

Measuring the value of placements to employers: A cost-benefit approach

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Keywords

Placement value, placements, internships, cost-benefit analysis, third mission

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Abstract

This paper explores the concept and measurement of placement value, under-explored in theory and practice to date. The paper makes a theoretical contribution to the placement value discourse by examining and articulating the placement value concept. It also offers a practical contribution by exploring a piloted tool to evaluating employer placement value, developed as part of a project funded by the Higher Education Funding Council for England (HEFCE). It examines the immaturity of the placement value concept against contemporary value discourse including service- and goods- dominant logic frameworks (exploring value-in-use and value-in-exchange) and calls for greater attention to be paid to placement value to support the sustainable provision of placements. The paper may appeal to academics, placement support staff and employers.

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Introduction

Over the last decade, performance measurement and metric-based management has ‘noticeably increased’ and become ‘commonplace’ in the higher education (HE) sector (Draper and Gittoes, 2004: 449), a trend observed across the world (Kallio, Kallio and Grossi, 2017; Parker, 2012; Woelert and Yates, 2015). Within current HE practice, there are numerous examples of evaluation and measurement activity in respect of research, teaching and student outcomes (Kallio, Kallio and Grossi, 2017). Within the UK, examples include the research excellence framework (REF), teaching excellence framework (TEF) and key performance indicators influential for various university rankings (staff-student ratios, student satisfaction). There are now proposals for a KEF – Knowledge Exchange Framework (Times Higher Education, 2017). The antecedents of this measurement culture are varied, but in the UK these include heightened government intervention and scrutiny (Jackson 1999; Watson, Hall and Tazzyman, 2016) and the emergence of new public management (NPM) (Devanney and Uglebjerg, 2009; Kettl, 2005; Pollitt and Bouckaert, 2011; Woelert and Yates, 2015). Despite this prevalent measurement culture, placements remain relatively under-evaluated and there

have been few quantitative assessments of their worth to various stakeholders (Lange, 2015; Wilton, 2014).

Concomitantly, the conceptualisation of placement value appears undeveloped (Lange, 2015), and like many aspects of HE, the ‘student-as-customer’ tends to dominate this discourse (Finney and Finney, 2010; Groccia, 1997; Laing and Laing, 2016; Woodall, Hiller, and Resnick, 2014). The value of placements to their hosts, employers, is under-explored and there is little articulation of what value might be delivered to employers through the placement exchange (Lange, 2015). The absence of the employer in placement value discourse has been previously outlined by Wilton (2014: 244), ‘less evident in the literature is an employer perspective on placement employment’.

The contexts outlined above introduce three potential problems: (1) the underdevelopment of the placement value concept; (2) the under-recognition of the employer in placement discourse; (3) the absence of an established approach to measuring placement value. The implications of organisations not articulating value has been outlined in value proposition discourse. Value propositions are used strategically to provide clear articulations of value promises, uniqueness and position (Frow, 2014). A number of scholars have proffered the benefits of having a clear value proposition in order to secure sustainable competitive advantage (Lapierre, 1997; Payne, Frow and Eggert, 2017). At a time where higher education institutions (HEIs) are experiencing significant competition in home and international contexts (Diaconu and Dutu, 2014; Watson, Hall and Tazzyman, 2016), being clear on the value offer may be important. If HEIs are not clear on the value of placements to employers then placement value may not be fully leveraged. As well as these competitive drivers, worries over the availability of placements and placement hosts provide a further rationale for developing the employer-placement discourse (Brennan and Little, 1996; Ellis and Moon, 1998; Walmsley, Thomas and Jameson, 2006). Jackson et al (2017), identified employers’ lack of understanding and concern for costs as reason for poor

engagement by employers. At a time when there is significant government pressure to engage with business (part of the third mission) (Diaconu and Dutu, 2014; Molas-Gallart et al, 2002), a clearer understanding and managed approach to placement value and placement evaluation may also be helpful.

This paper provides a critical examination of the value created for employers as placement hosts. In doing so, it stimulates discourse on an area of placement literature recognised to be deficient (Wilton, 2014; Lange, 2015). The paper also explores the under-measurement of placement value to employers, considering prior attempts and possible approaches to its evaluation. The paper draws on learning from a HEFCE funded project ('the case study') which developed and piloted an evaluation tool to measure (quantitatively) placement value to employers.

The methodology underpinning the case study project is described in the next section. The findings from the pilot evaluation tool are then explored. Against this background, the final two sections offer a discussion and conclusion which examine the placement value concept, implications and learning from the pilot and the opportunities for the evaluation of placement value to employers.

Methodology

Context

This case study is based upon a project commissioned by the Higher Education Funding Council for England (HEFCE) as part of the Postgraduate Support Scheme (PSS). The PSS project, at a local-level (within the HE institution), was delivered within a university engineering department in the UK, and was designed to analyse two advanced engineering programmes to explore sustainable and employer-driven postgraduate provision. The PSS project had secondary aims of improving university-employer relations and this included the development of a tool that would support employers to quantify the value of investing in

postgraduate students on placements and placement projects. Learning from the development of this tool is used in this paper to support the examination of placement value and placement evaluation.

The aim of the PSS project was, to ‘develop and pilot a tool to quantify the value of investing in postgraduate students on placements’. Several secondary research objectives were necessary to support this end: (1) to conduct a literature review to explore existing knowledge and practice relating to the placement value concept and placement evaluation; (2) to develop a placement evaluation tool to quantify placement value to employers; (3) to pilot a placement evaluation tool with employers to determine its potential.

Procedure

Several data-collection techniques were utilised in order to develop the placement evaluation tool, including a literature review, semi-structured interviews and user acceptance testing.

A background literature review on placement value and placement evaluation was performed using prior academic and grey literature, including theses and university websites. Grey literature was used under the ‘Prague definition’ of grey literature (Schöpfel, 2010). A background review supported the research problem to be fully identified, reinforced and justified (Vom Brocke et al, 2015) and data collection to be directed (Creswell, 2009). It also supported existing knowledge of placement value and its evaluation to be reviewed. The literature review was intentionally less comprehensive than, for instance, a systematic literature review (Collins and Fauser, 2005). The search was iterative and search terms evolved from those used initially (for instance ‘placement value’ extended into ‘internships’). Marketing literature was consulted more heavily than first anticipated, owing to the concentration on value discourse by marketing academics. Some of the literature resulting from this review is integrated into the literature review which proceeds this chapter.

Semi-structured interviews were held with academic peers to achieve a broader perspective of placement practice and potential value. A semi-structured, conversational interviewing approach supported the researchers to respond to academic peer feedback (as opposed to following a strict interview guide) (Brinkmann, 2013; Lavrakas, 2008). The constructivist nature of semi-structured interviews supported the researchers to generate knowledge useful to the development of the evaluation tool (Cohen and Manion, 1994). An opportunity sampling technique was adopted for academic peer interviews and these interviews were held in person and via email. In all, six peers across three institutions were consulted and all had experience of supporting placement students and working with placement hosts. Academic peers were consulted again once the evaluation tool was developed, in order to sense-test it.

User acceptance testing was conducted once the evaluation tool had been developed. User acceptance testing is widely seen in information systems research and examples in HE research also exist (Qomaruddin, Rahman and Iahad, 2014). The tests involved email distribution of the placement evaluation tool (hosted on Microsoft Excel) to employers, with employers being encouraged to trial this tool. A telephone interview was also booked for employers to discuss various aspects of the tool and conduct a trial attempt (walk-through) at completing it. In particular, this interview sought to establish the user-friendliness of the tool (the system), the extensiveness of the tool (the categories covered), and the results of trialling the tool (the outcomes). Interviews were relatively structured to ensure key information was gained. The user acceptance tests were offered to all employers who engaged on the postgraduate support scheme intervention, of the 30 employers invited (via telephone and email), 12 participated (a 40% uptake). All 12 had hosted 24 week-long industrial (engineering) placements in the UK, in the 12 months previous. All employers were small and medium enterprises (SMEs), located in the Midlands region of the UK. Their industries of operation were engineering management, construction, manufacturing, automobile and renewable energy generation. Some of the

projects that students carried out during their placements included – application of robotic surveyors in construction projects, examining approaches and tools to predict the behaviour of polymers, warehouse operation optimisation, and a feasibility study on alternative fuel for power generation.

So far, the working definition of value within this paper has, intentionally, not been outlined. A particular perspective on value discourse has also not been adopted (i.e. ‘financial value’ in accounting, ‘perceived value’ in marketing, ‘value for money’ in government). This supports an open exploration of the term, and more widely reflects a tension in the definition of value. In marketing discourse, customer value, in its simplest form, is something the customer stands to gain (benefits) relative to what they give up (costs) (Zeithaml, 1988). However, more multi-dimensional frameworks of value have since been posited, identifying various value types. Smith and Colgate (2007) for instance explore functional (e.g. product utility), experiential (e.g. emotions created), symbolic (e.g. association of meaning) and cost values (e.g. consideration for the sacrifice versus return). The brief for the case study outlined a particular focus on quantifying value, this scope is relevant to the evaluation approach developed.

The literature review is presented next and supports the examination of extant knowledge and practice on placement value and placement evaluation. Following this, the development of the placement evaluation tool is outlined and an exploration and justification of key decisions that were necessary to develop an approach to measuring placement value is explored.

Literature Review

The literature review critically explores value concepts, placement value and placement evaluation literature. It does so to establish the theoretical foundations of placement value, explore the maturity of the concept and identify articulations of value useful to the construction of the case evaluation approach. The literature review extends on the literature review completed as part of the case study project (and just introduced).

Value Concepts

To examine the notion of value in the placement context, a review of value concepts more generally was considered worthwhile. Value concepts have received significant attention in numerous disciplines and contexts (Frow et al, 2014), including supply chain management (see Lusch et al, 2010), marketing (see Payne and Holt, 2001; Ravald and Grönroos, 1996), human resources management (see Guthridge et al, 2008; Heger, 2007), public administration (see Osborne, 2017) and HE (see Woodall, Heller and Rensick, 2014).

Value can be a challenging concept to work with, as Woodall, Hiller and Resnick (2014: 49) state: ‘what value is, and what it is not, is hard to decipher, and the literature, generally, demonstrates how slippery this is perceived to be, irrespective of context’. In subjects such as marketing and consumer behaviour, despite much discourse on value, there is still healthy debate on how value is defined and created (Payne and Holt, 2001; Ravald and Grönroos, 1996). Further, within public sector management, there is recognition that, at the current time, ‘what constitutes ‘value’ is still embryonic’ (Osborne, 2017: 4).

Many agree that, value, if understood and leveraged well, can provide organisations with a sustainable competitive advantage (Grönroos, 1996; Payne, Frow and Eggert, 2017). Through an awareness of the value of core products and services, strategies to maximise (value-adding activity) or preserve this value can be developed (Ravald and Grönroos, 1996). Value can also support organisations to innovate (Spohrer and Maglio, 2008).

Value propositions support organisations to articulate the value that they can deliver. Although, value propositions themselves exist in various forms, with some definitions exploring value proposition as ‘promises’, ‘proposals’ or ‘claims’ surrounding what will be delivered and the savings and benefits the products/services provide (Anderson, Nargus and van Rossum, 2006; Frow et al, 2014).

The role of the consumer in the value exchange is well defined, particularly within the marketing field (Ravald and Grönroos, 1996; Zaltman and Wallendorf, 1983). Value to employees, suppliers and the public are also noted (Frow et al, 2014; Normann, 2001; Osborne, 2017; Payne et al, 2005). Within the HE sector, value discourse has become heavily occupied with debating the metaphor of ‘student-as-customer’ (Laing and Laing, 2016; Woodall, Heller and Rensick, 2014). Indeed, the sense of transaction (students paying fees), consumption (students consuming academic goods and services) and evaluation of the good/services consumed (satisfaction measures) seem to support the idea of student-as-customer (Finney and Finney, 2010).

The way in which value is created has attracted a great deal of attention in recent years, and has challenged the traditional economic view that firms create value for customers (Vargo and Lusch, 2004; Smith et al, 2010). The concepts of co-production and co-creation explores the role of the consumer in the creation of value alongside the organisation (Vargo and Lusch, 2004, 2008; Alford, 2009). Co-production recognises that it is difficult to separate consumption from production, and thus the consumer from the producer; they are interdependent and mutually reliant on one another (Brudney and England, 1983). For instance, customer feedback is an example of co-production with customers providing their feedback on the goods or services of a business (based on their consumption), which in turn supports product development and production. As such, within co-production the consumer is involved in creating the value. Co-creation, sees the consumer as a joint creator of value, and value can only be created when the consumer engages in the exchange, until then the firm can only make a value proposition or offer (Vargo and Lusch, 2004). To understand co-creation further, meanings of value must be understood, particularly the notions of value-in-use and value-in-exchange, and service-, and goods-, dominant logic frameworks (Vargo, Maglio and Akara, 2008). Value-in-exchange is associated with goods-dominant logic (G-DL) and sees the roles

of consumer and producer as separate from one another (Vargo, Maglio and Akara, 2008). Value-in-use, represented through service-dominant logic (S-DL), explores the co-creation of value with the role of consumer and producer less distinct. The utilisation of the knowledge and skills of both the firm and the customer are acknowledged in value-in-use and S-DL (Vargo, Maglio and Akara, 2008). Co-creation in the HE sector has not been extensively explored (one exception includes Fagerstrøm and Ghinea, 2013). Although prior studies in HE have called for better collaboration between business schools and businesses (Thatcher et al, 2014; Young, 2013), and suggest that, ‘collaborative practice appears to have a constructive and multifaceted impact on all parties involved’ (Thatcher et al, 2014: 577). There is a recognised need for further development in the university-business collaboration literature and in relation to benefits of university collaboration (and arguably in light of the above value creation) to SMEs (Thatcher et al, 2014).

Placement Value

Within the HE context, the concept of placement value appears under-developed (Lange, 2015) and the deep debate surrounding the nature of value creation (co-creation, co-production etc.) just observed is largely absent. Lange (2015: 16), in the placement context, interprets value in terms of ‘perceived importance’ and ‘benefits’ towards, but suggests that this cannot be quantified. Placement benefits tend to be described but not quantified. When exploring the value of placements, the value of placements to three stakeholder groups are clearly identified - the employer, placement student, and HEIs (Ellis and Moon, 1998). These benefits are summarised in Table 1.

<Table 1 (Placement value to stakeholder groups) about here >

Students receive the majority of focus in the extant placement literature (Little and Harvey, 2006; Walmsley, Thomas and Jameson, 2006; Wilton, 2014), congruent with Smith, Smith and

Caddell's (2015: 150) observation that, 'the benefits accruing to students from participating in placement(s) tend to dominate the discourse'. Numerous benefits of placements to HEIs are also identified in the literature, including enhanced graduate outcomes and student experience (Banga and Lancaster, 2013; Walmsley, Thomas and Jameson, 2006). Atfield, Purcell and Hogarth (2009: 67) acknowledge that placements support HEIs to network and develop a 'culture of placement activity'. Placements act as a vehicle for HEI and industry collaboration, and knowledge and technology transfer (CIHE, 2010; D'Este and Patel, 2007; Lee, 1996); driven by external pressures for increased collaboration (CIHE, 2010; Department for Business Innovation & Skills, 2012; HM Government, 2017) and part of the 'third mission' (Laredo, 2007; Lockett, Wright and Wild, 2013).

The value of placements to employers (the primary focus of our paper and the underpinning case study), receive less attention than students and HEIs in the extant literature. Atfield, Purcell and Hogarth's (2009) study is one of the few that has explored the impact of placements on businesses/employers. They identified a number of benefits including, the 'freeing up of staff time; having things done that other staff had not got around to; the implementation of new procedures; and the completion of specific projects' (Atfield, Purcell and Hogarth, 2009: iv). Furthermore, their study found that 89% of employers felt they had benefited from hosting a placement (Atfield, Purcell and Hogarth, 2009: 43). The benefits of 'fresh eyes' to a business are also described within prior literature (Abukari and Costley, 2015; Morse, 2006). Placement students may be able to view the organisation from an alternative perspective to their host, informed by the skills and knowledge from their university study experience (Benjamin, 2013). Placement providers report being able to 'try before they buy', marking the potential for placement students to be 'pre-selected' for a permanent role in the organisation after their placement (Ellis and Moon, 1998; Paisey and Paisey, 2010; Vakaloudis, Anagnostopoulos, and Elder, 2015). Organisations often embrace students who have proven during the placement,

with the benefit of avoiding costs associated with recruitment (i.e. versus recruiting externally/traditionally).

Whilst the economic benefits of placement hosting to employers dominate the literature, Smith, Smith and Caddell (2015: 150) note that employers may have ‘altruistic’ justification for supporting placements, because it is the-right-thing-to-do for others and the local and wider society. Locality may be important to employers, for instance Mitra and Edmondson (2015) outline the tendency for HEIs to interact with their local HEI, where the expertise exists.

However, placements are not always viewed positively and do have limitations for some organisations (Cooper and Shepherd, 1997). Atfield, Purcell and Hogarth (2009) concluded in their study that there was little evidence of the financial benefits of placements. They also found that placements were labour-intensive and few new employer links resulted.

Placement evaluation

Few examples of placement value being measured or quantified exist in the grey or academic literature, particularly from an employer perspective (Wilton, 2014). Indeed, there is recognition that few have addressed the measurement or evaluation of employer engagement (Tudor and Mendez, 2014). This is in spite of acknowledgement that tools are necessary to measure value in other contexts (see Rintamäki and Kirves, 2017 – retail context). Anderson, Narus and van Rossum (2006) suggest that documenting and explaining the cost savings and profits to customers (substantiating value claims), is good business practice. Lange (2015: 15), however, questioned whether it was possible to measure the value of work placements, stating such value, ‘could not be captured in a quantitative analysis’.

Those few who have attempted to evaluate placement or internship value to employers have looked towards a cost-benefit approach (Atfield, Purcell and Hogarth, 2009; Ruvoldt, 2000; Viet, Nguyen and Huyen, 2015). Atfield, Purcell and Hogarth (2009) considered an employer perspective on placement value in their evaluation (using a cost-benefit approach) of the impact

of placement value on employers in the South West of England. They captured feedback from 91 employers on the respective costs and benefits experienced, identifying the ‘day-to-day’ costs of managing placements as well as ‘transactional’ costs (Atfield, Purcell and Hogarth, 2009: 43). They gave temporal consideration to these costs and benefits, identifying ‘immediate’, ‘intermediate’ and ‘long-term’ timeframes (Atfield, Purcell and Hogarth, 2009: 43). Ruvoldt (2000), suggests that a cost-benefit analysis would support the return on investment of internships to be evaluated, and support business cases to be made to employers. Ruvoldt identified costs such as recruiting interns, administering the programme and any salary of the intern, and benefits including reduction of recruitment costs. Further, a cost-benefit model by Viet, Nguyen and Huyen (2015) also demonstrated a cost-benefit approach to internship evaluation in Viet Nam. It identified gross costs, and quantifiable and unquantifiable benefits to explore internship value. Costs included trainee costs, trainer/training cost, investment in infrastructure, and training materials. Benefits included productive contribution of trainees, investment, selection savings, reputation, and support of CSR strategies.

Morse (2006: 4-5) suggests that informally (without the need for any formal evaluation tools), organisations possibly do make an ‘assessment of the costs and the benefits of the placement’. The use of a cost-benefit approach echoes customer value literature. For instance, Monroe (1991) identified categories of perceived sacrifices and benefits as a means to establishing customer value. Monroe’s logic was that benefits had to outweigh sacrifice for the customer to perceive the relationship as having created value.

Development and piloting the tool

As outlined in the Introduction, the paper draws upon a wider project and the construction and pilot of a placement tool to measure (quantitatively) placement value to employers. The methodology for this pilot has been earlier explored. The outputs as a result of developing and piloting of the tool are now explored and demonstrated.

Developing the placement evaluation tool

Time constraints and user-friendliness were key considerations in the development of an evaluation approach. The intended audience for the evaluation approach included HE programme leaders, placement support staff, and employers, and it was likely that some of the intended users would not have prior evaluation or research training. Rorrer (2016) reminds of the need to consider evaluation capability when designing evaluation tools, and with this in mind, an uncomplicated evaluation tool was sought. The project also had to be completed within a relatively tight timeframe, imposing constraints on the extensiveness of the pilot. Figure 1 illustrates the process of developing and piloting the evaluation tool.

< Figure 1 (Development of tool) about here >.

As outlined earlier, a review of literature, and interviews with academic peers, provided knowledge to support the development of a placement evaluation tool. In particular, the literature review identified the clear delineation of benefits and sacrifices in both the concept and evaluation of value (Monroe, 1991) and past exploration of placement value (Atfield, Purcell and Hogarth, 2009). A cost-benefit approach emerged in prior placement evaluation studies (see Atfield, Purcell and Hogarth, 2009; Viet, Nguyen and Huyen, 2015), but remained relatively under-articulated, and under-used in practice. Cost-benefit analyses have long existed as a technique to weigh-up relative costs and benefits of particular initiatives (Clarke, 1999) and ‘to place monetary values on both the inputs (costs) and outcomes (benefits)’ (Robinson, 1993: 924). A cost-benefit approach also allowed the tool to remain relatively uncomplicated and user-friendly, supporting the earlier identified scope. Further, a cost-benefit model was considered to resonate with organisations (later confirmed during testing with employers) who would be familiar with such appraisal techniques.

The difficulties in identifying cost and benefits categories are well-documented (Rossi and Freeman, 1993; OECD, 2006; Schopper, 2016). By adopting principles of value chain analysis (Donaldson, Ishii and Sheppard, 2006), we were able to identify several interactions between HEI, student and employer in the placement process. Stages of the placement process were identified by considering the life of a placement from the employer perspective. No employer placement value chain had surfaced in the earlier exploration phase of our study (through the background review) or upon revisiting secondary sources. These were tentatively identified ahead of piloting the tool and peer review (feedback from academics). Academic feedback resulted in description of each category being added. The project's attempt to translate placement activity into a financial value was a concern for two of the academic peers, with one noting that they disagreed with such a 'reductionist approach'. However, this was a concern that, despite sharing, was pre-specified in the project brief initially received ('to quantify the value'). Table 2 presents the stages that were identified in the placement process.

<Table 2 (stages in the placement process) about here>

Mapping this value chain supported the researchers to interrogate the various activities where costs and benefits might be incurred or accrued by employers. Figure 2 demonstrates examples of the cost and benefit categories that were made available through the evaluation tool.

<Figure 2 about here>

Clarke (1999) notes that estimating and attributing values during cost benefit analysis can be difficult. These values were drawn from either, (a) the estimated hourly rate multiplied by time spent (hours x £/hour), against each cost/benefit category (e.g. time spent interviewing x approximate hourly cost of interviews), and (b) direct costs/benefits (e.g. £x benefits from not advertising a formal job position). Through the cost-benefit approach, the general assumption

for value was that where benefits are greater than cost, the placement is likely to demonstrate value ($B - C > 0$).

The piloting of the tool with employers who had recently hosted placements allowed financial values to be ascribed to the cost/benefit categories. As outlined earlier in the methodology, the cost-benefit template was piloted with 12 engineering placement providers in a user acceptance test. The original cost and benefit categories were confirmed by employers during the pilot, and no refinements were required.

Interviews with employers during the user acceptance test phase suggested that employers largely welcomed the tool. Feedback included that employers had not previously considered the value created or had not ‘previously appreciated the benefits’ realised from placements. The actual findings of the pilot, in terms of financial savings/costs, are outside of the scope of this paper.

Figure 3 demonstrates a completed example of the costs section of the employer placement evaluation tool.

<Figure 3 about here – cost example>

Figure 4 demonstrates a completed example of the benefits section of the employer placement evaluation tool.

<Figure 4 about here – benefits example>

Beyond the tangible

Recognising that not all benefits are financial, a slight deviation from the brief was made to acknowledge relevant non-monetary benefits, and encourage ‘non-financial benefits’ to be considered via a third section of the tool. The non-financial benefit categories were drawn from the earlier literature. This was asked using the question, ‘To what extent do you value non-financial benefits associated with your postgraduate placement student?’ Employers were

encouraged to rate the usefulness of such benefits (on a Likert scale of 0-10) from ‘did not value’ (0) to ‘value extremely highly’ (10). During the piloting of this section, a number of placement providers commented that the non-financial benefits were important to them (even where the financial benefits were relatively insignificant). This supported us so recognise that employers also made value judgements based on their social values, and valued placement hosting besides economic gain.

<Figure 5 (intangibles) about here>

Discussion

Employer in placement literature

Few attempts to define the value of placements to employers were evident in theory and mainstream practice, supporting earlier assertions by Wilton (2014). Placement value discourse had predominantly examined the benefits to students (employability, skills development, income) and less so on the value to employers as a result of the placement exchange. A focus on students in both placement and HE value literature was observed (student-as-customer discourse for instance) (Finney and Finney, 2010; Laing and Laing, 2016). This paper has given focus to the employer within the placement value exchange, exploring how value is created from employers in placements. However, as this Discussion will progress to explore, employers may have a role beyond that of consumer (of the value created by placement students). By drawing emphasis to the under-recognition of the employer within placement value discourse, this paper looks to stimulate further discourse on debate on the employers role in placements.

Amid concerns for the availability of placement hosts shared by some (Brennan and Little, 1996; Ellis and Moon; 1998; Walmsley, Thomas and Jameson, 2006), the recognition of placement value and the ability to articulate a value proposition to employers could be a

worthwhile exercise. Further research on the value proposition of placements to employers could also be developed.

Immaturity of the placement value concept

The paper set out to explore the placement value concept. Several observations and discoveries were made in this exploration about the way in which value is currently represented in placement value discourse. A review of extant literature demonstrated that the concept of placement value tended to be presented descriptively (Ferguson, 2014; Little, 2016; Morse, 2006). For instance, value from placements was described in terms of how it supported student employability or provided employers with a fresh pair of eyes, etc. There was little evidence of placement value being expressed quantitatively or financially in existing theory or practice.

The literature also revealed a distinct contrast between the maturity of value concepts seen in marketing, supply chain and public management literature and placement value literature. The former, had progressed to explore the co-creation of value and the role of the customer in value creation (Alford, 2009; Osborne, 2017; Vargo and Lusch, 2008; Vargo, Maglio and Akara, 2008). The latter, placement literature, represented simpler constructs and had not examining how this value came to be created. Whilst, the value of placements to students, employers and universities had been described in the literature, the interdependency between those groups in order to create value together (co-creation), had not been explored. This point is developed next, but also poses an opportunity for further research.

The Creation of Placement Value

The concepts of value-in-use, value-in-exchange, S-DL and G-DL (explored in the literature review), appear to have remained absent in placement literature (and relatively under-acknowledged in HE research), despite gaining prominence in other disciplines (HR, public management, supply chain) (Guthridge et al, 2008; Osborne, 2017; Lusch et al, 2010 respectively). A more fundamental rethink of the way in which value is considered, created

and measured in placement discourse is necessary. Table 3, demonstrates value-in-use and value-in-exchange in the placement context (adapted from a general overview of G-DL and S-DL provided by Vargo, Maglio and Akara, 2008: 148). This illustration presents the first to ally service- and goods- dominant logic in the placement context.

<Table 3 SDL and GDL in placement example about here>

It demonstrates that employers may have a role in creating value through service-dominant logic in the placement context. It also, explores how the concept and therefore evaluation of value may differ according to whether value is considered value-in-use and value-in-exchange. Value-in-exchange, whilst appearing to be under criticism for not considering the mutuality of the placement relationship, is still necessary to measure and monitor value in use (Vargo, Maglio and Akara, 2008). Further, value-in-exchange is likely to dominate placement value, since placement students (as creators) need host organisations, the employers, to operate. The confluence of co-creation thought with placement value discourse may be useful to reposition the role of the employer in placement theory and practice, and develop the placement value concept. In doing so, the under-attention that employers have received in placement value discourse may also be overcome.

Leveraging Value

In the same way as the placement value concept remained primitive, there were also few examples of the forming or leveraging of a placement value proposition by HEIs. The absence of tools to capture placement value (evaluation) and lack of mainstream evaluation practice supported this point (although our research was limited to an external reflection on HEI practice through grey literature searches – some HEIs may adopt internal systems). As the literature review demonstrated, value propositions exist in various forms, and some types may not be so relevant to placement practice. Some suggest value propositions are promises (Martinez, 2013),

yet it would be difficult for HEIs to promise a particular amount of benefits or value from each placement. Others recognise value propositions as proposals (Vargo and Lusch, 2004), a less rigid approach to promises. Value proposals would support the role of HEI outlined in table 3, as proposer in a value in use context.

The attempt to quantify the value of placements was a criticism found both in the literature (Lange, 2015), and through academic feedback in the case study project. Some academic peers shared concerns at attempts to turn value into a financial value. Whilst this could be understood, there is some evidence that such data could support business decision-making (Ruvoldt, 2000). In a placement context, this could include such financial data being used to support organisations to decide whether to host a placement.

Evaluating Placement Value to Employers

Through the study, there was recognition that little previous research or practice on the evaluation of placements had occurred, or occurs. Whilst the HE sector has evolved to measure a great deal of its activity (e.g. research, teaching, satisfaction, graduate career outcomes), placement evaluation appears to have been largely ignored. There is some prior recognition that HEIs are not always good at identifying and leveraging financial return, for instance, Mitra and Edmondson (2015) in the case of knowledge transfer.

To overcome the recognised gap in the evaluation of placement value to employers, the paper explored the development and piloting of a placement evaluation tool, and offers this as new knowledge with potential for adoption in HE practice. Our review identified some earlier explorations of cost-benefit approaches in the placement/internship context (Atfield, Purcell and Hogarth, 2009; Viet, Nguyen and Huyen, 2015).

The process of developing a cost-benefit approach to placement evaluation was examined. There had been few attempts to identify a placement value chain or articulate the stages of a placement lifecycle previously and this posed a starting point for a cost-benefit analysis to be

developed (as table 2). The stages offered in this paper may support further placement value and evaluation discourse to be developed. The paper also offers cost and benefit categories, identified from the literature. These represent examples where value could be measured and created at each stage of the placement process. By identifying discrete cost and benefit categories and breaking down the components of placement value, placement value can be more strategically managed. Monroe (1991) identified that value can be intentionally created by acknowledging benefits and sacrifices, in other words, benefits can be strategically increased, and attempts can be made to reduce costs. By recognising the stages and categories of placements, HEIs, employers and funders can work strategically to enhance value created within them. The pilot evaluation was treated as a success, with employers and academic peers accepting the tool as a viable approach towards quantifying placement value. This suggests that the tool could be developed and utilised further within the HE sector.

Conclusion

The paper set out to critically examine the value created for employers. It did so to address a recognised gap in the placement literature. The paper also explored the under-measurement of placement value to employers, and drawing upon an earlier study as part of a HEFCE funded project, identified possible ways in which employer placement value could be understood and measured.

This paper has addressed both theoretical and practice-based gaps. It has stimulated and contributed to the extant literature by: (1) providing an examination of the placement value concept which currently has a weak theoretical foundation; (2) articulating placement costs and benefits that have been previously under-explored; (3) stimulating discourse and inquiry on placement value and placement evaluation in general; (4) prompting recognition of employers in the placement value exchange; (5) exploring placement value in light of G-DL/value-in-exchange and S-DL/value-in-use, and co-creation concepts. It also contributes to practice by

offering HEIs a piloted evaluation approach to measuring placement value. The paper stimulates evaluative practice in the placement arena, and the identification of input and output categories and overall approach begin to offer a blueprint for further testing, development and discussion.

The pilot study generated an employer-informed model using a cost-benefit approach that sought to capture mainly tangible inputs and outputs. The evaluation approach advocated in this paper begins to prompt consideration for a sector-wide solution for HEIs to address the under-articulation, under-recognition and under-measurement of placement value to employers. The ability of HEIs to monitor placement activity using an approach such as the one advocated in this paper provides several opportunities. It allows greater knowledge of placement value to develop, with possibilities for HEIs to understand what sort of placement activity adds the greatest (or least) value for employers, to market placements to employers. The placement evaluation tool developed within this pilot might support several decisions by employers and HEIs.

Limitations

The evaluation framework met its brief, delivering a piloted model to quantify the value of placements to employers (as placement hosts), and began to fill the void left by few efforts to measure placement value to employers. However, the brief was relatively constrained, reducing placement activity to financial values and seeking only to quantify short-term outputs. It also encourage approximations. Further iterations of the tool could look to address these weaknesses further.

The paper has also assumed that placements provide positive value for employers. Arguments have been made in the academic literature to this effect (Atfield, Purcell and Hogarth, 2009). The engineering placements in the case study allowed knowledge and technology transfer resulting in considerable value for many of the pilot firms, yet placements in other disciplines

may not offer such value to be realised. Going forward there are opportunities to extend the evaluation tool to other disciplines, as well as different academic levels (the pilot occurred at postgraduate level).

The time taken for placement value to come to fruition, received little recognition in the literature, and was not explored extensively in the development of the placement evaluation tool. With the exception of Atfield, Purcell and Hogarth (2009) who identify various timeframes associated with placement costs and benefits. The evaluation tool explored in this paper looked to assess placement value on exit of the placement, which did not overcome this limitation.

Further Research

As outlined in the preceding discussion, the placement value arena is relatively under-explored and there remains significant opportunities to explore how value is defined and created. The role of stakeholders in the creation of this value, in light of co-creation, G-DL and S-DL concepts and frameworks would benefit from further inquiry and support the placement value concept to mature. In practice, placement evaluation tools could be trialled and piloted, using learning from this paper, in order to identify value and support this to be leveraged.

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Placement benefit to student	Placement benefit to the HEI	Placement benefit to employer
<p>Opportunity to apply knowledge (Smith et al, 2007; Ferguson, 2014).</p> <p>Opportunity to develop skills (Smith et al, 2007, Coates and Koerner, 1996; Walmsley, Thomas and Jameson, 2006).</p> <p>Enhances CV (Paisey and Paisey, 2009).</p> <p>Opportunity to gain experience (Little, 2006; Little and Harvey, 2006).</p> <p>Employers favour placement students (Little and Harvey, 2006).</p> <p>Test roles and sectors (Prospects, 2015; Smith et al, 2007; Walmsley, Thomas and Jameson, 2006).</p> <p>Can be paid (Atfield, Purcell and Hogarth, 2009).</p>	<p>Enhanced reputation (Banga and Lancaster, 2013).</p> <p>Enhanced employability outcomes (Banga and Lancaster, 2013; Walmsley, Thomas and Jameson, 2006).</p> <p>Industrial collaboration (CIHE, 2010).</p> <p>Opportunity for knowledge transfer from industry ('bi-directional knowledge flow') (D'Este and Patel, 2007).</p> <p>Networking with employers (Atfield, Purcell and Hogarth, 2009).</p>	<p>Additional capacity (including to undertake specific projects).</p> <p>Fresh perspectives (Abukari and Costley, 2015; Morse, 2006).</p> <p>Benefit from student as a critical thinker (Benjamin, 2013).</p> <p>Identify placement student as future employee (Ellis and Moon, 1998).</p> <p>Knowledge transfer (Ferguson, 2014).</p>

Table 1: Placement benefits to stakeholder groups

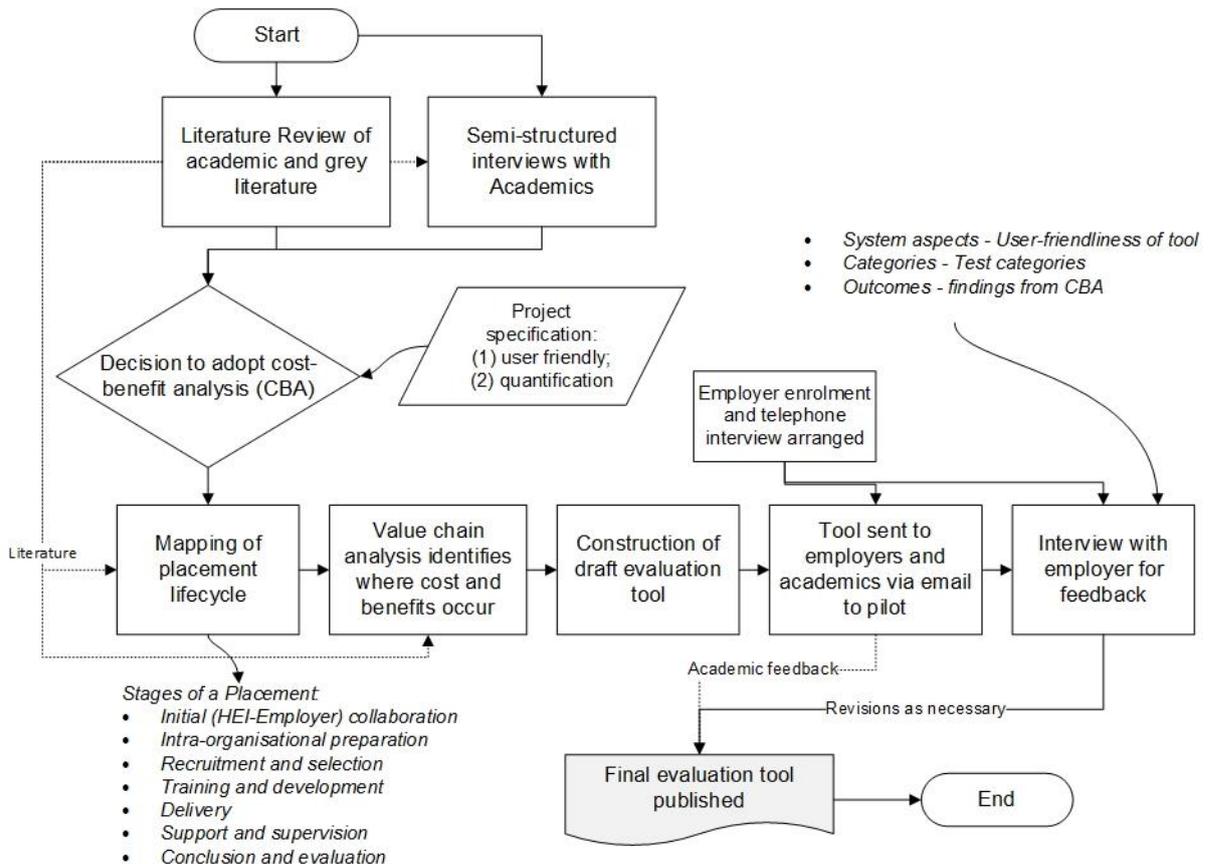


Figure 1: Process - Development of evaluation tool

Stage	Stage Description
Initial collaboration	Interaction and communication between HEI and employer to offer and understand placement opportunity.
Placement preparation	Activity relating to the organisation and preparation for the placement.
Recruitment	Activity relating to the recruitment of the placement student.
Development/training	Activity relating to the development and investment of the placement student by the employer
Support/supervision	Activity relating to the management, leadership, supervision and support of the student by the employer.
Delivery	Activity relating to the delivery of the placement.
Placement evaluation	Activity relating to the review and evaluation upon its conclusion.

Table 2: Stages in the placement process

STAGE	Initial Collaboration	Intra-organisational Preparation	Recruitment and Selection	Training and Development Delivery	Support and Supervision	Conclusion and Evaluation
COSTS	<ul style="list-style-type: none"> Cost of time spent negotiating placement opportunity with University. <p><i>Cost category - example: Student attends training at a cost of £100 to the organisation. The employer records this on the tool.</i></p>	<ul style="list-style-type: none"> Cost of time spent on internal meetings with regards to the placement. 	<ul style="list-style-type: none"> Cost of time spent selecting placement students including travel and administration. Cost of any remuneration agreed. 	<ul style="list-style-type: none"> Cost of training courses, time spent upskilling to role. Cost of any mistakes/waste. 	<ul style="list-style-type: none"> Cost of supervising student (not factored into the development category). Cost of time liaising with University re progress. 	<ul style="list-style-type: none"> Cost of concluding placement (e.g. meetings to review) Cost of evaluating placement (employer or HEI driven).
BENEFITS	<ul style="list-style-type: none"> Any value that emerged – other opportunities. <p><i>Benefit category - example: A project within the University is able to offer the placement host £2000 towards supporting the student. The employer records this as a £2000 benefit using the evaluation tool.</i></p>	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Savings from recruiting student rather than regular employee for that period (e.g. advertising, agency engagement). Savings in salary (staff salary minus student salary). Savings where student goes on to be employed (e.g. saving recruitment process). 	<ul style="list-style-type: none"> Value from accessing university resources (e.g. equipment/knowledge). Any value that the organisation places on outcome/output/impact create by the student. Financial benefits towards supporting the placement (for instance, funding that became available to pay for the placement student). 	<ul style="list-style-type: none"> Activity relating to the conclusion, review and evaluation of the placement. 	

Figure 2: Interrogation of Placement Costs and Benefits to the employer

SECTION A: CALCULATING COSTS TO ORGANISATION			
<i>This section allows us to identify what costs your organisation incurred through providing a placement. We have identified some common costs through our experience and knowledge of past engagement with placement providers, and through secondary research. Please provide a close estimate of the financial costs incurred to your organisation. The tool allows you to input hours and rates and will automatically calculate the cost (hours x £).</i>			
	Hours	Rate	Total £
A1: Initial Collaboration Cost of time spent negotiating placement opportunity with University (If more than one placement provided divide total time spent on all placements by number of placements)	6	£ 13	£ 75
A2: Intra-Organisational Cost Cost of time spent on internal meetings within organisation. (If more than one placement provided divide total time spent on all placements by number of placements)	30	£ 15	£ 450
A3: Recruitment Process Cost of time spent recruiting student (Include for interviews, travel, administration not factored in elsewhere)	20	£ 35	£ 700
A4: Student Development Cost of training and mentoring student (Cost of any training courses, cost of time spent mentoring students, other development)	48	£ 20	£ 960
A5: Student Support Supporting the student throughout the process (General supervisions of student unless factored into development. In addition to that please include any time spent on liaising with the University to communicate the student's progress)	62	£ 20	£ 1,240
A6: Additional Costs (1) Briefly describe: (Overtyp here) (e.g. additional material bought to cover wastage caused by inexperienced students and/or spend on office re-arrangement to accommodate the student etc. It should not include money spend on adjustments made for health and safety matters. If more than one placement was provided then divide total time spent on all placements by number of placements)			£
A7: Additional Costs (2) Briefly describe: (Overtyp here) (Additional costs identified)			£
TOTAL COST			£ 3,425

Figure 3: Example of employer entry onto tool – costs category

SECTION B: CALCULATING SAVINGS AND BENEFITS (IN FINANCIAL TERMS)			
This section allows us to identify what cost benefits and savings your organisation realised through providing a placement. We have identified some common savings and have also provided opportunity for you to identify your own. As in Section A, inputting hours and an hourly rate will lead to a total being automatically calculated.			
	Hours	Rate	Total £
B1: Recruitment Savings £ of savings from recruiting student rather than regular employee recruitment process for the temporary period. (Please include the resources spent on a recruitment agency, into your calculations if applicable)	1	£ 700	£ 700
B2: Labour Savings £ of savings in salary (Salary of similar staff minus student salary. Employer to determine the value of the student relative to employees.)	936	£ 4	£ 3,744
B3: Conversion from Student to Employee £ of savings where organisation is able to avoid a full recruitment process (In the case that student goes on to be employed only).	1	£ 1,500	£ 1,500
B4: Resource gains Any financial (£) value that the organisation places on gaining access to University resources (For instance academic resources, ISO manuals)			£
B5: Student Impact Any financial (£) value that the organisation places on impact created by the student (This might include productivity gains, efficiencies, innovations, savings).	1	£ 7,500	£ 7,500
B6: Financial benefits £ in financial benefits received (this may include any financial support received from the government or any other funding body as a result of recruiting a postgraduate student)			£
B7: Additional benefit (1) (expressed in financial terms) Briefly describe: (Overtyp here)			£
B8: Additional benefits (2) (expressed in financial terms) Briefly describe: (Overtyp here)			£
TOTAL BENEFITS			£ 13,444

Figure 4: Example of employer entry onto tool – benefits category

SECTION C: INTANGIBLE BENEFITS	
<i>This section allows us to identify the value that you place on particularly non-financial benefits for you of providing a placement.</i>	
C1: To what extent do you value non financial benefits associate with your postgraduate placement student? <i>Where 1 is 'did not value' and 10 is 'value extremely highly'. Or 'n/a' if you did not benefit from this component.</i>	
Benefits/Components	(Dropdown available)
Addition of qualified employee to the organisation	8
Ability to test the skills of the students (possibly) before offering a permanent position	9
Less paperwork	5
Less liability (if you considered this to be lower risk)	6
Less company manpower used during recruitment and the placement	8
Access to university academics and their knowledge	5
Access to other university facilities and resources	6
Opportunity to meet other employers	2
Improved company reputation/image	4
Other benefits that you identified (1)-	
Please describe: (Overtyp here)	
Other benefits that you identified (2)-	
Please describe: (Overtyp here)	

Figure 5: Example of employer entry onto tool – intangible benefits

	Goods-Dominant Logic (G-DL) Value-in-exchange	Service-Dominant Logic (S-DL) Value-in-use
Creator of value	Student as creator of value; <i>Employer role to use value.</i>	Student, employer and HEI all create value together. Student provides value; HEI proposes value; Employer co-creates value.
Process of value Creation	Student creates value by enhancing goods or services for the employer.	Value is fluid based on value proposition (proposals). Employers also create value through use (of goods and services developed by student).
Purpose of value	Value premised on economic growth/wealth to employer. Nominal value.	Value recognized for benefits to relevant stakeholders systems (sustainability, knowledge transfer, employability). Beyond economic wealth.
Measurement of value	Financial values/costs involved in the exchange.	Measures based on sustainability/survival/innovation etc.

Table 3: Exemplar: SD-L and GD-L in the Placement Context