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From regional colleges to global universities? The impact of academic drift on Norwegian higher education

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ABSTRACT

This paper examines the evolution of Norwegian higher education with a particular focus on the role and transformation of colleges. Historically, these colleges have been instrumental in providing geographically accessible, higher (vocational) education tailored to local and regional needs, significantly contributing to Norway's workforce and community development. However, reforms over the past three decades have drastically altered their structure and function. By using prior research and descriptive data analysis in combination with a case study of the consequences of a merger process at one leading university, we analyse the concept of *academic drift* and its implications. Our findings highlight side effects of these changes: While the reforms often claimed to streamline higher education, foster global competitiveness and improving efficiency, they disregard the original function of providing regional educational opportunities and skill needs, focusing less on the original welfare state-oriented goals of these institutions. Additionally, the geographical spread as well as the disciplinary breath of merged institutions are under constant threat as part of ongoing rationalisation processes. In summary, this study provides a comprehensive understanding of how educational reforms have reshaped the landscape of higher education in Norway.

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Higher education; college; university; neoliberal reforms; economies of scale; Norway

1. Introduction

In this article, we investigate how the transformation of Norwegian district colleges into universities has impacted their original missions, with a specific focus on regional educational access, technical and vocational education and training (TVET) and the broader dynamics of academic drift in the context of Norwegian higher education reforms. Colleges, globally, especially in nations striving for massification of higher education, have played a crucial role in

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providing TVET and fostering regional development, a role that has been increasingly challenged by academic drift and neoliberal reform pressures.

In general, Norwegian higher education is characterised by accessible and free public higher education provisions, high participation rates and a high level of investment (Bleiklie 2023). This system has traditionally operated with minimal political controversy, reflecting the consensus-oriented approach in Nordic policymaking (Elken et al. 2017). However, the landscape of higher education in Norway has undergone profound transformations over the past three decades, from 1990 to 2020, particularly with the evolution of district colleges but also other higher education institutions into universities or university-like institutions (Bleiklie et al. 2017; Kyvik 2008). These changes, while contributing to the enhancement of academic standards, have also raised concerns about maintaining the original mission of promoting social equity and providing educational opportunities to all people in all regions, including remote rural areas (Gythfeldt and Heggen 2013). The developments are reflective of broader global trends in higher education, particularly the processes of massification and academic drift that have reshaped educational systems worldwide (Altbach, Becker, and Moretti 2012; Kyvik 2009; Neave 1979; Teichler 1998a).

The massification of higher education – defined as the rapid expansion of higher education to accommodate a larger portion of the population – has been a significant global trend since the mid of the 20th century (Altbach, Reisberg, and Rumbley 2019; Trow 1973). This trend has led to the diversification of higher education institutions, as well as the proliferation of new universities and colleges, and has fundamentally altered the landscape of higher education across Europe and beyond (Guri-Rosenblit, Šebková, and Teichler 2007). In response to these global pressures, many non-university institutions, including those in Norway, have experienced academic drift, where they increasingly adopt the characteristics of traditional universities in pursuit of greater prestige, research capacity and alignment with international standards (Harwood 2010; Kyvik and Lepori 2010). However, this shift often comes at the expense of the regional and vocational missions that these institutions were originally established to serve, thereby impacting their role in promoting educational equity.

For the case of Norway, the development of a unitary school system has been the main policy focus in the 20th and 21st centuries (Ministry of Education and Research 2006). After 1945, more attention was given to developing higher education institutions to cater to new needs of professionalisation and specialisation in a developing economy (Hagemann 2015). In the late 1950s, Norway along with other industrialised nations, began a significant expansion of its higher education system. This expansion aimed partly to decentralise higher education, but also to provide access to higher education for all in line with social democratic ideals of educational equality (Aamodt and Lyby 2019). District colleges were especially crucial in this endeavour, as they were strategically located to ensure educational accessibility across the country, thereby

playing a key role in promoting social equity and regional development (Jensen 2011; Knudsen and Lauvdal 2019). However, as these district colleges have transformed into more research-oriented universities, their original missions of serving local communities and providing accessible education have been overshadowed by the pursuit of academic prestige and alignment with global standards (Hazelkorn 2015; Meyer and Ramírez 2000). In this way, the Norwegian case mirrors global trends, where higher education institutions face the dual pressures of maintaining their traditional roles while striving for international recognition and competitiveness (Marginson and Rhoades 2002).

In addition to the four established universities – Oslo (established in 1811), Bergen (1946), Trondheim (1968, as Norwegian Institute of Technology from 1911) and Tromsø (1972) – 15 district colleges were founded across the country starting in the late 1960s by merging 98 state colleges (Jensen 2011; Stambøl 2011). However, the Norwegian higher education system was still complex and diversified as in other countries, for the most part highly specified higher education institutions co-existed alongside universities and district colleges until 1994. Many shorter educational pathways were subject to professionalisation in the 1970s and 1980s, with various ‘schools’ becoming district colleges and ‘pupils’ becoming students. This was an important process to formalise training previously provided by many different public and private providers. They represented an important part of the educational system, providing an increasing number of the population with access to shorter educations (Kjelsberg 2023), leading to recognised professions in the welfare state, such as nursing, teaching, business, public administration and social work. Thereby, district colleges¹ have played a crucial role in promoting regional development (Normann and Pinheiro 2019). Recent debates have highlighted the shifting landscape of these professions and how their traditional roles have evolved becoming more top-governed and academised (Gunn et al. 2019; Smeplass, Schmees, and Leiulfstrud 2023). District colleges offered specific qualifications, thereby ensuring decentralised access to professional development (Caspersen, Hovdhaugen, and Karlsen 2012; Kjelsberg 2023; Kyrkjebø, Mekki, and Hanestad 2002) and therefore were integral to the development of the welfare state, adapting to local and regional needs and supplying trained professionals to various sectors, including education, health and care organisations (Thune 2011). They generated more standardised skilled workers for both the private and public sectors, acting as key suppliers of knowledge and collaborative partners to small and medium-sized enterprises. These institutions were also significant local employers, fostering a deep sense of community and identity among residents, many of whom were educated there. The reforms in the Norwegian higher education sector, particularly the Quality Reform of 2003 and the Structural Reform of 2014, have mirrored

similar trends across Europe, where institutions have increasingly focused on efficiency, accountability and alignment with global rankings (Bleiklie et al. 2017; Pinheiro et al., 2016). An overview of changes between 2000 and 2019 revealed that the sector underwent 16 different political reforms (Sørensen 2019). Such reforms have led to the consolidation of smaller colleges into larger universities, reflecting a common trend in Europe and beyond, where higher education policies are increasingly driven by global competitiveness and the demands of a knowledge-based economy (Enders and de Boer 2009; Hazelkorn 2015).

In this sense, the growth of higher education in Norway seems to be a success story: Along with the expansion of colleges (Aamodt 1995), the number of students constantly increased from 18,200 in 1973 to 61,400 in 1992 (Kjelsberg 2023). Today, there are over 300,000 students, while 36.9% of the total Norwegian population has completed some form of higher education (Statistics Norway 2023). However, higher education policy in Norway has fluctuated between decentralisation and centralisation. The latter was dominant in the past three decades, prioritising global standards of excellence and quality over the original regional missions of these institutions (Aamodt and Lyby 2019). Over time, universities have effectively cannibalised district colleges, as part of a public rationalisation process aimed at improving efficiency and quality (see for example Kyvik 2004, 2005). The Norwegian government's reforms in 1994 and between 2010 and 2020 have been particularly transformative, more than doubling the number of universities from four to ten while reducing the number of colleges from around 100 to less than ten (Karlsen 2015). However, there are currently no systematic overviews of this extensive transformation of Norwegian higher education.

Our research aims to map the mergers into the educational landscape that exists today, as well as explore some side effects of these higher education policies in Norway over the past three decades, particularly focusing on the consequences of transforming district colleges into universities. By examining the historical and contemporary roles of these institutions, we seek to contribute to a deeper understanding of how small nations like Norway navigate higher education reforms, balancing regional needs with global aspirations. This analysis positions the Norwegian experience within the broader international discourse on higher education, drawing parallels with global trends of massification, academic drift, and institutional mergers.

The paper is structured into six sections. The following section provides a theoretical insight into the concept of academic drift, establishing the foundation for the study (Section 2). Subsequently, the methods employed in the research are detailed (Section 3). The next two chapters present the results of an overview analysis: the historical transformation of university colleges into universities (Section 4) and a case study on the merger of several colleges into

one university (Section 4). Following these, an assessment of the reforms and their impacts is discussed (Section 5).

2. Massification of higher education and the academic drift

Theoretically, this article is based on theories explaining educational change through comparative notions of massification, academic drift, and the interplay between regional and global educational policies. *Massification* refers to the rapid expansion of higher education to accommodate a larger portion of the population, a trend observed globally and significantly impacting the European education landscape (Elwick and Friedrich 2022; Schofer, Ramirez, and Meyer 2021; Trow 1973). This expansion began in the mid of the 20th century, driven by socio-economic factors such as the demand for a more educated workforce, the democratisation of education, and the promotion of social mobility (Altbach, Reisberg, and Rumbley 2019). By increasing access to higher education, countries aimed to equip their populations with the skills necessary for a modern, knowledge-based economy (Meyer and Ramírez 2000). The effects of massification have been profound across Europe, leading to a diversification of higher education institutions, the proliferation of new universities and colleges, and the expansion of existing ones (Teichler 1998a). This transformation aimed to make higher education more accessible to broader segments of the population, including those from non-traditional backgrounds. The Bologna Process, initiated in 1999, further accelerated these changes by promoting standardised degree structures, enhancing mobility, and ensuring the comparability of qualifications across Europe (Guri-Rosenblit, Šebková, and Teichler 2007).

The term *academic drift* was originally coined to describe the tendency of non-university higher education institutions to orient their activities in ways that bring them closer to the university image (Kyvik and Lepori 2010; Tight 2015). This shift can undermine their original missions, especially in terms of providing regional and vocational education. Tight's (2015) analysis also situates academic drift within the broader context of institutional isomorphism, where organisations in the same field begin to mirror the practices of elite institutions (Meek et al. 1996). Scholars have described how there has been an academic drift in professional education during the last few decades, especially for many shorter professional programmes. Many of these shorter programmes have left the field of vocational education to enter higher education (Smeby and Sutphen 2014) and became higher education degrees. Academic drift generally is taken to entail the valuing and greater uptake of academic practices at the expense of vocational qualifications and practices (Edwards and Miller 2008). The term also refers to the process by which non-university institutions, such as vocational colleges and polytechnics, gradually shift towards becoming more like traditional universities (Kyvik 2009). This shift often involves an increased emphasis on research, the introduction of new degree programmes, and in Norway, the

pursuit of university status for colleges. Academic drift is driven by various factors, including the desire for institutional prestige, the pursuit of funding and the alignment with global educational standards (Bleiklie et al. 2017). Critiques of academic drift argue that it undermines the diversity and accessibility of higher education (Harwood 2010). Scholars suggest that alternative models and strategies are needed to balance research excellence with the practical, profession-oriented missions of non-university institutions. These alternatives could help maintain the distinctiveness of vocational and regional colleges while addressing the broader goals of higher education (Kyvik 2009).

In Norway, the phenomena of massification and academic drift have notably reshaped the higher education landscape, driving regional colleges to adopt characteristics of traditional universities in pursuit of prestige and funding (Kyvik 2005). Understanding these processes is crucial for studying the evolution of Norwegian colleges, as they have been significantly influenced by global trends. The transformation of Norwegian district colleges illustrates how massification and academic drift have reshaped their missions, continuously impacting how they serve local and regional educational needs. This analysis provides valuable insights into the broader implications of educational reforms in Norway, highlighting the need to balance global aspirations with regional commitments.

3. Methodology

The methodological approach of this paper is two-fold. On the one hand, we are applying a count data analysis to get a historical overview about the processes that occurred in the higher education landscape in Norway. Count data analysis is a method typically used to quantify occurrences within a dataset, often applied in larger studies for statistical purposes. However, in this context, it is used primarily for visualising trends and organisational changes with a small dataset. The focus here is on providing a clear visual representation of the key shifts in the Norwegian higher education sector, rather than conducting extensive statistical analysis. In order to understand the changes in-depth, we then apply a case analysis where we study the merger of several colleges into the Norwegian University of Science and Technology (NTNU). In the following, these two approaches are explained further.

3.1. Analysis of organisational change in Norwegian higher education

Processes of growth or decline of organisations within a geographical unit can be investigated by using count data analysis (Beck 2009). The central question to be asked when using this approach is the conditions under which certain changes occur. Count data analysis will generate the base for further interpretation by providing a detailed picture of changes in an organisational population over time. Therefore, detailed data of high quality is necessary in order to carry

out this analysis – data can be collected through data bases, directories or websites as well as a combined approach. As for data analysis several options are possible. While for big data sets statistical approaches are needed, a visualisation as form of data preparation is sufficient for small data sets. Through an appropriate visualisation, peculiar periods in the change of an organisational population can be singled out. For the actual interpretation of the data, the count data analysis itself is, in most cases, not sufficient. Therefore, additional data must be considered to generate explanations for the periods singled out. As for the change in an organisational population, policy reforms are a possible anchor to start with (Beck 2009).

We have compiled a detailed dataset covering the period from 1990 to 2024, which tracks the evolution of Norwegian higher education institutions. This dataset includes the names of institutions, the years in which significant changes occurred (such as mergers or rebranding), and the outcomes of these changes. For example, it documents the transformation of institutions like Vestlandet's Art Academy, which became part of the Bergen Academy of Arts in 1996, and the consolidation of Nordland District College into Bodø University College in 1994. These data provide a comprehensive overview of the shifts within the higher education landscape in Norway over the last three decades. We analysed available data on the establishment, merger, and transformation. This involves compiling detailed historical data on the number and type of institutions, significant policy changes, and their immediate outcomes. The data sources include official reports, governmental publications, and historical records from the Norwegian Ministry of Education and Research. The data was transferred to an Excel sheet in order to create an overview about the mergers and changes of names over time. The function of merging cells in Excel was used to visualise mergers or integration of colleges into existing universities or the establishment of new universities or multi-campus colleges. Results are presented in Supplementary material.

3.2. Case study

A case study is an 'in-depth exploration' (Gerring 2017, 4) of a "spatially and temporally delimited phenomenon of theoretical significance" (Gerring 2017, 27; Smeplass, Schmees, and Leiulfsrud 2023). While there is a wide range of what can be called case study, single case studies consist of one case only and entail an in-depth analysis using various data sources. As only one case is analysed, the case selection strategy is of high importance. Usually, exemplary or contrasting cases are used in order to confirm or challenge theoretical-derived hypotheses.

In this study, the case of the NTNU serves as an example of how several colleges were transformed into a multi-campus university. NTNU was chosen as a case study on the one hand due to the in-depth first-hand knowledge of NTNU's development of the first author and due to its pivotal role in illustrating

the broader national trends of academic drift and higher education reform in Norway. NTNU represents a key example of how colleges have been integrated into larger, research-oriented institutions, aligning with the government's strategic objectives during the Quality Reform and the Structural Reform. NTNU's transformation through multiple mergers, including the significant integration of several colleges in 2016, highlights the shift from vocational educational missions to a more centralised and globally competitive university model. This makes NTNU a good case for examining the broader implications of these national reforms on the higher education landscape in Norway. To create a comprehensive case study, we gathered a variety of data from multiple sources to construct a detailed narrative of NTNU's transformation. The narrative is supported by collected data included web pages and documents from NTNU's historical archives including administrative records, policy documents and newspaper articles. We employed a qualitative approach to analyse the data, focusing on the implications of the mergers and the challenges faced during the integration process and assessed how the mergers influenced the design and delivery of educational programmes. Our approach ensured the reliability and depth of our case study, providing valuable insights into the broader implications of higher education reforms in Norway.

4. Historical analysis: merging colleges

Over the past three decades, the higher education sector in Norway has experienced several significant reforms (Lyby et al. 2020). Bleiklie (2019) describes the historical changes in Norwegian higher education as quality and higher degrees (1990 to 2000), quality and governance (2000 to 2010) as well as concentration and relevance (since 2010). These reforms share a common characteristic: they have introduced substantial alterations to how the sector is governed and organised (Stensaker et al. 2013). The educational level within the population has risen significantly, and the Norwegian government has utilised colleges as part of a strategy to modernise the economy and labour market. At the same time, internationalisation in higher education has led to the adoption of global standards and practices, significantly influenced by European education policy. Especially the *Quality Reform* in 2003 (Ministry of Education and Research 2000) and the *Structural Reform* in 2014 (Ministry of Education and Research 2015) have integrated Norwegian higher education with broader European trends, emphasising efficiency, accountability and quality. In the following, we describe the changes from 1990 to 2020.

In 1994, like other colleges within the district college system, the district colleges were integrated into 26 university colleges. However, Neave (1979) notes that academic drift had already been occurring in Norway as early as the 1969 to 1976 period, during which time district colleges began to adopt characteristics traditionally associated with universities. His analysis, which

includes international comparisons, demonstrates that this drift was not unique to Norway, but part of a broader trend seen across Europe, where colleges increasingly pursued academic legitimacy through research activity and expanded degree offerings. Since then, the colleges in Ås (2005), Stavanger (2005), Agder (2007) and Bodø (2011) have been granted university status, doubling the number of universities in Norway from four to eight.

Technical vocational colleges, specialising in mechanical training, have a long history of preparing youth for vocational work after nine years of general education. However, they experienced a sharp decline in candidates after 1994, when national reforms defined vocational education as part of upper secondary education. Technical colleges were expected to provide training beyond vocational requirements without competing with existing higher education programmes. This led to higher vocational education (tekniske fagskoler) being positioned between upper-secondary and higher education, with a smaller market for attracting candidates (Trøndelag Fylkeskommune 2019). Simultaneously, many technical schools were redefined as college-level educations following the 1994 higher education reform, which merged. An overview using the definitions of higher education institutions at the time shows that 98 educational organisations merged into 26 (Bleiklie 2019; Ministry of Education and Research 2008). Our analyses, spanning from 1990 to 2020 suggests a merge of 132 education institutions into 21 higher education institutions today having status as universities, universities of applied sciences and university colleges. This process is described as a transition from a 'binary higher education system' with colleges for shorter specialised educations focusing on education rather than research, towards a 'dual higher education system' where universities and other post-secondary education institutions are regarded as entirely separate and treated differently. However, in the new institutions the majority of the historical short-cycle vocational programmes are now recognised as higher education (Kyvik, 2002; 2009). These mergers were accepted to achieve cost-effective outcomes in the public sector, inspired by New Public Management ideas (Christensen & Læg Reid, 2003). Despite the mergers, most of the formerly independent colleges were retained as geographically separate departments within the new institutions (Kyvik and Stensaker 2016).

To ensure more 'robust' institutions (Lyby et al. 2020) changes included greater formalised autonomy with the various organisations, new degree structures, emphasis on teaching and mentoring methods, institutional structure, forms of accreditation, the relationship of institutions with the state, funding efficiency and internal governance and organisation. Many of these recommendations from the early 2000's were in alignment with the Bologna Process at the European level and ideas of governing models where efficiency and quality in governance of higher education organisations should be attained through targeted management (Bleiklie, 2019). The policy shift during this time was based on a revised understanding of the interplay between the labour market

and education. It was posited that education should not only satisfy current demands but also help cultivate the economy and labour market for the future. Essentially, the premise is that a higher educational level within the workforce enhances economic development and competitive edge. This perspective was underpinned by evidence showing a statistical link between a nation's educational attainment and its economic progress (Meyer and Ramírez 2000). Considerations of academic quality, higher education, and research played a significant role in shaping the integration process, and further supported the movement towards academisation as a significant force driving this integration.

Traditional institutions and vocational colleges have historically served different educational missions. Traditional universities focus primarily on academic knowledge production and research, offering a broad range of disciplines that prepare students for diverse careers, including academia, research, and specialised professions. Although these institutions do provide professional training, it is generally more theoretical and research-oriented (Altbach, Reisberg, and Rumbley 2019). In contrast, vocational colleges are designed to provide practical, hands-on training that directly prepares students for specific professions. The curriculum at vocational colleges is typically more specialised and aligned with industry needs, ensuring that graduates are ready to enter the workforce immediately (Smeby and Sutphen 2014). Pedagogically, traditional universities often use lecture-based and research-focused teaching methods, encouraging theoretical engagement and critical thinking. Vocational colleges, however, often emphasise experiential learning and practical skills to meet the specific demands of the job market. This distinction in educational approach reflects the different societal roles these institutions fulfil.

As shown in our overview in Supplementary material, Norway has seen a tremendous change in its higher education landscape, resulting in large multi-purpose universities with complex societal roles. Some colleges actively pursued university status as part of their own internal strategies for growth, aiming to enhance their academic reputation and secure better funding, as Nord University (from 2011), Oslo Metropolitan University (from 2018) and the University of South-Eastern Norway (from 2018) illustrate (Smepllass 2024). This ambition for upward mobility highlights how the evolution of Norwegian higher education was not only a result of top-down policy reforms but also of the colleges' internal drive for prestige and international recognition. This process has led to new institutional dynamics for colleges, which have been merged into universities traditionally focused on disciplinary fields and less on vocational training.

Particularly after the Quality Reform of 2003, extensive standardised management and control systems have been developed that enable better measurement and influence over the outcomes of institutional activities than before (Bleiklie 2019). A common legal framework, financing, accreditation, and evaluation systems, uniform job titles and salary systems, a unified degree and

grading system, and a common system for registering research results made it possible to compare the productivity and quality of institutions as educational and research entities. A key goal was to establish procedures and incentives that contribute to the development of outstanding environments and high-profile, visible institutions. These systems were partly maintained by a more differentiated administrative apparatus with several new units under the Ministry of Education and Research (Smeplass, Schmees, and Leiulfstrud 2023). A significant aim was to develop administrative capacity that enables monitoring, control, and follow-up of the institutions' efficiency and quality. This includes entities such as the Norwegian Agency for Quality Assurance in Education (NOKUT), the Directorate for Education and Training, the Norwegian Universities and Colleges Admission Service (Samordna opptak), the Norwegian Agency for Shared Services in Education and Research (Sikt), and the Research Council of Norway. These new agencies in combination with mergers have significantly transformed Norwegian higher education, centralising and standardising the system with a focus on research and global competitiveness. While this shift has elevated the status of Norwegian universities, it also presents changes to the vocational missions of the former colleges. And as we will discuss later, the ongoing balance between academic prestige and the original educational diversity remains a key issue for the future of higher education in Norway.

5. Case study: internal challenges of merging surrounding colleges at NTNU

The NTNU is an example of how several higher education organisations merged to form a multi-purpose university that includes both the traditional university disciplines and shorter college educations, as illustrated in Supplementary material. NTNU was chosen as a case study because it exemplifies the national trends of centralisation and academisation within Norway's higher education system and is currently providing both traditional disciplinary educations and professions that previously were taught at colleges. NTNU is a good example of the complexities of the educational reforms that have reshaped Norwegian higher education, including the integration of multiple colleges, making it an interesting case for understanding the broader impact of these reforms on the higher education sector. The university's expansion is a long-term process wherein various academic institutions have gradually been integrated into an organisation that continues to grow in size and geographical reach. Today, NTNU offers a wide range of study programmes with more than 400 different courses, about 40,000 students and about 7,000 employees, of whom 5,300 are academic (NTNU 2024). This makes it the largest university of the country and in the Nordics. The students and staff members are based at three different sites, in Trondheim (main campus), Gjøvik (295 km linear distance) and Ålesund (240 km linear distance).

The origins of NTNU date back to the establishment of *Det Trondhiemske Selskab* in 1760, which later became *Det Kongelige Norske Videnskabers Selskab* (DKNVS) in 1767. This society included the Science Museum and Gunnerus Library, laying the groundwork for Trondheim's scientific and educational community. In 1870, engineering education commenced in Trondheim with the foundation of *Trondhjems Tekniske Lærestalt*. This institution was crucial in providing technical education in Norway. The significant milestone came in 1910 with the establishment of the Norwegian Institute of Technology (NTH). NTH quickly became a leading institution for engineering education in Norway, officially opened by King Haakon VII. This period also saw the establishment of The Norwegian Teacher College (Norges lærerhøgskole, NLHT) in 1922, which later evolved to a general scientific college (Den allmennvitenskapelige høgskolen, AVH). In 1968, the University of Trondheim (UNIT) was established as an administrative umbrella over NTH, NLHT, and the museum and library of The Royal Norwegian Society of Sciences and Letters (DKNVS). Despite this consolidation, these institutions continued to operate relatively independently until the mid-1990s.

A significant transformation occurred in 1996 when the Norwegian Parliament decided to merge several institutions to create the current comprehensive university. This merger included the Norwegian Institute of Technology (Norges tekniske høgskole, NTH), AVH, the Science Museum, the Faculty of Medicine (DMF), the Art Academy in Trondheim and the Music Conservatory. This merger aimed to create a stronger institution that could offer a wide range of educational programmes and research disciplines. At the same time, from 1994 the Sør-Trøndelag University College was merged out of the Trondheim School of Economics, Trondheim University College of Health Sciences (comprising the School of Occupational Therapy and the School of Social Education), Trondheim University College of Social Work, Sør-Trøndelag University College of Nursing, Trondheim University College of Teacher Education, Trondheim University College of Engineering and the National College of Food Technology. As a university college, the clustering of these different educations was thought to strengthen the administrative system and foster interdisciplinary collaboration, creating synergies that could lead to more advanced educational and research outcomes. This consolidation was also expected to enhance the ability of these institutions to attract external funding and improve the quality of education and research by pooling resources and expertise, better aligning with national goals for higher education's contribution to economic and social development (Ministry of Education and Research 2015). Additionally, scholars have found that the reform impacted the pedagogical practices at colleges by increasing the focus on structured learning and assessment methods, such as mandatory writing assignments and more frequent evaluations, which were introduced to enhance student engagement and completion rates (Dysthe et al. 2006). Although practical training historically has been a crucial

element in many professional education programmes at colleges, research on how these practices have evolved post-reform is limited. However, as pointed out by Flobakk-Sitter et al. (2023), the quality and structure of practical periods in professional education face numerous challenges, particularly related to the alignment between educational institutions and companies where students received their practical training, the adequacy of supervision, and the relevance of practical experiences to professional requirements (Smeplass and Leiulfstrud 2022). Karlsen (2006) discusses how the 1994 reform led to the integration of teacher education into the broader system of higher education in Norway. He emphasises that this integration subjected teacher education to the same governance and control mechanisms as other forms of higher education, which led to significant changes in how these programmes were managed and delivered. Specifically, Karlsen (2006) notes that teacher education had to align with new standards and regulatory frameworks that prioritised measurable outcomes, often linked to broader educational reforms in the primary and secondary school systems. This shift resulted in a greater focus on academic achievement and standardisation, while the distinctiveness of teacher education, particularly its emphasis on practical training, became less pronounced. Another example of how the increasing academic drift has impacted vocational education is evident in the nursing and social work programmes. As highlighted by Messel (2021), these programmes have shifted from being primarily practice-oriented to becoming more theory-heavy as part of their integration into higher education. This academisation, driven by both internal professional ambitions and external educational policies, has created a tension between maintaining the practical relevance of these programmes and aligning with the academic standards typical of traditional university disciplines.

The next major expansion of NTNU occurred in 2016, when NTNU merged with the three university colleges in Ålesund, Gjøvik and Sør-Trøndelag. These mergers were part of the broader national *Structure Reform* (Ministry of Education and Research 2015), thought to improve the quality and efficiency of higher education in Norway. However, the inclusion of these colleges into NTNU posed several challenges in terms of consolidating the different social missions of colleges and universities (Sørensen 2019). Integrating different institutional cultures and administrative systems was a primary concern (Svalund et al. 2020). The colleges had distinct educational focuses and operational methods developed in collaboration with stakeholders and organisations that provided practical learning arenas, necessitating adaptation with NTNU's existing structures, who had become more aligned with more traditional academic disciplines. This merger process required significant adjustments, such as developing new systems of agreements with partnering institutions and new standardised systems for registering and quality assuring practical training. Partnerships and collaboration now turned into more formalised partnerships. Additionally, the cultural integration of staff from these colleges into the university setting posed challenges, particularly

regarding expectations around research output, academic publishing, and the balance between teaching and research responsibilities. A stable increase in registered scientific publications has been seen as a sign of increased quality and competitiveness ((Forskningsrådet 2023; Research Council of Norway 2024). These challenges were further compounded by differences in governance models, where the more autonomous and often community-oriented governance structures of the colleges had to be harmonised with the centralised system at NTNU. This led to some friction as faculty and administrative staff from the colleges adjusted to the more hierarchical and research-focused environment of the university.

Furthermore, there were significant implications for the students, who found themselves navigating an academically demanding system. This shift was particularly challenging for those enrolled in vocational programmes, where the balance between practical training and academic learning became a contentious issue. The increased focus on research and theory, as part of NTNU's broader academic mission, sometimes conflicted with the practical needs of students whose career aspirations often were more aligned with hands-on professional work. The Department of Teacher Education at NTNU exemplifies some of these challenges. Historically rooted in several teacher training programmes, the general teacher education at Sør-Trøndelag University College and the university teacher programmes were merged into one major department with hundreds of staff members (Vabø et al. 2016).² The department had to integrate curricula, harmonise teaching methods, and merge programmes across different campuses, while simultaneously adapting to new educational standards and routines imposed by the university structure. From the college, the general teacher education and a few master programmes were embedded. From the university, a five-year integrated master programme designed to prepare students to teach in upper secondary school (grades 8 to 13) in specific subjects had a more university disciplinary base. Furthermore, practical-pedagogical training in shorter programmes designed to supplement bachelor's degrees had been developed within the university tradition, with a disciplinary home base at various departments. Teachers for vocational education were trained as a collaboration between the college and university. All the different programmes went through a process of aligning their design in accordance with new standards, while systems for student's teaching practice were streamlined. The integration involved aligning curricula, standardising the use of teaching resources, harmonising teaching methods, and merging all programmes at a campus in the centre of Trondheim. The integration of different educational environments also influenced students' study experiences. Johansen and Dons (2011) emphasised that teacher students' perception of their academic environment, particularly the quality of lectures, greatly impacted their motivation and learning outcomes. Smeplass (2018) documented how teacher students at the college wanted more practical training and found that academisation over time

had led to more lecture-based courses. This underscores how the merger has contributed to a shift from a more intimate teacher-student dynamics present in the smaller college. Issues from the merger included many things, particularly merging teaching cultures and traditions, on a practical level teaching staff new routines and software, at the same time as a larger national teacher education reform was implemented (Smeplass, Schmees, and Leilufsrud 2023).

However, some of the major issues in the aftermath of the period were related to differences in teaching and research time between staff groups, as the college employees were expected to continue working on premises from working contracts with less research time than staff originally hired at the university (Lie and Knudsen 2016). Furthermore, a difference in culture was also related to the social integration of students at the smaller college, where the everyday connection between staff members and students provided a closer teaching dynamic than the university system (Smeplass 2018). While the first years after the merger was by many regarded a success, student populations declined in the biggest programmes due to policy changes and higher academic requirements (Cochran-Smith et al. 2020). The post-merger period saw a decline in student numbers in some of the larger programmes, partly due to higher academic entry requirements and changes in government funding models. Changes in government funding has furthermore put the large institution under pressure, and one joint department budget between programmes make them vulnerable for fluctuations in the number of student applicants. The government is discussing even more changes to make teacher educations attractive for students in the future (Ministry of Education and Research 2024). At the same time internal discussions are being held regarding tightening resource budgets for teaching, increasing candidate production and completion and developing more sustainable budgets at the programme level. A decline in student populations however is a national trend, and the smaller colleges providing teacher training are currently hardest affected (Norwegian Government 2024; Samordna opptak 2024). From a policy level, less emphasis is placed on the role centralising and engulfing the prior college educations into university structures have influenced the local institutional conditions, and maybe also the attractiveness for different groups of students. Teacher training programmes that in prior arrangements could develop independently from each other, are now part of a much larger policy landscape, where macropolitical decisions have great impact on everyday tasks and adaptations. Furthermore, in times of budget restraints, programme profitability has become increasingly important, further threatening the study portfolio.

The case of NTNU and its Department of Teacher Education illustrate the struggles to find the balance between the social missions of shorter college educations and research-oriented disciplines who provides the standards for how all programmes should be designed. The integration of different administrative systems and institutional cultures presented substantial challenges,

affecting not only the operational situation but also the sense of community and identity among staff and students who used to have more intimate college environments.

6. Balancing the global and the local

As shown through the literature (Aamodt and Lyby 2019; Kyvik 2009), the role of colleges in Norway has changed tremendously over the past three decades, during a period marked by significant restructuring of educational institutions (see Supplementary material) and substantial government investment in higher education, as evidenced by the increasing number of students enrolled in higher education (Statistics Norway 2023). Consequently, the relationship between practical professions, once primarily taught at smaller, specialised colleges, and higher education programmes has largely shifted towards an academisation of these professions. This transformation is part of a broader story within Norwegian higher education – a balancing act between global outreach and regional relevance, standardisation and diversity, local investment and economies of scale and the ambition to raise educational attainment while at the same time promoting social equality. Historically, Norwegian colleges played a pivotal role in shaping the educational landscape, offering shorter, vocationally oriented programmes in rural areas. These programmes in fields like health education, teacher training, engineering, and business studies enabled local populations to acquire formal qualifications without the need to relocate to urban centres.

However, the integration of various forms of higher education into larger university structures, driven by reforms such as the Quality Reform of 2003 and the Structural Reform of 2014, has significantly altered their original missions. The shift towards a more centralised model of higher education, focused on global competitiveness, has introduced academic drift, where the emphasis on research and global rankings overshadows the practical, community-focused goals of the former colleges. The consequences of this shift can be understood through the lens of massification – the expansion of higher education to accommodate larger portions of the population – and stratification, which leads to institutional differentiation in prestige and function (Teichler 1998a; Trow 1973). While the former colleges are either merged with a university or oriented towards university ambitions, higher TVET in Norway finds itself in a squeeze between higher education and TVET as upper secondary training, with a recognition scheme implemented as late as 2019 (Cedefop 2024). While 50% of the youth population in Norway enters the TVET system (Schmees et al. 2024), only 30,000 students are enrolled in higher TVET compared to 300,000 in higher education. This sharp contrast underscores the relatively small share of higher TVET within post-secondary education, despite its potential role in equipping

candidates with vocational skills and providing continued learning possibilities in practical professions.

The expansion of higher education is not unique to Norway. Similar trends are observed globally, particularly in the European context, where higher education institutions also face increasing pressure to align with international research standards and rankings (Hazelkorn 2015). The Norwegian case, exemplified by the transformation of NTNU, illustrates how smaller, vocationally oriented institutions have been subsumed into larger, research-focused universities. This shift, while elevating the international stature of Norwegian institutions, raises concerns about whether they can continue to meet both regional and vocational needs in line with other educational goals. In the case of NTNU, challenges emerge around integrating diverse institutional cultures and reconciling the global pursuit of academic prestige with the local demands for profession-oriented education. Also, time will show if the geographical spread and the wide coverage of academic disciplines by NTNU can be sustained or if financial pressure over time will lead to a geographically more centralised and academically more focused institution. In the latter case, the benefits, the district colleges once offered, could fizzle out.

The academisation process has led to a prioritisation of research outputs and global rankings over the practical professional training. This misalignment is further exacerbated by centralisation trends, where rural regions, particularly in the north, face increasing difficulty in retaining qualified professionals in sectors like education and healthcare (Andersson, Håkansson, and Thorsen 2019; Ministry of Local Government and Regional Development 2020). The geographical concentration of universities in urban centres, combined with the migration of students from rural areas to these cities, has weakened the original mission of providing equitable educational access to rural populations. This urban-rural divide in educational attainment is evident in the migration of 99.3% of students from the least central municipalities to urban areas for their studies (Corneil 2023). Moreover, gender disparities persist, with women more likely to pursue higher education, while men from rural areas experience lower completion rates (Fredborg 2023).

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Notes

1. The translation of non-English names and titles into standard British or American terminology can be challenging and potentially misleading due to discrepancies between translations from various countries and their Anglo-American equivalents (Kyvik 2009). ‘Specialised university institutions’ translates from ‘vitenskapelige høyskoler’, referring to institutions with university status, a term officially adopted in 2000. ‘Distrikthøyskoler’ are translated as ‘district colleges’ and ‘regionale høyskoler’ as ‘regional colleges’ to maintain clarity. Following a 1994 merger, ‘statlige høyskoler’ were initially translated as ‘state colleges’. These were later approved to be called ‘state university colleges’ and are now officially ‘university colleges’. To avoid confusion with the English term ‘university college’, which typically refers to a section of a university, the term ‘college’ is used.
2. The department today offers a variety of programs including a three-year bachelor’s degree in Archive, Library, and Museum Studies and Vocational Teacher Education. Five-year integrated master’s programs are available in Primary School Teacher Education for Years 1–7 and 5–10, Lecturer Education in Geography, History, Physical Education, Science, Social Studies, and Languages for Years 8–13, with specific departments hosting each program. Additionally, two-year master’s programs include the Master in Archival and Documentation Studies and the Master in Subject Didactics. Experience-based master’s programs are available in Education for Teachers and School Development and Educational Leadership. Practical Pedagogical Education is offered in flexible part-time formats over two years or a full-time one-year program.

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