interested in what they are learning in class.

Another method in the seminar that was implemented in the classroom was learning from success. Korn & Yogev (2004) argue that this method uses success as a powerful lever in the development of individuals and organisations by learning from the factors leading to success. It enables social systems to find success stories in professional activities, to identify and document them in a manner that encourages more actions. Findings show that infusion of learning from successes as a systematic method in the intervention was significant for both teachers and students "Learning from successes contributes to their enthusiasm, to their cooperation and develops their learning and behaviour..." (Interview 315); "I expect to continue in this way because it greatly improves the feeling I have as a teacher...helping the students according to their need...they are succeeding and this encourages them to invest more in their studies. It also encourages me to continue to teach according to the methods I acquired because it works for me..." (Interview 309); "... This creates a positive cycle..." (Interview 192). Also, there is evidence from observations, Student A3. - You should know that at first, I did not accept that I have difficulty in writing. I thought I could write a masterpiece in two lines. I realise that this is not the case and slowly learned how to write better and so I got a better mark (Observation 47) and from questionnaire 70 "The new learning method...gave me a feeling of success".

Findings from post-interviews that took place six months after the end of the intervention in classes indicate that teachers continue to implement the AAAMS and other methods in the long-term because they experienced success and their students were provided with responses appropriate to their needs. Roy said "Today I gave back a test and I organised feedback, and I talked to them about the process we went through, and we see how the strategies helped them. In the feedback, I asked them if they used strategies to prepare for the test, and they said yes, and the achievements are high and better..." (Post-Interview 1); Rick said "Students both enjoy it and...get good marks" (Post-Interview 9). Similar evidence can be found also from observations The teacher: I'm very proud of you for the good work you have prepared. I saw that most of you referred to the strategies that I taught about writing and your marks went up by at least 20 points (Observation 18).

Furthermore, findings showed the students' angle about their successes as result of the intervention "I can see a change in the way I am learning. If I compare to last year I can see a real difference...my achievements in the last test really improved..." (Questionnaire 45). Kaplan et al (2001) and Kay (2002) say that the combination of strategies that meets the special characteristics and needs of students contributes to their cognitive and affective development. Plotnik (2008) points that there is an interaction between acquisition of tools that leads to an academic success and its contribution to the improvement in the students' self-image. Einat (2004) adds that it improves teachers' professionalism and their self-image. Ziv (2001) explains self-image as the confidence of a person in his capabilities and talents. The self-image that a person forms about himself is an important factor in shaping his behaviour. Students who experience academic success and fulfil their potential develop high self-esteem. Dahan & al (2006), Einat (2004) and Reis et al (2000) say that students who acquire tools to help them cope with difficulties improve their levels of achievements and they acquire compensatory strategies that help them succeed leading to a positive cycle that motivates them. Also, Kay (2002) and Nielsen (2002) recommend planning tailored programmes suitable for 2ELs in order to enable them to succeed and to realise their potential, hence improving their self-image. Both McCallum et al (2013) and Dahan and Meltzer (2008) claim that the gap between the high expectations of these students from themselves and their low achievements can cause a negative self-image and a great frustration and teachers should have knowledge and tools to aid their students to bypass their challenges. Findings revealed this "They possess low self-esteem. This is the most prominent emotional characteristic ... accompanied them throughout their years of study ... " (Interview 115); "... they are in double crisis: problems socially and low academic achievement..." (Interview 116).

Einat (2004:151) reinforces these findings and argues that students with SpLD that have low academic achievements and failures develop low self-esteem. They also adopt for themselves 'Strategies of Negative Behaviour' which are strategies that withhold them from having to cope with learning difficulties by using absenteeism from school when they invent health reasons, disruption in the lessons to get them sent out of the class, and not doing homework or written assignments with all sorts of excuses. These are also accompanied by symptoms of emotional problems, dropping out of school, and social problems. Einat (2006) as an educational psychologist conducted research in an Israeli prison for youngsters. Their psycho-didactic assessment showed that 70% have SpLD and they did not receive the treatments they needed in school. The findings show the correlation between the difficulties of these youngsters in school and family neglection and their deterioration to delinquency. Manor-Benjamini (2005) emphasises that negative emotions

are intensified with 2ELs and the results are worse because of the gap between their high abilities and their failures in school.

5.5. Summary of Discussion

In Discussion chapter I evaluated the contribution of this research to 2ELs teachers' learning processes in an Israeli high school in two aspects: providing relevant knowledge to 2ELs teachers about their students' characteristics and needs and implementation of the model of three strategies AAAMS (Salem, 2014) that was adapted to 2ELs' needs especially in Humanities Disciplines. Findings showed that the intervention positively contributed to 2ELs teachers. Teachers changed their attitudes and stigmas towards 2Els after they learned about these students and they acquired tools that assisted them to enter their classes with more confidence which enhanced their self-efficacy (Day and Gu, 2010). Teachers felt that they succeeded in meeting 2ELs needs and they opened their minds to new learning, to new strategies as they employed these strategies in their classes (Levy, 2008). The teachers felt that they helped their students in the acquisition of tools that develop their HOT skills with tools that cope with their difficulties in writing skills. The byproducts are improvement in 2ELs self-esteem, motivation and outcomes which results in the teachers' motivation to mobilise the new knowledge they gathered in this intervention to other areas in their school (la Velle, 2015). This research met the objectives set for itself in both its values and pedagogical aspects in the cognitive, affective and organisational aspects.

5.5.1. The Research Objectives

The thesis met successfully all its research objectives. Findings indicated the teachers' challenges while coping with classes of 2Els in an Israeli high school are due to the lack of CPD that prepare these teachers according to these students' needs. This deficiency creates conflicts between teachers and students, thus impairing the ability of teachers to fulfil their roles. Findings showed a positive contribution of the intervention since it provided solutions customised both to teachers' and to 2ELs' needs in the field of teaching Humanities Subjects. The findings showed that teachers underwent processes of learning that changed their teaching attitudes and methods and they consequently benefited from the intervention. This research was designed to meet its research objectives and it made it successfully. It has done so by contributing an insight into the world of 2Els teachers and by offering an effective intervention for teachers and their 2ELs. The research objectives were:

- To find a response to the affective aspects; to develop the teachers' awareness about gifted students with SpLD, and to increase their professional commitment and responsibility towards these students.
- To meet the cognitive aspects by expanding the teachers' knowledge about the characteristics and needs of these students, about alternative teaching methods and strategies that can benefit the students and how to integrate these methods into the existing programmes for each subject.
- To meet the organisational aspects by improving the ability of teachers to plan and organise their time and the process of teaching in class. This helps teachers to meet the different needs of students taking into account the standards and outcomes expected by the educational system.
- To write a manual for teachers of 2ELs in order to train the teachers and to give them tools to cope with the needs of these students.
- To assess the contribution of the intervention of this study both to teachers and students in order to turn it to a recommended CPD programme for teachers in this area (Appendix 6.1 A Table showing the goals and objectives of the study according to the RQs).

The first and second objectives were to find responses to the affective and cognitive aspects of teachers and to develop the teachers' awareness about 2Els. These two objectives were met by showing that the combination of knowledge and strategies in the CPD programme in this study improved teachers' teaching skills, minimised their opposition to employ new methods, and changed their stigmas and attitudes towards 2Els. Tov-Li (2008) supports the connection that exists among teachers between the acquisition of knowledge about the characteristics of their students, and the increase in awareness and changes in their attitudes towards those students. These changes in teachers' learning had a positive impact on teachers' self-efficacy and improved the learning processes and outcomes of their 2Els students. The teachers reported a sense of empowerment of their self-efficacy when they experienced successes during the intervention and their students enthusiastically cooperated and showed great interest. The CPD made a difference to teachers' learning because the researcher based the CPD programme on teachers' needs with a consideration of characteristics and specific needs of their 2ELs. It was seen from the findings that the teachers did not oppose learning new strategies because they felt they needed new tools to cope with 2Els and they were open and anxious to learn. During the intervention the teachers' enthusiasm was enhanced when they realised that the strategies were effective and their students improved their behaviour and their outcomes. Mutton et al (2011) claim that methodical and systematic acquisition of strategies, as well as being successful, leads teachers to greater openness towards new experiences in teaching. Teachers felt that they succeeded in meeting 2ELs needs and their resistance to new strategies vanished as they employed these strategies in their classes (Levy,

2008). The teachers felt that they helped their students in the acquisition of tools that develop their HOT skills and also, with tools that cope with their learning disabilities in writing skills. The byproducts are improvement in 2ELs self-esteem, motivation, and better outcomes creating teachers' motivation to mobilise the new knowledge they gathered in this intervention to other areas in their school (la Velle, 2015). This research met the objectives set for itself in both its values and pedagogical aspects in the cognitive and affective aspects.

The third objective was to meet the organisational aspects and it was also fulfilled in this research. Findings indicated that the provision of tools supported teachers in organising their lessons. Teachers combined the current curriculum with the strategies they learned in the intervention and diversified their teaching methods in their classrooms. In this way teachers improved their ability to plan and organise their time and the process of teaching in class. Time was better used which also enabled the infusion of the strategies to create interesting and challenging lessons.

The fourth objective was to assess the contribution of the intervention of this study both to teachers and students in order to turn it to a recommended CPD programme for teachers in this area and it was met by the researcher that developed a manual for teachers' CPD tailored to the unique needs of teachers who teach Humanities Subjects (as History, Literature, Bible) to 2ELs and included the model of three strategies that the researcher wrote for this study, AAAMS (Salem, 2014). The researcher trained the teachers in order to give them tools to cope with the needs of 2ELs students. The researcher accompanied the teachers during the employment of the strategies in 2Els classes. The findings showed that this was an effective process of learning for teachers.

The fifth objective was to assess the contribution of the intervention of this study both to teachers and students in order to turn it to a recommended CPD programme for teachers in this area, thus enhancing its generalisation to other teachers in Israeli high schools. The findings showed that 2ELs teachers underwent a learning process of changing their attitudes towards their students, from antagonism and distance, to a position of caring and understanding of the challenges faced by these students. Teachers felt that they can contribute to their classroom atmosphere, which enabled learning and developing HOT skills, while at the same time providing solutions to the students' difficulties. The students also improved their academic outcomes as they were given a proper attitude that nurtured their strengths and addressed their points of difficulties enhancing their self-image as well. This research conclusion can be mobilised to the Israeli Educational Department as a recommendation for preparing CPD programmes for 2Els teachers. In summary, this research achieved successfully all of its research objectives. It can be argued that the triangulation between interviews, observations and questionnaires reinforced the internal validity of the research and also

that there is an external validity for this research on the basis of the explanations given from the literature for these findings (Shkedi, 2003). The next chapter summarises and discusses this research conclusions.

Chapter 6: CONCLUSIONS

6.1. Introduction

This study investigated the challenges faced by teachers of gifted students who also have learning disabilities in writing skills (2Els). It was conducted in an Israeli high school where the researcher works as a teacher and a vice principal. My aim in this research was to inquire and prepare CPD for 2Els teachers, including a relevant knowledge about 2Els characteristics and a set of strategies that could fit these teachers' needs (AAAMS, a model of three strategies, Salem, 2014) and then to study how this CPD impacts teachers' learning, attitudes and the employment of new strategies in the area of teaching 2Els (Appendix 3.3.). My findings confirmed that there is a lack of focused CPD for 2Els teachers in Israel as Manor-Binjamini (2005) claimed, and this has implications on teachers' self-efficacy as Day and Gu (2010) argued that teachers should be provided with adapted CPD to their needs. For example, information about 2Els characteristics, strategies to develop High Order Thinking skills and strategies to support the learning disabilities in writing skills. This argument is in line with the views of Montgomery (2013) and Lovett and Sparks (2011) about 2ELs teachers that need to learn specific knowledge and strategies in order to meet their students' needs especially when they have dual needs and difficulties.

As a practitioner researcher, I was conducting my qualitative research in my natural environment as Poultney (2017) emphasised that teachers' inquiry into practice originates from their own practice, normally in the form of a problem which requires further investigation. I was interested in the viewpoints and experiences of teachers as Cohen et al (2011) claimed that a qualitative researcher should be interested in the individuals from practical fields. Therefore, I investigated 2Els teachers, their interpretations of their learning challenges, and their difficulties throughout teaching 2Els. As a senior practitioner and one of the leaders in my school I decided to conduct this research in my practical field and to prepare a CPD focused on 2Els teachers in order to contribute to their knowledge and to make them re-think their attitudes and strategies when they teach 2Els with dual exceptionalities. This is in view with the UNESCO (2015) declaration that learning information is central to any discussion of re-thinking education by teachers and additionally with the view of Teachers' Guide to Teaching and Learning International Survey (TALIS) (OECD, 2014) that the existing deficiency of knowledge in teachers' learning, results in their attitudes towards their students and it shapes the way teachers teach. The CPD I prepared was classroom-based on 2Els teachers' needs that emerged from the practical area as Walter and Briggs (2012) emphasised that it is important to create specific and classroom-based CPD programmes and thus increasing teachers' acquisition of knowledge and improving their teaching skills. As a practitioner researcher I contributed to my colleagues' CPD for 2Els teachers that can be useful in their practical lives and la Velle (2015) indicated on the importance of the knowledge mobilisation from academic research to professional areas. This is the way in which practitioner researchers like me employ the new knowledge from theory to their practical lives in schools.

The originality of my research lies in the development of CPD's manual for teachers (Appendix no. 3.3.) which I tailored to the unique needs of teachers who teach Humanity Subjects such as History, Literature, Bible to 2Els. I also included the model of three strategies that I developed for this study, AAAMS (Salem, 2014) and its integration into the curriculum of various Humanities Subjects. I based this manual and the model of three strategies on the literature (Harpaz, 1998: Kaniel, 2006: Melitz and Melitz, 2002: Shaked, 2007) and on 2Els teachers' needs which emerged from the area. The CPD in my research includes learning processes that empower teachers' self-efficacy and it is in accordance with Kershner (2007) and OECD (2014) that claimed that when teachers are able to provide appropriate solutions for their students' needs, they become more self-confident and they improve their self-efficacy.

My qualitative research was conducted as a case-study based on two teachers as a unit and this is in accordance with Simos (2009) which emphasised that this is one of the options for conducting a case study when dealing with processes in social and educational issues. It suited my goal to inquire in depth (Yin, 2011) the 2Els teachers' challenges and their needs in their learning processes. My epistemological and ontological perspectives in my professional, as well as my personal life, guided me to choose the qualitative approach that is based on the naturalistic constructivist paradigm because it perceives the world from viewpoints and experiences of individuals and their interpretation of reality (Dreak and Heath, 2011). I am guided by the humanistic approach that places equality in educational system in the top of its principles as declared in the World Education Forum (UNESCO, 2015). Furthermore, I place the individual's needs in the center of society's interests as was claimed by OECD (2014) that teachers should be provided with specific knowledge and strategies for their students' needs, in order to become more self-confident, and improve their self-efficacy. My research contributes to the field of 2ELs teachers' learning in Israel and in how to prepare their CPD in order to contribute to their professionalism and to the development of practitioners in the domain of teaching Humanities Subjects to 2Els in high schools.

6.2. Key Findings and Conclusions

My findings confirm that the CPD I developed for my study was effective and efficient for Israeli 2Els teachers in re-thinking their attitudes and methods and making a difference to their learning processes. The importance and contribution of this research is in identifying and mapping what is needed in 2ELs teachers' learning such as knowledge about the characteristics of 2Els, and specific strategies to meet the dual needs of 2ELs as Montgomery (2013) and Walter and Briggs (2012) recommended. My research investigated the

enabling and inhibiting motives in Israeli 2Els teachers' learning processes concerning cognitive, affective, and organisational aspects.

My findings confirm that 2ELs teachers in Israel do not have enough knowledge and appropriate tools to cope with 2Els (Heiman, 2011: Manor-Binjamini, 2005) and this results in their negative stigma and labelling of these students as claimed by David (2011) and Talmor (2007). My findings confirm that before the intervention, teachers felt intimidated by 2ELs students, hence negatively labelling them and it created antagonism and fear about teaching them as Perković Krijan and Borić (2015) claimed that teachers have ambivalent attitudes towards gifted students and this influences their practice. But as a result of the intervention the teachers underwent learning processes of changing their attitudes towards their students from antagonism and distance, to a position of caring and understanding of the challenges faced by these students. This is in line with the views of Bar-El and Noymayer (2013), Bourne (2007) Montgomery (2013) and Talmor (2007) who argued that teachers' stigma towards gifted are intensified when the students have dual exceptionalities as 2Els because teachers do not have enough knowledge about their students' needs and often teachers find it difficult to believe that gifted have also learning disabilities. The findings showed that when teachers learned about these students' characteristics and needs in the CPD (such as their High Order Thinking skills, boredom, disruptive behaviours, and disabilities in writing skills) they felt less intimidated and more capable of teaching them and more open to learn new strategies that assisted them in meeting their 2ELs dual needs. Gross (2016) argued that teachers' attitudes towards gifted can be changed by means of professional development when it is focused on their specific needs. OECD (2014) indicated the connection that exists between the acquisition of knowledge among teachers about the characteristics of their students with learning disabilities, and the increase in their self-efficacy and awareness that influence their attitudes towards those students.

The findings showed that it took longer for Israeli teachers to change their attitudes and to engage with new methods of teaching 2ELs. This does not concur with Poultney (2017) who found that in the UK, teachers easily engaged in learning new methods. My findings confirm that after teachers underwent a learning process during the intervention, they did not oppose the learning of new strategies. The findings proved that teachers felt a deep need for knowledge and tools to cope with the challenges they had while teaching 2Els. The void in CPD programmes for teachers in Israeli high schools has immediate implications for their practical lives since they feel frustrated hence they were anxious to learn new strategies. This is in line with the view of Day and Gu (2010) and Walter and Briggs (2012) about what makes a difference in teachers' re-thinking their learning and changing of attitudes and they all indicated on the importance of focusing on specific needs in teachers' learning in purpose to enhance their professionalism and to improve teachers' lives. My findings confirm that there is an ambiguity and disagreement concerning definitions, characteristics and needs of 2Els which has implications on the lack of adapted CPD programmes for their

teachers. This is in line with Freeman (2011), Montgomery (2013) and Winstanley (2005) in UK, David (2011), Manor-Binjamini (2005) and Margalit (2004) in Israel, Bourne (2007) in New Zealand and Nielsen and Higgins (2011) in US. These findings about ambiguity in 2ELs teachers' area, led me to learn and to investigate this issue in the literature in order to offer an intervention that included CPD focused on 2Els teachers with the purpose to provide teachers with specific knowledge and strategies so they will be capable to teach their 2ELs and to lead them to enhance their learning.

My findings showed that the intervention contributed positively to the learning processes of both teachers and students and they perceived learning differently as a result of the engagement in this research. It was found that the teachers went through a transformation in their attitudes and stigmas towards 2Els, and also in their learning and employing new strategies. Teachers perceived learning as an empowering process and consequently, they enter classrooms with more confidence and their experiences of successes empower them and improve their professionalism. This is in line with the view of Yosifon (2004) that claimed that teachers were empowered when they learn how to improve their teaching skills and when they can make a difference in their classes by meeting their students' needs.

My findings confirm that the AAAMS (Salem, 2014), the model of three strategies, was well accepted by teachers and students since these strategies were a new way to learn and to integrate into the curriculum, and they meet 2Els points of strength and weakness. Thus, the teachers varied their teaching methods and improved their teaching skills and the employment of this model has contributed to the success both of teachers and students. Teachers experienced success when their students improved their learning skills, their outcomes, and their self-image. Furthermore, teachers had greater motivation and satisfaction which leaded them to greater openness towards new experiences in teaching. The combination of strategies in AAAMS (Salem, 2014) contributed to 2Els teachers' needs in cognitive, affective and organisational aspects and to their students' outcomes in HS as OECD (2014) declared, when teachers are equipped with proper tools, they are motivated and they can contribute to their students' outcomes. Lovett and Sparks (2011) argued that teachers experience success when they employ new strategies that are accustomed to their students' needs and in my research the 2Els teachers experienced success and they applied these strategies later on in their practical lives in order to recreate their success. The contribution of the intervention for the long term was confirmed by the findings from the data collected six months after the end of the intervention when teachers continued consistently to employ the strategies of AAAMS in all the classes they were teaching.

In addition, findings indicated that the provision of the AAAMS model of three strategies contributed to the improvement of teachers' abilities to organise their lessons in a systematic way so that they can incorporate into the curriculum new strategies. This is in line with the views of Montgomery (2013) and Mutton et al (2011) that said that proper planning of teaching allows a space to create an optimal learning environment. Furthermore, my findings indicated that the teachers transferred the new knowledge they learned in this intervention to their colleagues in high school. The transformation in their self-efficacy led them to initiate a change in wider circles in school as La Velle (2015) argued about the importance of mobilisation of knowledge inside the educational organisation and to create a bank of knowledge that all teachers can employ. Moreover, my findings confirm that the teachers' transformation in their attitudes and learning impacted positively 2Els, whose attitudes towards learning changed. 2ELs behaviour improved and their curiosity to learn new things increased. The students claimed that learning became joyful, and that they enjoyed that their teachers challenged their critical and creative thinking skills and it minimised their boredom. Also, they felt that their difficulties in writing assignments were addressed by their teachers, and their successes had an impact on their motivation to learn as Millman (2011) indicated on the connection between learning from successes and acquiring new attitudes and methods in learning.

In summary, my conclusion is that the intervention in this research proved that the 2Els teachers' CPD including AAAMS model of three strategies (Salem, 2014) was a new way to learn and was well accepted by both teachers and students. The CPD contributed to teachers' learning skills and self-efficacy and drive them to re-think their attitudes and methods in meeting their challenges while teaching 2Els and improving their lives as teachers. For these reasons, it can be assumed that the methods that were investigated in this research can be generalised to larger populations of Israeli 2Els teachers as Drake and Heath (2011) explained that generalisation is the ability to widen and extend research findings and inferences from one study to larger populations. Therefore, this research findings could be used to prepare CPD for 2Els teachers in an Israeli context.

Chapter 7: LIMITATIONS AND CONTRIBUTION OF THE RESEARCH

The qualitative research approach was chosen in this study. The researcher was aware that she should circumvent the limitations of subjectivity as an insider-researcher, and enhance the trustworthiness of the research. The researcher's interpretations could be influenced by her personal perceptions, teaching culture, personal biography, experience and ethical standards and they cannot be eradicated but the researcher should be aware of them. Qualitative research does not pretend to prevent those biases but suggests strategies to reduce their influence as much as possible. For this purpose, the researcher employed several research tools to investigate from different angles (Yin, 2011) the subject of what makes a difference to 2Els teachers' learning. The researcher carried out triangulation using various research tools and various points of time over an extended period (interviews in the beginning, during and at the end of the implementation of the intervention in classes, and six months after the end of it). In this way, the researcher created a strong basis for the validation of the research findings and received reinforcement concerning the long-term contribution of the intervention. The research process was consistent, correct, and accurate in the application of the research methods, as well as in the analysis of data in order to reduce the potential for bias.

It is well known that an insider-researcher might create bias (Shalsky & Alpert, 2004). This researcher is a vice principal in the high school where this research took place and a member of the staff participating in the study, therefore, bias could result from this situation. To circumvent this limitation the researcher based the relationship in a longitudinal study on mutual respect, empathy and cooperation as Elliot et al (2008) suggested. The process of the study was transparent to the participants, the goals and methodology were made clear and the researcher held an open dialogue with the participants from the beginning to the end of the research. In addition, they were able to leave the research at any time so, as Yin (2008) recommended, the research was based on a single unit case study that included the two teachers in order to be able to keep on with the research if one of the participants withdrawals but the worries about this issue proved to be not real. In addition, during the interviews with the participants they shared their feelings, difficulties, thoughts and reflections at any time during the process of the research and they were partners involved in the study. Also, the participants were enlisted willingly and they gave their full consent to be interviewed, to be recorded and to be observed (Kusmisky, 2006). To safeguard the participants and the researcher itself, the principal gave her full consent. Also, the researcher maintained an absolute discretion and anonymity regarding the identity of the participants. I was aware of Shalsky and Alpert's (2007) warning about developing involvement and close relationship, so I employed

an outsider observer, a student without any prior connection with me or with the participants in order to reduce this limitation that can risk objectivity. The students agreed to accept the outsider observer into their classes. The researcher was supported by the literature (Sabar Ben-Yehoshua, 2006: Shkedi, 2003) that suggests that the presence of an observer or the presence of the researcher herself over a long period of time in the research field neutralises the observer's effect on the participants.

The researcher took means to strengthen the replicability of this study in Israeli context by allowing full transparency of the whole research. Recordings of the interviews were made and are kept by the researcher. There is a transcription of all the interviews, observations and questionnaires in order to provide an audit trail of every stage of the data analysis (Shkedi, 2003) available to the readers. Also, the manual for teachers' CPD developed by the researcher for this study is applicable tool that can be reused by readers. It was important for me to make this research generalisable and to widen and extend the research findings and insights from this study to larger populations. I was aware of the limitations of the case study I conducted in my Israeli high school such as a small sample, that the study was conducted only in one high school, and the risk of bias and subjectivity that could arise from my dual role as an insider researcher. However, Yin (2008) argued that the findings of a case study can be generalised to other situations because a particular case can teach us a lot about a larger phenomenon. Furthermore, according to Shkedi (2003) when a group of people have similar characteristics and needs, they will also have similar social and emotional patterns since these arise from similar experiences. This research intention was to circumvent the research limitations and to disseminate this research findings and insights.

The original contribution of this study in the context of Israel is about what made a difference in 2Els teachers' learning. This study proved that the combination of a relevant knowledge and strategies that meet 2Els teachers' challenges made a difference in their attitudes and stigma to these students and empowered their teaching skills and self-efficacy. The findings showed that CPD should be adapted to 2Els teachers' needs as they were detected in the beginning of this research such as to be provided with a relevant knowledge about the characteristics and special needs of 2Els in the humanistic subjects thus they can re-think their stigmas and attitudes to these students. Also, teachers need to learn strategies that meet 2Els dual needs such as how to nurture their High Order Thinking skills and on the same time how to assist them to bypass their learning disabilities in writing skills. The AAA model of three strategies that was included in the teachers' CPD was a different way of doing things and this made a difference to teachers' professional lives and enabled them to integrate these strategies in their curriculum. For these reasons, it can be assumed that this study can be generalised to larger populations of 2Els teachers in Israel that their

setups are similar to my high school and this study's findings can be used to prepare CPD for 2Els teachers in Israeli context.

The teachers that participated in this research became a focal point of knowledge in the field of teaching 2ELs in their school and they mobilised new knowledge from their professional development and translating it for other teachers in their school. The students that participated in the intervention acquired new learning methods and experienced success in improving their learning skills and as a result of this process, they were asking other teachers to adopt these methods. In this way, they also contributed to the change in their learning environment. The mobilisation of knowledge (la Velle, 2015) from micro to macro in this high school (the mobilisation of knowledge from two teachers that participated in this research to other 2Els teachers in this school) can act as a lever to disseminate the research findings and to contribute to larger professional circles of 2Els teachers in Israel. In addition, I became more professional adopting a dual identity as a teacher and as a qualitative researcher and it is the worth of research in education that empowers my confidence to expand this research elsewhere in developing CPD programmes for larger professional audiences and in educational academic frameworks in Israel. The next chapter will discuss the recommendations for future research that arose from my insights of this research.

Chapter 8: RECOMMENDATIONS

This chapter discusses the practical and academic recommendations.

8.1. Practical Recommendations

The recommendations are based on my research findings, in the context of Israel, and inquiried the issue of what made a difference in 2Els teachers' learning. This study proved that the combination of a relevant knowledge and strategies that meet 2Els teachers' challenges made a difference in their attitudes to these students and empowered their teaching skills and self-efficacy. The findings confirmed that CPD should be adapted to 2Els teachers' needs as they were detected in the beginning of this research such as to be provided with a relevant knowledge about the characteristics and special needs of 2Els in the humanistic subjects so they can re-think their stigma and attitudes to these students. Also, teachers need to learn strategies that meet 2Els dual needs such as how to nurture their High Order Thinking skills and on the same time how to assist them to bypass their learning disabilities in writing skills. It is recommended that the Israeli educational system should develop CPD for 2Els teachers in high schools as well as in elementary schools that is focused on providing teachers with knowledge and methods in purpose to re-think attitudes and methods in teaching 2Els.

Also, it is recommended that teachers should be trained to include teaching strategies during their lessons in each subject. The teachers should learn how to employ strategies so they can help their students to develop their learning skills.

8.2. Academic Recommendations for Further Research

This study was based on data collected from 2Els teachers in Israel and it was focused on the learning and challenges of teachers who teach humanities subjects to 2Els in a high school. It is recommended that future research should continue to study 2ELs teachers' learning processes in Israel in various directions such as inquiry of the challenges of 2Els teachers in elementary school or inquiry of the learning processes of teachers who teach mathematics and sciences to 2Els.

Also, it is recommended that future research should include the students' families in order to get another dimension of the contribution of this type of intervention beyond of the learning environment of the school. In the current research, we found evidence of the impact on 2Els parents who reported on an improvement in their children's' attitudes towards learning. The current study did not include the parents, so it is recommended that this theme should be developed in future research

Chapter 9: DISSEMINATION

9.1. Goals of WBP's Dissemination

The main goal of the researcher of the recent WBP is to disseminate the findings in order to contribute knowledge to the practical field as Granger and White (2001) recommends. Dissemination has various aspects: Rowley and Slack (2000) point on professional and personal benefits researchers would gain from disseminating their findings. Hughes (2003) suggests that dissemination of a research can contribute to a specific target audience in the professional field. Concerning the professional aspect, disseminating the recent research may contribute to colleagues in this field so they can use strategies that fit the needs of their students. This will allow them to develop a better learning environment and achieve better learning products. Harmworth and Turpin (2000) suggested three criteria to examine the professional benefits researchers might derive from dissemination of their findings. The first criterion is Dissemination for Awareness. It refers to the category of people who do not require an explicit knowledge of the findings, but the knowledge they acquire from the research's findings encourage their awareness in this issue. They will spread the research findings and the awareness of the research's issue will grow.

The second criterion is Dissemination for Understanding. It refers to the category of people who are peers from the same professional field for example: teachers of 2ELs. that can be directly benefited from the new knowledge this research provides. The third criterion is Dissemination for Action. The goal of the dissemination is to make changes in practical fields. The action taken after learning the outcomes of the research will change the practical strategies, attitudes and products of the colleagues in the professional researchers' circles. These three criteria are reflecting the benefits the writer can have from disseminating the recent research.

The third criterion fits best this WBP's goals because as Wilson (2002) argues one should desire to make a difference and to contribute new practical knowledge because if not, it will perish and not be valuable to or acknowledged by others. Also, Albert (2002) and Dahlberg (2006) said that researchers' task is to publish their findings and to contribute to their society. In addition, Brodie (2005) argues that dissemination serves three main roles and the researcher found them fitting this study: the first is validation of the scholars' work, the second is communication of ideas in the professional field and the third is the archiving of this knowledge for future access by others in the field. This WBP's issue is dealing with the validation of the teachers' work in school. Also, this issue opens the opportunity to discuss between colleagues. In addition, it may add new knowledge and extend the existing literature.

A strong motive for disseminating this study was to make a difference and to better the lives of teachers who teach 2ELs because the researcher is one of them and she understands their difficulties and these students' needs. The researcher was convinced about the need of her WBP's topic and the more she talked with peers at school or in teachers' CPD conventions, she became more convinced that this research should be disseminated. In a recent teachers' convention, she used a poster which outlined her WBP's goals and findings and attracted a lot of attention. As personal benefits of researchers are concerned, Rowley and Slack (2000) point to dissemination of a research as a substantial contribution to Curriculum Vitae and as a lever to develop researchers' careers. The dissemination of WBP's findings in academic educational journals, websites and conventions can be the way to achieve such personal goals and thus by making a difference in the professional and personal aspects the researcher can feel encouraged and self-fulfilled.

9.2. The Dissemination's Plan

Looking at all the different ways to disseminate a study, it fits best to work on several fronts at the same time. Harmsworth & Turpin (2000) offered a dissemination model with three domains: Awareness, Knowledge and Action. The researcher adopted it and formulated the following plan as a strategy for disseminating the recent WBP in its various stages:

Table 9.1. The Dissemination Plan

Awareness	Knowledge	Action
During research process the researcher exposed the intervention in the Teachers' Conference held by Israeli Ministry of Education Department of GT students. It created a base to have feedback from colleagues and opened a discussion about this issue. Researcher also lectured about it in	In the end of intervention, the researcher published WBP's findings in an article in an Israeli professional journal for teachers: Kesher-Ain (8.2014) and also disseminated an article in website of The Israel Association of Child Development (29.1.2014) as a start for a dialogue with	The researcher formulated a course in the issue of this study and she is already teaching it in university and also teaching in CPD seminars for teachers about AAAMS.

Israeli schools that have	other researchers in this	
gifted classes.	field.	

9.3. Ethical Considerations, Forms and Means of Dissemination

There are ethical principles to be aware of in the process of dissemination a study such as the dilemma to whom should the researcher be loyal to the research goals and objectives or the participants (Sabar Ben-Yehoshua, 2001). The researcher will try continuously to be loyal to the participants, to keep their welfare and to be careful that no harm will be done to them (AERA, 2002; BERA, 2005). In the recent research the researcher will keep anonymity of the participants and avoid the use of any information that is not relevant to this research even if it is interesting or appealing to the public (Appendix 9.1). On the other hand, the researcher will try continuously to be loyal also to the professional standards demanded from a researcher and the research goals.

There are a number of forms and means that are potentially appropriate for disseminating a WBP such as Professional Educational Journal, Academic Journal, Conference or workshop seminar (local and international), Information and Communication Technologies (ICT) that enable sharing of quality learning and teaching with universal audience and also contribute to teachers' CPD and more efficient education (Voithoefer, 2005). Each form has advantages and limitations (See Appendix 9.2). The selection of journals that best fit this topic should consider a careful investigation of relevant academic and professional journals in Israel and abroad and also to be considered are requirements such as some journals demand that the submitted article be original and never before published, subject requirements, readership, copyrights, restrictions on the amount of words, which all vary noticeably among different journals.

An important aspect to be considered is the rules for disseminating a paper. Most of academic and professional journals have several rules with variations (Fridman, 2006: Shefler, 2006) (See Appendix 9.3). The expectations of academic journal readers who might benefit from the research are different from the target audience of the professional publications. Therefore, the audience may determine the readability of a text because it serves the need for the information to be readily accessible for a varied audience. These guidelines lead the researcher in the process of writing articles and deciding about the target audience. The researcher was aware and did her best to meet all the expectations required by each journal she chose to submit to.

9.4 Conclusion

The process of dissemination demands examination of the researchers' intentions and aims. The most important aim of the recent research was to add new knowledge to colleagues in the field of teaching HS to 2ELs in writing. There are various options and criteria for disseminating this type of research and are appropriate to the target audiences of this field. The researcher was aware of ethical issues related to the dissemination of this research and how to take means to confront challenges that could evolve during this process. Dissemination of this WBP was prominent to the researcher in order to start a dialogue with other colleagues from the professional and academic fields.

Chapter 10: PROFESSIONAL AND PERSONAL REFLECTIONS

My reflection will deal with professional and personal aspects.

10.1. Professional Aspects

The trigger for the current research was my dissatisfaction and that of my colleagues at the school on matters relating to teaching HS with large amounts of text to 2ELs. The need arose from the distance between the needs of students and teachers and the solutions that are formally available in practice. There was also frustration on the part of teachers and students because of the gap between the potential of gifted students and their low or mediocre achievements that do not match their high abilities, because of learning disabilities. These needs did not let me any rest. I read an extensive literature on this issue and I learned about it from conversations and interviews with my colleagues and it led me to plan the current research. I feel that I developed my critical thinking skills due to the process of this research. I learned to examine various options and different research directions; I differentiated between the essential and the subordinate and went through a process of decisionmaking in the literature review. I critically inquired and focused on the research topic and also on the selection of appropriate research approaches and methods, design and implementation of the intervention. It also assisted in increasing my skills as a researcher and enabled me to carry out the research to high quality standards of trustworthiness. I learned to make distinctions between planning, implementing and evaluating an intervention. I developed the ability to critically evaluate the processes I was going through and I brought this into the current study. For example, from my point of view, the collection of data was not complete in the end of the intervention as I thought it would be and I was not satisfied until I undertook a further evaluation process after six months. Only after this stage could I assume that there was high internal validity to my research. In other words, as Shkedi (2003) recommends, I had carried out a triangulation of data from all phases of the intervention with the post-intervention data, which reinforces the validity of the findings.

In the aspect of my skills' development, it is important to note the significant insight I had during the process of planning my research: Bloom's Taxonomy (1956) (which presents taxonomy of six stages of development of thinking from low to highest levels of thinking) was a useful basis for understanding the development of HOT skills, but then I read Passig's (2003) theory who added to Bloom's Taxonomy (1956) one more advanced level of HOT skill called "melioration". According to Passig (2003) at this level a person integrates between knowledge or strategies from different fields and creates his own new knowledge. So, I asked myself: what I could create in my research that would be as "melioration" level, original and effective knowledge that contributes to teachers

and their 2ELs in my professional field? My answer was to develop the AAAMS (Salem, 2014) of three strategies as the main tool of the intervention in the recent WBP. I combined my knowledge and professional experience from my two different fields of expertise: The SpLD and the gifted students' characteristics and needs, in this model of three strategies. I also combined responses from these two realms of knowledge in order to offer a new tool that might provide an answer to the minority population of teachers who teach HS to 2ELs. Therefore, I developed a teachers' manual and I conducted a seminar for the teachers participating in my study. The goal was to equip the teachers of 2ELs with alternative methods in order to provide them ways to minimise the barriers and challenges they have while teaching these students and thus also assist their students to realise their high potential and improve their performances, self-esteem and motivation. The product of this process was the Manual for Teachers that can be implemented in teachers' CPD and this is an original contribution to the professional field in this issue.

Also, during the seminar and intervention, I supported the teachers and mentored them following my professional belief to make a change in teachers' attitudes and varied their teaching methods: from a situation in which teachers were at the centre, they became facilitators and mentors leading students to learn and develop HOT skills. Thus, I improved and sharpened my professional skills as a teachers' mentor. Additional belief which guides me is that it is better when teachers personally experience strategies in a CPD seminars and then they can transfer them to their students. So, I lead my seminar for teachers in this way thus the teachers together with me could experience the alternative strategies through active, involved and shared learning. With this training, they can pass on the learning skills to their students.

In addition, I sharpened my professional writing and designing skills and felt content that I completed the challenge of planning a CPD programme from the first stage to the last. This has contributed to my professional development and undoubtedly, I had been enriched by the expansion of my knowledge. In this way, I became an expert in the field of teaching 2ELs to such an extent that last year I decided to develop a teaching unit as part of my work as a university lecturer to students-teachers who are doing a master's degree in Special Education. In addition, I was satisfied that a considerable professional improvement took place in the school. For example, I built a forum of 2Els' teachers and the participants' teachers in the recent research, became ambassadors of the topic at school and leaders of the approach of teaching these students and for that I am deeply grateful to these teachers. I see this as my unique contribution to the development, implementation and evaluation of knowledge in this field. I intend to expand the professional circle by holding seminars about my WBP's issue in other schools and to train teachers in academic frameworks. All the professional skills that I developed have strengthened my critical and creative abilities and

increased my confidence that I can break through and develop new areas and spread this knowledge among the relevant audiences.

10.2. The Personal Aspect

In personal aspect, due to my research I developed various skills such as my ability to make decisions, my leadership, my critical and reflective thinking and my ability to manage my time effectively. My decision-making technique was greatly helped by the process of the doctoral dissertation. I now make decisions in various fields, both professional and personal, only after checking, researching, reading and thoroughly learning the topic. I learned that I should take into account a broad perspective of options. I have to weigh up possibilities that support with those that inhibit, in order to see the full picture. It is important to me to check different angles of the issue and the possible implications and thus to make decisions on a more objective basis and to minimise my biases that could be involved in the process. During the research, I developed my critical and reflective thinking. Today I check everything and nothing is taken for granted. I ask questions and investigate different types of responses as an integral part of my way of thinking because any subject can be tested again. This is the way to bring about change – to leave the comfort zone and habits and deal with those challenges posed by the processes of critical thinking. Today I also explain to my colleagues at work, to my students, to friends and of course to my close family the importance of seeing critical thinking as a way of life and the value of renewal as leading the individual to regeneration. In this way, it is possible to cope with challenges and goals in life and make tomorrow better in many ways.

During the research and at the end of it I had personal insights into the development and upgrading of my effective time-management skills both at the professional and the personal level. I was always an organised and well-planned person, but the situation of writing a doctoral thesis put upon me new requirements. I learned to focus and organise my time on a busy day in addition to managing the current research in all its stages (working full time, as I do, as a vice principal in a high school, as a teacher while also working at teachers' CPD colleges and as a wife, mother and new grandmother). I learned to recognise my best hours of work, to use them to maximum effect and to neutralise various factors that could hinder effective time-management. This is not an easy or simple matter and entails slow and Sisyphean learning but I learned important lessons during the process and implemented them. I built timetables and worked efficiently in order to keep to them and reach the intended achievements. In this way, I am currently conducting my life in every project and every personal and professional framework.

In addition, I proved to myself, to my great satisfaction, that I have the ability to lead people to perform a task in the way I think it should be done. I conveyed my deep belief in the correctness of this research and managed to recruit the teachers participating in the research into a complete and caring partnership. I am grateful to these teachers for that. The teachers became ambassadors of this matter at school, thus creating an expanding circle of knowledge being disseminated and changes being brought in to the teaching of 2ELs. I'm very gratified that my study in the school framework increased the awareness about this issue.

One of the wonderful results of my professional and personal development happened this year. The school gave me the option to choose the class I shall teach literature and be their home-teacher. I chose one of the most significant classes in the secondary school in the eleventh grade that learn in a special course on social and ecological leadership. This class is leading this school's educational concepts of green environments and contribution to the community. The highlight is that in this class are included 2ELs. Now I am able to combine in my practical work with this class both the AAAMS (which are at the heart of the intervention and in which I took great pride) and all the knowledge I acquired during the years of research. Of course, I have been helped by the leadership skills which I have sharpened and developed during these years. These leadership abilities would not have germinated successfully if I had not gone through a parallel process of personal leadership development.

Another result is preparation of an academic module (target audience is the post-graduate students in Special Education at the university). The unit deals with methods of teaching 2ELs and is based on the great amount of knowledge I acquired during the research and its findings and from literature. In this way, I am fulfilling my dream to spread the new knowledge that I am adding to this field and to promote the topic among as many teachers as possible. Also, I disseminated an article about my study in an academic journal in Israel "Kesher-Ain" (8.2014) and in the website of The Israel Association of Child Development (29.1.2014). I received feedback from teachers and professionals that empowered my intention to promote this subject in my community. I intend to disseminate an article in journals abroad and to spread the knowledge. I see in these results evidence of my personal development parallel to my professional development. It is personal growth and the flowering of personal powers that I experienced during the years I was doing research. These powers and skills enable me to make further choices both in my personal and in my professional development.

In summary, I began on my path as a researcher challenging the status quo in the field of teaching 2ELs. I refused to accept the situation as it was. Through this research, I searched for the code to

open the door that was so far pretty locked to teachers and 2ELs. At the end of the process, I am proposing a new doctrine (the AAA model) that might fill the void in this field. I hope that adopting this model and the manual for teachers that I offered and utilise it in teachers' CPD will be a breakthrough for teachers who teach various populations of students with special needs.

Chapter 11: REFERENCES

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DC60AD54A52F/56027/1and3.pdf (accessed 23rd April, 2014).

Chapter 12: APPENDICES

Appendix 2.1

The Two Research Domains

The table below was based on the list of key authors: Freeman (2010) and Winstanley (2005), Einat (2004), Kaniel (2006), Feuerstein (1997), Harpaz (1998), Heiman (2011), Margalit (2000), Melitz and Melitz (2002), Landau (2001), Salomon (2000), Shaked (2007), Kay (2002), Neilsen (2002) and Bourne (2005). The table shows the two major domains in this review and the three dimensions within each one. Domain A refers to 2ELs in Humanities Subjects. Domain B refers to their teachers. In the recent research the intention is contribute to the teachers' professionalism as well as to their students' performance.

	Domain A: 2ELs		Domain B: Teachers who teach 2ELs
1.	Definitions, characteristics, needs.	1.	Characteristics, needs.
2.	Methods of dealing with the difficulties.	2.	Methods of dealing with the difficulties.
3.	Responding by training teachers to teach according to student's needs:	3.	Responding by training teachers to acquire relevant tools:
	Developing writing skills in HS (Strategy of Analysing Questions and Strategy of Answering Questions by a Template).	3.1	Acquiring Strategies of remedial teaching in HS (Strategy of Analysing Questions and Strategy of Answering Questions by a Template).
	Developing High Order Thinking (HOT) skills (Strategy of Asking Questions).	3.2	Developing High Order Thinking (HOT) skills (Strategy of Asking Questions).
	Developing transfer capabilities.	3.3	Developing transfer capabilities.
	Learning from success.	3.4	Learning from success.
	Active learning.	3.5	Active learning.

Appendix 2.2 – The Story of Ron

An Example of a Gifted Students with Learning Disabilities

Ron is 15 years old. He is studying in a separated class for GT students in the high school I am working in. I am his literature teacher.

Ron has been assessed as gifted by the formal government assessment project for gifted students when he was 8 years old. Since then he was receiving various courses for gifted students in science and mathematics and in development of high order thinking skills. In the last two years, he chose to learn in the separated class for gifted students in my school. Ron has difficulties in his literal skills and had been assessed as having special literal learning difficulties.

Ron is an impressive student. Ron is a boy with great curiosity who studies independently every subject that interests him by searching the web, reading the sources that are relevant to his interests and by going to university lectures, mainly on scientific subjects. He acquires a great fount of knowledge. A salient feature of Ron is that he reads only scientific materials or only very narrow areas of interest and is unable to read a short story or read a book or learning materials in subjects with great amounts of text such as history and literature. During lessons, Ron is very enthusiastic about sharing his knowledge of his extensive world with the class. Ron listens to the reading of works and class discussions on their interpretation and remembers the learning material well. During the class discussions Ron participates extensively. Ron has a very rich vocabulary and his ability to express himself verbally is excellent. Also, his understanding of learning materials, such as in literature which is the subject I teach him, is of a high level. Ron has deep and interesting insights about the subjects being taught and in particular he makes some very interesting connections between the r materials learned in class and his extensive general knowledge. Ron can offer interpretations and explanations of a high level. Many times, he offers very interesting philosophical interpretations of a poem, a story or a play studied in class. Ron stands out in his abilities to make arguments in discussions held in class. Ron is also very enthusiastic about creative tasks and personal study assignments related to the lesson as long as the work demands learning by heart.

All these are characteristics of Ron's strengths which are also features of gifted students according to the relevant professional literature (Freeman, 2001: Kay, 2002: Manor-Benjamini, 2005: Nielsen, 2002: Ziv, 2000). In addition, Ron shows the prominent characteristic of gifted students of demonstrative boredom which manifests itself when the lesson subject does not interest him or

when the pace of the lesson does not correspond to his pace. Ron gets bored and falls asleep or disturbs others around him or makes cynical and belittling remarks.

Ron's difficulty begins to stand out when he needs to express himself in written assignments of any kind. Ron finds it very hard to express his wide knowledge in writing answers to questions. Ron writes very short answers and cannot put the contents in writing in a clear, focused and detailed way according to the questions asked.

The sentence structure and basic grammar of Ron are very poor and he makes many spelling mistakes. Ron is unable to focus on the instructions in a question and reply in a focused way to them. His answers are very general, very often confused, usually very short and do not relate to all the instructions in the question. As a result of these difficulties, Ron's written performance is very low and his achievements in tests or in written work preparation are extremely low. Ron can give long and detailed verbal replies but even these are sometimes unfocused and he branches out into general and philosophical ideas, forgetting to concentrate on the specific subject of the question. In his written answers, these difficulties are greatly exacerbated and the answers are on a very low level. These are all traits characteristic of students with non-verbal learning disabilities (Heiman, 2011: Einat, 2004), but these difficulties are more pronounced among gifted students because of their great capabilities, resulting in a very large gap between their high abilities and the low levels of achievement which do not reflect these capabilities (Freeman, 2001: Kay, 2002; Manor-Benjamini, 2005: Millman, 2010: Nielsen, 2002).

Already during his studies at elementary school Ron had difficulties and his achievements were very mediocre. Ron was sent to be diagnosed for learning disabilities. The diagnosis highlighted his difficulties in reading and especially in writing answers or texts. The diagnosis emphasised his disabilities alongside generally high capabilities. This is not surprising because, as already noted, Ron was diagnosed as a gifted child.

During Ron's transition to the higher grades it has been clear that the difficulties are increasing and becoming more prominent and the levels of achievement falling because the requirements of the learning material is increasing in all subjects and especially in those subjects with large amounts of text such as literature and history. Ron often expresses his terrible frustration when he has written tests and his achievements do not reflect his knowledge or the skills he thinks he has. His constant under-achievement is undermining his self-confidence and weakening his motivation to learn and make an effort. He is losing confidence in his ability to succeed. The difficulties are very prominent during classes because Ron can be very active and involved in the discussions and conversation and is very proud of the wide knowledge that he can display verbally but as soon as there is a

written task in class or a writing assignment for homework he becomes evasive and angry and often does not prepare the assignments. Ron is an expert in finding negative avoidance strategies such as various excuses not to write or prepare the assignments (for example: he feels unwell; his hand hurts; he wants to go to the bathroom all the time; various different stories why he had no time to prepare homework etc.). Negative avoidance strategies of this kind are familiar characteristics of students with learning disabilities in order to avoid having to deal with the difficulty and in particular with the results, which are low achievement and failure (Einat, 2004). For a gifted student like Ron it is even more difficult to understand and accept the large gap between his high abilities and low achievement (Manor-Benjamini, 2005). Ron has a formal diagnosis that he is gifted and very capable and he finds it very difficult to understand and accept the large gap between the high-level capabilities that he knows he has and the low levels that he achieves in subjects involving large amounts of text. One of the painful statements that I heard from Ron was when he said that once he was sure he was smart but now he is convinced he is an idiot.

Appendix 2.3 – Taxonomy of Passig

Passig, D (2003) A Taxonomy of Future Higher Thinking Skills. *Informatica*, 2, pp. 79-92.

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Appendix 2.4 - Models of Strategies of Asking Questions

Rafael's Model (1998) of Asking Questions

The first type is questions with the answer in the text. These types of questions are basic with only one correct answer from the text. The corresponding interrogatives are why, where and when. These questions help the students to understand the text.

The second type of question requires thinking and searching in the text. These questions demand higher cognitive abilities such as collecting and organising information, understanding motives, relationships, the continuum of events, cause and effect and analysis and synthesis of the facts or motives. The corresponding interrogatives include describe, locate the problem and its solution, find the parable and the moral, what the pre-clues are and how they develop later in the text.

The third type of question uses the general knowledge of the students. These are questions to which the answers can be found outside the text which enables the students to broaden and enrich the text from his general knowledge. This type of question can be answered in many different ways as long as the answer is relevant to the text and its subject matter. Among the interrogatives that correspond to this type of question are: provide reasons why..., what is your opinion regarding..., how did you come to this conclusion? Answering these types of questions requires the use of HOT skills such as making syllogisms based on the text and the students' knowledge. The students search for links between information in and out of the text. These questions stimulate thinking, curiosity and creativity.

Singer (1978) Model of Asking Questions

At **the first stage** of this model the teacher asks "what would you like to ask about the story/poem/ topic in history etc.?" and the students ask their own questions based on content clues like title, external structure and the context of the material. These questions direct and focus the students while reading the text to look for answers to their questions and stimulate curiosity because they require searching for answers in the text.

At **the second stage** the students check whether they can find answers from the first stage but in addition ask questions that arise while reading the text and in this way, they can control the process of understanding the text.

The third stage of the Singer model involves the students asking questions that demand understanding beyond the content of the text. The teacher encourages the students to ask critical and evaluation questions, to declare opinions and to draw conclusions.

Appendix 2.5 - Model of Writing in a Template the Four Stages' Model of Melitz & Melitz (2002)

The four stages in Melitz & Melitz's model of writing a text or an answer are Planning, Translating, Reviewing and Revision.

The first stage is planning. In this phase the teacher encourages the students to collect and prepare the materials for the task of writing (from sources like the text book, their notebooks containing lesson summaries and other sources including the students' own general knowledge). Shaked (2007) recommends allowing peer-learning and brain-storming among the students.

From my experience, I would suggest that teachers trained in the use of these strategies could contribute at this stage by holding a class discussion and brain-storming and using the strategy of Asking Questions in order to stimulate curiosity and assist in collecting materials for the task of writing.

The second stage is the translation stage. The students translate their knowledge and ideas into words and sentences and organise the knowledge according to the instructions included in the task. At this stage the teacher is teaching and practicing with the students the template of answers according to the discipline (for example, in Literature the norms for writing examination answers are different from those in History).

At this stage it is important that students write the text in **draft** form and that the teacher provides feedback. This gives the students a real opportunity to learn from his success and his mistakes without worrying about the mark. This method leads to a real process of learning and practicing of the strategy.

Students who have difficulties with rules of spelling and syntax waste much energy and time (Heiman, 2002). The methodological patterns of writing make it easy for them and free their energy to focus on higher writing skills such as developing clarity of ideas, integrating knowledge, thinking critically about the subject of the writing task and expressing their opinions. They will also be free to concentrate on other aspects of the writing task such as correcting the spelling and formulating the sentences.

The third stage of Melitz & Melitz's model is the review stage in which the students re-reads the answer he wrote in the draft. Using the teacher's feedback, he checks and decides whether the words and sentences are written correctly and if they express the knowledge and ideas he wanted to write as well as seeing if he followed all the instructions of the question.

At this stage, the teacher takes the role of a mentor by helping the students individually and leading them to improve their writing skills. According to research (Heiman, 2002; Melitz & Melitz, 2002) it is hard for students with learning difficulties to check the contents, structure and formulation of their work on their own. Since they find it difficult to relate to the main points of the question and to find the logical and conceptual sequence of the answer, the role of the teacher as **intermediate** is of great help to the students at this stage (Feuerstein, 1997).

The self-examination carried out by the students with the guidance of the teacher helps him to develop **self-criticism** and **meta-cognitive thinking skills** (Heiman, 2002). These skills can be developed also by creating an indicator for the task including all the criteria demanded in the assignments. The teacher should prepare the indicator with his students who can then review their answers on their own or with their peers thereby developing interpersonal skills in teamwork (Einat, 2004). After practicing this method, the students will be able to prepare the indicator independently or as part of a team (Shaked, 2007).

The fourth and final stage in the Melitz & Melitz model is revision at which stage the students re-read their draft, check for any new information to add, correct their work and then hand it to the teacher for a final check.

Appendix 3.1 - Teacher's Letter of Consent

	ormed Consent Form for Partic pants in Nur't Selem's Work-Based Project (WBP)			
Name of Participant:				
Date:_	12/12/2011			
	pant Duties and Rights			
<u>1</u> .	The participant shall give his informed consent to participate in the study after he is fully informed about the aim of the research, who the researcher is, and receive a "fair processing statement" about using the information collected by the researcher.			
	Personal Information gathered will not be distributed to outside parties and will be used discreetly within the research. The researcher will protect the participants' anonymity unless permission is given to be identified.			
	The data is not being used in any way which is, or is likely to, cause damage and/or distress to any living individual.			
4.	All data will be returned to participants or destroyed if consent is not given, or if a participant withdraws.			
5.	Demands of the participants include:			
	a. To consent to be raped during the interviews.b. To consent to be observed during three lessons in class.			
	 To consent to be conserved acting three lessons in class. To consent to be trained in using the new manual offered in this study before starting the research. 			
	 d. To consent to using the manual for at least four months during the school year. 			
	 To consent to share their experiences of applying this manual during and after 			
	with the researcher in the interviews.			
_	. f. To consent to applying the manual as the researcher planned it. Rights of the participant include:			
c.	a. The participant may withdraw from the study at any time up until the analysis of data is complete. After the data has been analyzed, participants may no longer withdraw.			
7.	The researcher will debrief the participants orally throughout every stage of the			
	research process.			
	Simont:			
	Signed:			
	Date: 12/2014			

Appendix 3.2 - Teacher's Letter of Consent

1-0	in month of the second
110:	formad Consent Form for Participants in Nurit Salem's Work-Based Project
	(<u>WBP)</u>
Name	of Participants Read Management
	1.1.10 4
Date:	12/12/20//
Partici	pant Duties and Rights
1.	The participant shall give his informed consent to participate in the study after he is fully
	informed about the aim of the research, who the researcher is, and receive a "fair
	processing statement" about using the information collected by the researcher.
2.	Personal information gathered will not be distributed to outside parties and will be used
	discreetly within the research. The researcher will protect the participants' anonymity
	unless permission is given to be identified. The data is not being used in any way which is, or is likely to, cause damage and/or
٥.	distress to any living individual.
4.	All data will be returned to participants or destroyed if consent is not given, or if a
	participant withdraws.
5.	Demands of the participants include:
	 To consent to be taped during the interviews.
	 To consent to be observed during three lessons in class.
	c. To consent to be trained in using the new manual offered in this study before
	starting the research. d. To consent to using the manual for at least four months during the school year.
	To consent to using the mandarior acreast roun months going the school year, To consent to share their experiences of applying this manual during and after
	with the researcher in the interviews.
	f. To consent to applying the manual as the researcher planned it.
6.	Rights of the participant include:
	 The participant may withdraw from the study at any time up until the analysis of
	data is complete. After the data has been analyzed, participants may no longer
_	withdraw.
7.	The researcher will debrief the participants orally throughout every stage of the research process.
	research process.
	1
	Signed:
	~ 7 11/2/21
	Date: / //// 607

Appendix 3.3 - Manual for Teachers - Seminar for Teachers of Gifted Students with Learning Disabilities (2Els)

MANUAL FOR TEACHERS

of Gifted Students with Learning Disabilities (2Els) in Humanities Subjects

AAA Model of Three Strategies for Teachers

Who Teach Humanities Subjects

in Separated Classes, for

Gifted Students Challenged by

Learning Disabilities

(2Els)

BY: Nurit Salem

September 2011

SYLLABUS

30 Hour Course

1. General

The course is designed for teaching teachers and its main goal is to train teachers in using strategies of high order thinking skills and strategies for difficulties in humanities subjects. The course of study will employ "active learning" methods in which teachers are active partners in the learning process.

The purpose of the course is to kick-start organisational learning processes among a team who teaches gifted children challenged by learning disabilities (dual exceptionality) and build a learning team; to provide practical strategies for these teachers which foster processes of higher order thinking suitable for gifted students, in combination with cultivating strategies suitable for gifted students challenged by learning disabilities.

Meetings will be part theoretical and part workshop, with implementation, simulation, practice and learning from successes.

Participants will submit independent work at the end of the course.

Mandatory attendance is 80%.

2. Table of sessions and subjects

Sessio n	Date	Content	Participants	Hours	Total Hours
1.	23.10.11	Dual exceptionality: background, definitions, characteristics and needs of students. Demonstrating examples from the field and analysis.	Teaching staff	5	5

		Instruction on writing personal feedback – a tool for learning development. The vision of a teacher for the gifted and the learning disabled – vision and goals.			
2.	30.10.11	Elements of higher-order thinking. Learning and implementation. Teaching strategies for gifted students with SpLD – knowledge and implementation. The infusion approach in training teachers applying values – transfer, and learning from successes.	Teaching staff	5	10
3.	6.11.11	Questioning Strategies – a tool to develop high order thinking skills. "Active learning", and infusion of transfer, learning from successes.	Teaching staff	5	15
4.	13.11.11	Strategies for analysing questions and answering questions by patterns – tools for developing written and expression skills – (using active learning and infusion of transfer and learning from successes).	Teaching staff	5	20

5.	20.11.11	AAA- Model-Combining the strategies: strategies of high order thinking and of difficulties in writing.	Teaching staff	5	25
6.		Simulations and exercises- practicing the implementation of AAA-Model of strategies. Feedback and evaluation of the course learning. Personal reflection and guidance on preparation of paper-work.	Teaching staff	5	30
7.	Jan-May 2012	One-on-one guidance of teachers during class manipulation.			
8.	10.6.201	Summary and feedback meeting at the close of the manipulation process: revisiting the planning pages, vision and goals. Reflection and personal conclusions. Future recommendations.			
9.	20.7.12	Submission of final paper.			

3. Scope and Characteristics of Paper

The paper should be printed in academic format (Times New Roman font, size 12, 1.5-line spacing) and no longer than 2,500 words. The paper should offer formulated feedback on each session and

a summative personal reflection (rubrics for preparation of the feedback and reflections will be provided at the course start). Papers may not be returned and you should keep a copy.

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SEMINAR

First Session

Session objectives

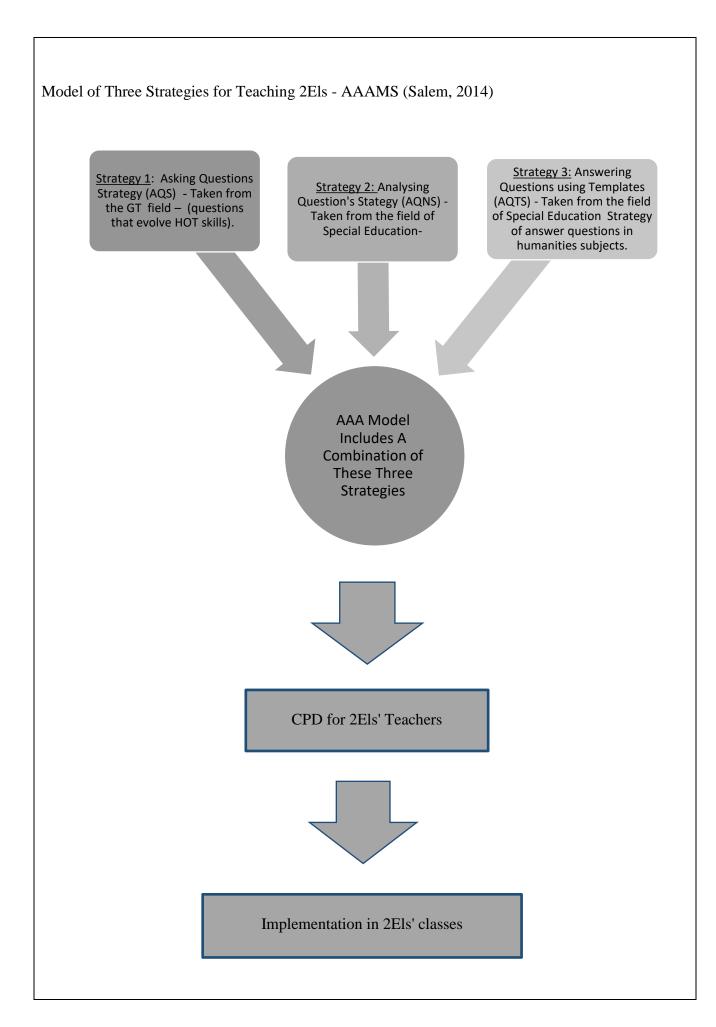
Clarification of the unique requirements of teachers who are challenged by gifted students who have been diagnosed with a learning disability – high school and middle school age students with dual exceptionalities.

Acquaintance with the definitions, characteristics and needs of students with dual exceptionalities: characterisation of giftedness and characterisation of learning disability in gifted students.

Personal feedback - as a tool for personal reflection and the development of meta-cognitive ability.

My vision as a teacher of gifted students and those with learning disabilities - vision and goals.

Note: All the course contents are suitable for use with the general population of students, but can particularly benefit those teaching the research population: gifted students challenged by learning disabilities – with dual exceptionalities.



Session Procedure

The session will proceed on the basis of "active learning" principles, i.e. it will promote "learning"

through the solution of a problem which is obtuse, challenging and meaningful to learners" (Salomon

2000, p.101). A second basic principle is that learning methods practised during the session serves as

modelling which demonstrates the learning methods the teacher can use in the classroom.

Tutor Guidelines:

Stage One: Individual Work (25 minutes)

The teachers are asked to write about 4 events which have occurred in class and which are related to

students with dual exceptionalities. Events may be related to behaviour or to academics.

Teachers will be asked to describe:

The events

Teacher's management of the events

Response of the students to the event, students' solutions

Feelings that arose during the event, and afterwards

Questions arising from teacher's experiences with gifted students who also have learning

disabilities.

Stage Two: Sharing with the Assembly (75 minutes)

Each teacher will describe the events to the assembly.

During the discussion questions will be raised regarding the difficulties, the successes, the unique

needs and the approaches used by teachers.

The tutor will summarise or will collect the written notes on the events, in accordance with the wishes

of the teachers, and will summarise the issues raised, for later attention.

Break: 20 minutes

Stage Three: Knowledge Acquisition (60 minutes)

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The tutor will present the subject of dual exceptionalities and their elements (target 2 in the first session), and a review of current research and relevant knowledge, while at this point relating to questions and issues raised in the discussion from a strictly academic perspective.

Homework: Expand your knowledge.

The tutor will refer teachers to bibliographic resources dealing with higher order critical thinking, learning disabilities, and characteristics of dual exceptionalities.

Stage Four: Personal Vision (15 minutes)

Assembly discussion on: What is personal vision?

What's the difference between vision and goals?

Presentation of the model for planning, execution and evaluation of vision and goals: the method, schedule, partners, evidence of success. (example attached).

Individual assignment

The tutor will ask each teacher to write: What is your personal vision as a teacher in a gifted classroom?

Peer feedback in the assembly.

Tutor will ask teachers to complete the planner sheet for vision and goals and bring to the next class.

Note: it is important to note that reflection and feedback on the planner sheet will occur at the end of the course, and once again at the closing meeting after implementation of the strategy model.

Stage Five: Personal Feedback (personal reflection) (45 minutes)

Since this is the first meeting the tutor will ask teachers to tell what they know about personal feedback, its goals, methods of fulfilling, and its use.

The tutor will explain the importance of the instrument for the development of higher order thinking skills, at an emotional level, and also for the development of meta cognitive abilities in academic learning and as a tool in learning from successes.

For the first session teachers, will be given feedback example sheets (attached), Later, teachers will write feedback after each session and email to the tutor.

The tutor will read the feedback questionnaire with teachers (the feedback is structured, with an open section for free comments). Teachers will complete the feedback questionnaire during class to practice the use of this tool.

Teachers will have the opportunity to sum up, to describe, express feelings, raise questions and so on, in their own ways, using short sentences about their learning in the current session (the session is scheduled for 5 academic hours).

Reminder

Feedback should be sent to the tutor by email during the coming week.

Bibliography should be read according to instructions given during the session.

Second Session

Session Objectives

Reference and discussion- vision and goals planner sheets (assignment from previous session).

Familiarity with the elements of higher order thinking skills (HOT).

Training teaching strategies-learning from successes.

Training the Transference of knowledge skill.

The tutor will teach the principles of infusion of terms, values and strategies into the lesson plan (Salomon, 2000).

Note: All the course contents are suitable for use with the general population of students, but can particularly benefit those teaching the research population: gifted students challenged by learning disabilities (with dual exceptionalities).

Session Procedure

Vision and goals – The tutor will ask teachers to present the planning sheets, and will ask others to provide peer review. The tutor will emphasise the importance of working with the planning sheets as a tool of reflection, critique, and personal evaluation. We will refer later in the course to the planning sheet at two anchor points: at the course end, and at the end of the manipulation of AAA Model.

Familiarity with the elements of critical high-order thinking skills –knowledge and exercise. Based on the principle of "active learning" and the principle that the lesson in training provides modelling for teaching in the classroom. The lesson will be varied with activities.

Tutor Guidelines:

Stage One: Spectogram Exercise (30 minutes)

The tutor will ask teachers to stand in a line and move about the room according to numbers marked on the floor, from 1 to 10 – and to place themselves according to the statement that will be read to them.

Completely disagree with the statement, 10- completely agree with the statement.

One may stand on any number and has to prepare and explanation about his choice.

Statements in this lesson will be on the subject of HOT-higher order thinking, for example:

Statement 1: The teacher is supposed to provide the students with all the knowledge in his subject.

Statement 2: The teacher is supposed to be a mentor who awakens the students to self-study.

Statement 3: The teacher is required to allow the students to learn through various learning styles, such as research, individual work, team work.

The tutor will request explanations from each teacher regarding the choice of location for each statement. A teacher who changes his mind as a result of the others' explanations may move and locate himself at a different number.

The purpose of this interactive exercise is to demonstrate physically and literally the range of options (as one of the elements of teaching higher-order thinking) with regard to attitudes of teachers and the range of explanations that can be provided.

Stage Two: Assembly Discussion (30 minutes)

Reference to the individual feedbacks sent to the tutor following the first session.

Opening discussion on subjects rose during the exercise, questions and other subjects that teachers

wish to raise following the self-reading of professional literature on critical high order thinking.

Stage Three: Individual Work (35 minutes)

The tutor will ask teachers about their knowledge on the subject of critical thinking, high order

thinking, and will ask each teacher to write two examples, from their experience of teaching gifted

classes, which represent teaching, learning or demand for the elements of high order thinking

(according to their understanding of the subject).

What was the need raised by the event? What was the solution provided by the teacher? What were

the questions and difficulties which arose?

Stage Four: Pair Work (45 minutes)

Each pair of teachers will study a source on the elements of high order critical thinking. (The

Taxonomy of Passig attached). Teachers will analyse the events they described in stage 3 according

to the elements in the source.

Teachers will suggest ideas for classroom teaching methods.

Break: 20 minutes

Stage Five: Knowledge Acquisition (45 minutes)

The tutor will ask teachers to share the work prepared in stage four with the assembly.

The tutor will explain and expand on the elements of HOT -high order thinking and will assign further

individual reading to expand knowledge.

Stage Six: Knowledge Acquisition on Infusion of Values – Transfer and Learning from

Successes

The tutor will ask teachers to demonstrate one of the teaching methods suited, in the teacher's opinion,

to critical thinking. It is important to describe a successful experience.

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Teachers will give constructive feedback on the demonstration.

Assembly Discussion

What is learning from successes? What is learning from failures? What, in their opinion, is desirable and preferable as an educational principle in teaching?

The tutor will refer teachers to reading material for expansion on teaching strategies, in preparation for the third session.

Feedback (10 minutes)

The tutor will ask each teacher for a short statement summarising the learning in the second session. (Regarding teaching methods, feelings that arose, questions etc.).

The tutor will remind teachers to complete feedback on the second session by email, and send to the tutor within the next two days.

Third Session

Session Objectives

"There is no thought that was not born of a question" (Melitz and Melitz 2002:145).

A strategy of asking questions contributes to the development of higher order thinking among gifted students. Involvement in asking questions empowers gifted students to act as experts and provides solution to their curiosity and individual exploration, to examine a subject from different angles, and to nurture the ability to think abstractly (Kaplan, 2009).

Asking Question strategy – goals, types of questions, models for classroom teaching (in each discipline dependent on subject and/or in the studied texts).

Active learning of the implication of asking questions' strategy in the class of gifted students.

Infusion of the use of transfer skills – learning the term transfer, and exercise with teachers.

Infusion of the use of learning from successes – exercise with teachers on their success experiences.

Note: All the course contents are suitable for use with the general population of students, but can particularly benefit those teaching the research population: gifted students challenged by learning disabilities – with dual exceptionalities.

Session Procedure

Stage one: knowledge acquisition of the principles of the strategy, its goals and various models for its teaching.

Stage two: Active learning – Exercise the implementation of two models of the strategy of asking question: Singer's model (1978) and Raphael's model (1982) – development of high order thinking using asking question strategy. (The tutor will teach these models in stage one of this session).

Tutor Guidelines:

Stage One- (45 minutes)

Introduction of the theoretical background of question asking strategy, its goals, types of questions and various models.

Stage Two – Active Learning

Teachers will be provided with a text (recommended to select texts according to the subjects taught by attending teachers).

Instructions to teachers:

Individual work, sharing with the assembly after each stage (65 minutes).

Don't read the entire text but look at the title and the overall structure of the text and refer to the instructions in section 1.

Pre-Reading questions (Singer's model) – What questions arise before reading the text? As a result of the title, associations, hypotheses, relation to the subject of the lesson.

Tutor's notes: These questions stimulate curiosity, guide and focus the students' thoughts on the text and the subject.

Sharing with the assembly.

Read the instructions, and then read the text.

Questions arising during reading of the text (Singer's model). Are there answers to the questions raised before reading?

Are new questions raised that did not arise before reading? If so, what are they?

Tutor's notes: The students determine, while reading, whether his questions are answered in the text. This process creates curiosity, seeking, examination and focus on the text.

Questions following the reading of the text (Singer's model). Did you find answers to all the questions raised in the two previous stages? What further questions arise following the reading of the text? Can suggest reference to private opinion, message, conclusions, etc.

Which questions are clearly answered in the text? (Raphael's model – Category A questions).

Assisting guide: questions of the type: where, when, who etc.

Sharing with the assembly.

Which questions have answers inferred by the text? (Raphael's model – category B questions).

Assisting guide: Questions of the type: Describe, find the problem, what's the suggested solution, find the parable and the moral, what are the supporting clues and how do they develop?

Sharing with the assembly.

What questions are raised by the text which relate to your private world, to prior knowledge on the subject (Raphael's model – category 3).

Assisting guide: questions of the type: what's your opinion? Expound, provide foundation for your reasoning or opinions. What do others think? Are there alternate angles to view the subject? What can strengthen it? Does prior knowledge add to your understanding of the text?

Sharing with the assembly.

Tutor's notes: One of the goals of Singer's model is to create active learning. The students directs his thinking and becomes an independent learner.

The purpose of varied questions and different stages in the two models of Singer and Raphael is to allow the learner a literal understanding and an understanding of the content of the text.

In stage B, the models allow a range of answers, so long as these are reasonable and based on the text.

In stage C questions result from individual prior knowledge and stimulate thought and creativity in

order to create analogies and relationships between the textual and the non-textual information.

The purpose of the tutor, or the teacher in the classroom, is to develop an environment which

encourages different and original viewpoints even if they result from the "different thinking" of the

gifted students and don't always match the expected answers.

Clarifying questions may be asked about students' answers, in order to define the statements and give

students the stage.

Later leading questions may be asked, to develop "knowledge based sceptical reasoning"- questions

which stimulate, examine, inspect and more. (Shaked, 2007, p. 2).

Break: 20 minutes

Stage Three – Exercise – Practice of the Open Question – method 5>3>1

This is another option for the use of asking question strategy to practice the development of high order

critical thinking, and for lesson variance.

Tutor guidelines (30 minutes).

Divide the students into pairs, or groups of four if the class is large.

The group will appoint a guide, who will also make notes of member's contributions.

The teacher will write a statement on the board, such as "everything is possible and permission is

granted".

The guide will present the open question as follows:

Consider and write about various situations and people in various times, to which this statement can

apply.

Recommended to give the same statement to everyone in order to enable comprehensive discussion.

Tutor's notes: When an open question is presented in a gifted classroom, we take into account the

heterogeneous population and allow each students to express himself and produce his or her own

product, in order to make use of the wealth of knowledge, to enable creativity, and to enable inter-

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personal communication and group activity. This answers the gifted students' needs regarding their characteristics (first session).

The tutor mingles with the groups and asks clarifying questions (such as who? when? where?), followed by leading questions which develop critical thinking (such as what can this be? What can it not be? How can one distinguish?)

Continuation of activity: the tutor will tell participants:

Assuming each group had 12 ideas the tutor will ask the students to select 5 ideas which appeared to them the most interesting/ precise of the group. They must justify their selection (original, worth bringing before the assembly)

Next step is to select 3 of the 5.

Last step to select only one idea!

This is the 5>3>1 method

The method provides a relatively small number of the most selected ideas. The process is not tiring (no need for everyone to listen to all the flurry of ideas) and is even interesting.

Everyone has an opportunity on the stage, in the group setting, and there is room for discussion during the selection of ideas that the group will present to the assembly.

In the event of irreconcilable differences within a group on the selection of one idea, one should allow presentation of both ideas along with the reasons that led to disagreement.

Tutor's notes: Such a question invites:

Practice at multiple associations/ examples and ideas on the same subject

Enabling the use of wide knowledge that gifted students possess.

Creative thinking.

High order thinking – drawing conclusions, providing arguments.

The subject can derive from learning material in the discipline, or a general subject from whom each student will extract what is individually relevant.

The last stage: Discussion in the assembly (30-45 minutes).

The students guide of each group will raise the selected idea and the arguments for choosing it, and will describe the selection process in the group. The guide will invite members of the group to add or sharpen as they wish.

All students will discuss the ideas, the arguments and the group working process.

Stage Four (10 minutes).

Teacher feedback on the course to close the third session

Each teacher will say a few words about the session – open comments.

Reminder: Send structured feedback by email to the tutor.

Fourth Session

Session Objectives

To provide solutions for difficulties specific to gifted students challenged with academic learning disabilities. (Disabilities in the areas of reading, writing, text comprehension, organisation of learning materials).

Notes to tutor:

Patterns of analysing questions and patterns of answering questions are effective strategies for overcoming the difficulties of gifted students with learning disabilities. These strategies are not having been automatically developed despite the general high level of ability. The result in most cases is a large discrepancy in achievement between the ability expressed verbally and the ability expressed in writing. According to research, students with disability struggle to develop learning strategies on their own, and the strategies should be taught systematically, stage by stage, and

particularly should involve exercise in texts with heavy subjects to help students absorb the various strategies and conduct transfer of their application to a variety of subjects. (Melitz and Melitz, 2002: Kaniel, 2006).

To teach two strategies that help dealing with questions in text heavy subjects (History, Bible, Literature etc.):

Analysing questions strategy – the purpose of this strategy is to teach how to break down the question into various parts in order to assist the students in understanding the question's instructions and correctly answer all parts of the question.

Strategy of answering questions in patterns – the purpose of this strategy is to teach how to write answers in the format required in various subjects. To utilise the analysing question strategy in order to focus on the correct answer and to answer all parts of the question.

Note: All the course contents are suitable for use with the general population of students, but can particularly benefit those teaching the research population: gifted students challenged by learning disabilities – with dual exceptionality.

Session Procedure:

Tutor Guidelines: Teachers should be asked to bring to the session any relevant learning materials and appropriate questions for their disciplines. Have available markers in two colours.

Stage One

Two Steps of the Analysing Question Strategy:

Ask teachers to select a question from the materials they have brought. Ask them to read the question once, and then to read it again according to the following instructions: (tutor may select one question and write on the board for a common exercise).

Find and mark with yellow marker, the subject of the question. Asking clarifying questions (see third session) helps in understanding the question. Example questions:

What does the question ask?

What is the question about? What are the key words in the question?

Note that in some questions the subject appears at the beginning of the question as a statement, and in other questions the subject is scattered among all parts of the question.

The tutor will check that the students understand the meaning of key words, subject etc, so that they may complete the assignment.

The tutor will check students' work, especially the subject of the question, in an assembly discussion.

Find and mark in green marker the instruction words and the question words in each part of the question.

It is important to check with students that these terms are understood, and to ask and write together

the <u>instruction words</u> (such as explain, reason, note, discuss, support, quote etc.), the <u>question words</u>

(such as why? where? which? who? when?) and the combinations common in many questions (such

as note which, explain why etc.).

Finally, note the number of the instructions that are in the question.

The tutor will ask teachers to again read the question and check that they completed all instructions.

Exercise

Each student should choose a question from his/her own discipline, and analyse it according to the

instructions.

The tutor will pass and check the solutions.

Peer Review

Students should choose another question, and after analysing it exchange questions among themselves

and check each other's solutions.

This can be repeated few times, achieving several goals:

Allows students to experience questions in various disciplines – exercise in transfer of the strategy.

Allows students to test their skill in the strategy by examining their peers' questions – the students as

an expert, and reinforcement of learning from successes.

Exercise in teamwork and interpersonal communication.

Break: 20 minutes

Stage Two: Learning the Steps of Answering Questions Strategy in a Template

Tutor Guidelines:

Written language is influenced by spoken language, but during the process of maturation and

education of a child the spoken language function is as a connecting link. The child develops the skills

of written language. He builds the meaning of an idea using knowledge and prior experience and

considering the potential reader, or the specific demand (format) of the answer in various disciplines,

and thus creates his text.

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Instruction for writing and answering questions according to patterns will be based on:

The Four Stage Melitz's Model of the Writing Process - Planning, Translation, Review, Re-editing. (Melitz and Melitz, 2002).

We will refer to the specific needs of gifted students who are challenged by learning disabilities in a separated gifted class.

One must work within the specific requirements of each subject for matriculation. It changes from subject to subject. Teachers know this as part of their professional instruction, and through circulars from regional subject inspectors.

The exercise in answer writing will be conducted according to the disciplines of the attending teachers.

In addition, I conducted an investigation in classes where the strategy model was to be implemented and discovered that the students had learned, in lessons on language and expression, how to write paragraphs, claims, and comparisons. Therefore, one may build on this knowledge, expanding it during exercise.

Tutor Guidelines:

Students will select one of the questions, from their discipline, as analysed in the first part of the lesson.

Than the teachers will be asked to follow the instructions while they answer this question stage by stage, systematically.

They should write an opening sentence for the answer, using words that appear in the question as the subject of the question.

The tutor will pass and lead the students individually.

Peer review:

At this point students, will check each other's opening sentences – exercising their skills applying the term the students as an expert.

Tutor's notes:

Answering questions by writing in patterns benefits students with disabilities who expend much energy on searching for words and sentences and organisation of material and knowledge in order to convert it to written language. By learning and practicing answering by patterns strategies students may focus their energy resources to the stage of planning and writing the answer, instead of investing and tiring their energy in how to open or continue or looking for words (Heiman 2004). This strategy is very useful for gifted students with learning difficulties because it helps them to close the growing gap between their high abilities and low achievements in writing skills (Manor-Benjamini, 2005).

Stages of Writing – Melitz's 4 Stage Model

<u>Planning stage:</u> Collection of materials for the answer from outside sources such as book, notebook, and personal knowledge. Each student will collect the material for his answer. At this stage the writer should refer to the intended reader of his answer, usually the teacher, or in the peer review method, his student's peers.

One may have an assembly discussion like brain storming and also practice the strategy of asking questions on the relevant issue.

After this the students, will continue to answer the question according to the specific pattern that is requested in each discipline, for example:

In Bible – there is a format of an answer required for the matriculation exams (this model of answering is taught from middle school):

A short, practical answer focused on the subject and the question instructions.

Sometimes there is a question about one Biblical source, and the requirement is to explain it and quote examples.

Sometimes there are 2-3 sources, and the requirement is to compare the similarities or differences between the sources, to explain, and to quote.

At this stage one must teach and practice the pattern of a comparison question in Bible Study using the table method (draw a table) and practice it on questions from this discipline. The table is a tool which assists with preparation for the actual answer, focuses on the areas of similarities and differences between the various sources and organises the materials for the actual answer.

Following the table stage one must write text for the similarities and differences, explain, and quote.

The teachers' roll is to explain the strategy step by step, exercise the strategy and accompany each individual as needed.

Peer review is another tool that can be used in the practicing process.

Tutor notes:

In History, Philosophy, Geography etc. disciplines one must answer questions using discipline specific patterns, according to the required range but one must always use the permanent format of analysing question strategy and then to use an opening sentence which relates to the subject marked by the students in the question. Also, the students must relate to the instructions and question' words marked by him in the analysing question stage. It is important to use the table in questions where needed comparison. The next step is writing the answer to the pattern required in each discipline.

In Literature, there is a specific format for writing a matriculation answer and it is important to practice this systematically, stage after stage, with Literature teachers. (attached format of a matriculation answer and the list of connecting words).

Stage Two - Translation

In this stage of answering questions, the main tool is the **draft method.**

At this stage the writer translates his knowledge and ideas into words and sentences. The students will continue to write according to the pattern, and thus will be free to focus on other parts of writing, such as correct spelling, correct composition, reference to the subject matter and following instructions in the question.

Explanation

Students with disabilities have difficulties with automatic processes such as spelling and grammar rules and therefore need to invest more time and energy than usual. The patterns assist them and direct them to focus on higher writing skills, such as idea clarity and knowledge integration.

Stage Three – Review

The students will re-read the draft of her/his answer and will check and decide which words and sentences correctly express the knowledge and ideas s/he wished to write.

The tutor will assist individually and will direct the students to examine other areas of his answer. According to research (Melitz and Melitz, 2002) a student with disability usually examines spelling mistakes and doesn't examine the content, structure, text, reference to question, continuity of sense and ideas of the answer.

This individual examination helps students develop skills of self-critique and meta-cognitive thinking.

A self-examination tool – preparing the answer guidelines. One may prepare answer guidelines for various answers and allow peer students to check their answers.

Stage Four – Revision

Following the review, the students will re-read her/his draft and decide on whether to add more information and to elaborate on his/her text. Here, instruction and agency of the tutor is required.

The students will copy out his answer for submission to teacher. This assignment is suitable for homework.

To end the lesson – oral feedback in pairs

Students will sit in their chosen pairs and will share their experiences of applying this model of writing answers.

Each student has 2-3 minutes.

The tutor, or teacher in class, will emphasise the use of transfer of strategies learned and their implementation in various disciplines. The tutor will request examples of questions and answers in various disciplines and will practice the strategies with students.

Reminder: complete and email feedback to tutor.

Homework for the fifth session

Prepare and bring along a lesson plan for a learning unit due to be taught in the upcoming semester. Implement the learned strategies from session four in the lesson plan and the infusion of transfer skills and learning from successes, as integral parts of each lesson.

Sixth Session

Session Objectives

To practice in lesson plans the implementation of the infusion of the AAA Model, high order thinking

skills and low order thinking skills, transfer skills, learning from success.

Learning from successes – examples from the field.

Reflection and re-evaluation of the goals and visions planners of participating teachers.

Summative feedback on learning in this training course.

Guidelines to preparing the assignment.

Note: All the course contents are suitable for use with the general population of students, but can

particularly benefit those teaching the research population: gifted students challenged by learning

disabilities – with dual exceptionality.

Session Procedure

Stage One: Exercise

The tutor will ask teachers to present the lesson plan they prepared.

Peer feedback.

Tutor feedback.

Stage Two – Assembly Discussion – Learning from Successes

The tutor will ask teachers to report examples from the field of their implementation of lesson plans.

The tutor will ask for peer feedback. In discussion, it's important to emphasise successes, but also

coping with difficulties or questions which arose during implementation. Brainstorming in the

assembly enriches the variety of tools and ways to succeed.

Stage Three – Reflection and Re-Evaluation of the Visions and Goals Planned

Individual Work

The tutor will ask teachers to write about their successes in accomplishing their visions and goals.

Also about their difficulties and questions. If they decided to change or add a vision or goal they

should explain the process that leads them to do so.

Assembly Discussion

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The tutor will ask teachers to share their evaluations on the vision and goal planner.

Peer feedback.

Feedback of the tutor.

Stage Four: Summary OF Course Feedback

Option 1: The tutor will ask each teacher to express feedback on the training teachers' course without using guiding questions.

Option 2: The tutor will ask for focused feedback regarding the process each teacher has undergone during the training. (Knowledge gained, tools gained, has reached a stand on the subject, or changed a stand? Was the training helpful? Etc.).

Stage Five – Guidelines for preparation of the assignment, per syllabus.

End of sessions.

Appendix 3.4 - Feedback Questionnaire for the Teacher, within the Framework of the Seminar for Training Teachers

Name:
Meeting number: Date:
Please fill in the feedback after each session and send it by e-mail to the course coordinator.
What was familiar to you in the content of the lesson? What was familiar to you in the way the lesson was given?
What was new to you in the content of the lesson? What was new to you in the way the lesson was given?
What do you think you will use in the classroom from the content of and/or the way the meeting was conducted?
What do you think you will not use from the content of and/or the way the meeting was conducted?
If you have recently experienced success which was related to change you made following this training, please tell us about the success in a few words

Appendix 3.5 - Vision and Objectives of the Teacher in a Class of Gifted Students

with Learning Disabilities - a Task within the Framework of the Seminar

A task for the teacher participating in the research within the framework of the teacher training seminar – at the start of the intervention program.

Describe your vision and your goals as a teacher of gifted students with learning disabilities.

The vision and goals of R:

1. Vision – Passionate learning.

Objectives - to foster in the students a love of History and Bible Studies.

To develop a desire in the students to have interest in and explore the subject matter even in their spare time.

To build lessons that are given over in an interesting way using pictures, films and preparation of projects.

2. Vision – Teaching values through History and Bible Studies.

Objectives – to derive values such as leadership, tolerance, acceptance of others, ecology from History.

To build inter-disciplinary lessons with teachers of different subjects.

To prepare homework that will contain historical information and through these to develop discussions dealing with universal values.

3. Vision - Studying into the third millennium.

Objectives – to use available technology, implementing technology in class in order to develop greater interest among the students.

4. Vision - Imparting of learning skills.

Objectives – to use and provide relevant learning skills for subjects with large amounts of text. **Other Objectives:**

- to exhibit the students' projects to students of the school and their parents.
- to develop collaboration in teaching and in the planning of curricula among teachers of different disciplines related to material taught in various subjects.

Appendix 3.6 - Lessons with an Infusion of the AAA Strategies' Model

Three Sets of Lessons in History with an Infusion of the AAA Strategies' Model Final Task

The task was given to the teacher who participated in the research as part of the teacher training seminar for teachers of gifted students with learning disabilities.

The subject for the three lessons was: "The Institution of the Papacy in Christianity"

Design: three lessons of 45 minutes each = 135 minutes

Time	Course of the lesson	Teaching	Infusion
5 minutes	The opening paragraph that summarises the process we've been through so far and leads to the lesson heading "The Pope"	Write on the board	
30 minutes	Start: To ask the students: "What questions come to your mind about the Pope?	Record the students' questions on the left side of the board.	Conceptualise to the students the term "Asking Questions" and divide the questions into 3 types: Clarification, Enrichment and Expansion. To allow students at this point to answer the questions they know the answer to from previous knowledge. Learning from success: mark the questions that the students answered. To ask the students: Where can I find the answers to the questions that students could not answer? Note the sources on the right side of the board to use for homework
80 minutes	Main part of the lesson: the historical story - a flow chart that includes the	Writing on the board Using presentation	Conceptualise and explain to the students the concept of transfer . Does the papal diktat remind us of

	following dates and historical events: 395 - split in the Roman Empire and formation of Eastern Christianity. 800 - Charlemagne and the Vatican State. 1073 - Gregory VII and the Papal diktat. 1077 - Walk to Canossa. Journey to the Vatican.	Use of the projector – Film section Reading the source from the textbook Use of the projector - Screening of videos on the Pope.	laws and decrees of other leaders? Perhaps there are examples from other subjects you have learned such as Bible or Literature? Analysing the question related to the topic. To note down the question on the board and underline the words of the question, the subject matter of the question and to check how many parts there are to the question. "Walk to Canossa": transfer to everyday life - did it ever happen that someone hit you and then came to beg for forgiveness?
10 minutes	Summary paragraph: 1095 – The papacy is strong enough to call for a crusader war.	To write on the board.	Transfer: The Pope moves away from the message of Jesus. Do you know about other leaders who promised one thing and did something else? Maybe from other subjects? Maybe from everyday life? To try and reach a conclusion about visions and ideals as compared to reality.
10 minutes	Lesson summary	To write on the board	Learning from success: to note the questions which the students managed to answer. Extension Questions: to ask the students to asked questions to try and find the answers in various sources and to talk about this in

	the next lesson in front of the
	class.

Homework for the students

Explain and present in any way you wish the historical process undergone by the Papacy. In the next lesson the assignment will be **checked by peer students** followed by **presentation** of the work in front of the class.

Appendix 3.7 - Preliminary Interview - Questions

Hello. As you know, the purpose of this interview with you is to further my research. I received your agreement to participate in it, and your consent to record this interview.

The interview starts in an open and friendly manner and continues with more focused questions on the research topic.

- 1. Tell me about your experience in teaching classes of gifted students.
- 2. What training did you receive for teaching gifted students?
- 3. If you did not receive training in the field, explain why not.
- 4. Describe the expectations you had of the students before entering the classroom.
- 5. What were your concerns, if any, before you entered this class?
- 6. Which of your expectations have been fulfilled up to this point in the year?
- 7. Which of your concerns have materialised up to this point in the year?
- 8. What do you know about the special characteristics of the gifted students in your class?
- 9. Describe the needs of the gifted students in your class.
- 10. What learning strategies do you use in teaching your subject in this class?
- 11. Specify any differences between the learning strategies you use in the class of gifted students and the strategies used in ordinary classes.
- 12. If there is a difference, explain how the strategies differ.
- 13. What do you know about students in the gifted class who have been diagnosed as having learning disabilities?
- 14. How many such diagnosed students are there in the class?
- 15. Describe the characteristics of gifted students with learning disabilities (Dual

Exceptionalities) from your experience of teaching a class of gifted students.

- 16. How many of the diagnosed students are having difficulties with subjects of large textual content (students who received adjustments in: time, adaptation, dictation, reading aloud large amounts of text)?
- 17. What are your qualifications to teach students with learning disabilities?
- 18. If you have no training in this area would you be interested in attending a course on this subject?
- 19. From your experience in teaching, describe the strategies you would use to teach in order to meet the needs of students with Dual Exceptionalities.
- 20. Describe your feelings while having to cope with the needs of gifted students and those with learning disabilities in your class.
- 21. What are the achievements of this group of students (Dual Exceptionalities) in your subject up to this point in the year?
- 22. What are your recommendations for teachers/your colleagues who are dealing with the same problem?
- 23. What requests or recommendations would you make to the education system in the State of Israel in connection with teaching gifted students who have learning disabilities?

Appendix 3.8 - Mid-Intervention Interview – Questions

A semi-structured interview with the teacher participating in the research

8.2.2012

About three months has now passed during which time you have implemented the intervention programme in the class of gifted students. The purpose of the interview is to review what was done and to see what can be improved, changed or added.

The interview was recorded with your prior consent.

Questions:

Has the AAA strategies' model been a helpful teaching tool for you up to this point? Explain and give examples of how the model was used.

- 1. Describe the difficulties, for you as a teacher, in implementing the model. Give examples of the difficulties and the ways in which you coped with them.
- 2. Describe the difficulties there were in implementing the model from the point of view of the students. Give examples of the difficulties and the ways in which you coped with them.
- 3. Do you think, following the implementation of the intervention program up to this point, that there has a change in the behaviour and achievements of the students in the gifted class?
- 4. How do the changes that have taken place up to this intermediate stage of the intervention programme compare with the objectives you have set yourself?
- 5. What are the goals you are setting for yourself as you continue implementing the intervention?
- 6. Is there content in the intervention program that needs: a. changing?

b. improving?

c. adding to?

Thank You!

Appendix 3.9 - Ethical Approval Form



Request for Ethical Approval for Individual Study / Programme of Research by University Staff

Please complete this form and return it to the Chair of your subject area/subject cluster Ethics Committee, via email or post. Your proposal will be screened and a decision on ethical clearance will be made. Once approval has been given, you will be eligible to commence data collection.

1. Your Name:	Salem, Nurit	2. School, Subject Area/ Research centre/group (if internal applicant) Hakfar Hayarok, Gifted and Talent and Students with Learning Difficulties
3. Contact Info	Email: nurits52@walla.co.il Tel No. 972-52-3251058 Address: 5/31 Hatanaim Street, Herzeilya, IL 46447	
4. Position:	Vice principal and Literature Teacher in a high school – also teaching in separated classes of Gifted and Talented students.	

5. Title or topic area of proposed study

CHALLENGES IN TEACHING GIFTED STUDENTS WITH SPECIAL LEARNING DIFFICULTIES:

Using a strategy model of 'Asking, Analysing and Answering Questions' to improve the learning environment.

6. What is the aim and objectives of your study?

My Work Based Project (WBP) will focus on teachers teaching separate classrooms of Gifted and Talented (GT) students in an Israeli high school. The WBP will focus on challenges and strategies of those teachers who teach Gifted and Talented students with Special Learning difficulties (2ELs). In my research, I offer an intervention that includes a model of teaching strategies that I wrote, and some of the tools that might help the teachers and equip them with practical strategies in order to deal with the challenges that arise while they are teaching students with multiple exceptionalities. This interest arises first from my experience as a teacher in a separate class with 2ELs, and secondly, from my colleagues' interests who cope with the same difficulties. Most of these teachers have been trained to teach in a regular class, and do not have additional strategies and enough knowledge about the exceptionalities of their students (Freeman, 2001: Kay, 2000). The declared goal of a Professional Doctorate is to study a subject in a professional domain of the researcher and from his field of work in order to discover new knowledge, to improve his professionalism and to develop practical tools (Bourner, Bowden and Laing, 2001). Based on this principle, I will try to research in my WBP this topic in order to contribute to my professional field. My WBP target audience will be the teachers that teach 2ELs.

My aim is to write and then to implement a manual for teachers that includes a model of strategies that might assist the teachers teaching processes. I will inquire how the use of special strategies with 2ELs can make contribute to a more effective teaching environment.

Objectives:

- ♦ To inquire the needs and challenges of teachers who teach 2ELs Humanities Subjects.
- To inquire the contribution of the model of three strategies to teachers who teach 2ELs and to their students.
- ♦ To contribute a new knowledge to the world of teaching 2ELs

7. Brief review of relevant literature and rationale for study (attach on a separate sheet references of approximately 6 key publications, it is not necessary to attach copies of the publications)

Universal education goals are to promote, nurture and support the learning process. Moreover, the goals are to prepare the children for proper professional and social life and to maximize their abilities for them and for the community benefits (standards.dfes.uk, 2009; education.gov.il, 2010) (Kay, 2002). The educational goals of populations with additional learning needs such as underachieving students, students with Special Learning Difficulties (SLD) or Gifted and Talented (GT) are identical but emphasised the possibility to achieve the maximum for them and for the society where they live. The teachers who teach populations of different needs are required to use an additional qualification beyond the regular education in order to achieve those goals and carry out the processes mentioned above (Standards.dfes.gov.uk, 2009). This assumption based on research that found the features and the special needs of 2ELs (Freeman, 2001; Landau, 2001; Kay, 2002; Manor, 2005; Nielsen, 2002). The research and professional literature reveal that there are no standardizations or generally accepted definitions (Winstanley, 2005). Perhaps the difficulty is derived from this reversal phenomena: how a human being with high abstract abilities finds it difficult to write or to simultaneously express his abilities and becomes an underachiever (Brody and Milles, 1997). There is a "blessing" and "cursing" situation when the high skills and learning difficulties cancel each other and the student cannot fulfil his potential.

More definitions in this domain are dealing with the conflict that arises from the characteristics of the GT students (Landau, 2006) on one hand and on the other hand with the characteristics of students with SLD. The emphasis is on the huge disparity that arises between the high abilities and its expression in practice. Gifted and Talented (GT) features are mostly defined as high and abstract level of thinking, exceptional memory, the ability to find solutions and creative, inventive attitudes for complicated sophisticated problems. High skills are related to art, music, sport and science. (www.standards.dfes.uk.2009; Manor, 2005).

Special Learning difficulties (SpLD) characteristics in most definitions refer to underachievement in many subjects to failures:

- Inability in expressive writing
- Inability in learning consistency
- Boredom
- Lack of concentration

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The results are frustration and destructive behaviour (Manor, 2005). Moreover, the research revealed the low self-esteem of GT with SLD pupils. Today, the attitude is to consider this group as a group with unique characteristics and difficulties and to allow this group effective response according to their needs (Freeman, 2001; Kay, 2002; Manor, 2005). There is no consistent acceptable definition with regard to the criteria, characteristics and needs of this group. Even the specific qualification for teachers is not consolidated sufficiently (Brody, and Mills, 1997; Freeman, 2001), it causes problems in implementing effective strategies in class. For the same reason, also the percentage incidence of the phenomena had difficulty to assess the extent of this group in the population. In the UK, Freeman (2001) argued that 5%-10% in each yearbook in high school were gifted, but there are no diagnoses or incidences of gifted with SLD. U.S. research proved that, 2%-5% of all the SLD population were gifted

students and constituted 10% of the student population (Freeman, 2001: Nielsen, 2002; Winstanley, 2005). The situation is similar in Israel (Manor, 2005). According to research from UK, U.S. and Israel, most of the teachers dealing with GT and/or SpLD students or students with Dual Exceptionalities did not get appropriate training. That is, teachers are required to use tools and strategies that are familiar to them, which do not necessarily meet the additional needs of those students. Furthermore, most teachers do not receive training in the practical field (Freeman, 2001; Manor, 2005: Nielsen, 2002). The teachers often come to a situation of great frustration and great difficulty. This may damage their sense of self-efficacy and this can affect their contribution to the students (Bandura, 1997; Freeman, 2003; Kay, 2002). Today, there are training frames for teachers of gifted students and training frames for teachers who teach students with SpLD. Recently more attention has been paid to build a special training program for teachers teaching in classes with groups of students with Dual Exceptionalities. Still, there are many difficulties in this fieldwork.

The teachers' needs are significant in the training, guidance and in being accompanied in the process of applying the strategies in order to give appropriate answers to their students and to accomplish the goals of education that are set out above (Freeman, 2001; Manor, 2005).

8. Outline of study design and methods

In my WBP, I will use the Qualitative Research approach and because the nature of the topic of my study requires a deep investigation of processes and intensive contact with the research participants (Sabar Ben-Yehoshua, 1999). The qualitative research highlights qualities of processes, meanings, and particular situations that can reflect phenomena that are not experimentally examined or measured in terms of quantity (Denzin & Lincoln, 2008). My WBP emphasises processes and changes. The methods I will use will be observations, interviews and questionnaires. I am planning to use the semi-structured focused interview. "Semi-structured interviewing is the most widely used method of data collection in qualitative research in psychology" (Willing, 2001, p.21).

First, I intend to create a model that includes three strategies based on professional literature and my experience in the educational field. The first strategy is 'asking questions' that evolve high-level thinking skills and it is taken from the field of Gifted and Talented teaching strategies that evolve development of High Order Thinking skills. Two more strategies in my model are taken from the field of Special Education. The model includes a strategy of 'analysing questions' and a strategy of 'writing answers to questions in templates' in Humanities Disciplines according to the demands of the Israeli Minisrty of Education. I named my model in acronym AAAMS. I intend to write a Manual for teachers who teach 2ELs and include in it the AAAMS. Then I will conduct a seminar to the participants in my research and after that I will conduct an intervention in classes of 2ELs students.

To achieve this purpose, I will use a case study. After an inquiry in the literature I selected a case study because it fit best with my topic. My aim is to inquire about the impact of the AAAMS and how it can contribute to an effective teaching as well as better learning and performance by 2ELs.

The data collection will be from all the qualitative research methods as observations, interviews and questionnaires.

10. Ethical Considerations Please indicate how you intend to address each of the following in your study. Points a -I relate particularly to projects involving human participants. Guidance to completing this section of the form is provided at the end of the document.

a. Consent

I will obtain an informed consent from the participants in my research before starting the process of collecting the data. The form will plainly describe what they will be doing and anything they might object to.

I will be aware of this dilemma and will try continuously to be loyal to the teachers, pupils and other participants in my research, but, on the other hand, to the professional standards demanded of me as a researcher.

I will keep in mind throughout the research process the welfare of the participants in my research and be careful that no harm will be done. I will use some measures to assure this ethical principle is followed, such as:

- I will gain the informed consent of the participants in my research from their own free will. I will give the participants all the information they need so they can decide to participate and I will make sure they agreed to participate in the research without any pressure.
- After collecting and analysing the data, I will make sure that the research findings will be reported as they were experienced by the participants and I will not use any detail to fit my theory or assumptions. So, I will report and conclude my research with integrity and objectivity. (Sabar Ben-Yehoshua, 2001). I will be aware of the prevention of falsification, fabrication or misinterpretation of data.
- I will not use any information that is not relevant to my research even if it is interesting or appealing to the public.
- I will meet the ethical principles required by the research journal I intend to use for disseminating my project. I will be aware of:
 - o I will be the sole writer of the article and research that I will publish.
 - o I will only send the article to the magazine in which I intend to have my research published.
 - I will uphold the civil rights of the participants and other interested parties in my research while publishing material and declarations.
 - o I will not infringe on the copyrights of any other party.

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In summary, I will fully inform the participants in all stages of my research such as procedures, data collection, conclusions, and recommendations. I will inform them about my intentions to publish the research findings in a journal. I intend to contribute significantly to my colleagues, the teachers who teach pupils with multiple exceptionalities, to improve their personal and professional development, and the improvement of learning for each and every participant in my research. I will make these my ideological intentions and they will become the criteria for which I will evaluate my research. The principles of the University of Derby and BERA and also the APA ethical guidelines for researchers will guide my actions. I am aware of and have taken into account that I am insider researcher because I work in the research field that I am conducting in, and that the participants are my colleagues. I am aware of the possibility of negative reaction if the participants refuse to continue with the manual because of its demands, or from personal reasons. They might be angry with me because of the feedback I give them. On the other hand, they might continue applying the research with the aim of pleasing me, which is the wrong reason to apply the manual. I believe that the open dialogue I have with the teachers participating in my research from the beginning will be the base of the relationship throughout the process of the research. The informed consent form is the first stage in establishing a healthy base and I hope that this will help me to deal with this kind of professional difficulties that may arise within my research.

b. Deception

My research does not involve any form of covert or deceptive research. The participants are fully informed about all the stages and details of the research process.

c. Debriefing

I will debrief the participants in a written letter.

d. Withdrawal from the investigation

I will inform the participants in the Participant Information Sheet in the beginning of the research process that they are free to leave the study at any time without jeopardy. I will clarify that they have the right to withdraw their data in retrospect, and also clarify that they won't be able to withdraw after the data has been analysed and disseminated.

e. Confidentiality

In the Participant Information Sheet, I will emphasize that I will conduct the research. I will detail the aims of the research and that I will inform them personally by letters. I will make a 'Fair Processing Statement' which will assure them that only those within the framework of the act will have access to the information and that information will be kept until the data has been analysed and disseminated. I will always keep anonymity as a priority and will not use or mention the participants' names or identifying details of any kind.

f. Protection of participants

The participants may believe that they are criticized or unfairly observed which may affect their feelings and behaviour, including how they react to observations or critiques. Also, they may be afraid of exposure in front of other teachers or managers.

g. Observation research [complete if applicable]

I will obtain an informed consent from the participants before conducting observations.

h. Giving advice

I, as a researcher, will address the participants in a very suitable, qualified and appropriate way as professional colleagues.

Research undertaken in public places [complete if applicable]
 Research will be conducted in private classrooms.

j. Data protection

I will obtain informed consent from my participants for any audio recordings. It will be stated on the Participant Information Sheet. I will use several means to protect the data and create confidentiality and likewise I will securely and separately store the data. I will only collect data that is relevant to my study and I will use solely according to my research purposes. I will be conscious that the data will not be used in a way that will be damaging to any individual. The Participants' identity will remain anonymous unless they have given explicit permission to be identified. I will return data to participants if and when it becomes necessary.

11. Sample: Please provide a detailed description of the study sample, covering selection, number, age, and if appropriate, inclusion and exclusion criteria.

Sample:

I chose two teachers to participate in my research because I am familiar with them and their teaching styles and experience. I know they are open-minded, cooperative and willing to try new strategies. They all have excellent communication skills. I think this group of teachers will be appropriate for my research because I can depend on their cooperation and I think they can bring important information to my research for the purpose of collecting valid data. One is a male, 35 years old, 5 years' experience teaching Bible. The second is also a male, 30 years old, 3 years' experience teaching History.

12. Are payments or rewards/incentives going to be made to the participants? If so, please give details below.							
No.							
	•	•	_	etails here of valid	· •	oke questionnaire	s, interview
	nal work sc				,		
Task	s	Winter 2011	Spring 2011	Spring 2011	Summer 2011	Winter 2012	
	ate earch icipants	*					
	her cipants	*					
Obse	ervations		*	*			
Inte	rviews	*	*	*			
Diss of art	semination				*		
Subr	nission of paper					2017	
1 mai	рарсі					2017	
14. What resources will you require? (e.g. psychometric scales, equipment, such as video camera, specialised software, access to specialist facilities, such as microbiological containment laboratories).							
I do not require any special resources.							
15. Have / Do you intend to request ethical approval from any other body/organisation? Yes / No (please circle as appropriate)							
If 'Yes' – plea	If 'Yes' – please give details below.						
16. The information supplied is, to the best of my knowledge and belief, accurate. I clearly understand my obligations and the rights of the participants. I agree to act at all times in accordance with University of Derby Code of Practice on Research Ethics http://www.derby.ac.uk/research/ethics/policy-document Date of submission (draft)March 10, 2011 Signature of applicantNurit Salem							
For Committee	e Use	Re	ference Number (Subject area initic	als/year/ID number	r)	
Date received Date approved Signed							
Comments							

PLEASE SUBMIT ALONG WITH THIS APPLICATION THE FOLLOWING DOCUMENTATION WHERE APPROPRIATE (please tick to indicate the material that has been included or provide information as to why it is not available):		
Questionnaires/Interview schedules		
Covering letters/Information sheets		
Briefing and debriefing material Provided in oral form		
Consent forms for participants		

Appendix 3.10 - Interview on Completion of the Intervention – Questions

A semi-structured interview with the teacher participating in the research.

20.6.2012

We have completed the implementation of the intervention programme in the class of gifted students. The purpose of the interview is to learn about the contribution of the intervention programme to you as a teacher and to your students as well as the difficulties and needs that arose from the implementation of the intervention.

Just to remind you, the interview is being recorded with your prior consent.

Questions:

- 1) At the beginning of the year, you set yourself a vision and objectives. Did you achieve the vision and the objectives? Give examples of successful experiences and of difficulties encountered.
- 2) Specify and give examples of how you measure success in achieving your objectives and vision.
- 3) Which of the areas covered in the teacher training (held at the start of the intervention programme) would you strengthen? Which areas would you do without? What would you add?
- 4) Which programmes and tools ought to be part of the plan for the training of teachers in order that they will be able to provide optimal teaching to the class of gifted students with learning disabilities? Explain in detail and give examples.
- 5) From your experience in the field, describe the characteristics of a gifted students with learning disabilities. Describe in detail and give examples.
- 6) In what areas has the intervention programme helped you (personally and professionally)? Give examples.

7) In what areas, do you think that the gifted students with learning disabilities benefited from the intervention programme (affectively: motivation, self-esteem, experiences of success, enjoyment of learning, and cognitively: improvement in learning and writing skills, capability of transferring skills, improvement in performance and achievement)? Give examples.

8) Are there strategies that you have learned during the seminar that you did <u>not</u> use? Why? Will you use them later? Give examples.

9) Do you use the AAAMS and the skills that you acquired in the intervention programme also when you teach ordinary classes? Give examples.

10) Can you sum up your experience in the process of implementing the intervention programme?

Thank You!

Appendix 3.11 - Post-Intervention Interview – Questions

A semi-structured interview with the teacher participating in the research.

20.2.2013

The interview was conducted with the teacher who participated in the research six months after the end of the intervention programme in classes of gifted students (the intervention took place in the 2012 school year). The purpose of the interview was to check the implementation of the intervention programme and its contribution to the teacher over a period of time. The interview was recorded with prior consent.

Questions:

- 1. Did the intervention help to change the perception of your role as a teacher of gifted students with learning disabilities? Please give examples.
- 2. Has the intervention helped you over a period of time in the field of your speciality (cognitive) concerning gifted students with learning disabilities? Give examples.
- 3. Has the intervention programme made a contribution over a period of time to your awareness of and attitudes towards these students (affective)? Give examples.
- 4. Has the intervention, over a period of time, contributed to your motivation to teach these classes (affective)? Give examples.
- 5. Which elements of the intervention programme have made optimal teaching possible in the classes for gifted students? Give examples.
- 6. Which elements of the intervention programme have prevented optimal teaching in the classes for gifted students? Give examples.
- 7. Did you implement the contents of the intervention programme during the new school year in classes of gifted students with learning disabilities (the AAA strategies' model, diversity of teaching methods, vision and objectives, lesson planning)? Give examples.
- 8. Did you apply the content of the training also in other classes (transfer)? Give examples.

- 9. Have you shared the knowledge and tools you acquired in the intervention programme with your colleagues at school? Give examples.
- 10. Has the intervention programme had a wider impact on the school's awareness of gifted students with learning disabilities? Give examples.
- 11. Do you need additional training in teaching gifted students with learning disabilities?
- 12. What would you recommend for the training of teachers at school and in the education system in this area?

 Thank You!

Appendix 3.12 - Open Questionnaires – Feedback from Students at the end of

Intervention - Questions

Feedback from students about the use of learning strategies at the end of the intervention.

This feedback deals with the implementation of the three learning strategies during lessons. The questionnaires are anonymous and the answers will be used to improve learning processes.

You are presented here with a list of statements about each of the three strategies. Please write your opinion on each of the statements in as much detail as you can. Your opinion is very important. Your comments will make a very important contribution to the drawing of conclusions. Thank you for your cooperation.

1. The Strategy of Asking Questions

- 1 It helped me in the process of learning by investigation and examination of the subject.
- 2 It helped by making the learning experience enjoyable.
- 3 It helped by developing critical thinking on the subject.
- 4 It enabled me to use the previous knowledge I had.
- 5 It allowed me different perspectives on the subject.

2. The Strategy of Analysing Questions

- 1 It helped to improve my understanding of the question.
- 2 It helped me to focus on the requirements of the question the subject and the instructions.

3. The Strategy of Writing Answers in a Template

- 1 It helped me to write a full and detailed answer.
- 2 It helped me to focus on writing the main points in the answer.
- 3 It helped me to write with greater enjoyment.

Thank you!

Appendix 3.13 - Guidelines for Class Observation

November 2011

Guidelines for Focused Observation in a Class of Gifted Students (for the external observer)

The observation will take place in a class of gifted students who have also been diagnosed with learning disabilities in subjects with large textual content.

The purpose of the observation: Observation to be focused on the course of implementation of the intervention by the teacher participating in the research (the AAA strategies' model and implementation of an infusion of ideas and values learned in the seminar for teachers of gifted students).

The teacher gave prior consent to the observation.

Subjects taught in the class: History – observation of teacher R.

Bible - observation of teacher G.

General guidelines for the observer:

- 1. The students should be shown the purpose of the observation: this is an educational research investigating teaching processes in a class of gifted students (no need to give more details).
- 2. It should be pointed out that the students are not being examined and it is not for grades.
- 3. The observer must be a passive watcher, neutral and objective (the observer has no previous knowledge of the teachers or the students).
- 4. The observer should note down **in great detail** everything she sees during the lesson as well as personal interpretation of what occurs. This should be written on the attached observation sheet.
- 5. <u>The observation is focused</u> the guidelines set out for the observer on which aspects to focus.

Guidelines on How to Observe the Lesson

The following should be described in great detail:

- description of the field of study description of teacher and students in the classroom during the lesson
- interactions between them and others

- interaction between them and the teacher
- actions of the teacher
- reactions of the students to these actions
- expressions at the class, group and individual level
- information on class discussion
- the manner in which knowledge was transferred in the lesson
- the place of the learner in the class with the teacher
- expressions of emotions sadness, happiness, satisfaction
- disturbances during the lesson

The Matters to be Focused on in the Observation (detailed guidelines to follow)

A. The Cognitive Aspects – the AAAMS:

- 1. The strategy of Asking Questions
- 2. The strategy of Analysing Questions
- 3. The strategy of Answering in a Template

Observation on implementation of the strategies during the lesson.

B. The Affective and Meta-Cognitive Aspects (reflective thinking and self-criticism among the teachers and students):

Emotional reactions such as "anti" reactions, attitudes for and against the mission, persistence, concentration, curiosity, boredom, derision, cynicism, anger, cooperation, enthusiasm, mutual help, chatter, expressions of boredom or over-expression of assertiveness,

Inhibiting or enabling by the teacher, encouragement and reinforcement of the students by the teacher.

Reflection on what is happening in the class.

C. Infusion of Ideas and Values During the Lesson:

- 1. Conceptualisation of the strategic goals
- 2. Conceptualisation of the values:
- transfer of the use of the strategies to other subjects.
- critical thinking
- meta-cognition, reflection (what did you learn? how did you learn it? did you learn any lessons? how did you learn from your failures/successes? let's learn from the success of an

individual/ the group/ the process undertaken...)

- learning from success

D. Assignments for Individual or Group-Work during the Lesson.

Details of the Guidelines on the Matters to Be Focused in the Observation

A. Cognitive aspects, affective and meta-cognitive aspects:

Strategy 1: Asking Questions

How the teacher presents **the strategy of Asking Questions** should be checked. Does the teacher give individual students the chance to ask questions or can everyone do so?

- During the lesson, does the teacher prevent or allow the student to add another question, despite continuing with the lesson.
- Does the teacher allow or prevent students who want to add a perspective or a second opinion?
- How do the students react during a lesson that uses the strategy of Asking Questions?Do the students participate or abstain?
- Do they react disdainfully to each other? Do they encourage each other? How does the teacher respond to the reaction of students to their fellow students when asking questions?
- Does the teacher conceptualise the different types of questions (for example: leading, clarifying, open, enriching, and exploring)?
- Does the teacher conceptualise the purpose of the strategy, such as developing high order thinking, developing different perspectives, fostering curiosity, using prior knowledge? (These are all a response to the phenomenon of boredom and other characteristics of gifted students (Manor-Benjamini, 2007).

Strategy 2: Analysing the Question

The Cognitive Aspects

During the lesson was there a Question and Answer task? Was the strategy of Analysing Questions taught? Were the students requested to use the Analysing Questions strategy during the lesson? Was the strategy practised on the board?

The Affective Aspects

Teacher's reaction to students' comments: allowing or preventing and inhibiting (pleasant tone of voice, aggressive, encouraging, friendly, pleasant, irate...).

Students' reaction - collaborative, avoiding, bored, cynical, resistant (don't understand, avoiding, asking for help and explanations again and again, angry, irritable, getting up and leaving the room, leaving the task and falling asleep or disturbing, etc.)

How did the teacher respond to the students' reactions?

Strategy 3: Strategy of Writing in a Template - individual or group work

Was there a written assignment during the lesson?

Cognitive and Affective Aspects

- How did the students react: cooperated, avoided, wrote briefly and finished fast?
- Asked for help
- Found other things to do
- Disturbed, went outside the classroom, fell asleep, got up and walked around the classroom
- How did the teacher react? explained? was patient? the teacher walked among the students and helped? etc.

C. Observation of the work in the classroom during an individual or group written assignment

Cognitive and Affective aspects

- Did the teacher explain the task clearly/unclearly/repeated several times etc.
- Did the students ask questions? Did they ask for more explanations?
- Are they excited/ bored/ cooperative / disturbing?How does the teacher respond to their reactions?

Throughout each observation, teacher-students' interaction should be noted and reported whether with an individual student, a group of students preparing the written assignment or among the students themselves.

Manifestations of negative compensatory strategies (avoidance) should be documented (Einat, 2004):

A students who has learning disabilities which affects writing skills may be active during verbal discussions but find written assignments difficult and then he may disturb lessons

especially when required to perform written tasks.

Over the years, a student adopts different types of negative compensatory (avoidance) strategies, for example, by withdrawing into himself and not writing, conspicuously and repeatedly requesting to leave the classroom during written activities, sleeping, loudly interrupting in order to be sent out of the class, offering to help the teacher in matters unrelated to the written assignment in order to avoid having to do it, having various excuses for not preparing homework etc.

Reminder to the observer -Please, write as detailed as possible descriptions and interpretations.

Good Luck!

Appendix 3.14 - Transcript of Interviews with teachers - August 2011-June 2012

	1. Characteristics of a teacher that boosts (enables) his students learning process
1	Roy - I was told by the training leader that it is very difficult to receive training for gifted students, because there is no such thing as training for gifted students, or there are no satisfactory courses in this field in the State. This is despite the fact that I am now an undergraduate studying for a teaching degree at Beit Berl. The course is partly for the population with difficulties and the other half is for outstanding students, although it is not designated as a course for gifted students. I am still in the process, and I have not received significant tools yet.
2	Creative - challenging
3	I manage to challenge them at a high enough level that they understand they are learning at a high level
4	Preliminary interview - cognitive characteristics
	I know the level of their IQ is high, according to the tests they passed before coming into the class. I did not expect that they would have severe emotional problems. I thought they would be gifted and curious without emotional problems but I do not really know the special factors.
5	Roy - the lesson must be as interesting and challenging as possible, to get them to use as much of their intelligence as possible in the lesson, but at the same time to understand they are still children. Do not go for the highest level, but build a suitable framework that will meet the needs of the gifted students some of whom, thanks to their high abilities, are already learning at university in addition to their studies at high school. It is a thin line. I understood and discovered this after two months and then I went into the class differently than with other classes, but I also do with them what I do with other children

6	Rick - Characteristics of a teacher that enable - Preliminary interview with Rick - I enjoyed it from the start. I was not worried
	Independent Study
7	I have no training in learning disabilities other than what I have taught myself, I asked for help from teachers who know more about gifted students or about special education who also worked with my class, for example from the integrated teacher who was the form teacher of the class I taught. She gave me some informal training, and I learned some methods from her. In addition, I read and looked into autodidactic learning because I needed to.
8	Balance
9	There is an emotional connection with them, but on the other hand one must set limits, not lose direction or be pulled along although that's easy and convenient for me
10	Building trust, empathy, understanding
	Not to be alienated from those with Dual Exceptionalities. To build a sort of trust while empathising with their difficulties. It is very easy to tell students that he is being smart and cynical without realising that this is a defense mechanism
11	To play their game
	The ping-pong that can be developed between teacher and students can be perceived as a disturbance, but you have to play their game, to develop with "the game" and get them to recognise that they can lower their defences during the lesson, to allow them to develop a sense of security
12	First show them that there is nothing threatening them or to be frightened of.

13	Dina - Characteristics of a teacher that enable
	When I went in the first time when they were in seventh mark, I thought I should teach great things with complex, adult themes, but I found out that this was wrong. The level I use to teach other classes is challenging enough for them, but they require wider and more complex treatment of the subject.
14	To open multi-disciplinary perspectives
15	When I don't know something and I learn from them, that was fine, my status was not diminished in their eyes – we are learning together
16	Roy - Characteristics of a teacher that enable — Mid-stage Interview - I have understood that I enter my class of gifted students clearly aware that they need limits even more than the other classes and it works and helps
	The teacher's vision - Mid-Stage Interview
17	that I will manage the class more assertively, and will place limits within the working environment
18	And at the same time to set boundaries to behaviour, in their relationship and way of talking to me and to their friends.
19	Rick - Characteristics of a teacher that enable - after the course - My lesson plans will be built later according to the model that I learned at the course - to develop thinking and an answer template
20	I base my lessons on the study book but develop new ways of teaching according to what we have learned. One must put a limit and should avoid getting carried away too much by the system of asking questions. * I need to develop a delicate balance between a structured and technical lesson and an informal lesson in which

	there is the danger of losing direction and then the students will complain that
	valuable time is being wasted. This is definitely related to their competitiveness
	over achievements and marks. The same question keeps being repeating in class: is
	this for a test? If I say no, a large part of the class will lose interest arguing that it's
	a waste of time. This happens in other classes too but is more pronounced with the
	gifted students. They expect more of themselves. I think this is what the education
	system transmits to them and they have internalised it. I am changing this
	perception in my way of teaching.
21	I need to develop a delicate balance between a structured lesson or a looser one in
	which there is a danger of losing direction and then there will be complaints from
	the students that valuable time is being wasted. This is certainly related to the
	competition between them about achievement and grades. The same question
	keeps being repeated in class: is this for a test? If I answer no, then many of them
	lose interest and argue that it's a waste of time. This happens with other classes but
	it is even more pronounced in a class of gifted students. They expect more of
	themselves. I think that's what the education system transmits to them and they
	have internalised it. I am changing this perception through my teaching.
22	Rick - Characteristics of a teacher that enable - I prefer to teach on the basis of
	successes, in order to help them cope with the gap that some students with learning
	disabilities have. They will experience a gap between their high levels of ability
	and an inappropriate level of achievement which will lead to great frustration
23	Rick - Characteristics of a teacher that enable - Assessment of the course – it was a
	small group – and this made possible a very thorough course and personal support
	and enabled everyone to say what they wanted. The course should be for a small
	number of people, not for large groups.
24	Content - the content was excellent. I think next year I will continue to use and to
	apply everything I learned because it is internalised and sinks in and then I feel it
	helped me.

25	The instruction was good - inclusive, understandable and responsive to the needs. The moderator did not pressure but instructed and led. It created in me the desire to experiment, to learn and to implement, because it was important for the moderator. Just as students see the teacher comes with "passion" for his subject, so too the moderator was enthusiastic and passionate and it rubbed off on me so that I voluntarily cooperated and was helped a lot.
26	I cannot think of anything that was superfluous in the course. The number of sessions was exactly and precisely correct for this year and there is no need to load on more. At every meeting, I learned something and it added up and completed the whole puzzle. Improvement – there were observations and guidance but there is always a need for more. The additional observations have contributed as a reflection and feedback that helped me a lot. That is, support is always very essential, it's an important part of the course and of advancement.
27	It was always important to receive more feedback in order to learn and improve.
	Roy – The teacher's characteristics after the CPD seminar
28	As far as the level of professional preparation is concerned, I prepare for all the classes; the building of my lesson plans is much more precise. I enter the class of gifted students differently from other classes in terms of my perception of my role as a teacher and also emotionally.
29	I would recommend first of all patience, which I learned on the job immediately. One needs a lot of patience and self-control because their stimulation threshold in particular is very low and they react so quickly to every detail and especially to a lot of associated things which do not seem to have any connection with the subject
30	(Interpretation, I also feel that on the ground)

31	They are constantly in competition to prove themselves, especially as all are gifted and there is competition between them who is the cleverest and most knowledgeable.
32	Roy - it is important to understand that there will be a lot of comments on whatever is said and the teacher needs to be aware of this - about the characteristics and to understand that this is one of the characteristics which therefore requires patience.
33	The teacher who knows about the characteristics of the students shows patience and understanding.
34	The teacher must set clear boundaries, otherwise they will make sure to prove to you that you are not authoritative, not a teacher who controls the classroom. They are always trying to break through the limits and this characterises them more than any other class.
35	The teacher should accommodate and understand these characteristics and respond accordingly.
36	Roy – the characteristic of the teacher who uses a variety of teaching methods and also technology and other aids is especially important in this class. One has to turn to their high intelligence to stimulate them, to allow their curiosity to flourish and be nurtured.
37	The teacher needs to enable their curiosity and to nurture it.
38	Roy - A teacher should be able to manage discussions at a very high and deep level, more than in other classes. The teacher is sometimes amased by the opinions, reactions, knowledge of the wider world and high level of discussion and debate; very interesting perspectives

39	Roy - The teacher should be capable of giving legitimacy to different perspectives and opinions, specifically in the case of gifted children who are very verbal and those among them with learning disabilities who are especially verbal.
40	A teacher should enable and encourage other, special, perspectives
41	The teacher's perception of his role is important, but content, preparation and professionalism are also important.
42	I have taught in gifted classes for several years. Some characteristics are similar in all the classes and there are also differences, just like in regular classes. Every class has its own character, but there are features which recur in classes of gifted students with learning disabilities and because of this the profile of the effective teacher in these classes is important.
43	The teacher must know the characteristics of gifted children.
44	Roy – The teacher's characteristics after the course. In classes for gifted students there is a feeling that you start from scratch in every lesson, in terms of the emotional and mental effort put into planning and management of each lesson. You need to invest, to be prepared and focused and patient - all the time, constantly. Until you see the result takes time and then at the beginning of the next class there is a feeling that there is a process taking place but slower and more difficult than with regular classes. Every time one needs to be more careful about everything".
45	Roy – The teacher's characteristics after the course. – from my own personal experience with the class of gifted children and the difficulty of others who teach my class, there is a difficulty struggling with the forces of the students and the teacher goes into a defensive position in front of them and may even respond aggressively to the students and is unable to contain this situation.

46	A teacher needs to be able to deal with situations of resistance and in addition to be prepared to accept that there can be cross-fertilisation of knowledge and not simply the students accepting the teacher's world of knowledge - it's not a one-way channel.
47	The teacher should be open and not conservative in his perception of his role concerning investigation and asking questions – he must be able to guide as well as to teach, and to move dynamically between these locations. When a teacher delivers a body of knowledge and directs a lesson but also let go and allows the discussion to stray, it does not detract from his dignity as a person of authority in the class.
48	It is understood that some of the behavioural symptoms are also emotional difficulties and learning disabilities. One can say that the students disturbs and one can say that the students has difficulties - these are two ways of looking at the phenomenon.
	In which ways, a teacher of gifted students is different from teachers in regular classes?
49	
49	regular classes? Rick - the teacher must be as willing to learn from them as to teach them, and this
	regular classes? Rick - the teacher must be as willing to learn from them as to teach them, and this is more pronounced in a class of gifted students because of the extremes I think in such classes a teacher needs special knowledge, but all the characteristics

53	Rick - to be flexible and to change the lesson that was prepared if a different need arises from the students. Not having to cover the material but to go with the issue that arose in the class.
54	Can every teacher teach a class of gifted students? These characteristics are required of all teachers for any kind of class, but this is more prominent in a class of gifted students. So, if the teacher of gifted students has these characteristics it would help also in a regular class.
55	It is also beneficial for disadvantaged students who are not gifted.
56	In my opinion, all the parameters have the same priority and are of equal importance
	Characteristics of the teacher that inhibit learning processes
	Roy - preliminary interview
59	Concerns - perhaps as a new teacher, that they will know a lot, and they will, on purpose, try to start testing my knowledge.
60	I received no training
61	Roy - My expectations were that they would be at a higher level of writing because verbally I expected them to be at a high level.
	Lack of knowledge, lack of tools

62	I do not have enough knowledge to talk about the Dual Exceptionalities and\or to identify it, and I received no training in teaching students with learning disabilities. I went through half a course on "Challenging Populations" and "Differences" as part of the teaching course, but it was all very theoretical and academic, not practical. I did not receive learning strategies, apart from focusing and giving attention, I did not receive practical learning strategies, such as how to approach historical events with challenging populations. Maybe later in the course I will do this, but at present I lack many tools. I'm interested and want to integrate it.
63	I do not use special strategies.
64	Coping emotionally - less connected, I do not know how to handle it, it distances me
65	Emotionally, it's not clear to me. It always amases me. I keep asking myself: "Wait, how they can be diagnosed both as gifted and as having learning disabilities? How do these fit into the same class together", I ask myself: "What's the catch here?"
66	Roy - I feel less attached to them. They are carrying a burden which I do not understand, and at present do not know how to deal with it, so it distances me emotionally. I am least connected to them emotionally.
67	They will not approach me during breaks, "Hey Roy, how are you?" etc or "we want you to teach us next year," as happens with students in regular classes. Because there, there is a feeling of warmth in the class - I feel least good in comparison with other ordinary classes.
68	What's the teacher lacking? - First of all, training. What are gifted students? What do they need? What is learning disability? And how to respond to this combination of needs? Does this require deeper thought? The teacher must know something about this.

69	Roy - Who is this population? And I must say that even after a year of teaching this class I do not have enough knowledge about all this. There is a need to learn about strategies and skills that are suitable for them. How to help them in organising the learning material for a history test, and how to approach students in the classroom who are very intelligent on the one hand, but on the other hand, very childish? How should this be done?
70	If this is a class of gifted students, what does it mean emotionally? Socially?
71	I would be pleased if they checked and let me know about the diagnosis of the gifted students.
72	Rick - Characteristics of the teacher that inhibit – preliminary interview - I received no training
73	This gifted class is so interesting and intriguing that I am tempted to get carried away with them, and I must force myself to keep to the framework of the lesson
74	Rick - I have no training in learning disabilities other than what I have trained myself. I asked for help from teachers who know more about the field of teaching gifted students or those in special education who also worked with my class, such as the combination teacher who was the form teacher of the class I taught. She gave me some informal guidance, and I learned some tools from her. In addition, I read and I interested myself in autodidactic learning because of my need to learn.
75	Characteristics of the teacher that inhibit – preliminary interview - I received no training for gifted students
76	Pressure of the matriculation exams reduced the storm of creativity. One does what is needed without a great fuss. I was very successful in interesting them.

77	They received help only with attention deficit disorder, such as extra time and technical help in photocopying the materials.
78	Frustrated – we do not cover the material.
79	I need to fulfil the requirements of the system however unfortunate this is because that's how it is. I have empathy towards their difficulties.
80	Rick - I'm frustrated by the things I need to request from them because of the system and this sometimes prevents me teaching the way I believe in. I would give up two lessons, for example, in order to develop critical thinking by using discussion and other teaching methods, but if I teach that way there will be a problem later with the test requirements. The students will not be prepared sufficiently and they will not reach the required achievements.
81	I am required to teach for the sake of achievement, but I prefer to teach on the basis of successes, in order to help them cope with the gap that gifted students with learning disabilities have. They will experience a gap between their high levels of ability and an inappropriate level of achievement. The result of this gap is great frustration.
	The contribution of teaching strategies
82	Roy - preliminary interview - asking open questions - which learning strategies do you use in teaching your subject in this class?
83	For me as a teacher, to use as many leading, open questions as possible and then you hear beautiful and wonderful things.
84	Answering questions in a template - the difficulties I encountered in this class are similar - all classes need to be taught how to answer correctly, and it's the same in this class.

85	Lack of knowledge is a limitation – this is a heterogeneous class but the teaching method is directed to everyone, and so doesn't reach the students with Dual Exceptionalities or other difficulty, and I do not know yet how to do it. I also feel that the resources of the school do not allow it. Treatment at school is a patchwork. Only an oral exam may allow something special to be given.
86	Only if I stay in my own time and give an oral test to this class. There is no time allotted for oral tests or to use special teaching techniques - there are no school hours for this.
87	Rick – strategies for Dual Exceptionalities: assistance with anything to do with writing, like teaching students with Attention Deficit Disorders in regular or difficult classes.
88	Teaching 10 minutes frontally and then 10 minutes working on their own and then instruction. And this works well even in a big class as it is suitable also for the associative mindset. Dividing the lesson into directed sections – diversifying the lesson, discussion between groups, creates a framework that neutralises attention deficit disorder and the wandering off the point of the gifted. There are those who need a framework (an organised basic lesson plan) – a class discussion is good for some while others will wander. For those who need diversity and stimulation of their curiosity – it's the opposite.
89	They received help only with attention deficit disorder, such as extra time and technical help in photocopying the materials.
90	I work with methods of organisation, order and being methodical – in preparing the lesson and test preparation etc. and this helped students with disabilities and also others.

91	Rick – mid-stage interview - Contribution of the course – also in terms of the students there is a change - it works better than just frontal instruction from the book. For example, with the use of the strategies of analysing questions and answering questions in a template it seems there is a significant change for most students in the class, especially those with learning disabilities.
92	The purpose of submitting class work is to reflect the capabilities and successes rather than just to highlight the difficulties. So, I do not give only tests but assignments which they can correct and learn. I think that using only examinations can trigger failures and fears.
	Characteristics of 2ELs
93	Roy - I have to say, at the class level, I have two regular classes and one with gifted students. As far as marks are concerned, the average marks of the regular classes are higher than that of the class with gifted students, but the gifted class has the capability for high order thinking and verbal expression. One can develop a discussion on any subject at a higher level and it seems they have general knowledge, read newspapers and books and talk about them. It seems to me that there are no topical issues that they don't know about and understand. The students have great curiosity and wide horisons, with a high level of intelligence and impressive verbal abilities which they show in class discussions.
94	I know their IQ level is high, from the tests they passed before being accepted for this class.
95	I did not expect that they would have severe emotional problems. I thought they would be gifted and curious without emotional problems, but I do not know really the special characteristics.
96	I know their level of general knowledge is high.

97	Roy – an affective characteristic - I did not expect that they would have severe emotional problems. For example, one of the students who received a low mark in a history test said about himself in sorrow: "When I was a little boy I thought I was gifted and now I have grown up and have become retarded".
98	Roy - impatience, cynicism / arrogance – they have great problems understanding the question. They have difficulties with complicated questions. Some of them ask questions after reading the statement in the question or after reading from the board and make comments that show they do not understand the context. Socially, in this class they want to prove their knowledge, but there is a lot of cynicism.
99	Roy - Characteristics of Students - preliminary interview - this is a characteristic I discovered during the year, the students express a lot of negative criticism and also make cynical comments about each other. There is a lack of patience and tolerance towards peers in the classroom. There are some students who find it difficult to express themselves or they are quiet and only sometimes join in the lesson and there are students who are really bothered by everything, and they immediately respond impatiently, with negative criticism and very cynically. There is impatience particularly in tests. They are not willing to check again what they wrote – they wrote fast, and submitted the work without checking, and the results were lower than usual, because of lack of attention to the fact that it is possible to elaborate, expand and enrich the answer. They need to understand that they must treat the examiner as if he does not know the material, you have to explain to him in full detail, for example in history. There's a need to work on the answer format expansion, detail and enrichment of the answer.
100	They can express themselves verbally very well.
101	Now I know of some children who have been diagnosed and where large amounts of text are involved so the test has been adapted and they can take it orally. Because they write so little, their written achievements are lower than when they are tested by heart.

102	I would characterise some of the children in this class as having difficulty expressing their knowledge in writing in an orderly way.
103	Perhaps it is related to the fact that they more introverted, perhaps politer. I ask myself these questions maybe it's hard for them to be open and to get excited?
104	When I examine the students orally – his marks are 97 and above, but in writing – he is unable to write a single line. He writes a little and loses patience quickly.
105	Perhaps it is related to the fact that they more introverted and find it difficult to express emotions.
106	Roy - In writing, the students' achievements are lower than by heart. When I examine the students orally he gets marks of 90 and upwards, but when he is asked to write down his answers he cannot write a single line. Even when this student does write, he writes very little and loses patience quickly.
	Rick - Characteristics of 2ELs
107	Students have difficulty doing anything involving writing.
108	Without learning skills, they are bored because they wander while dealing with the question and there is a need to guide, work with and summarise the topic learned in the lesson together with them so that they can write an answer.
109	Students are directed more towards the practical sector and less to the humanities.
110	They cruised for six years in the education system without much effort, and reached a high level of achievement without building up learning skills, and for some of them there is a fall at high school when achieving good results requires at least partial effort which is more than they were used to.

111	They achieved 95-100 without learning and without listening, just from their basic knowledge and memory. They were bored in class, and yet were very successful. But in high school this does not work.
112	Rick - in class discussions they are able to participate at a very high level on any subject.
113	Rick - During the discussion the students deviate from the subject of the lesson to other issues that come from their wide general knowledge and mainly because they find it difficult to focus on the subject. This in my opinion a characteristic of gifted students. They become very compulsive about an idea or subject or comment from someone.
114	In every class of gifted students there are some with learning disabilities. About a third of every class are diagnosed as having learning disabilities.
115	Rick – they possess low self-esteem. This is the most prominent emotional characteristic. Low self-esteem that has accompanied them throughout their years of study until now.
116	The cause of their low self-esteem was that their social acceptance was low to nil, and therefore self-image was built on intellectual capacities and not on a sense of belonging and acceptance. They define themselves as exceptions "by definition", so that with low academic achievements they are in double crisis: problems socially and low academic achievement. They are in a state of shock from the difficulties they have; in particular, from the poor results they achieve which do not reflect their abilities.
117	Rick - Characteristics of students - cynical, smart, lazy - This is defensive behaviour. The students use the best weapon they have from their high capabilities in order to defend himself against failures and the highly unsupportive

	environment he has encountered over the years, so one should understand where this comes from.
118	Characteristics of Students - When I went in the first time when they were in seventh grade, I thought I needed to teach them as though they were adults, but I found out that this was wrong. The level I use to teach other classes is challenging enough for them, but they require wider and more complex attention.
119	Roy – The students are able to make these connections by themselves. And I also responded to initiatives when there was special interest.
120	There is weariness and laziness.
121	in such classes there is a high percentage with a huge gap between intelligence and their ability to express it. These students have a need to talk and explain a lot. They have intuitive thinking which takes them to many things which are unrelated to the subject of the lesson. They feel they have to talk about it and do not give up.
122	Terrible difficulties in writing.
123	There are 28 students in this class, and 8 students who are diagnosed.
124	Difficulties in writing, they are better orally.
125	A very heterogeneous group.
126	Roy – They are academically weak – under-achievers.
127	They are outstanding in terms of effort.
128	Some are very active during the lesson.

129	What stands out is their social exceptionalism – non-acceptance of those who are different, gifted.
130	During the lesson, there was a need to focus so that they wouldn't wander too much.
131	Roy - Characteristics of Students - my gifted class is actually more argumentative because they have something to say about every technique and on every matter much more than others. This really stands out. And for some students I felt that this sort of lesson was sometimes a bit confusing for them because they need a clear lesson framework.
132	Roy - they get stuck on small matters that are unrelated to the subject and they argue and philosophise about this issue regardless of the lesson subject.
133	Roy - There are some children with very high capabilities while others are very weak. the gap is very conspicuous in class and causes disruptive behaviour. For example, going outside often, cynical comments, laughing and chatting or not cooperating in written assignments in class.
134	They answered the questions. And even with enthusiasm as someone said in class that it helps to answer more accurately and the mark will be higher. It is very important to them. They are very competitive about marks.
	Characteristics of Students - Mid-Stage Interview
135	I have understood that a class of gifted students is in greater need of boundaries.
136	Rick - Characteristics of Students - is it reflected in the behaviour of students in classes?

137	Rick - Yes, absolutely. They argue with me all the time. About the method, the strategy, the subject, the questions. In short, the students argue about everything and not everyone cooperated at first. A prominent feature among gifted students that I recognised is that they get bored very quickly. In many lessons in the gifted class some students seem bored and claim they already understood the material and have no desire to hear more explanations. "What? Again, about the blessings? We're tired of it. Exhausted". But in general, their argumentativeness and excess probing is very prominent. I know this is a prominent feature of the gifted and this makes it easier for me to deal with these reactions.
138	There is no culture of discussion. They need more framework and authority.
139	Rick - There is negative competitiveness between them, ambition that results in negative criticism towards each other and it's not positive at all.
140	They need a guiding and authoritative moderator to help them to conduct a discussion.
141	Rick - During the discussions, the students stray from the subject to all sorts of other associated issues because they become very compulsive about a concept or topic or about a comment of a students or teacher. They do not give up on making the response they wanted to give even if it happened an hour ago and there is a completely different lesson. They find it difficult to change the subject if they have not exhausted it from their point of view. They continue to deal with it during breaks. It's not just from curiosity. I learned that this is a characteristic of gifted students and it makes it easier for me to see this phenomenon and to know that they need help to break free from this.

142	They give in very limited work even though in the class they showed great rhetorical ability. And when they needed to write for homework they wrote one line with difficulty, but they were sure it was okay. Because in elementary school this worked for them to write one line since they knew the topic because of their high ability. In high school the greater requirements caused them to deteriorate and it takes them time to learn.
143	I conceptualised for them the process they went through, but it was hard for them to accept that they did something wrong before, and now it suddenly works for them. It's necessary to conceptualise it for them, to explain to them.
144	There is a defensive and resistance posture and they think they are pleasing the teacher when they expand and pad it out, but the experience of success encourages them. They have to give up and understand that it's not enough to write brilliant and creative thoughts but instead need to give simple answers showing examples and the basics. This means both low order thinking and high order thinking.
145	There is a huge gap between their intellectual and emotional levels. On the one hand, they are grown-up students in their ability to express themselves and childish in their emotional and social behaviour, for example when there is criticism, opinions contrary to their own etc.
146	They have difficulties at the social and emotional level, a great many emotions as opposed to their very rational and mature intellectual level.
147	Roy – separating the trivial from the important - this is very typical of the difficulties from their learning disabilities. They flee from usual low order thinking like understanding and interpreting a text to high order thinking at which they excel. They analyse and synthesise ideas, draw conclusions and discover new insights. But they find it difficult to focus on answering a question on the text. They are not focused, they run away from the whole thing, their minds wander and then they are unable to understand why it is important.

148	Roy - There is a huge gap between the verbal abilities of the students, for example: during discussions in class, and their ability to express themselves in writing. In this they become sub-achievers and this gap causes them very great emotional damage.
149	Roy - in the literal part, much work is required to help them write and express themselves in a manner that will show their high level of knowledge and capabilities which will also show up in the marks.
150	There is a reliance on bypasses - compensatory strategies — that developed organically over the years and it is very difficult to give up their strategies even if they do not help them now. They turn the strategy into part of their identity and ideology — the dissonance with them is higher than with other children who have learning disabilities because they are gifted and expect to be bright and their failures are very extreme.
151	Example - "I do not write because I do not think it important enough because I think at a high and abstract level and can say the whole thing from my head analytically, so why write?
152	The disability is identified with high capabilities and not as a deficiency and therefore there is no need to "fix" it, even though they fail in their studies.
153	Rick – the cynicism – this is also a compensation strategy because of their inability to cope emotionally with a sense of inferiority, low self-esteem which is not related to their ability to think, but to failures on the ground. And with the knowledge that the output is not brilliant and amasing especially compared to other gifted students in the class who do not have a learning disability and who are highly successful, it causes the decline in motivation and confidence.
154	Argumentativeness - for example, at the beginning of each test I read it aloud and explain every question but unlike regular students, they argue with the questions.

155	Most of the students ask questions about the questions because they are unable to give a simple answer and it seems to them that they always need to answer at a very high level.
156	The compulsive behaviour is because it is related to their difficulty or their characteristics as gifted students. Then many teachers can say that the class is annoying and argumentative.
	The contribution of external factors – Parents, Educational Regulations and Demands
157	Is the project of a separate class for gifted students effective, in your opinion?
158	This class has saved some of the gifted students socially and emotionally.
159	There needs to be resources provided for intensive support because the students will become sub-achievers as a result of their difficulties.
160	There is no external reference system, as though gifted students cannot have learning disabilities. Awareness of this has developed recently, and the attitude towards the gifted students is changing.
161	They received help only with attention deficit disorder, such as extra time and technical help in photocopying the materials.
162	There is great support from parents – both academic and emotional: parents always cooperated and came to remind me that their children have difficulties.
163	One parent made sure to bring his child whatever he had forgotten at home. Another parent would sit and dictate the lessons to his child.
164	One of the keys to success - help from the parents.

165	I need to fulfil the requirements of the system however unfortunate this is because that's how it is.
166	I'm frustrated by the things I need to request from them because of the system and this sometimes prevents me teaching the way I believe in. I would give up two lessons, for example, in order to develop critical thinking by using discussion and other teaching methods, but if I teach that way there will be a problem later with the test requirements. The students will not be prepared sufficiently and they will not reach the required achievements.
167	I am required to teach to obtain achievements but I prefer to teach about successes in order to help them cope with the gap that some gifted students with learning disabilities experience, the gap between their high level of ability and low levels of achievement which do not reflect their capabilities and they will become very frustrated.
	Contribution of training to Teachers
168	Roy - I was told that it is very difficult to receive training for gifted students or there are no satisfactory courses in this field in the State. I am now studying a course which is partly training for the population with learning difficulties and partly training for the teachers of outstanding students, although it is not designated as a course for gifted students. I am still in the process, and I have not received significant tools yet.
168	there are no satisfactory courses in this field in the State. I am now studying a course which is partly training for the population with learning difficulties and partly training for the teachers of outstanding students, although it is not designated as a course for gifted students. I am still in the process, and I have not

	who are very intelligent on the one hand, but on the other hand, very childish? How should one do it?
184	And of course, if this a class of gifted students, what are the emotional and social implications?
185	Do they also here receive "slaps" because they are gifted?
186	Does being in a class like this raise their self-esteem? Does it improve their pride in themselves?
186	I would be pleased if they would check and let me know about all this.
188	Rick – I think it should be a mandatory course for schools.
189	Roy - The contribution of training – Mid-stage Interview - asking questions, developing critical thinking.
190	There is an improvement in the gifted class. It works pretty well in the other classes I teach in addition to the gifted class. I implement the model and what I learned from the course and it works very well for me. For example, the Asking questions strategy has become a tool for opening issues in lessons and a tool for further development of critical thinking and the kids really love it.
191	At first there were some who said that Asking Questions causes them to wander but later they became interested and gave them a desire to prepare work on issues that arose in the Asking questions session and which remained open or just interested them and they continued at home because it really interested them.
192	Roy - The contribution of training - The process of planning objectives really helped me and the strategy models I learned in the course at the start of the intervention programmegave me tools to teach in other ways and to see that it has value both for the gifted students who do not have difficulties and for those

	with learning disabilities. Using the strategies makes them think, to show interest,
	to express their ability and to develop. And also for the students with difficulties I
	have tools now to enable them to progress and succeed. This of course takes time
	but one can already see a change for the better. Also in the conduct of the class.
	All the students, even those who have difficulties, are participating more, are less
	disruptive, are asking to go out less and have acquired tools to deal with written
	assignments. They write and their marks are improving. This creates a positive
	cycle. It makes me feel good and stimulates me to continue to look for ways to
	improve my teaching.
193	Implementation of the model I learned at the course contributed to the improvement in behaviour.
194	Students tell me that despite the confusion of some of them when the teaching
	method of Asking questions was first used, they understand the rationale behind
	the method.
195	Quote: "Roy is also trying to teach us how to learn not just the knowledge".
196	After the test that took place at the beginning of the year I see how critical it is to
	teach the gifted students how to answer questions. With everything connected to
	large amounts of text there is a need to rethink the approach to an answer. And not
	to get stuck in thoughts and all sorts of philosophical ideas and to philosophise but
	to focus and respond according to the format and detail required. It is a feature of
	all gifted students that they are strong in thinking at a high level and can relate to
	the level of knowledge and understanding of ideas and concepts, but it is difficult
	for some of them to go "down" to lower levels of simple application of knowledge
	in an answer and demonstrate and explain as needed by the questions. Not all
	questions require philosophising.
197	Roy - The contribution of training is to the characteristics of gifted students that
	cause difficulties and behaviour problems.

	For example, in a regular class the test was completed on time because they were focused, while in the gifted class there were difficulties because they were arguing about a question which did not seem to them to be "smart" enough and then they refuse to answer it because the question is "retarded" or they write scattered ideas at length in directions not needed for the question.
198	For example: I do not know how to write stylishly
199	I do not know how to start I cannot shorten itI cannot write any more, why do we need examples at all?
200	I think what to write and how to formulate my thoughtsand this takes all the exam time so there is not enough time to answer all the questions.
201	I wrote in detail only on the first question (out of 7) which took all the time there was and I did not have time for the rest.
202	They argue with everything and get angry and in the end the test results are poor.
203	Roy - The contribution of training – implementation of the model - actual improvement - I worked with them on two tracks according to the model, both on the development of high order thinking and also on the form of Analysing questions and writing answers in order to relate to all the characteristics I have seen. And it really works and there is also an improvement in the classroom atmosphere, in participation and in the results of written work and tests.
	Roy – The contribution of training - what you expect to happen later this year, according to your goals and your conclusions so far?
204	The next goal is to focus them on writing, in wording their answers as required and not to wander off the point.

205	It gets better with the teaching method. Analysing, focus and format.
	At the beginning of the last test we practised Analysing questions in class again and everyone did it and again I practised the answer template and only then they answered the questions. And they even did so with enthusiasm as someone in class said that it helps to answer more accurately and the mark will be higher. It is very important to them. They are very competitive about marks.
206	Roy - The contribution of training – the teacher's vision - I wanted, with the help of this test, to check where are the problems of wandering off the point and time distribution with the questions and to focus on the answers. And indeed, there was an improvement with everyone and also with the students who have difficulty writing.
207	Roy - I want to continue on this path and reach the end of the year with improvement in all areas and that students will report that it was interesting and this will be reflected in the marks and then I will feel I've done my job in the way I believe.
	Roy - Contribution of the training from the cognitive point of view — implementing the strategic models, diversifying teaching methods. Feelings - enthusiasm, satisfaction, hope.
208	Diversifying teaching methods - developing thinking.
	Classroom work will follow the Analysing Questions model, then working on a computer and in addition some investigative work — working in pairs, structured - 10 pages of text from which they need to take out the important points. There I will instruct them and each pair or students will present to the class in the way they choose. Thus, I can teach the subject in different ways and I think it will be interesting for me and for them.

209	Roy - The contribution of training – Mid-stage Interview – I enter classes of gifted students with a clear awareness that they are more in need of boundaries.
210	Roy - The contribution of training - the teacher's vision — I will be happy if at the end of the term the gifted class will manage to internalise the work process for large amounts of text.
211	My goal – since the education system is measured by tests – is that when we get there it will be clear to them on what to focus, not to argue about the questions, not to philosophise and to write correctly.
212	And when at the end, they will tell me: We enjoyed learning and we also learned how to learn - that is my goal and then I will know we have succeeded.
213	Roy - The contribution of the training – implementation of the model - I wish for myself that I will not lose interest in the process and will enjoy the subject. Not to become technical, but that I as a teacher will know how to combine and continue to interest them and at the same time also to implement the strategies.
214	I move between two extremities: super-interesting lessons that leave them at the end with shining eyes, but also not to lose the techniques, boundaries and strategies so they will know what to do and to succeed.
215	Diversity of methods, for example: the subject of the French revolution - start by asking questions – in order to bring out ideas.
216	Personal investigative work – on the subject of The Declaration of Human Rights - to bring out the main ideas.
217	Working in groups

218	Work on computers - personal investigation.
219	I expect them to keep to the time required in tests and to be focused.
220	To conduct myself more assertively, and I will set the limits while working on the ground.
221	To set limits to behaviour, the relationship and the way of talking to the teacher and to their friends.
222	To keep them focused in class, not to stray all the time from the subject.
223	During the lesson the teacher relates to the comments of the students, but sets limits.
224	Some of the students have already learned to wait with their comments saying it's not relevant to the lesson and it can wait. They have internalised the need to wait with things that are not relevant.
225	To be handled with greater understanding and patience.
226	I learned to be more familiar with the difficulties and to help them.
227	To help them focus on issues, on the essence and the insignificant.
228	The teacher allows comments yet knows how to prevent discussion about them.
229	The students have internalised the need to wait with things that are not relevant to the lesson.

230	I learned a lot this year following the course and personal instruction and classroom experiment. Even before I used all sorts of techniques but in a sporadic way, not systematically.
231	Roy - Today, I realise how important the strategies are and I knew this also before, but when it is built-in in an orderly fashion, I learn and work in a systematic and clear way and there are objectives and goals so I see now how important and significant this is for learning and I am learning myself how to do it but it's important that the material should be interesting, using different techniques and aids.
232	And my mission is that it will be interesting, together with the use of techniques.
	Rick - The contribution of training – Mid-stage Interview – Has there been a change? How do you see that a change has taken place? What change occurred?
233	This year a new teaching booklet was brought in which contains difficulties and problems and the techniques that we learned in the course provide an excellent solution and response for teaching the subjects in a better and more interesting way. It helped me a lot preparing lesson plans that fit me as a teacher who wants to teach in an interesting way that develops thinking and creativity and to feel that I am giving the correct response to my gifted students and also to those who have many difficulties
234	Rick - when I gave back the Bible exams after we had learned and practised the strategies, there was a significant improvement in the level of answers. Most of the students implemented it successfully; there are some for whom it is more difficult and the process is longer for them.
235	Rick - The contribution of training – improvement in achievements - the knowledge is better reflected in writing despite the difficulties, not just verbally during lessons as it used to be. Among these students there was an improvement of up to 20 points and they didn't need to submit a corrected test as they had to in the

	previous term. For example, they would forget to answer parts of the question and would skip the instructions and give very general answers. And they did not refer specifically to the question. During the second term, I taught and practised these strategies over and over again and at the beginning of each assignment in the classroom or exam and for homework I required them to analyse the question and only then to answer. Systematic implementation of the strategy has proved itself completely.
236	Rick - The contribution of training - success - even concerning the answer template. I taught how to relate correctly to the question and how to answer according to what is required for answers on Jewish Thought and the answers have greatly improved. All the gifted students improved very quickly and there are four who found it very difficult and it took them a few times until they improved. They corrected over and over again and the last test was really a huge improvement. They were pleased and I was pleased. And I'm sure it will encourage them to write better next time.
237	I learned in the course about the characteristics of gifted children such as being obsessive and argumentative. The way they deal with questions and answers comes from being argumentative and critical but they do not really answer the question because they write general answers. They are not focused on the question, and certainly not on the format of writing clearly. Not as is needed in my subject. And I got to realise that my insistence on the use of these strategies really helped them.
238	Another issue we learned in the course was learning from successes as opposed to learning from failures.
239	Even those who have trouble with learning disabilities - they are writing and learning to cope, but they also receive creative assignments that allow them to reflect their capabilities and positive experiences.

240	Rick - The contribution of the training - Additional benefits in adopting the new approach - I give the class investigative and creative work in all the study units so that it gives me time to teach strategies and gives them a stage to show their capabilities. This again raises the level of interest in my lesson and the motivation to do assignments that had escaped them. And also in the class there is an air of satisfaction and interest.
241	The training sharpened my writing lesson plans when I build them according to what we learned in the course on this topic.
242	For example: preparing a set of lessons on the four blessings according to the strategy of Asking questions.
244	"We analysed concepts related to the lesson into different components and then we put them in a new general definition of the subject".
245	The students responded enthusiastically and asked many questions and answered some of them using their prior knowledge and I could see the interest and curiosity. There was enthusiasm and joy. There were no disturbances and they didn't even ask to go to the toilet. They didn't even go out to break and continued the discussion around the questions. They said they want to learn like this all the time because it was interesting and they found out lots of new things and new perspectives they hadn't thought about. For some of them it connected to previous knowledge they had and gave them a way to use it. The students continued to engage in discussions around the questions that had been asked. They said that is how they want to learn all the time because they found it interesting. They found out a lot of new things.
246	They enthusiastically accepted the task to research and write about questions that we had not answered in class. And to seek new knowledge.

247	I was very excited and enthusiastic and I am continuing in this way to start lessons with new topics from the curriculum.
248	Next topic - prayer. From the general to the particular – I also began using the Asking questions method.
249	It's a subject that can create alienation because it's not from their personal worlds, but in this way by using the strategy of Asking questions so many diverse possibilities of thinking and perception were opened that they connected to it and became very interested. We connect to something every day. From their own world and in the philosophical sense. The contribution of training - cognitive - diverse teaching methods, implementing the AAA model.
250	Another thing I did following the course was to divide the study units into those for learning in class and those for studying on their own.
251	The students prepare work on some of the topics in the book. Then they present it in front of the class. It allows me time to teach strategies.
252	Rick - The contribution of training – diversity in methods of teaching - it is also in the content. For example, in Bible I gave them some creative work to prepare on Chapters 1-4 on Moses instead of learning it in class. Then they present the output in an exhibition and talk about it to the class. There was a diversity of presentational methods such as a presentation, newspaper, video, interview. The strategy is part of the lesson plan and shortens the processes as learning is focused and efficient
253	They were very pleased and invested a lot in the work and in presenting it and they asked to present it also in front of the other classes in the year and it was fascinating. On Parents' Day, there were several parents who approached me and enthused about their children's enthusiasm in preparing the work. One of the

	parents said: it is a long time since I saw my son so enthusiastic and putting so much work, even in Bible studies.
254	One of the things I learned in the course was to conceptualise the process we are going through in the class and to apply it with the students in order to develop metacognition.
255	I have always had a strong awareness and sensitivity to the needs of the students, but I take from the course particularly the ability to be more structured and to find a delicate balance between being without limits and setting limits. Even students have difficulty with this – they want freedom so that their creativity is not restricted but on the other hand they need frameworks in which they can express their abilities both creatively and academically.
256	Rick - the integration between the two types of capabilities helps them to excel and improve.
257	There is a good classroom atmosphere, because the lessons are interesting as a result of the fact that the topics the students raise are given an airing while I give up some of the knowledge that I want to give them and they get self-expression.
258	For example: they wanted me to be their psychologist so they could talk about social issues that interested them, and they linked it to the subject being taught "the individual and society" and about feminism, because it was of interest to the girls.
259	Rick - The contribution of training – the teacher's vision - I expect to continue in this way because it greatly improves the feeling I have as a teacher that I am developing and helping the students according to their needs. I hope at the end of the year to see a pleasant process of the students giving feedback that they enjoyed learning this way because it helped them to develop ways of thinking and of learning, and those who had difficulty in writing will continue the improvement I've seen so far and will be able to express themselves well.

260	Rick - I feel that it's more pleasant for me to teach this class. That they are finding it interesting and are willing to work and they know what is required of them. I leave with a smile and it seems to me that the students do so as well.
	Roy - The contribution of the training - What was new to you about the way of giving the lesson?
261	The fact that disability darkens things for the gifted students was a surprise and new to me.
262	I received from Rick, a form teacher in a class of gifted students, more information about the disabilities of his students.
263	I listened to the examples of gifted students with disabilities.
264	I was introduced to the expression "a hand-held fan of possibilities" concerning various ways of teaching and exams.
265	What was new to you about the way of giving the lesson?
266	In terms of content:
	1 - I learned the teaching strategies of Asking questions of Singer and Raphael, while understanding how the strategy develops and how to implement it in the classroom.
267	2 – I was presented with a new term: "transfer" and its meaning.
268	3 - I was introduced to two types of questions: for clarification and for conveying - I understood these types in a clearer way and at the conceptual level.

269	4 - I was introduced to the possibility of teaching in the "aquarium" way and the "reverse aquarium" way.
	Rick - What was new to you about the way of giving the lesson?
274	In terms of content: 1 - greater awareness of the option of numbering the question words.
275	2 – Dividing the analysis into "the question topic" and the "question words".
276	3 - Understanding that question words like "how?" and "what was?" always mean "explain how" and "explain what was".
	What was new to you about the lesson content?
277	New concepts I learned at the lesson: "infusion" which means, how to turn the above concepts into actual tools that can be used in the classroom. I also learned how to use a spectrogram regarding statements such as "learning from success" and "learning from failures".
278	What do you think you will take you to the classroom from the content and/or the way the meeting was conducted? I will take to the class all the new content I learned in the lesson and all the new concepts, and I hope to implement them already in the next term.
279	What do you think you will not take you to the classroom from the content and/or the way the meeting was conducted? There is no such content.

280	If you recently experienced success related to the change you made following this course, tell me please about the success in a few words. Yes, I experienced successes in everything connected to the use of reflection in the investigative work of the students in history. I use the word "transfer" quite a few times, and I paid attention to everything to do with "excitement" and awareness of how one gets excited and how intensely.
283	Roy - what do you think you will take you to the classroom from the content and/or the way the meeting was conducted? I think that the training significantly changed the way I build my lesson plans. For example, I will apply the strategy of Analysing a question when I build my lesson plans. Now I am aware of Asking questions, Transfer, Analysing the question and learning from success or failure, and I will have to consider them when I build the lesson plans.
285	Roy - The contribution of training – experience of implementation - if you recently experienced success related to the change you made following this course, tell me please about the success in a few words. Yes, I experienced successes in everything to do with "Asking questions" and "Analysing questions". I use Asking questions as an interesting and intriguing way of starting before each lesson, and Analysing questions for getting skills in learning subjects with lots of text.
286	Roy – I was helped a lot in the process, I learned a great deal and especially that it is important to have many more tools that I can use in the classroom to help me in interesting the students. Together with that, however, I learned that one should put a stress on nurturing learning skills.
287	In this process I learned that learning skills are very important. I really believe in teaching with the tools I learned and I see that on the ground it works.
288	For example: Analysing a question - students miss parts but with this they focus and can fully express their knowledge and ability in the classroom and their increasing achievements challenge them and result in learning from success and so later on learning becomes more meaningful for them.

289	From my personal perspective, I feel that I am a better teacher. I feel that I'm a more confident teacher and person. I walk more confidently into the classroom because I have clear and systematic tools. I come prepared to the lesson and do it much better because the training I received as part of the intervention programme helped me a lotand I go into each lesson with a great feelingand succeed in it.
	Contribution of the CPD Seminar to Teachers
290	Celebration of successes - We analysed a concept into its different components and then we joined them together in a new general definition of the subject.
291	Cognitive - implementing the model of developing thinking - analysis and synthesis.
292	The students responded enthusiastically and asked many questions and answered some of them using their prior knowledge and I could see the interest and curiosity. Everyone, absolutely everyone participated and voted and asked and answered and talked and there was enthusiasm and joy. There were no disturbances and they didn't even ask to go to the toilet. They didn't even go out to break and continued the discussion around the questions. They said they want to learn like this all the time because it was interesting and they found out lots of new things, including perspectives they hadn't thought about and for some of them it connected to previous knowledge they had and gave them a way to use it.
293	They enthusiastically accepted the task to investigate and write about the questions that we hadn't answered and to seek new knowledge.
294	I was very excited and enthusiastic and I continue in this to start new topics. From the general to the particular – I also started using the questions method.

295	It's a subject that can create alienation because it's not from their personal world, but in this way by using the strategy of Asking questions so many diverse possibilities of thinking and perception were opened that they connected to it and became very interested. We connect to something every day. From their own world and in the philosophical sense.
296	There is a cognitive contribution – the implementation of the development of thinking model and there is an affective contribution - feelings of satisfaction, interest, pleasure.
297	Rick - celebration of success - but after the second lesson they already opened their eyes and they became excited and everyone was looking for questions and definitions and answers and were having heated debates and brought examples from their lives and it was an interesting change.
298	I am pleased with the change which is what I was looking forward to and on that basis I will continue to conduct classes in order to develop their critical thinking and to give space for their great abilities in class and also to address the difficulties of those with learning disabilities in writing the answers so we can close the gap between their knowledge and ability and their achievements.
299	The experience of success is one of many that I have had so far in the class.
	Improvement in the ability to express themselves in writing and in giving answers in exams, improvement in understanding the requirements for handing in work compared to the beginning of the year.
300	They got a sense of proportion about what the format is, what the instructions are (Analysing). And the work they handed in is because of their capabilities, but also because of the demands – only one or two students didn't really manage it at first but after some practice they also greatly improved.

301	Improvement in writing and expression of their large amount of knowledge.
302	Concerning the Dual Exceptionalities there was an improvement this term in their writing and in the expression of the great knowledge they have. They are not failing (as they did in the past – in the first term before we worked on the strategies) because at that time they didn't understand the requirements and the scope and they found it difficult to express themselves properly in writing.
303	Currently there is an improvement except for one students, who failed in Bible and submitted corrections. He was surprised that he failed because he went into philosophy and analysis of ideas and completely ignored (not on purpose) the simple instructions and the formats required in the answer: to provide a basis, to emphasise, to explain.
304	The students skipped the instructions although we analysed the question at the beginning of the test and he was given help such as someone reading it to him and extra time, but he had emotional difficulty writing answers and giving examples that corresponded to the content. He received 50% - because he answered the sections on high-level comprehension and failed due to a lack of answers to the simple questions.
305	The other students improved their marks following the experience and explanation of the strategies and they were very pleased. I conceptualised the process that they went through, but it was difficult for them to accept that they had done something wrong before and now it suddenly works for them. I need to explain it to them.
306	There is a defensive and resistance posture and they think they are pleasing the teacher when they write their answers, but the experience of success encourages them. They have to give up and understand that it's not enough to write about brilliant and creative thoughts but instead need to give simple answers showing examples and the basics. This means both low order thinking and high order thinking.

307	A description of today's Bible lesson – a successful learning experience. I practised the question strategy in classwork: Explain and give examples using the text. There were three answers that the students wrote on the board as an example. Their content was good, but less good in terms of wording and expansion and of relating to analysis of the question.
308	A student wrote an exemplary answer and asked to write it on the board as an example and everyone discussed the answer which I used to explain the concept of constructive criticism to them, and they copied it for themselves as an example. The students could see clearly the difference between what they did and the format required. The successful students were not usually one of the prominent ones in the class and it gave her great reinforcement (success in dealing with the question). Students applauded at the end. I told them that everyone is learning how to write and this reduced the level of resistance from those who did not write well.
309	I expect to continue in this way because it greatly improves the feeling I have as a teacher that I am developing and helping the students according to their needs. I see they are succeeding and this encourages them to invest more in their studies. It also encourages me to continue to teach according to the methods I acquired because it works for me. I hope at the end of the year to see a pleasant process in which my students will report in their feedback that it was interesting for them to learn like this, that it helped them to develop lines of thought and ways of learning, and for those who had difficulty in writing to continue the improvement that I've seen so far and will be able to express themselves well.
310	I already feel that it's more pleasant for me to teach this class. They are finding it interesting and are willing to work and they know what is required of them. And I leave with a smile and it seemed that the students do so too.
311	Building the lesson plan - for example, I took each one of 6 definitions and built a lesson plan with asking questions and giving definitions from the knowledge of the students - and we made a transfer to the annual theme which is The Individual and Society and to the materials we had learned so far. It worked very well.

312	There was something that happened in these lessons. Students thought that we keep going back and learning the same thing because it's the same topic. They complained that they were bored. It was too easy for them. And in their opinion the subject could be exhausted in just one lesson and then I surprised them when I started going deeper into the same subject. We held dozens of discussions from different viewpoints (6 different definitions of the concept "blessing").
313	And it is also a variation in my teaching methods - not necessarily to learn different topics but to learn the same topic from different directions and in different ways. I'm very pleased with it and I find it very challenging and creative for me and my students.
314	The contribution of training to students according to Roy – the gifted students with learning disabilities were helped firstly by the level of focus and preparedness for how to get ready for the answers, not to wander off the point. There is an assignment and a way of carrying it out which will lead them to a high level of achievement and will improve their feeling and image and will enable them to learn better.
315	Learning from successes contributes to their enthusiasm, to their cooperation and develops their learning and behaviour in the classroom. They understand why detail and examples are important and not just general and philosophical arguments. In my subject this is very important, for example: in all questions, there are different requirement levels: bringing the argument, the explanation and the example. In the past they fled to general arguments and avoided the main point and did not get to explaining or giving an example. Learning from success contributes to their enthusiasm, to cooperation.
316	Of course, once they succeed they feel confident and their mood improves. Their level of argument became more focused and that helps them also verbally and orally, occasionally they take a rest from being argumentative for its own sake which characterises them and focus.

317	For the students with learning disabilities suddenly their achievements are rising and then their self-confidence goes up and they dare to participate more in class both verbally and in written tasks. They sleep, disturb and go out less. It really stands out in the lessons this half, and this is a result of the process we have been through.
	Rick's assessment - what do you think you will take with you to the classroom both of the content and/or the way the meeting was conducted?
318	The gifted students with learning disabilities are taking part in the process of implementing the AAA model.
319	The students were certainly helped during this project. I had the outline related to asking questions and investigation even before but this was very much upgraded in the framework of the course. And the structuring of it was more appropriate, as the students were also helped by the better balance between order and disorder, between lessons that developed thinking and regular frontal lessons. Limitations within the framework as opposed to the freedom of associative thinking.
320	Rick - I think my contribution was that I used different teaching methods that helped the students to show enthusiasm and interest. Also, the work on the writing strategies brought about a significant improvement and they were helped by this a lot. The work was more systematic and it helped me and them greatly.
321	Teaching that involves awareness, not just intuition or sensitivity to the Dual Exceptionalities of the gifted students.
322	The teaching methods that were presented bare a deeper awareness regarding giftedness and Dual Exceptionalities.
323	The teaching methods that were presented bare a deeper awareness regarding giftedness and Dual Exceptionalities.

324	Use of reference material and its application in the classroom, the way of giving over the lesson, reflection on my existing lesson plans for different subjects of study.
325	Implementation of the teaching methods + theoretical knowledge accumulated about "Dual Exceptionalities" and learning disabilities of gifted students, in order to upgrade the teaching and evaluation methods in class.
326	Rick – in the course I learned a new method - infusion. This is integration of learning content with various strategies and it was very effective in my lessons.
327	For example - a combination of teaching how to Analysing questions and learning from successes/failures.
328	For example, infusion of the strategy of asking questions, active learning, reflection.
	Roy's assessment - What do you think you will take with you to the classroom both of the content and/or the way the meeting was conducted?
329	

	programme there are also systematic constraints, cancellation of lessons and various events which were fixed in this half.
331	I was required to adjust the learning materials in the books according to the number of teaching hours and I also put in creative work which included writing and I made effective use of the skills I acquired at the course.
332	I gave them work to do on their own so that I would have time to teach the strategies.
333	These are difficulties that prevented continuation of work in the classroom and also more developed investigative work. Conversion of investigative work to personal creative work was effected by using techniques learned on the course.
334	Other difficulties are the balance in the lesson between learning skills and writing and Analysing questions as opposed to a creative lesson model such as asking questions/investigation - a very fine balance between part of the lesson of this and part of that.
335	In feedback from students we see that there are those who have problems with freedom in lessons using questioning and the development of creative and critical thinking, and there are those who have difficulty in learning the techniques of learning skills. All this creates resistance in class. I had to stop in order to do a mainly technical lesson devoid of creativity, or alternatively a lesson that is fully or partly more creative. And that's my difficulty - finding the right balance. My tendency is to be associative and break through the boundaries of frontal lessons and to diversify in creative directions, although sometimes I limit myself according to the requirements of time and programme in order to emphasise the learning of basic skills.
	Rick - Measures of Success
336	Sticking to objectives - enjoyment, interest, compliance with required curriculum.

337	Development of critical thinking.
338	Their ability to conceptualise improved: the ability to make an argument, to think "outside the box", not out of argumentativeness or rebellion but on a solid basis.
339	The students discuss the different arguments and from these make their own arguments, which is a process of analysing and synthesising the data collected and worked on. My work is to develop high order levels of thinking. I also try to develop lower levels of thinking, as they lack basic skills specifically at the lower levels.
340	And also on the emotional level, it is important to make clear to them that they need to build the basis so that they can use their high capabilities and improve their self-esteem. One needs to neutralise opposition which has to do with carrying out basic skills such as analysing a question, writing in a template.
341	Rick – a personal reflection of the teacher: For the students, it is difficult to put his abstract and fancy thoughts into the format of the answer. For example, a student, who performed a task in history and wrote two brilliant lines on the subject of the lesson in which he expressed his thoughts and personal opinion on the subject but did not address either the components of the question or the material being studied, received a low score. He was sure that what he wrote was the text of a genius
342	One need to know how to contain those feelings and the sense of failure that makes him feel "I'm different, they don't understand me".
343	For example, we watched the movie "Edward's Scissors" and we connected it to the concepts of "identity" and "the individual and society" which were two annual topics and I asked them who feels different? A large number of the students put up their hands, and talked about the traumas experienced from being different. For example, they were unusual in their elementary school, there they were different

	and were abused physically and emotionally. While those in a relatively uniform gifted class experienced a safe and supportive space.
	Evaluation of the CPD seminar
344	It would have been better to have had the training in smaller doses and not at such an intense pace. It would have been better to have done an hour's course throughout the year instead of several meetings packed into a long period. In this way, it would have been possible to make plans each week and receive closer guidance. This would allow more correct internalisation and integration.
345	Observations by the moderator which were spread out over the year, contributed to tailored and educated reflection contrary to the observations of the principle or the subject coordinator. Also from the point of view of the students the process is more correct when spread throughout the year.
346	In class we learned from the experiences of success, when we talked about their accomplishments at the beginning of the year, compared with their achievements after undergoing the process: the process of failure, correction of the test, academic success. This reduces the difficulty of their self-image and they cope better with their studies better, and motivates them to continue and to make progress.
347	For example, today there are students whose mark is 95 and would also like to improve on that because they realise they are able to and even the parents expressed surprise at their strong desire to progress and succeed.
348	The course, the consultation, the learning with colleagues in the course and the weekly support of the moderator of the course contribute very much to the process
349	My recommendation for the next course is to spread it throughout the year and to do more learning with peers about lesson plans. And make an interdisciplinary link between different subjects.

350	Recommendation - after training, each teacher should give a lesson to his colleagues while applying the skills and he will get feedback and improve.
351	The best thing about all that happened with the process of implementing the model was that it naturally became integrated with the content of my subject and there was no feeling that they were experimenting with us.
352	Development of critical thinking, conceptualising, preparing lesson plans with the help of the strategies contributes to improved teaching of writing and to upgrading of the existing study units in the book.
353	The course very much helped me to deal with two new textbooks this year and to build creative lesson plans. In particular, when one of the books was not available to the students (it was reported by all teachers to the subject coordinator). The course greatly helped me succeed in achieving all of my goals and - most important to me: to make the students fonder of the subject to foster critical thinking and to nurture writing skills.
	Roy - Achievement of objectives. Were the objectives achieved? Give examples.
354	It was very important to plan goals and to have a vision.
355	Learning with passion - I have accomplished this goal because that's my motto in teaching and the students love history and civics because I came with passion.
356	Teaching values connects with the subjects learned. It connects very well to current events. Christianity and Islam are connected to patience and tolerance. I add subjects to the lessons which are not in the programme, like the jihad, so that they will have knowledge of the world.

357	My challenge with gifted students is greater because in regular classes it works for me right away, but with them I always wonder if it will interest them because their emphasis is always on science and it's a bigger challenge to attract them. I go into them in a different way, with different thinking and planning. It is not self-evident that it will be just the gifted students who will like large amounts of text so I put more effort into it in order to interest them.
358	The study subject was into the Third Millennium - preparing research work using Google Earth. I chose the gifted students because I have a feeling that they will like it more and thus I will draw them into issues of the subject through technology. And it worked incredibly well (see research work through technology).
359	Learning skills was most important for gifted children with learning disabilities. It was a target within my visionbecause they are used to writing short, philosophical answers and everything else seems to them banal and obvious. They do not understand the need to provide detail, to give examples, to deal with all parts of the questionto focus on the main point which is hard for them. I see that I managed to pass on this skill to them. At the beginning of the year, their writing was all over the placeand if I check according to their achievements, their marks went up by twenty points or more after practicing the strategy of writing answers in a template.
360	According to the feedback from the students received in conversation and writing – about the way of learning, on analysing questions and writing answers, they understood and applied the skills. They thought that I insist on details but after it helped them to be more successful in recent tests everyone understood the advantage.
361	About asking questions, most of them did not see the benefit, did not understand why one should ask before learning the material, why ask questions which are not always related to the subject. It was a little confusing, and disturbed them that I am wasting time. They expected a frontal lesson.

362	But with some of them it arouses curiosity and provides a solution. In classes of gifted students that I taught they really liked it. Maybe it's related to the nature of the class.
363	Cooperation with other teachers for example in classical music from the period being studied in history. It was successful interdisciplinary cooperation.
364	Using technology was successful.
365	Imparting 5-6 skills - I provided these and it worked for me.
	Roy – Measures of Success
366	One measure: learning from success.
367	For example, in the last test – they applied the strategies of analysing the question and answering in a template, and it helped them to arrange, organise and focus. The important things and the unimportant. This succeeded very well and is proof.
368	A measure of success - the application of skills that have been learned. The students learned seriously and this greatly improved their marks, and consequently their feelings and enthusiasm. They seem to be very pleased that they have improved by 15-20 points and there are still more possibilities to improve because they have learned the way.
369	The output – The Google Projects - I think that by implementing and using it I am proving its success. This is a big step towards "Entering into the Third Millennium" and connecting to the world relevant to the students and to areas they like and are interested in through advanced technology.
370	We will finish the year by showing the output to all the teachers and parents and this proves success in this field.

371	Evaluation of the course - Roy – It was a small group - and that enabled very thorough training, personal support and allowed everyone to express themselves fully. The course should be for a few people and not for large groups.
372	The content was excellent. I think that next year I will continue to use and apply all that was learned because it has been internalised and has sunk in and so I feel it helped me.
373	The method of instruction was good - inclusive, clear and meeting the needs. The moderator did not pressure but guided and led. For me this created a desire to experiment, to learn and also to implement, because it was important to the moderator. Just as the students see the teacher coming to his subject with "passion", so too the moderator was enthusiastic and passionate and infected us with it and then I voluntarily cooperated and gave a lot.
374	I cannot think of anything that was superfluous in the course. The number of sessions was exactly and precisely correct for this year and there is no need to load on more. At every meeting, I learned something and it added up and completed the whole puzzle.
375	Improvement – there were observations and guidance but there is always a need for more. The additional observations have contributed as a reflection and feedback that helped me a lot. That is, support is always very essential, it's an important part of the course and of advancement.
376	It was always important to receive more feedback in order to learn and improve.
377	Roy - Difficulties in implementation – you don't think it went easily! Most of them argued with me all the time: what do we need it for, we know how to write and what do you mean to teach us to analyse and write correctly? This very much characterises them - this argumentativeness and arrogance and that they know very well how to do everything.

378	There are students who get confused by it and they require a more structured framework. I prepare a lesson about how all the seemingly irrelevant issues are
	connected to the subject of the lesson.
379	Rick - Difficulties in implementation - they realised that there is purpose in all the discussions around the topic. I work from my own personal inclinations. I am also
	associative and tend to wander to various interesting topics about which they have extensive knowledge.
380	They think I am also associative and tend to wander but then I put down limits for myself.
381	Descending in order to rise – then they received a shock when they received a relatively low mark in the test. They were frustrated and angry with me and slowly
	accepted the techniques but only after they managed to improve their marks were they pleased and enthusiastic.
382	Roy – teacher's transfer – yes, there was a transfer from the gifted class. It works well also in other classes I teach in addition to the gifted students. I implement the
	model and what I've learned in the course in all my classes and it works
	wonderfully. For example, the questioning strategy became a tool for introducing
	the subject of the lesson for the development of critical thinking and the children very much like it.
383	Teacher's transfer in implementation of the model in other classes. Cognitive,
	feelings of joy at the success, enthusiasm.
384	Rick – teacher's transfer - my lesson plans will in future be built according to the
	model that I learned at the course - to develop thinking and to answer in a template.
385	I base it on the course book but build new outlines according to what we learned.

386	One should avoid and put limits and not get carried away too much during the lesson according to the outlines of the lesson on asking questions.
387	I need to create a delicate balance between a structured, technical lesson and an open lesson in which there is a danger of losing direction. There are complaints from students that valuable time is being wasted. This is certainly related to the competition between them on achievement and marks. The same question is repeated all the time in the class: is this for a test? And if I say no then many of them lose interest and argue that it's a waste of time. This happens in other classes but it is more pronounced in the gifted class. They expect more from themselves.
388	I think this is what the education system transmits to them and they have internalised it. I am changing this perception in my way of teaching.
389	Rick – teacher's transfer - I expect to continue in this way because it greatly improves the feeling I have as a teacher that I am developing and helping the students according to their needs. I hope at the end of the year to see a pleasant process of the students giving feedback that they enjoyed learning this way because it helped them to develop ways of thinking and of learning, and those who had difficulty in writing will continue the improvement I've seen so far and will be able to express themselves well.
390	Rick - I feel that it's more pleasant for me to teach this class. That they are finding it interesting and are willing to work and they know what is required of them. I leave with a smile and it seems to me that the students do so as well.
391	Roy – teacher's transfer - this is called "transfer of the teacher" - categorically I use this in all of my classes. And the other classes are actually more excited because they are not critical, argumentative and cynical in the way that characterises the more gifted. And therefore, the regular classes are very much helped by the asking of questions, the analysing and the template, looking at the work through the model.

392	I use all the tools and it works wonderfully on the ground and also the students' achievements are rising.
393	The skills will help me all the way and that's perfectly clear from what I have said so far.
394	Rick – teacher's transfer – I use this process also in the other parallel classes, in classes of regular students.
395	Yes, the course was packed but over time I took away a lot of tools that I internalised and in the future, they became an organic part of the building and planning of study units and lesson plans.
396	Rick – students' transfer - And the students even told me that they asked the teacher of literature to use the strategies I teach in her lessons and they taught her how to do it and she came to ask me about the strategy and since then she teaches in the same way as I do and she says it proves itself in the achievements of the students in her literature class
397	Rick – students' transfer - change in the students.
398	Was this reflected in the behaviour of students in class? Definitely. They argued with me all the time about the method and strategy. Not everyone cooperated at the beginning. Some looked bored. "What? Again, about the blessings? We're tired of it. Exhausted". But in general, their argumentativeness and excess probing is very prominent. I know this is a prominent feature of the gifted and this makes it easier for me to deal with these reactions.
399	Rick – students' transfer - but after the second lesson their eyes had already opened and they were excited and everyone was looking for questions and answers and definitions and were having heated debates and brought examples from their lives and it was an interesting change.

400	I am pleased with the change which is what I was looking forward to and on that basis I will continue to conduct classes in order to develop their critical thinking and to give space for their great abilities in class and also to address the difficulties of those with learning disabilities in writing the answers so we can close the gap between their knowledge and ability and their achievements.
401	The atmosphere in the class - the integration of two types of skills helps them to excel.
402	But there is a good classroom atmosphere, because the lessons are interesting as a result of the fact that the topics the students raise are given an airing while I give up some of the knowledge that I want to give them and they get self-expression.
403	For example: they wanted me to be their psychologist so they could talk about social issues that interested them, and they linked it to the subject being taught "the individual and society" and about feminism, because it was of interest to the girls.

Appendix 3.15 – Questionnaires – Students' Feedbacks on the Implementation of Strategies in Class

Rick's class

- 1. Strategy of Asking Questions
- 1. I think this strategy should be used at the start of each subject.
- 2. The use of the strategy of asking questions was very nice and helped me to look at the subject from different directions through each question that was asked. It was also very convenient to use this strategy because one could link the questions to previous knowledge.
- 3. This strategy contributes to investigation and critical thinking. This strategy enables the class to look at the issue from the different viewpoints of the children in the class and opens up for us different possibilities of thinking. This strategy also shows us a little of children's previous knowledge and helps to expand on the subject.
- 4. I think the strategy of asking questions is an enjoyable method that allows use of prior knowledge, but this strategy takes up a lot of time answering the questions and then maybe we will be short of time for the material to be studied.
- 5. In my opinion, this strategy is very good, because the subject was thought about before learning. Great fun and very thorough, and then when the subject is being studied students already understand the subject better.
- 6. It is a nice method because it enables one to "think outside the box". This is critical thinking and it helps me in that it is not the standard educational framework and it helped me, for example, with different perspectives for using prior knowledge.
- 7. I think it really helped, and was also fun and an experience.
- 8. I think the strategy of asking questions is a good method. The teacher allows you to think about the topic, also to use your own brain and in addition to try to understand it. The disadvantage of the method is that because some people do not know about the topic they might relate to it as if it were a different subject.
- 9. I think the strategy of asking questions in the lesson is very good. It contributes to investigation of the matter, to critical thinking and brings us different perspectives. It is

also possible to use prior knowledge, which is special about this strategy (usually they want us to use only what we have learned). To summarise, this procedure is very nice and improves one's feelings during the lesson.

- 10. In my opinion the strategy of asking questions is very good and is fun and makes us learn and investigate the subject ourselves. It let me feel that this is not a lesson in which we learn and write, but one in which we learn and discuss the topic, to know what other people think and to know their opinions.
- 11. I think the lesson helped me focus the investigation of the question and understanding the topic on which we needed to focus in order to answer the question. In the lesson, I use my prior knowledge and my perspective.
- 12. I think the Asking questions strategy very much helps. With its help one can understand the subject better, and in that way, we also see the thoughts and understanding of the students without having learned about the subject. It helps more with understanding and is more fun than reading a text that explains what it is.
- 13. In this strategy I could not use prior knowledge because I had no prior knowledge of the lesson topics, which was a shame.
- 14. The questions are very enjoyable and it gives the possibility of critical thinking because you ask the questions.
- 15. This affected me in as far as it develops critical thinking and helped me to understand the subject from different directions and not just from the obvious and straight direction.
- 16. I think the strategy of asking questions in the lesson is very good. It contributes to investigation of the subject, contributes to critical thinking and brings us different perspectives. It is also possible to use prior knowledge, which is special about the strategy (usually they want us to use only what we have learned). To summarise, this procedure is very nice and improves one's feelings during the lesson.
- 17. This strategy helped me to provide details in writing the answer and was very nice and helped me focus on the question and the task it gives.

2. The Strategy of Analysing Questions

- 18. This strategy sorts the things out that you want to note down and then it's easier for me to answer the question properly. Like I said before nothing in these lessons is fun except for the lessons which have discussions and asking questions and then you can draw. It also helps with concentration.
- 19. I think this strategy helps us to focus on the answer.

3. The Strategy of Writing Answers in a Template

- 20. I think this strategy is extremely helpful for focusing on the question because first of all it helps to write a full and detailed answer, and helps focus on the wording of the question. And we really enjoyed the process of intensive writing (at least I really enjoyed it). What is certain is that I prefer answering orally and then I explain best. But my mark really improved since we learned this method. Really 20 points more than in the previous test.
- 21. It helps to answer in detail, to be focused. It does not help in enjoying writing.
- 22. It helps to answer more accurately.
- 23. We learn how not to stray from the topic, to focus and expand on it.
- 24. The strategy of Writing the answer in a template very much helps me to focus on the subject. And I managed to give detailed answers and got better marks, so it's good for me.
- 25. The strategy of Writing the answer in a template helped me in wording my thoughts and enabled me to enjoy writing the answer and not to miss anything.
- 26. The lesson contributed greatly to writing more detailed answers and to focusing on the important points in the question. With this method, I enjoy writing my answers in class.
- 27. It helps to write more neatly and not be messy and helps in organising thoughts.
- 28. It helps in tests by making order in the reply. It helps in wording much better on tests.

Roy's Class

1. Students' Feedback on the Strategy of Asking Questions

- 29. It was very helpful for learning and the process was fun and more interesting.
- 30. I think there should be one at the beginning of each new topic.
- 31. I wasn't in the lesson.
- 32. We should continue with this strategy because it helps develop critical thinking on the subject.
- 33. It delayed the duration of the lesson and digressed from the subject. It took too long.
- 34. I think it's interesting and suggests the need to let us ask about the topic and to connect with prior knowledge when you present a topic.
- 35. My suggestion would be to remember the questions and answer them during the year.
- 36. I wasn't present (I think) and I don't remember.
- 37. It was a serious waste of time and the questions were out of place.
- 38. It could have contributed but it lasted too long with about 20 minutes going over the same questions and stopped the lesson progressing.
- 39. I did not notice a significant change but the change in my mark indicates that there was an improvement.
- 40. It bothered me personally, in these first 10 minutes I lost concentration. I was bored.
- 41. A much more pleasant learning atmosphere.
- 42. It helps to organise the material and the information, helps to develop new topics and creates interesting learning.
- 43. In my opinion the strategy of asking questions is important to teach because it enables you to give a more specific answer on the study material.
- 44. This method is fun and interesting.
- 45. I feel that the three strategies together were integrated into the lesson in class to the point where I can see a change the way I am learning. If I compare to last year I can see a real difference. I think these three methods together contributed more than any one of them individually. I was also interested in the strategy of Asking questions and I think I've

put a lot of thought and knowledge into it and my achievements in the last test really improved because I used the strategies.

- 46. The strategy of Asking questions introduced a different and new method of learning but I didn't feel it helped a great deal.
- 47. I really enjoyed this kind of learning it is active and thought-provoking and helped me.

2. The Strategy of Analysing Questions

- 48. Marking parts of the question helps us to write answers without leaving out details and this seems to me important.
- 49. To continue to do these things in tests helps us not to forget parts of the question.
- 50. It's an excellent idea and there's no doubt I'll use it in all subjects that I will learn and for tests in general.
- 51. It helped me a lot in understanding the question ... in understanding all parts of the question.
- 52. The treatment of the subject was excessive, but it helped me to focus during the test.
- 53. An excellent strategy that helped to separate the main point from the less important.
- 54. It contributed and helped avoid skipping parts in the answer.
- 55. It helped a bit. It helped in understanding what he wants us to answer and what is not needed.
- 56. Analysing the question helped me a lot in understanding it and gave me a feeling of success in understanding the question.
- 57. It helps to bring the material together.
- 58. In my opinion the strategy of Analysing the question is an important strategy to save time.
- 59. The strategies of Analysing the question and writing the answer helped me a lot in the test. I felt I knew what to do and it gave me a good feeling.

- 60. The strategy helped me to understand the question better.
- 61. It helped me, though I had prior knowledge in how to analyse a question.

3. The Strategy of Writing Answers in a Template

- 62. It helped me a lot, I feel there is an improvement and I can transfer this to other subjects.
- 63. I think the template is unnecessary and prevents me from having enjoyment and creativity when answering the question, although I understand that you want to get an answer of this type so I understand why you are forcing us to write like this.
- 64. The method makes the possibility of each one to use his writing in the way he is used a little bit harder.
- 65. Keep it up!
- 66. I think that the whole process helps us focus and learn from past mistakes. Continue the process, including this!
- 67. The answer came out well worded and eloquent.
- 68. It always helped in the past, the lessons on the subject were slow and therefore did not reach the goal in the best way but it still helped.
- 69. The template makes writing easier.
- 70. The new learning method and the transmission of information by the teacher gave me a feeling of success, self-fulfilment and achievement. Certainly, it is much better than anything I've been exposed to it until now.
- 71. I do not like the system but I think the template really helps to focus on the main points.
- 72. I think the strategy of writing an answer in a template is important in order to write a more understandable answer.
- 73. The strategy very much helps in improving achievements but I feel a bit like a robot.
- 74. The strategy was familiar to me but it certainly helps.
- 75. I didn't enjoy the uniform template so much, but this method is very focused perhaps too focused.

Appendix 3.16 - Transcript of Post-Interviews with the Teachers, January 2013

Post-Interviews with Rick, Examples 1-19

Rick - 1 - Lack of relevant knowledge in the field - I learned strategies that are suitable for both gifted students and those with learning disabilities, which are not significant, not "highlights" and fireworks. They never learned about Dual Exceptionalities, and did not receive any training on strategies in this area.

Rick - 2 - Contribution of the intervention in the long-term – the strategies work very well for me in both the class for gifted students and in other classes and also in the current school year, I take with me what I learned and am implementing it in the field.

Rick - 3 - Enabling factors in teaching – teachers' transfer – the learning and the application of the conceptualisation of abstract ideas – for nurturing high learning talents or planning the lesson structure and lesson plans, even if I learned to formulate a particular arrangement for the class of gifted students they were good also for the other classes.

Rick - 4 - Contribution of the intervention programme – the intervention programme helped me deepen my awareness of the matter and to implement my vision more easily at the level of educational planning for teaching and also at the level of providing guidance for the needs of students with Dual Exceptionalities that are related to learning disabilities and their emotional needs. Even before I had a position and understanding, but the programme and the course deepened the awareness in practice to enable me to design a curriculum that is not rigid, and I managed to build and customise a special programme that fits their needs. The model of the strategies that was taught during the course did not fix the curriculum, but opened it and enabled it to be adapted to their cognitive needs.

Rick - 5 - Contribution of the intervention - for sure I use the curriculum learned in the training programme last year, and even more effectively, because I am more experienced now. I learned whilst teaching what did not work and I especially learned from successes. I learned to use a variety of teaching methods, using the strategies, individual projects, and investigative work. The lessons are more efficient because of learning and experience. It was not a one-off,

but was internalised as part of my teaching. I managed to integrate the training content. Integrating the training is an organic part of the curriculum.

Rick - 6 - Contribution of the intervention in the long-term - learning from successes - teaching with the help of the strategy of Asking questions that I learned in the framework of the training in the intervention programme last year, serves me all the time. This year also I am teaching with the help of this strategy and I see that it causes the students to leap forward in their way of thinking, in their achievements and in developing awareness of different ways of learning that enable the students to experience success and create a love of the discipline, History, that I teach them.

Rick - 7 – An enabling factor – enjoyment of the lesson - the students in the gifted class like the course of the lesson which integrates the use of the Asking questions strategy and they find enjoyment in the lesson especially from the way of teaching, even if the students do not always connect with or like the particular content of the lesson topic. They are involved and show interest and go and investigate and develop the issues which arose in the lesson out of interest and personal initiative.

Rick - 8 - Factors that inhibit the teachers teaching – the inhibiting component – the dimension given to us as teachers are the very limited means of evaluation. For example: all are tested by the same tests as required for the subject, instead of learning through investigative work etc. and it highlights the inhibiting difficulties: there is no place given to their strengths, and this highlights the difficulties of these children. All the projects: research, teamwork, discussions, etc. count for a small percentage, and the race for the matriculation examinations requires dry learning according to the book, and this is an inhibiting factor. It limits me in an inhibiting framework that does not enable learning by the use of the Asking questions strategy which enables significant and true learning as I know and am sure that it should be taught.

Rick - 9 - Enabling factors in teaching – teachers' transfer - learning by the strategy of Asking questions continues to be a very effective tool and allows diverse and enriching learning. Now that the students are skilled in using this strategy I can ask the students to explore a topic in a text taken from the History or Bible curriculum, to check it from different angles and to create new definitions and interpretations of their own. And then they can use the two other strategies I taught, Analysing questions and Writing an answer to do their work and answer the questions at a level that reflects their knowledge and capability. And it works very well. Students both enjoy it and develop and in addition get good marks. It strengthens them. For example, part of the output of the students' activities, who studied together in learning teams, was the writing of a glossary. In this dictionary, the students defined by themselves the concepts that they had investigated in class. You could see the diversity and enrichment of the students for example when they made five new definitions of a particular concept (eg. the concept of "guilt" which was a key concept in the text that they studied in class) from their personal world and experiences. The students analysed the concepts and definitions in teamwork and then presented them to the entire class.

Rick - 10 - Diversity of teaching methods - a cognitive enabling factor - the students' body of knowledge is acquired as a result of the students and their peers discussing and brainstorming during class when it is done on the basis of the text in the course book. Following the strategy of Asking questions which stimulates thinking and interest, the students produce new knowledge. After the text has been analysed and worked on they go through the process of finding insights and drawing conclusions. The lesson was constructed in a multi-disciplinary form and integrated different levels of thinking ranging from interpretation and understanding of familiar concepts to finding insights and drawing conclusions that led to further thinking on the subject, creating new perspectives.

Rick - 11 - Diversity of teaching methods - Non-frontal teaching: the lesson is divided into parts that only students did and they built the lesson. The result in class was 80% participation and 100% attention, because it was important for everyone to be a partner in creating definitions for concepts and to contribute.

Rick - 12 - Characteristics of gifted students – the negative competitiveness that characterises a class of gifted students, criticism, etc., was greatly reduced, and there was a

common interest and the argument was productive and came from real curiosity. A lesson like this enriches and gives a stage for their high abilities and ends in expression, which is the development of capabilities despite the difficulties.

Rick - 13 – using the strategy of Asking questions as an example of success even after a year - using the strategy of Asking questions while using a diversity of teaching methods. I started a new topic using a picture with a message that was connected to the subject and the students asked questions and answered using their prior world knowledge, and expressed great curiosity. To give you the idea: For example: a child, a log that was uncarved but in the end is carved. I used the techniques that we learned and the model of the strategies to enable them to decipher the picture independently by asking questions and writing a title. For the first half hour there was excitement and creativity from the ability to decipher the picture, which was to give a creative interpretation, a programme for the picture.

Rick - 14 - Characteristics of students – in classes of gifted students the discussion always becomes more philosophical. For example, in a history lesson with a class of gifted students there was philosophical thinking about education and the rebellion, the conservative education framework and resistance to it (The Wall-Pink Floyd) Every reference was at the level of philosophical discussion. I see an interesting gap between regular classes and classes of gifted students (both of which I teach). In the gifted class the level of discussion is very high giving expression to very extensive world knowledge. Yet it is interesting how it is possible to work with a similar picture in different classes and certainly with different age groups. This is an excellent tool which is good for all ages and types of students.

Rick - 15 - Characteristics of students - the gap among gifted students as an inhibiting factor - you discover a talented class, but with a huge gap between classroom discussions and its application in writing.

Rick - 16 – The experience of success -. These two strategies – analysing a question and writing - have become part of the lesson plans and they create an experience of success. One example of learning from success is the reaction of a mother of one of the students, a bright student but whose writing is clumsy and who does not manage to reach the standard required for an answer, when asked if she agreed with the teacher's comments about her answers to the test and the very low mark the students received, while in the class she is considered to be

knowledgeable and to have excellent verbal abilities. The students found it difficult to write and elaborate her answer, to discern what was important and what was irrelevant, to build an answer according to the structure required. In class I practised the two strategies with them.

Rick - 17 – the contribution of the 2 strategies, Analysing and writing over the long-term

– We practised on the board the structure of the answer required – an opening, the body, a summary. It improved the writing of all the students and their achievements. The mother requested that the strategies should be practised and internalised in the lessons in order to improve their writing, and so I gave them practice in the lessons and for homework, and the students began to improve her writing, went up to 70 and then reached a mark of 90 on the last test. The mother was happy that her daughter experienced success as a result of this learning. One can see the improvement also in her happy participation in class.

Rick - 18 - Characteristics of the students - the dynamics of the competition in the class is very problematic: the students have very high levels of thinking and knowledge, the students feels competent and smart, and then the results are poor and degrading, and it's hard for them to deal emotionally with the fact that their results are not brilliant and amasing especially in comparison with the gifted students who do not have learning disabilities and whose results are brilliant. This causes a decline in their motivation and confidence.

Rick - 19 – The effect of change at the organisational level - the other teachers who teach the classes of gifted students see and hear about the various methods and implementation of the AAA model and are asking questions about it. The students themselves are requesting the teachers to relate to my teaching methods, and so there is implementation of part of the strategies in the lessons of other teachers in the organisation and the development of awareness in this field.

Post-Interviews with Roy, Examples 1-14

Roy 1 - Contribution of the programme - Cognitive – The intervention programme contributed to a change in my perception of my role as a teacher of gifted students with

learning disabilities - unequivocally. I think this is long term with a class of gifted students that I am teaching for the third year. Today I gave back a test and I organised feedback, and I talked to them about the process we went through, and we see how the strategies helped them. In the feedback discussion I asked them if they used skills to prepare for the test, and they said yes, and the achievements are high and better. The marks of the gifted students were always lower than the other regular classes I teach, but this year there is great success. The change in me found expression in class 7/2 (a new class of gifted students). I started this year with all the skills, and we see already its contribution and the cognitive help it gives to students.

Roy 2 - Contribution of the programme - Cognitive – the programme contributed to me a lot of knowledge – the fact that I understand better how their brain works, and I adjust myself, and to know where to put the emphases in order to make a programme suitable for them such as History, a subject with lots of text, so that it will benefit them. About learning skills, I know it is critical for them and I'm not giving up on the use of strategies.

Roy - 3 - Contribution of the programme - Affective – there was a change in awareness and attitudes - yes. I understand more of their emotional difficulties, which in the past I did not really understand, and today I am aware of this even when they are misbehaving or other situations in the lesson and I relate to it accordingly. And this I learned at the intervention programme.

Roy -4 - An affective contribution — Diversifying my teaching methods helped me a lot in my motivation to teach the class of gifted students. Also from the viewpoint of the students it became more interesting. In the lessons, I use the strategies I learned at the teacher training at the start of the intervention. The gifted students are very enthusiastic about active learning and they have a great platform for proving and developing their high abilities and the extensive knowledge of the world that they have. They have become involved learners. Both I and the students benefit from it and I enjoy it.

Roy -5 – An affective contribution - They did not complain about the homework, but were very enthusiastic and really competed about who will submit the answers to the questions at the next lesson. It very much excited and intrigued them, and resulted in them doing their homework and presenting it in class.

Roy - 6 - Transfer – the organisational aspect – The other teachers who came into the classroom liked this matter very much and requested that I should share with them the way I teach.

Roy - 7 – It enables teaching – it is an example of an enabling factor in the programme for the teacher - all the components of the intervention are enabling factors, there's nothing inhibiting in it. The strategies only enable me.

Roy -8 - Transfer and the organisational aspect -. I share my way of teaching with colleagues - teachers who teach parallel classes to mine, and teach them what I acquired at the course - the strategies. I'm not sure to what level they have implemented these in the class as this has not yet officially found its place at the school. Teachers see how I teach, are interested, and take some of the methods for their own use.

Roy - 9 – A cognitive contribution - the contribution of the training and the intervention programme from the personal and professional aspect - I feel it's part of the construction process of myself as a teacher. For example, the emphasis I put on learning skills in the classes I teach in a structured and systematic way, rather than spontaneously and "from the hip".

Roy - 10 – A cognitive contribution - Following the training and support of the researcher I now know how to organise, prepare and build lesson plans and to integrate the strategies within them in a much more efficient and good way. It changed a lot of things in me, for example I learned that it is better not to teach another chapter of the learning materials using the frontal method, and to divide the hours so that there will be time for teaching the strategies. It acts as a basis for the rest of the learning, for example: preparation for a test. Instead of teaching frontally and then preparing a test as I used to do, I learned to activate the gifted students in active learning so that they prepare the subject with personal or team research work and the students themselves will organise the learning materials and write the test questions. I allowed them to create the learning instead of going over the material and wasting lessons.

Roy - 11 – An affective contribution. As far as my passion as a teacher in a class of gifted students, the intervention programme added to the variety of ways of learning and caused both

me as a teacher and also my students to be excited and to become engaged and partners in the learning process.

Roy - 12 - enabling teaching and learning - the contribution of the Asking questions strategy as an enabler of learning for the students - asking questions taught them that they can learn on their own without waiting for the teacher to give them the answers. They can investigate, check and learn, and teach others, and I'm glad I taught that and that they learned it.

Roy -13 - contribution to the affective aspect to the teacher and the students - the success of the students – that they continue to enjoy History, and that their achievements are high, and the lessons are of interest to them and then both they and I are happy. I see that students do not miss out questions: they answer all parts of the question, give details, test themselves using the strategies that they learned and then they are more satisfied and the results are better. This virtuous cycle creates enthusiasm and enjoyment of learning.

Roy – **14** – the intervention programme contributed to a change in the perception of my role as teacher of a class of gifted 2ELs. The programme contributed to my knowledge, the fact that I understand better how their brain works, and I adjust myself, for example where to put the emphases in the learning materials in order to make a curriculum suitable for them. There was a change in my awareness and attitudes. I understand their emotional difficulties better, which in the past I did not really understand.

Appendix 3.17 - Transcription of Observations in Classes of 2ELs - March 2012

Please note: The names of the students are denoted by a letter with a number added in cases where there are more than one students whose name begins with the same letter.

30 stud A lesso	Observation in a History lesson - teacher: Roy. 19.3.2012 30 students in the class, two were ill. A lesson of 90 minutes. Observation no.2 The outsider observer: Or – a student	
1	The teacher introduces the subject of the lesson and the use of the model of the strategies already taught in previous lessons.	
2	The teacher: the strategy of asking questions opens the door for personal expression and develops critical thinking. The other strategies help in writing detailed answers.	
	The subject lesson today - the French Revolution - This is a continuation from the previous lesson. The teacher asks the students to describe what they learned in the last lesson.	
3	O1. Describes what they learned in class at the previous lesson. The teacher directs the lesson using discussion with students: questions and answers about what they learned.	
	The observer: the teacher allows discussion, questions and answers on the subject of the lesson.	
4	The teacher returns to the students the work they submitted. The teacher points out that the work was very good and he was happy that the students were helped by the strategies they learned. The students are pleased. First they check the scores and compete among themselves, but also the comments that the teacher wrote are important to them. The students read the comments from the teacher to each other: you worked hard, you focused, you gave details.	

5	The teacher: the subject of the lesson is the meaning of the concept of freedom (according to the principles of the French Revolution). The teacher asks various types of questions: (integrating the model of the strategies for developing critical thinking) Clarification Questions: what is the meaning of the definition? Where is the emphasis? What are the principles? And after some discussion the teacher asks
	Challenging Questions: the teacher gives examples of different situations and asks how the principle works in different situations. The teacher explains the different types of questions to the students and what the purpose is of each type of question. The observer: the teacher is pleasant but assertive, authoritative, directs the discussion in a culture of debate and allows expression of different opinions (development of critical thinking).
6	To sum up the discussion on the concept of freedom, the teacher asks the students to summarise the subject in their notebooks. O1. refuses to write and says: Freedom is not anarchy. Freedom is always within the law. The teacher asks him to write and explain the issue in a detailed answer. O1. asks to go to the toilet and claims he will write later but in his opinion it is unnecessary as he knows the material.
7	The teacher asks them to read the answers and allows differences of opinion and discussion.
8	N1. Expresses her opinion and argues with students who disagree with her. A discussion on the concept of anarchy follows. O1. returns to the class and argues. The teacher allows this but stops it after a few minutes and continues with the lesson plan. The observer – the lesson is planned but the teacher allows questions and comments.
9	The next concept: the right to property: B. reads a definition from the book. The teacher asks clarification questions about the definition and requests examples. The observer: many students participate.

10	The teacher asks: What is your opinion about the interpretation of the concepts in the book? A discussion followed and all the students participated.
11	The teacher: Let us build a new perception and understanding of the concepts taught in the lesson and we'll develop a new concept that we understand from all the concepts.
12	L1. Expresses an opinion. N1. argues with her. They do not agree. N2. disturbs and wants to interrupt. The teacher calms thing down authoritatively, approaches him and asks him to take part in a proper manner. M1. does not listen. The teacher remarks on this to him. The observer - the teacher encourages discussion in order to ascertain different positions and to expand the topic.
13	The Observer: Many students indicate that the lesson topic and the asking of questions arouse great interest.
14	The teacher stops and explains that later in the lesson there will be an opportunity to develop the discussion.
15	The teacher: let us discuss the law of equality in France after seeing a picture from the French Revolution (the picture shows there is no equality for women). This generates a heated debate. Students interpret the picture. The observer – the teacher allows openness, the atmosphere in the classroom is pleasant, the discussion is calm and the arguments are neither aggressive nor cynical. There is a positive attitude to each other.

16	The classroom discussion continues. Students give examples from different countries about inequality, and various explanations about the development of equality for women. M2. Brings examples from subjects she learned last year and compares these with recent examples concerning women's equality. Many students wish to join in the conversation and share their extensive knowledge on this subject. M1. Constantly makes cynical comments to all those who speak with negative and insulting criticism and stimulates anger and strong reactions from his friends.
17	M2. Continues with her arguments, connecting knowledge she has with the subject being discussed. R1. adds examples from the Bible. H. adds examples from the world of religion and claims that women themselves perpetuate inequality. The observer - the teacher allows, reinforces and compliments. The teacher praises the "transfer" from one domain to another made now by the girls.
18	The teacher: I am returning to you now the work on the Declaration of Human Rights in the French Revolution. I'm very proud of you for the good work you have prepared. I saw that most of you referred to the instructions and strategies that I taught about writing and your marks went up by at least 20 points.
19	The teacher: Some of the students "fled" to making general and philosophical comments rather than focusing on the required format, in other words writing about the main points rather than the trivial ones, explaining and giving examples and therefore their marks were lower but this can be corrected and improved.
20	The teacher: the majority have greatly improved and have achieved great results and I was pleased and proud. I asked you to write answers that give expression both to your knowledge and your opinion on the subject and that used the strategies in order to write the correct answer. Most of you did it well.

21	The teacher gives out the work he has checked to each student together with an expression of encouragement: well done, terrific, great, wonderful.
22	One of the students got back his work with a mediocre mark, crumpled and threw it and left crying. The observer: the teacher did not give up and asked his friends to bring him back, sat down and explained to him how to correct and improve it so that the mark will improve accordingly.
23	The teacher came to O1. and told him that his writing is general, very short, with no introduction and no examples. O1. was angry and claimed that it is difficult for him to write as the teacher requires.
24	The teacher comments to R2. that the ideas he explained verbally were excellent but it's not enough because he needs to write them down and answer questions that deal with the subject of the lesson. The students said he prefers explaining verbally because it's hard for him to describe so much in writing and anyway, why is it necessary to write all this? The bell rings to end the lesson. The teacher sits and talks with R2. during the break.
	Observation in a Bible lesson - teacher: Rick. 20.3.2012
	25 students in the class, two were ill.
	A lesson of 90 minutes. Observation no.2
	The observer: Or – a student
25	Observer – the class is calm, ready for the lesson.
	The teacher: Today we will continue to study the subject of the blessing which was
	also the central theme in the previous lesson.
	The teacher: Are there any questions or comments on the subject particularly about
	the command of the rabbis - "If we don't bless we won't enjoy"?
	A1. – Does the blessing prevent true pleasure?
	O2 Is the purpose of a blessing to cause other people pleasure?

good luck, be healthy? The teacher: Is it related to human behaviour that a person must get a commod bless before he enjoys? Must one bless or not? Many students indicate a request to participate in the discussion. The discussional lasted 10 minutes. The teacher halts the discussion and writes an assignment on the board: an	
bless before he enjoys? Must one bless or not? Many students indicate a request to participate in the discussion. The discussion lasted 10 minutes.	
Many students indicate a request to participate in the discussion. The discussion lasted 10 minutes.	ssion
lasted 10 minutes.	ssion
26 The teacher halts the discussion and writes an assignment on the board: an	
The teacher harts the discussion and writes an assignment on the sound, an	
association game - make a list of associations that connect to creative conce	epts,
framework and laws.	
27 Many students respond: lovely, fun, I like it.	
The observer: there are enthusiastic responses. The students enjoy the diver	rsity of
teaching methods in the lesson.	
28 I I didn't understand the assignment. L2 asks the teacher to clarify the	
instructions.	
Teacher: You should write a chain of associations with concepts without m	ıuch
thinking. Associations are words that come up automatically in connection concepts.	with the
O3. And N3. are laughing, busy chatting.	
M3. Is not writing. He looks around and laughs. When he gets no response,	. he puts
his head on the table.	, p
M4. – How many words to write?	
The teacher: as many as possible.	
O2. – are four associations enough for each idea?	
The teacher: as many as you like. The teacher turns around and encourages	s writing.
The teacher then puts on the board another writing assignment that requires	_
answer to be written according to an answer template (which they learned i	
lessons) for one of the concepts.	pro (10 0 0
1555015) 151 513 50 155 pt.	
(During the written assignment in the lesson, examples arose of difficulties	s that
characterise the gifted students in the class who have disabilities): N2. – I s	still
haven't figured out what to write. A few minutes passed and he still did not	t start to

	write.
	O3. Is not writing, but is talking with others and scribbling in his notebook.
	N2. again asks what he should do. What should he write? And he starts saying orally
	what he thought about the concepts.
	The teacher asks students to stop writing and go back to the plenum.
	Students put up their hands.
	A2. reads her answer. Some students immediately jump in with critical and cynical
	remarks about the associations she made.
	The teacher asks them to refrain from these negative reactions and to allow everyone
	to express themselves.
	L2. is disturbing. The teacher silences him.
	N1. I want to add something interesting to the concepts. May I? The teacher allows
	her to add what she wants and then asks everyone: let's read together and explain.
30	The students who didn't write do not participate in reading the answers. One asks to
	leave the room, a second lies on the table, a third sorts out his bag.
	N3. explains orally in detail and clearly. The teacher asks: Did you write this?
	N3. replies: I wrote only one sentence, but I can explain orally.
	The teacher reflects: It is important to learn also how to answer in writing. That's
	why I taught you to use the strategy of answering in a template. It helps to answer the
	questions as required. I ask you to write a detailed answer using the template and not
	to rely only on your ability to answer orally.
	Also N2. wrote two lines, but explained in detail verbally. T. does the same. The
	teacher turns also to them and again explains the importance of writing.
31	The observer: The teacher allows students to experience different opinions and this
	creates discussion on the subject of the blessing.
32	The teacher stops and asks them to continue reading the words they wrote.
	D I built a chain of associations. Voices heard in the class: also, me, also me.

33	The teacher reflects: you are doing transfer – from the principles of the Bible to our daily lives. S1., N1. read the answers they wrote. They wrote briefly, but prefer to develop the subject orally. N3. opens the discussion orally and brings more examples from life about an argument between the two rabbis. In his opinion the rules and laws of the Torah create uniformity. This is a format that enables life to be easier for human beings. T. adds that also in a law court there are clear rules about punishments. R2. gives examples from football.
34	N1. the story of "The boy whistling instead of praying" that we learned in a literature class is connected with the subject. Can you explain it? The teacher – agrees with a smile R2., N3. argues that there is no connection. N1 wait and see that there is. The observer: The teacher allows her to explain. The teacher compliments her on the connection (transfer) she made and asks her to tell the story again to those who have forgotten.
35	The teacher: We talked about the framework and template and the opinions of various rabbis. Who of you support the opinion of Rabbi Yossi about the framework and template? M3. immediately puts his hand up. For me the format and framework is suitable. One doesn't have to be creative all the time. The observer: The teacher encourages: reinforcements from the teacher for a new perspective. It seems that it triggers other students to put their hands up and express themselves.
36	The observer: Everyone wants to participate. There is enthusiasm and interest. The teacher asks them to listen - he explains that the assumption which underpins the associations exercise is that without giving an opinion it makes it clear what we think about concepts.
37	The teacher: I want to show you how the associations exercise on concepts is connected to the concept of "blessing" that we learned in the previous lesson.

The teacher: Read again the definitions on the subject of the blessing and look for similarities between the definitions and the concept of "blessing".

Write your answer using the answer template that we learned.

N3. Immediately answers orally: the concepts of order, limitations, framework were also in the definitions.

A3. interrupts - about the concept of creativity there is nothing in the definitions.

The teacher: I asked you to write now.

The teacher: Let's find a connection between the text about the debate between the rabbis and the main topic of the blessings. In this way, we develop our thinking, analyse, pull apart and put together again and suggest a new understanding.

The teacher continues to ask searching questions about creativity as opposed to rules, and gives examples from daily life about it.

The observer: this is generating a heated debate in the classroom and real-life examples.

N2., N3., O2. and A4. quote from songs they learned in literature lessons.

The teacher comments that they made a transfer and that is wonderful.

The teacher: Can I say exactly what I think at any given moment to anyone, especially if it is unpleasant for him?

The observer: more heated reactions.

N1. gives an example from comics on the subject of the blessing...and connects it to the words of the rabbis in the text. And she offers her own conclusion.

The observer: the students are enthusiastic about the conclusion and example.

The teacher shows that N1. took different materials from each of the principles and connected them to a principle of her own on the subject with an example which is an excellent way of thinking.

The teacher asks them to do the written assignment.

N2. chats and asks to go out.

N3. doesn't write and puts his head on the table.

The teacher asks him what would help him to write. N3. answers: help from the teacher. The teacher asks him what he means. And N3. asks the teacher to explain to him again how to analyse a question and how to write an answer in "this template". The teacher sits with him a few minutes and N3. begins to write.

M4. complains that it's difficult for him to write and he prefers the lessons that have discussion and conversation. He prefers the lessons in which questions are asked but without the need for writing after that. The teacher told him he has to explain more and not just give examples. So, for example in the question on the subject "social isolation" he has to write the definition and explanation and to add examples only after that. The teacher sits next to him while he writes the answer and assures him that in this way he will improve his writing.

41 The teacher turns around and explains to students individually.

S2. argues: These questions - it's really retarded. The questions are retarded and I don't want to answer them. The questions are stupid and not interesting. It bores me to answer them. I prefer a discussion on the subject. Some other students agree with him. The teacher explains very patiently that they should stop arguing with the questions at this stage of the lesson because these are the questions that will be in the matriculation exams. The argument continues and some students refuse to write and continue talking.

The teacher does not give up and insists that they write. R3. and A3. are chatting and not writing. They make faces at N2. and distract him so he also did not write. R2. and I. are not writing and pass the time chatting. Some of them ask all the time to go out to drink or to the toilet. The teacher does not allow them to and asks them first to write answers to the question he gave them.

N3. explains the answers verbally to his friends and continues bringing real-life examples. But he avoids writing his answers in the notebook as required by the teacher.

After 10 minutes, the teacher asks the students to read out their answers. N3. explains his opinion orally. He did write a short answer but wants to elaborate orally. He is very enthusiastic, giving real-life examples of principles in the text.

The teacher conceptualises to N3. and to the class that he made a transfer of the concept from the Bible into other areas of daily life and in this way expanded understanding of the concept.

43	N1 the subject of the lesson fits together for me with the concept of blessing - creativity, personal expression. A3. interrupts and argues and makes comments that are derogatory, critical and cynical. The class does not respond. The teacher warns him to stop interrupting and tells A3. that his behaviour is not appropriate and prevents discussion and the development of thinking. He suggests that he expresses his opinion in a respectful manner. A3. puts up his hand and gets permission to speak. Teacher: Now talk in an orderly manner.
	A discussion develops and the teacher encourages examples from different fields in
	order to broaden their knowledge. The students have a lot of knowledge and are happy to share it with their friends.
44	N3 I'm bored. I have exhausted this topic. Maybe we can move to a new topic? The teacher asks him to be patient.
45	The teacher introduces a new subject with which they will be dealing in the next lesson: Think how the material in History that you learned this week about the church connects with the formats of blessing/creativity. Each student should write some questions that interest him on this subject.
46	N3. – Why do we need to write? I can already tell you four questions I have in mind. N2 I also don't like writing, but I am now trying to write in more detail and I learned that there is an answer template and I use this for my answer. I got 80 in the last test and for me it's a huge accomplishment. N3. throws a pencil at him. The teacher asks him to stand up and apologise. The teacher asks N3. to remain behind for a talk at the end of the lesson.
47	A3 You should know that at first I did not accept that I have difficulty in writing. I thought I could write a masterpiece in two lines. I realise that this is not the case and I slowly learned how to analyse the questions and how to write better and so I got a

	better mark.
	Teacher: I'm glad you arrived at these insights. Well done.
48	Teacher: Please prepare the questions as I asked. The bell ends the lesson. The
	teacher calls N3. for a talk.
	The observer: there is usually a relaxed atmosphere in the classroom, a culture of
	discussion exists but it needs the help and guidance of the teacher. The teacher
	doesn't shout, his voice is pleasant but very assertive, and his comments about
	cynicism, argumentativeness and the way to talk are also pleasant but assertive.
	Behaviour is improving under the guidance of the teacher.
	The teacher preserves the boundaries but also allows discussion and the expression of
	different opinions.

Appendix 3.18 – Coding Students' Questionnaires – Students' Feedback to Third Research Question - Strategy 1- Asking Questions Strategy

Quotes, Frequencies from the Feedback of Students and from Classroom Observations

Category criteria	Samples of statements that reflect the criterion of the perception of Asking questions as conducive to learning	Number of times	Source (students, teacher, researcher)
Total category observations		Total for the group	
Pleasure	this is a characteristic of gifted studentsand it makes it easier for me (interview 141);fun and more interesting (interview 342); much more pleasant learning atmosphere (interview 354)	Students 16	Rick's students - 10 Roy's students - 6 2,7,12,14,15,17
(2) Promotes critical thinking		Students 31	
(2.1) Different viewpoints	to look at the subject from different directions (interview 315);different viewpoints (interview 316)	Students 6	Rick's students - 6 2,3,6,10,12,19
(2.2) Link to previous knowledge	connect with prior knowledge (interview 347);the subject was thought about before learning (interview 318)	Students 7	Rick's students - 7 2,3,4,6,12,15,5
(2.3) Investigation	critical thinking (interviews 327-329);investigation (interviews 316, 370);the subject was thought aboutvery	Students 11	Rick's students – 8 3,12,18,19,5,11, 14, 15

	thorough (interview 318);asking questions (interviews 323, 325); It helps to organise the material and the information (interview 355);thought-provoking (interview 360);helps develop critical thinking (interview 345);enables you to give a more specific answer (interview 356)		Roy's Students - 3 5,15,20
(2.4) Understanding	With its help one can understand the subject better (interview 325);helped me focus (interview 324)	Students 7	Rick's students 16,15,3,13,18,19 Roy's students 16
	Samples of statements that reflect the criterion of the perception of Asking questions as inhibiting learning		
Takes time	takes up a lot of time answering the questions (interview 317) It delayed the duration of the lesson (interview 346), deviates from the topic (interview 317),It took too long (interview 346)	Students 3	Rick's students 1 4 Roy's students 2 6,11
(2) Disturbs	bothered meI lost concentration (interview 353);It was a little confusing (interview 404)stopped the lesson progressing (interview 351)	Students 3	Rick's students 2 13,8 Roy's students 1 13
(3) Lack of prior knowledge	I could not use prior knowledge because I had no prior knowledge of the lesson topics (interview 326);do not know about the topic (interview 321)	Students 2	Rick's students 2

Appendix 3.19 – Coding Students' Feedback –Students' Feedback to the Third Research Question - Strategy 2 - Analysing Questions Strategy

Quotes, frequency from the students' feedback and classroom observations - the Analysing questions strategy:

Criteria for category A	Examples of statements that reflect the criterion of the concept of the Analysing questions strategy as enabling learning	No. of times	Source (Students, teacher, researcher)
Total for category from observations		Total for section	
(4) Focusing on requirements of the question	extremely helpful for focusing on the question (interview 333)helps us not to forget parts of the question (interview 362);in understanding all parts of the question (interview 364)	Students 11	Rick - 6 8,9,10,11,13,14 Roy - 5 1,3,5,10,15
(5) Focus of question	helps us to focus on the answer (interview 332)without leaving out details (interview 361)	Students 7	Rick - 5 1,5,6,10,13 Roy- 2 2,8
(6) General focusing (for tests)	it helped me to focus during the test (interview 365a)	Students 5	Roy 4,6,9,11,13
(7) Separating the important from the minor	to separate the main point from the less important (interviews 147 & 366)	Students 2	Roy - 2 7,12
	Examples of statements that reflect the criterion of the concept of the		

	Analysing questions strategy as inhibiting learning		
Time consuming, burdensome	takes up a lot of timeand then maybe we will be short of time for the material to be studied (Interview 317)disturbed them that I am wasting time (Interview 404)	Students 1	Students Rick - 1
(2) boring	Students thought that we keep going back and learning the same thing because it's the same topic. They complained that they were bored. It was too easy for them (Interview 312)	Students 2	Students Rick - 2
(8) Difficulty accepting the strategy, argumentativeness, arrogance	This very much characterises them - this argumentativeness and arrogance and that they know very well how to do everything (Interview 420)	Students 2	Students Rick - 2

Appendix 3.20- coding Students' Feedback - Students' Feedback to Third Research Question - Strategy 3 - Answering Questions in a Template

Quotes, frequency from the students' feedback and classroom observations - the Analysing Questions strategy:

Criteria for category A	Samples of statements that reflect the criterion of the perception of the strategy of Answering questions in a template as conducive to learning	No. of times	Source (Students, teacher, researcher)
Total for the category from observations		Total for section	
(9) Focusing on requirements of the question	extremely helpful for focusing on the question becauseit helps to write a full and detailed answer (Interview 333)	Students 14	Rick - 3 1,2,4 Roy - 9 1,2,6,7,8,9,12,13,14
(10) Focus on the answer	helps us to focus on the answer (Interview 332); helped me in wording my thoughts andwriting the answer (Interview 338)without leaving out details (Interview 361);and not to miss anything (interview 338)	Students 12	Rick - 9 1,3,4,5,6,10,12,13,16 Roy - 1 12
(11) General focus (habits for the future)	really helps to focus on the main points (Interview 372a); It helps in tests by making order in the reply (Interview 341);helps us focus and learn from past mistakes (Interview 367)	Students 7	Rick - 3 8,14,17 Roy - 2 11,15

(12) Pleasure	I really enjoyed it (Interview 333)	Students 6	Rick - 5 1,4,8,12,13
	Samples of statements that reflect the criterion of the perception of the strategy of Answering questions in a template <u>as inhibiting learning</u>	No. of times	Source (Students, teacher, researcher)
Working according to a template	I didn't enjoy the uniform template so much (Interview 376);but I feel a bit like a robot (Interview 374)preventscreativity (Interview 364)	Students 6	Rick – 3 students 7,15,16 Roy - 13
(13) Hard	The method makes the possibility of each one writing in the way he is used to a little bit harder (Interview 365)	4	Rick - 11 Roy - 14

Appendix 6.1 - A summary of the research's aims, objectives and research questions

Aims	Objectives	Research Question
To inquire the needs and challenges of teachers who teach GT students with SpLD (2EL)	To inquire the challenges and the needs of the teachers of 2ELs. To identify the factors those, inhibit or enable optimal teaching to 2ELs. To convert the information gathered from the field and from the literature into planning of an intervention programme as a response to the teachers' and 2ELs' needs.	1. What are the critical elements (enabling and inhibiting) in the training of teachers of 2ELs?
To study the characteristics, needs and challenges of 2ELs	To inquire the characteristics and needs of 2ELs. To identify the factors those, inhibit or enable optimal learning of 2ELs. To convert the information into an intervention for teachers so that they can provide suitable responses to 2ELs.	2. What are the characteristics of 2ELs?
To plan a model of strategies (AAA model), to develop a manual for teachers based on this model, To conduct training seminar for teachers, to implement in classes the	Development of an enabling learning environment in its cognitive, affective and organisational aspects. Establishment of a teacher training manual. Training and support of teachers and implementing of a variety of teaching methods.	3. What is the contribution of the three teaching strategies in the AAA model to 2ELs and to those who teach them?
intervention and then to evaluate contribution of the intervention for these teachers and students.	Assessment of the contribution of the intervention to teachers and students.	4. What is the contribution of the

To recommend to the decision-makers the adoption of the programme as a means of improving the methods of teaching students with SpLD and contribute to their success.

To develop a policy of support for the allocation of resources to foster students' population

intervention
pedagogically and in
terms of values both
to teacher and
students.

To develop awareness among the public and in the education system of the needs of the minority group of 2ELs To develop a programme that can be implemented to provide a response to the characteristics and needs of those who teach 2ELs

To train teachers and school staff to support the teachers while implementing the programme

Personal and professional development of the researcher (reflection) To evaluate the effectiveness of the programme and to improve it as needed.

Personal development

To develop management skills and personal leadership and the ability to lead colleagues to realise personal and professional goals

To develop skills of thinking, reading, critical writing, and "transfer" of skills from one learning environment to another.

To realise my personal vision and bring a dream into reality.

Professional Development

Development and adoption of innovative approaches and strategies to promote the teaching of 2ELs.

Professional development as a teacher, lecturer and trainer of teachers in the field of learning disabilities and gifted 2ELs (a new field that is not developed at present in Israel).

Development of integrated learning programmes such as the AAA model.	
Professional development as a researcher – development of skills as a researcher and skills as a practitioner-researcher on occupational areas.	

Appendix 9.1 - Some means of preserving Ethics in Dissemination

- Keeping anonymity as a priority and not using or mentioning the participants' names or identifying details of any kind.
- Gaining the informed consent of the participants from their own free will in my research and for the dissemination of the findings.
- Reporting research findings as they were experienced and not using any detail to fit my theories or assumptions. So, I will report and conclude my research with integrity and objectivity. (Sabar Ben-Yehoshua, 2001).
- Preventing the falsification, fabrication or misinterpretation of data.
- Avoiding the use of any information that is not relevant to my research even if it is interesting or appealing to th

Appendix 9.2 - Dissemination - Means and Forms: Advantages and Limitations

Dissemination Means an Forms	Advantages	Limitations
Professional Educational Journal	* Targeted to particular groups of professionals. *useful and applicable	Limited audience
Respected Academic Journal	*Benefits the researcher by placing his accomplishments in the forefront of the academic research. *Provides a wide impact on the intellectual network.	Limited audience
Professional Journal	* Wide exposure to colleagues. * Practitioner oriented –targeted to a variety of professional groups, more so than any other medium (Ritchie, 2003). * Enables one to get helpful feedback from colleagues. * Regarded as more prestigious than E-journals.	* Lower standards for publishing. * Places the researcher lower than the forefront of academic research. * The impact on the practical field is hard to assess (Moloney & Gealy, 2003).
Conference, workshop seminar (local and international)	*Creates a professional network * Direct contact with a large and wide audience (Moloney & Gealy, 2003; Ben & Zhao, 2003). * Instant, helpful feedback.	A high level of resources is required to travel and participate (Moloney & Gealy, 2003).

Networking (Person to Person Contact)	Shared interest	Time consuming. Low level of active contribution
ICT (Information and Communication Technologies)	* Compared to other media, the exposure is enormous (Lee, 2001). *It is accessible and convenient.	* Not appropriate for every audience (Moloney & Gealy, 2003) *Difficulty focusing on target
		* User must have experience using ICT to gain benefit (Moloney & Gealy, 2003).
		* Some people avoid reading from the screen (Lee, 2001). * Academics tend to disapprove
	* Electronic journal allows access to a wider audience	of this media in deference to print (Lee, 2001).
	* Evolving media with options for publishing * Is a trigger for developing the project and publishing	
Electronic Journals:	innovations (Lee, 2001). *Use for pilots, feedback, option for global interactions and	
	immediate learning from other's experiences *Easy to connect to sources and	
	audiences globally	*Sources are not identified and/or trustworthy *It is difficult to validate
		information

Blogs/Forum:		
Websites (private or shared):		
Popular media	* Wide reach	Lack of control, dilution of message
Book	* Prestigious * Aesthetic	* Involves a significant quantity of work and dedication. * Not widely distributed.
Research reports	Single reference point	Limited spread

Appendix 9.3 - Rules for Publishing a Paper (Fridman, 2006: Shefler, 2006)

- A structure is demanded composed of a beginning, middle and an end.
- It is not recommended to use words and concepts of professional jargon unless they are well-known to all target audiences.
- The abstract has a formula which is composed of: a short summary of the article, the purpose of the paper, the argument, the methodology and the conclusions.
- It is not advised to use disproportionate claims of innovation, or exaggerated statements without real proof from the research.
- One should ensure that the important points within the publication of the research are complemented by illustrations and not confused by them.
- One must follow the editorial guidelines of writing with a word processor, such as indentation, natural flow of words, margins, spacing, etc.