

# The changing nature and role of vocational education and training in Europe

**VET in higher education: Country Case Studies**

AO/DSI/JP/Changing\_Role\_of\_Vet/009/15

## Case study focusing on Norway

prepared for CEDEFOP – European Centre for the Development of Vocational Training

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*This text is presented in its original form.*

*It has neither been revised nor edited by Cedefop.*

## **The changing nature and role of vocational education and training – overall aims**

The purpose of the Changing nature and role of VET-project is to improve our understanding of how VET is changing in the countries belonging to the European Union (as well as Iceland and Norway). Over a three-year period (2016-18) the project will analyse how vocationally oriented education and training has changed in the past two decades (1995-2015) and based on these results investigate the main challenges and opportunities facing the sector today and in the future. Work is divided into six separate but interlinked themes:

- (a) the changing definition and conceptualisation of VET;
- (b) the external drivers influencing VET developments;
- (c) the role of traditional VET at upper secondary level;
- (d) VET from a lifelong learning perspective;
- (e) the role of VET at higher education levels;
- (f) scenarios outlining alternative development paths for European VET in the 21st century.

The study takes as its starting point that vocationally oriented education and training is something more than the traditional VET delivered at upper secondary level (in the form of school-based education or training, apprenticeships, or combinations of these). Due to the requirements of lifelong learning, we are able to observe diversification of VET with new institutions and stakeholders involved. We also see an expansion of VET to higher education areas, partly through reform of existing institutions, partly through the emergence of new institutions. This has been caused by factors internal to the education and training system as well as by external pressures linked to demographic, technological and economic changes.

This particular case study, together with 9 other case studies, provides input to theme (b) of the project ('The external drivers influencing VET developments').

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## Case study

**Country: Norway**

**Author: Torgeir Nyen & Anna Hagen Tønder**

**Title of the case study: Higher VET in Norway**

### 1. Introduction

*Please provide a concise introduction that gives an overall indication of the change processes observed (during the last 20 years) related to VET at higher levels in terms of 'academic or vocational drift' or 'expansion of VET at higher levels (outside higher education)'.*

**University colleges** have since before 1990 provided vocationally oriented programmes in fields like nursing, engineering, teaching and social work. These colleges have gone through institutional changes the last 25 years that can be characterised as **academic drift**. In 1994, colleges with programmes in teaching, nursing, engineering and social work were merged to regional university colleges (so-called state colleges). There has been a harmonisation of legislation and governance applying to university colleges and universities, in the form of common legislation (mid 1990s), academic career system, grade system (Bologna-induced) and financing system. The introduction of an accreditation system from 2004 has also contributed to academic drift because of staff competence criteria, although labour market relevance criteria have also been introduced. The latest decade has seen large institutional changes, where university colleges have become universities and university colleges have merged with each other or merged with existing universities. These restructuring processes have fundamentally transformed the higher education system in the direction of a unified system. Also, when it comes to content and delivery there are signs of academic drift. The general tendency is towards a stronger emphasis on theoretical and abstract knowledge.

**Within higher education**, there are also **some examples of vocational drift**, including new programmes that can be combined with work through the practical organisation of the programme and through programmes where students should apply theoretical knowledge to their work experiences.

Outside higher education, the **vocational college sector** has been increasingly 'institutionalised' as a part of the education system. Legislation in 2003 established vocational colleges as tertiary education, with completed upper secondary education as admission requirement. The sector is diverse, with a stable segment functioning as further education in technical, maritime and health fields. In other fields, there are examples of academic drift, where some large mercantile and creative vocational colleges have become university colleges. So far there has not been an increase in students and programmes in the sector. However, the ambition of government and the social partners is to develop the vocational college sector as an alternative to academic higher education.

**Non-formal tertiary vocational qualifications** have by and large maintained its role in the labour market, primarily in the private sector. The Master Craftsman's Certificate (mesterbrev) is the most important of such qualifications.

## 2. VET at higher levels

*Please briefly describe the current situation related to 'VET at higher levels' in your country and refer to the following questions:*

*Which **types of vocationally oriented degrees/qualifications** are currently awarded at **EQF levels 5-8** and **since when**? Please include the titles of these types and their NQF/EQF level and **describe them briefly!** Please use the most commonly used English translation for the titles of qualification types and use these titles consistently! <sup>(1)</sup> To which **educational segment** do they belong (e.g. higher education, post-secondary level VET, CVET)? What is the **'importance' of these types** (e.g. in terms of number of learners or graduates) compared to other types (such as number of students enrolled in academic HE programmes)? Are there any prevailing economic sectors?*

*Please include any **figures or diagrams** (time series), if possible!*

On EQF levels 5-8, there are four types of vocationally oriented qualifications:

1. Qualifications at EQF level 5 from vocational colleges:
2. Vocationally oriented qualifications at EQF level 6, sometimes 7, traditionally acquired through studies at university colleges (within HE).
3. Vocationally oriented qualifications on EQF level 6-7 from universities or specialised university institutions
4. 'Non-formal' higher qualifications outside higher education and vocational colleges

**Vocational colleges** provide tertiary vocational education programmes that last between ½ - 2 years. Public colleges run by the county authorities offer technical and maritime programmes as well as health and social work programmes, while private providers offer an array of programmes, where the largest are within the fields of creative work (incl. media) and economy and administration (Høst and Tømte, 2016; Kyvik, 2016). The programmes provided by public colleges are the largest and are growing in student numbers, while the number of programmes and students in private colleges is declining. The sector is diverse, with both initial education and further education. Many programmes in vocational colleges function primarily as further education, especially for skilled workers with vocational upper secondary education, but vocational colleges provide also initial education. Some programmes are closely linked to particular positions in the labour market. Other programmes have weaker ties to the labour market, and correspondingly lower employment rates after graduation (Støren and Waagene, 2015).

In 2003 the sector was formally regulated by the Act Relating to Tertiary Vocational Education. All qualifications/education programmes in vocational colleges need to be accredited by the national accreditation body, NOKUT, but there is a provision that NOKUT

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<sup>1</sup>() If applicable, refer to the Cedefop NQF monitoring reports – see: <http://www.cedefop.europa.eu/en/events-and-projects/projects/national-qualifications-framework-nqf/european-inventory>

can grant a college self-accreditation rights to establish new programmes within a particular field, which a few colleges have acquired. In recent years there has been a strong growth in the number of vocational colleges and the number of students enrolled in vocational college programmes. In 2005, there were around 3,500 students in vocational colleges. In 2016 there were 96 vocational colleges, with around 14,750 students (SSB, 2017b). There has also been a large increase in the proportion of students in private education. In 2005, almost all students in vocational colleges were enrolled in technical programmes. In 2016, less than half the students were in technical programmes. Other subject areas that attract many students are health and social care, business and administration, and humanities and arts.

6,559 students completed such education in 2015 (KD, 2016). This segment of the education system is small compared to higher education which has around 289,000 students (SSB, 2017a).

Entry requirement to vocational colleges is vocational upper secondary education (trade certificate), general upper secondary education, or assessment of prior learning. 60 percent is admitted on the basis of the vocational upper secondary education (trade certificate), 30 percent on general upper secondary education and 10 percent on assessment of real competence (NOU 2014, p. 20). In the Norwegian NQF, which has eight levels that correspond to the EQF, there is a subdivision of level 5 to distinguish between short programmes and more comprehensive programmes: 5.1 Certificate of completed postsecondary VET 1 (*Fagskole*), 5.2 Certificate of completed postsecondary VET 2 (*Fagskole*). The term 'higher vocational education' has recently (May 2017) been established as an official term for the vocational college programmes.

**Vocationally oriented higher education qualifications**, mostly on EQF-level 6, but some on EQF 7, have traditionally been offered by **university colleges**. These qualifications include nursing, teacher, engineering qualifications and various other qualifications. The ongoing restructuring process of higher education has seen many university colleges merged into existing universities or becoming universities on their own. Consequently, such higher VET programmes are increasingly offered by universities, although often at the college campuses and with the same college staff. In 2016, there were about 100,000 students in university colleges, of which 80,000 in public colleges and 20,000 in private (SSB, 2017a). These figures include all students in such colleges. There is no clear distinction between academic and vocational qualifications and programmes on the higher education level (unlike at upper secondary level, EQF level 4).

**Vocationally oriented qualifications provided by universities or specialised university institutions** include vocationally oriented bachelor (EQF 6) and master (EQF 7) programmes. The total number of students in such institutions, including more general programmes, was 173,000 in 2016 (SSB, 2017a). All higher education, both university colleges, universities and special university institutions, is regulated by the Act Relating to Universities and University Colleges of 2005. University colleges need accreditation from NOKUT for master or PhD programmes, but have self-accreditation rights for bachelor level programmes. Universities can establish programmes on all levels.

**'Non-formal' higher qualifications** <sup>(2)</sup> are not (yet) a part of the NQF, and thus not attributed to a particular EQF level. There are however a few qualifications that build upon upper secondary qualifications and which can be regarded as at least on EQF level 5 or higher. The most prominent example is the *Mesterbrev*, or master craftsman qualification within around 70 different trades, which is normally awarded on basis of a specific vocational and commercial education, the *Mesterutdanning*, though other routes do also exist. The normal entry requirement is the relevant trade certificate (upper secondary) and two years of practice as a craftsman. The qualification is outside the formal education system, but regulated by a separate act, *Lov om mesterbrev i håndverk og annen næring*, of 1986 (Master Craftsman Certificate Act). The master craftsman scheme is regarded as a business policy instrument as well as an education and is therefore organised under the Ministry of trade, industry and fisheries. The purpose is to strengthen recruitment and training in the trades, and to ensure the sound operation of enterprises and protect consumer interests.

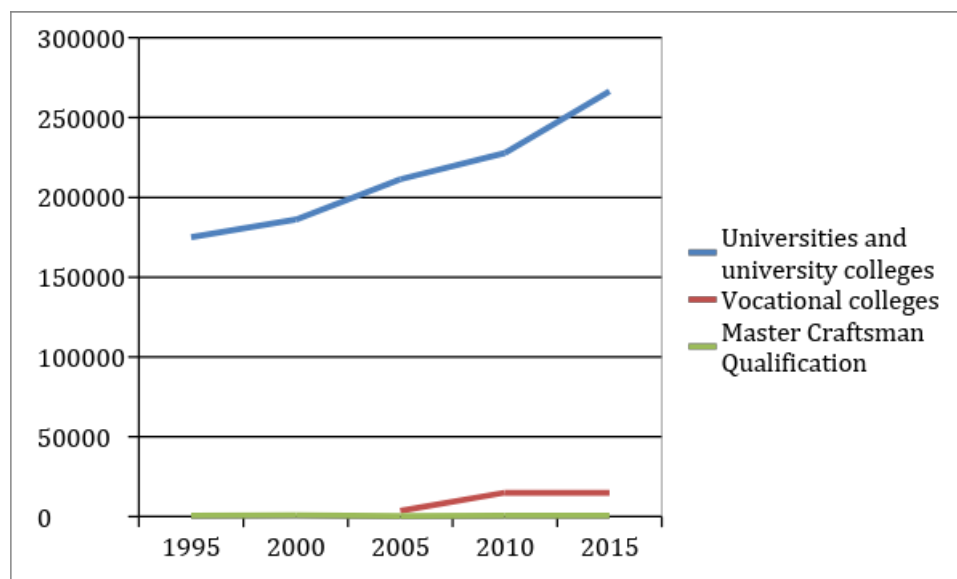
The qualification is governed by a committee consisting of representatives from the main employer and employee organisation, which is responsible for managing the scheme. The committee is appointed by the Ministry of Trade, Industry and Fisheries. SRY, the main tripartite advisory organ for vocational upper secondary education, propose two of its five members. There is a permanent staff which administers the qualification. The education itself is provided by three different providers: a training institution established by employer organisations within construction, an adult education provider and a vocational college.

The figure below presents an overview of students enrolled in programmes offered at universities, university colleges and vocational colleges during the last 20 years. Unfortunately, separate data for universities and university colleges for the 20-year period are not available. For vocational colleges, there are no continuous data series until 2011, so the figure is based on a report for the 2005 data point and the authors' own estimate for the 2010 data point based on the 2011 figure. There are no data for 2000 and 1995. Høst and Tømte (2016) estimate the number of students to be fairly stable in that period (based on a report from 1999 that is only available in printed form), but provide no exact figures.

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<sup>2</sup>() Please note, this term is not officially used in Norway but used in this case study for qualifications that are offered at a tertiary level outside the formal education system.

Figure 1 **Students enrolled in universities, university colleges and vocational colleges (1995-2015) and master craftsman qualifications granted**



Source: Statistics Norway (SSB), NSD-DBH-fagskoler, Master Craftsman Committee. Note: The graph for universities and university colleges include all students in these institutions. The graph for master craftsman qualifications shows the number of master craftsman qualifications granted in 1995 (487), 2000 (787), 2005 (406), 2010 (562), and 2015 (566).

### 3. Change processes during the last 20 years - educational system perspective

*One of the unique features of this study is the emphasis given to the historical development of VET systems. In this section, the focus is on the change processes that have taken place during the last 20 years related to VET at higher levels in terms of 'academic or vocational drift' or 'expansion of VET at higher levels (outside higher education)' from the perspective of the educational system.*

*Depending upon the situation in your country, relevant developments might have started already before the 1990s. In other cases there may be no need to take such long-term perspective, but at the very least the commentary should go back to the middle of the 1990s.*

*Please describe first these change processes and their impact on the overall system (3.1), before presenting characteristics of VET offered at higher levels from the perspective of the educational system (3.2). Please clearly distinguish between the different objects and contexts of change, respectively the different types of VET qualifications/programmes offered at higher education levels.*

*Please refer to the "Characteristics and indicators of 'academic drift', 'vocational drift' and 'expansion of VET at higher levels (outside HE)'" (presented in Table 2 of the guidance note; the relevant aspects are included in each section here below): Please reflect whether any of these characteristics and indicators can also be identified in your country and which ones – identified in your country - should be added.*

#### 3.1. Change processes and their impact on the system



- a) *To what extent can changes related to 'academic or vocational drift' or 'expansion of VET at higher levels (outside higher education)' be observed? To what extent have vocationally oriented programmes/qualifications at higher levels been introduced during the last 20 years and in which way (e.g. by up-grading VET institutions/programmes into higher education, by introducing new types of programmes within higher education without upgrading VET institutions/programmes, or by establishing new types of VET programmes/qualifications outside higher education)?*
- b) *Can any different phases or stages of this development over time be identified?*
- c) *What kind of impact does this have on the education and training system? E.g. development of a new sector outside higher education, development of a new sub-sector within higher education (and to what extent has this change led to the establishment of a - full or partial - 'unified', 'binary' or mixed higher education system)?*

The restructuring process in **higher education** is an important change process impacting on higher VET. Through this process, the number of **university colleges** has been reduced considerably, and the distinction between universities and university colleges has been blurred to an extent that researchers within the field say that the binary system is breaking down in Norway (Kyvik, 2016, p.169). We can distinguish between two phases, first, the merger of university colleges, second, the gradual integration and later merger of university colleges and universities. These processes are highly related to academic drift, whether as cause or effect. The second phase of institutional changes has been interpreted as a result of academic drift of the vocationally oriented higher education in the vocational colleges (Kyvik, 2016), although there are of course mutual interaction effects, where institutional changes and harmonisation of rules/systems provide further incentives for academic drift.

Already in 1994, 98 regional colleges merged to become 26 university colleges, mainly through a regional integration of colleges within various fields, for instance nursing colleges and engineering colleges. Such changes were proposed as early as in the 1960s. The stated ambition on the 1994 reform was to strengthen research and education, improve administration and realise economies of scale. The ambition that teaching in colleges should be research based came with the merger in 1994, and so did the introduction of a leadership model similar to universities with a distinction between elected and administrative leaders (Kyvik, 1999).

The merger of university colleges was a prerequisite for the later gradual integration between universities and the university college sector. The integration has taken place through harmonisation of rules/systems, through new legislation allowing university colleges to become universities and through recent mergers between university colleges and universities. First, the rules and systems applying to universities and university colleges were harmonised. From the mid-1990s, university colleges and universities have been regulated by the same act (*Act relating to universities and university colleges*). Later, an academic career system was introduced in the colleges, the Bologna process led to a common degree system, and financing of colleges became partly based on academic achievements. Along

with increased competition for students in a 'market' where youths increasingly have had academic aspirations, these changes have reinforced the academic drift in the self-perception and goal-perception of the university colleges. Then from 2004, the colleges were allowed to apply for accreditation to obtain university status. Three colleges have become universities through this procedure. Four more have applied or will apply in 2017. The criteria to be accredited as a university obviously focus on the institution's academic merit, for instance the number of students in PhD programmes. Since 2010, several university colleges have merged with each other and/or existing universities, especially during 2015-2016 as a result of the incumbent right-wing government's explicit policy aims of making structural changes to create larger university colleges and universities. By the beginning of 2017 there were 22 universities and state university colleges, compared to 33 as late as in 2015. There were 17 private university colleges which receives public funding, compared to 21 in 2015.

These restructuring processes have fundamentally transformed the higher education system in the direction of a unified system. As mentioned in chapter 2, there has been criticism of this, where some fear that the vocational programmes will become too academic and removed from practice. Changes in the content and delivery within the programmes are discussed in chapter 4.

Within higher education, both in **university colleges** and in **traditional universities**, there are examples of vocational drift. New 'work-based' bachelor and master programmes that can be combined with work have been established, including so called experience based masters (Kyvik, 2016). These can also function as further education for adults. This development was spurred by a policy program - the 'competence development programme' (2000-2005) – which was part of a policy of developing lifelong learning and adult skills. That program led to many education programmes that could be combined with work and used workplace experiences as part of the programme. Besides, some academic bachelor and master programmes have introduced work practice periods to improve employability of candidates (Kyvik, 2016). An important reason for increasing the vocational aspect of higher education programmes or establish new more vocationally oriented programmes is to secure the recruitment of students to these institutions and programmes. Also new programmes combining elements of other programmes have been established, the primary example being the lecturer programme, where future higher-grade teachers (upper secondary) now study in an integrated programme with pedagogy, disciplinary subjects and practice.

The **vocational college sector outside the higher education system** is very diverse. Unlike higher education, this sector meets no formal requirement that the education should have to be research based. According to a NOKUT report, there is still a tendency towards academic drift through institutional changes and through establishment of higher education programmes within vocational colleges (Bakken, 2014). Some colleges have established programmes on the higher education level (EQF 6, accredited by NOKUT). It has led to a less clear distinction between vocational colleges and higher education (Bakken, 2014).

Besides, several vocational colleges have become university colleges (eleven in the period 2004-2013), including some of the larger ones. Only a limited number (14) of new vocational colleges has been established in the same period, mostly small institutions. However, as

mentioned above, there is an ambition among the main social partners and government to develop this sector further to become a vocational alternative to the higher education system.

The **master craftsman scheme** was established in 1987 and is therefore relatively new. An adult education association used to be the main provider of the master craftsman education. Since 2010, a master craftsman programme has been offered by a vocational college, VEA. This programme is aimed at practitioners within traditional crafts. In 2016, a third master craftsman education was established by employer organisations within construction. The stated aim was to offer a modern, practical and relevant education aimed at master trades within construction. <sup>(3)</sup> It is also possible to obtain a master craftsman certificate through alternative routes, mostly programmes offered by vocational colleges. In recent years the number of students enrolled in master craftsman education has declined more than the number of new certified masters, indicating that more people have followed alternative routes to the master qualification (DAMVAD, 2014).

### 3.2 Changes related to characteristics of 'VET at higher levels'

#### 3.2.1 Changes related to governance and institutional structures of 'VET at higher levels'

- a) *What is the governance structure of these VET programmes/qualifications at higher levels and what kind of quality assurance regulations are in place (e.g. which national/regional authority provides accreditation/recognition, how are aspects of academic or vocational drift reflected in accreditation regulations)? To what extent and how has this changed?*
- b) *What is the role of labour market stakeholders/companies in relation to these types of programmes/qualifications? To what extent and how has this changed?*
- c) *What are the funding sources (and with what share) for these type of programmes/qualifications? E.g. what is the role of the State (educational or labour market budget) and of labour market stakeholders? To what extent and how has this changed?*
- d) *Which are the key providers of such programmes/qualifications? Do they differ from other providers, such as IVET providers or providers of more academic higher education? To what extent and how has this changed?*

**Universities and university colleges** are regulated by the Act Relating to Universities and University Colleges of 2005, while vocational colleges are regulated by the Act Relating to Tertiary Vocational Education from 2003. In a long-time perspective (over 30-40 years), there has been a shift from direct governance of higher education by the state, to greater institutional autonomy combined with external accreditation following the Bologna process. The role of labour market partners towards higher education on the national level has not changed considerably. The social partners have had a weak influence on the national level in this sector.

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<sup>3</sup>() <https://www.byggmesterforbundet.no/nyheter/mesterutdanning-fra-blimester.com>

Accreditation rights differ between universities, university colleges and vocational colleges. Universities can establish programmes on all levels. University colleges need accreditation from the national accreditation body NOKUT for master or PhD programmes (with a few exceptions), but have self-accreditation rights for bachelor level programmes. Vocational colleges need accreditation for all qualifications/education programmes by NOKUT, but there is a provision that NOKUT can grant a college self-accreditation rights to establish new programmes within a particular field, which a few colleges have acquired.

The national accreditation body NOKUT was established in 2003. The accreditation criteria for institutions and programmes within higher education are formulated in a regulation about inspection of quality of 2017. The regulation has a number of general and more specific criteria, including requirements about percentage of staff at various academic levels for programme accreditation. The NOKUT accreditation and review processes have been seen as inducing academic drift in the **university colleges**, especially the requirement regarding percentage with research competence in the teaching staff. In an early review of nursing education in the university colleges, many colleges failed to be accredited, as they did not have a sufficient number of teachers with research competence, which led to a debate about the criteria. The criteria for accrediting vocational colleges are listed in a different regulation (about quality reviews in vocational colleges), and includes mostly general criteria regarding vocational relevance, competence and administrative elements. As far as we know there has not been a debate about academic or vocational drift regarding these criteria.

**Vocational colleges** are legally organised in different ways, both within the public and private sector. National legislation requires all colleges to have boards that are accountable. There are no requirements for representation of enterprises or labour market organisations in these boards. However, NOKUT requires vocational colleges to have a formalised agreement with labour market representatives to ensure that the content of programmes is relevant to labour market needs. On the national level, there is an advisory tripartite body for the vocational college sector, called *Nasjonalt fagskoleråd*. It has a broad mandate focused on developing the sector at large. It was established in 2010. Establishing this body was a strategy to strengthen the vocational colleges' position within the education system and in society at large, and to coordinate a diverse sector, as well as to ensure their relevance to the work life. The body is inspired by the tripartite body for upper secondary education (SRY), and has a majority representation from the social partners (employer organisations, trade unions) in addition to representatives from the vocational colleges. It can be interpreted as a strengthening of the vocational aspect of the vocational colleges, bearing in mind that the relation to the labour market varies between different types of colleges. An evaluation has been carried out (Høst and Tømte, 2016). The evaluation report suggests that the vocational college sector might concentrate to a greater degree on the role of providing further education to people with upper secondary VET, as these programmes (within technical, maritime and health areas) are the most stable programmes with a clear relationship to the labour market, while there is much academic drift within other parts of the college sector.

Most **universities and university colleges** are public, and can in principle be instructed by the ministry of education although this rarely occurs. The ideal of academic self-governance is central, also for university colleges, including decisions on which programmes they offer. There is a joint body, *Universitets- og høgskolerådet*, which has all universities and university colleges as members, and which has a cooperative function and policy advising function towards government and parliament. There are a large number of national cooperative councils underneath this council/body, at different levels (aggregated education fields, professions, disciplines). From 2011, each university and university college has been required to have a council for cooperation with working life. In a recent evaluation (Tellmann et al., 2017), these councils are said to have strengthened cooperation with work life institutions, especially on the strategic level. This could be considered as vocational drift; however, few changes in the structure of programmes are observed yet, but the structural changes on the institution level have delayed the establishment of such councils, so they are still in an early phase of operation. Traditionally employer and employee organisations have had a weak or no role in the governance of higher education. However, there has been an increased emphasis on relevance and work life cooperation also for higher education, which has also led to new programmes, as described in chapter 3.1.

Funding for higher education institutions is public over the national state budget. Output/results-based funding were introduced in 2002, and currently account for 31 percent of state funding, while the rest is basic funding. There are comparatively few private higher education institutions. These also have primarily public funding, but some funding through tuition fees. Higher education institutions do not rely on funding from enterprises, but do receive private funding from enterprises for tailor-made continuing and further education courses; however, in most cases these are non-formal courses.

**Vocational colleges**, both public and private, receive funding primarily from the county administrations. This funding has shifted back and forth between state (2003-2010) and county (up to 2003 and from 2010 to present). <sup>(4)</sup> Some colleges receive funding directly from government ministries or underlying units, primarily within health care to cover skills needs related to government policies to improve quality within the sector. In the recent government white paper, Meld.St.9 (2016-2017), it is proposed to establish a new funding model for all types of vocational colleges, with earmarked state funding through a combination of basic and output<sup>5</sup> funding.

The **Master Craftsman qualification** is, as mentioned above, governed by a committee consisting of representatives from the main employer and employee organisation. Some of these are proposed by SRY, the main tripartite advisory organ for vocational upper secondary education. Tripartite cooperation is therefore a strong element in the

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<sup>4</sup>() The counties receive cross-sector en bloc funding from the state. The number of students in vocational colleges influences the distribution of the en bloc funding.

<sup>5</sup>() Output funding will be based on study points completed.

governance of these qualifications. The governance structure has not changed significantly in recent years.

Summing up, the governance structure has changed, with different changes pointing in different directions. On the one hand, accreditation procedures and government policy on institutional changes induce academic drift. On the other hand, a prime intention behind the establishment of the national advisory council for vocational colleges and local councils for higher education institutions has been to create stronger links between the educational institutions and labour market stakeholders and local companies. Overall, the trend has still been towards academic drift. Institutional changes 'upwards' in the educational hierarchy tend to move institutions into governance structures where labour market stakeholders have less efficient formal arenas to voice their concerns and where legislation encourages education with a research based and academic profile. The attempts to strengthen the vocational aspect through tripartite cooperation and local councils for cooperation with work life have not yet brought major changes.

### 3.2.2 Changes related to the target groups of 'VET at higher levels'

- a) What is the main target group of these types of programmes/qualifications, what are the access requirements? E.g. to what extent is possession of an IVET qualification, professional work experience or the school-leaving exam a requirement? To what extent and how has this changed?
- b) How can the identity of students (their legal status) be indicated and how has this changed (e.g. are they predominantly students and in some cases interns and trainees or are they predominantly employees enrolled in programmes)? To what extent and how has this changed?

A dimension to assess academic vs. vocational drift is the entry requirement for higher vocational education. Vocationally oriented programs in **university colleges** usually require general entry qualifications to higher education (like university studies). Completed general upper secondary education gives general entry qualifications to higher education, but completed vocational upper secondary education do not. However, those with vocational upper secondary qualification (trade certificate) may take a one-year course of general subjects to obtain general entry qualifications. (Also, vocational students at upper secondary level can take this course during their education to bridge across to the general, academic track.) Adding a vocational college qualification on top of a trade certificate does not give general access to higher education, but may give credit points for entry to some studies. <sup>(6)</sup> Before the reform of upper secondary education in 1994, there was a debate about whether vocational upper secondary education should give general access to higher education, but

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<sup>6</sup>() In May 2017, parliament decided that vocational college should give credit points for admittance to higher education, provided that the student had acquired entry qualifications (general or programme-specific).

this was decided against. Some alternative pathways into higher education, however, exist in the field of engineering and (as a pilot project) in nursing (see Section 6).

A small third path to **higher education** is admittance on the basis of assessment of 'real competence' (only for applicants 25 years or older). Between 1,500 and 2,500 applicants have entered higher education each year through assessment of prior learning the last few years (2014-2016). <sup>(7)</sup>

Unlike the university colleges, students/participants in vocational colleges and the master craftsman programme to a far greater extent have work experience. The **master craftsman programme** recruits participants with previous work experience in the relevant field. The programmes in the various fields build upon vocational education on the upper secondary level and relevant work practice. A major segment of the **vocational college sector** recruits students with a vocational qualification (from upper secondary VET) and often with relevant work experience. This includes the technical, maritime and health colleges/programmes. In this segment, the vocational colleges function as further education institutions, or alternatively students with completed upper secondary VET transit directly to vocational colleges (in maritime programmes). A smaller segment of vocational colleges recruits students with a general upper secondary education. This includes creative studies, business and a variety of other programmes. These programmes have a less tight relationship to employers and work life, and students do not necessarily have previous education in the field or relevant work practice.

The master craftsman programme and many vocational college programmes are offered in a part-time format, making it possible combining study and work. Also, university colleges offer part-time study programmes to accustom the need for employed students.

There is evidence of academic drift in students' educational aspirations. Although the proportion of each birth cohort who enters higher education has not increased substantially since 2000, an increasing number of those who complete initial upper secondary VET later enter higher education, measured as proportion of each cohort of VET graduates 2003-2012 (Nyen, Skålholt & Tønder, 2014, p. 151). Although some take higher education to move to other work fields, most within health care take higher education to work within the same field, but in other positions. Health care is a highly 'occupational labour market', with strict formal qualification requirements for various positions (Marsden, 1990).

### 3.2.3 Changes related to the main purposes and functions of 'VET at higher levels'

- a) What is the main destination of graduates, which qualifications and rights do they acquire? E.g. do they gain rights for progressing in education (such as access to higher education), do they occupational qualifications and rights or both, educational and occupational qualifications/rights? To what extent and how has this changed?
- b) What is the occupational status of graduates? E.g. will they be technicians/professionals? To what extent and how has this changed?

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<sup>7</sup>() The data are collected from the database Statistikkbanken at Kompetanse Norge.

Over the last few years, little has changed regarding the value of qualifications from **vocational colleges** for access to higher education. The same is true with **non-formal tertiary qualifications like the master craftsman certificate** offered outside the vocational college sector. Both these types of qualifications are aimed at filling competence needs in particular positions in the labour market. Only a handful of these qualifications are certified occupations though, all in transport; either maritime, train or plane. Actors within the national council for vocational colleges have tried to achieve recognition for vocational college education into higher education (within relevant fields), but have not succeeded. However, recently it was decided in Parliament that, although vocational college qualifications will not give general entry qualifications for universities or university colleges, vocational college will give extra points when competing for a study place (on par with military service) if the person has general entry qualifications from elsewhere.

Vocationally oriented qualifications at **university college** level are also aimed at the labour market. A number of these, including teachers, kindergarden teachers, nurses and various other health professions, are regulated professions. Most students within these programmes enter the labour market after completion. There are a number of specialisation programmes at university colleges (1-2 years) that function as further education for nurses. These are often linked to specific positions which require such specialisation. As mentioned above, these programmes are increasingly offered on the master level.

#### *3.2.4 Changes related to the perception of 'VET at higher levels'*

- a) *How are these VET programmes/qualifications at higher education levels perceived? Are they considered as second choice, equal to more academic higher education programmes or are they even valued higher? To what extent and how has this changed?*

Vocationally oriented programmes within **higher education** generally enjoy high esteem. **Vocational colleges** and qualifications like the **master craftsman certificate** are less well known. Potential students often become aware of many of these programmes only after having gained work experience in the relevant field. The gradual institutionalisation of the vocational college sector, that started with common legislation in 2003 and will continue with measures from the recent government white paper (Meld.St.9 (2016-2017)), is probably helping vocational college education becoming more well-known. From 2018, the colleges will probably have a common admission system, which might improve visibility.

It seems fair to say that there haven't been any significant changes in esteem through the last 20 years in neither sector. Efforts are currently being made by policy makers to present vocational colleges as a distinct vocational alternative to (academic) higher education and to raise their esteem by calling it 'vocational higher education' (Meld.St.9 (2016-2017)).



## 4. Impact on content and delivery of qualifications and programmes - the epistemological or pedagogical perspective

*This section focuses on the implications of 'vocational or academic drift' or of the 'expansion of VET at higher levels (outside higher education)' for the content and delivery of programmes and qualifications.*

### 4.1 Changes in relation to content and profile

- a) *How can the content or profile of VET programmes/qualifications at higher levels be described? E.g. accentuation or reduction of theoretical, abstract and disciplinary based knowledge vs. practical or experience based knowledge or an enhanced emphasis on the integration of professional and academic knowledge? To what extent and how has this changed?*

As described earlier, vocational programmes like teacher training, nursing and engineering have been restructured and 'upgraded' from upper secondary or intermediate levels to bachelor programmes in **university colleges** over the last decades. In relation to the restructuring process, changes can also be observed in the content and profile of these vocational programmes. The general tendency is towards a stronger emphasis on theoretical and abstract knowledge. Smeby (2011, p. 2) describes the development in curricula as a movement from a craft model towards an academic model (i.e. academic drift). The university college sector in Norway is considered to be among the most theory and research oriented ones in Europe (Heggen et al., 2010). In the new bachelor programmes a stronger emphasis was put on theoretical knowledge at the expense of more practical elements (Smeby, 2011, p. 3). The connection between vocational programmes and the occupational sectors were weakened. Another tendency was that relevant occupational practice was removed as a requirement for enrolment (Smeby, 2006, p. 6). National policies have contributed strongly to this development. State authorities have emphasised that vocationally oriented higher education should be research-based, and this has also been one of the requirements in order to obtain institutional accreditation (Heggen et al., 2010).

While there is a general tendency towards academic drift or research drift in the university college sector, there are also differences between programmes regarding their content and profile. Academic drift seems to have been stronger in some programmes, like teaching and nursing, than in others, like engineering (see Section 6).

A recent study found that three out of four **vocational college** graduates were in relevant work or engaged in further studies nine months after completing their education in vocational colleges. However, there were wide variations in the labour market and vocational relevance of the programmes. College graduates in media studies, business studies and in the humanities and arts were at great risk of being unemployed, underemployed or overqualified for the jobs (Støren and Waagene, 2015).

- b) *To what extent do the learning outcomes refer to a specific occupation/profession, to a broader vocational field and to what extent can an equal balance between*

*occupation-specific and transversal learning outcomes (such as leading teams, entrepreneurship) be identified? To what extent and how has this changed?*

In **higher education**, the definition of learning outcomes varies widely between different vocationally oriented programmes (for information on nursing and engineering programmes see section 6)

As previously mentioned, there is much diversity between programmes offered within the **vocational college sector**. This is also reflected in terms of different learning outcomes. There is an ongoing debate about how to strengthen the vocational college sector as a vocational alternative to higher education while at the same time attract students who want to be able to go on to higher education. The discussion of measuring learning outcomes in terms of vocational college points or in terms of credits is important in this respect. The Norwegian Parliament has recently decided that the vocational colleges should be recognised as 'higher vocational'. <sup>(8)</sup> Some of the two-year technical vocational now colleges offer courses at the level of higher education, with a stronger emphasis on academic knowledge and learning outcomes. A main motive is to attract more students. Another is to prepare for an institutional change of status to higher education (Kyvik, 2016, p. 175).

The content of the **master craftsman education** is decided by the Master Craftsman Certificate Committee. New curricula were adopted from 2016, containing three main elements: Business management/entrepreneurship, professional management and vocational specialisation. The curriculum for business management is common for all master trades, professional management is adapted to the various groups of trades, while vocational specialisation provides a specialisation within the particular trade. The new curricula represent a shift in emphasis from the general to the occupation specific by establishing a stronger link between the education and the specific trades (Espelien et al., 2016).

#### 4.2 Changes in relation to the delivery

- a) *How can the pedagogical/didactical approach in relation to VET programmes/qualifications at higher levels be characterised? E.g. by enhanced practice-orientation (learning by doing) and work based learning (e.g. as traineeship periods) or by enhanced theory-based reflection on practice and scientific research? In which formats are they offered (e.g. as part-time study programmes for workers, as 'dual study programmes')? To what extent and how has this changed?*

At the **university level**, several bachelor and Master programmes have recently introduced practice periods in their study programmes in order to enhance the employability of their graduates (Kyvik, 2016, p. 164). One example is the Master programme in cultural heritage offered by the Norwegian University of Science and Technology. The programme includes an eight-week training period with a further two-week period of complementary work and report writing. Even in disciplinary programmes, examples appear of practice elements, for instance

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<sup>8</sup>() <http://norwaytoday.info/education/vocational-colleges-recognized-higher-education/>

in political science at the University of Oslo, where a practice module has been offered as an optional part of the master programme beginning from spring 2017.

In the **university college** sector, two opposite trends can be observed, according to Kyvik (2016, p. 164). On the one hand, theoretical knowledge has been strengthened in vocationally oriented programmes at bachelor's level over time, at the expense of practical training. This change can be related to the removal of work practice as an entry requirement as well as to the reduction of practical training within the programme. On the other hand, a range of alternative work-based bachelor programmes have been established in order to cover a demand for further education by employees in the public and private sector. One example is a workplace-based bachelor programme in preschool teaching. Several university colleges now offer part-time programmes aimed at assistants in kindergartens who want to become preschool teachers. The programmes are work-based, and the kindergarten is an important learning arena.

A study of practice periods in **vocational colleges** found that only 15 percent of the programmes had practice placements with supervision at a workplace outside the school (Storm, 2012). One reason for this is that many vocational college programmes are aimed at students with prior work experience. The majority of students in vocational colleges are adults with work experience. Some programmes are offered as part-time programmes for workers. In programmes with practice placements, the practice periods typically account for 20-30 percent of the education. Practice placements are most common within health care studies.

The **master craftsman education** is currently offered by three approved institutions. The education is a part-time education that can be combined with full time employment, either as an evening course or as a combination of seminars and an online course.

*b) Which learning sites are used? E.g. mainly classroom with some practical experience, WBL-sites including real companies, multiple learning sites? To what extent and how has this changed?*

In the **university college sector**, the role of work-based learning varies between different vocational programmes. Practical experience plays a major role within teaching and in health and social studies. In engineering and business administration programmes, the relation to practice is important, but the work place is not used as a learning site to the same extent (Kyvik, 2002).

The general long-term trend has been less emphasis on learning through work practice. However, much of these developments took place early, before the 1990s.

In the **vocational college sector**, most students are adults with prior work experience and many programmes are part-time programmes for employed persons. Many vocational college courses are also offered online. Work-based learning is integrated in around 15 percent of the programmes and is most common in health care related programmes (Storm, 2012). A governmental committee set up to examine the tertiary vocational sector suggested to introduce mandatory practice in all programmes in the vocational college sector (NOU,

2014). The committee stated that undertaking relevant projects in cooperation with a workplace should count as practical training (Kyvik, 2016, p.166).

**The master craftsman education** is currently offered by three providers that have been approved by the Master Craftsman Certificate Committee. All providers follow a national curriculum, with room for adaptation to each master trade. The education is usually offered as a part-time programme. Many participants work within the trade/craft while taking part in the master craftsman education. Courses are offered as traditional classroom instruction, as online courses or a combination.

- c) *What is the educational and professional background of teachers? E.g. are they required to have comprehensive work experience, are they part-timers who are also 'practitioners' or teachers with professional experience in industry, are they trainers in companies, do they need to have an academic degree? To what extent and how has this changed?*

There has been an academic drift in the educational and professional background of teachers in **university colleges** over the last two decades. According to Kyvik and Marheim-Larsen (2010), very few of the teachers in the colleges of engineering and nursing were qualified for and actively took part in research when these colleges were merged into university colleges in 1994. Since then, there has been a markedly increased emphasis on academic qualifications and research activity at university colleges, although still considerably lower than in universities. By 2008, 26 percent of university college staff was at professor or associate professor level, compared to 75 percent of university staff (Kyvik and Marheim-Larsen 2010, p. 227).

There are broad national regulations regarding competence criteria for employment in positions at **university colleges** and **universities**, but each institution may set additional criteria. Among the most relevant positions for the vocationally oriented programmes are university college teacher and university college lecturer. For university college teacher four-year higher education, with minimum two years in the relevant field, is required, combined with relevant work practice. For lecturer, a minimum of a master degree or equivalent and researcher qualifications above master degree are required. As described in Section 3, the NOKUT accreditation and review processes have been seen as inducing academic drift. The accreditation criteria for programmes within higher education include requirements about percentage of staff at various academic levels. At bachelor-level a minimum of 20 percent should have PhD competence or equivalent, and at master level 50 percent (and 10 percent with professor competence). National evaluations of nursing, teacher training and engineering have recommended that the research competence of teaching staff should be strengthened. In 2008, a national commission, set out to propose reforms in the higher education system, argued that a stronger research orientation was needed in order to improve professional education and professional work (Heggen, et al. 2010, p. 47).

The criteria for accrediting **vocational colleges** include mostly general criteria, including general criteria regarding having staff with relevant competence. There are also criteria on cooperation with actors representing the labour market to ensure that the programmes are

relevant to the work field. There are no national qualification requirements for being a vocational college teacher. Each institution sets its own competence requirements, according to the vocational college act. As far as we know, there are no research or survey/reviews on the educational and professional background of vocational college teachers. The technical, maritime and health programmes, which are closely tied to particular labour market positions, are generally assumed to have staff with relevant vocational education and work practice and generally less emphasis on academic qualifications.

**The master craftsman education** is offered by three providers. We are not aware of any research or surveys on the professional background of their teachers, or whether they work part time or not. One of the providers is an adult education institution and has teachers with relevant work experience and teaching experience and/or pedagogical education, according to information on their web site. The other two are a provider established jointly by a number of trade organisations within construction (masonry, carpentry, plumbing etc.), and a vocational college. Both these providers have teachers with relevant vocational education and work experience.

## 5. The context of change: rationale and drivers for change or persistence

*This section aims at understanding how policy influences and justifies the change processes and which external factors influence and shape policy responses/decisions and the change processes observed.*

- a) *How and to what extent are the change processes supported (or hampered) by specific educational policies?*
- b) *What is the rationale for offering VET programmes/qualifications at higher levels respectively for the changes observed? How are these changes justified in educational policy? (E.g. increasing labour market relevance of curricula/qualifications, securing supply of highly skilled labour, professionalism, innovation and economic growth in enterprises, individual and social progression?) To what extent and how has this changed?*
- c) *Which drivers for change or persistence can be identified that shape policy responses? (E.g. European/international developments, such as Bologna process – harmonisation of degree structures in higher education, expansion of higher education, autonomy of universities, technological changes, EQF/NQF implementation)?*
- d) *How are the change processes perceived in the country? (e.g. are they generally welcomed, are there critical remarks?)*

**Higher education** policy and interests of professional groups combine to strengthen the academic aspects of the vocationally oriented higher education that has traditionally been offered at **university colleges**. The relative weight of policies and internal pressures in creating such academic drift is a matter of discussion. Smeby (2011) acknowledges that the professional organisations in fields like nursing and teacher training have considered

academic drift an important strategy of their professional project. Still he argues that higher education policy and international policy trends have been more important driving forces behind academic drift within higher education. Kyvik (2016) sees academic drift in the **college sector** as the most powerful driving force in breaking down the binary system and bringing the two sectors, universities and university colleges, closer together. He mentions government policy in coupling the two sectors and vocational drift in the **university sector** as two other forces working in the same direction. As also discussed in Kyvik (2006) and Bakken (2014), it seems likely that there are mutual reinforcing effects between institutional changes and academic ambitions within the university colleges.

Educational policy influences vocationally oriented higher education in several ways. The institutional changes in higher education are to a large extent driven by government education policy. Larger units are seen by policy makers as important to increase the quality of higher education. Furthermore, the Bologna process, with the common degree system, has made university colleges and universities more similar and has facilitated the policy of merging colleges with universities. Content and delivery within the college programmes has been influenced by the institutional changes that have turned colleges into universities. Besides, the introduction of the accreditation system and a common academic career system, also influenced by international policy trends, has contributed considerably to academic drift. However, internal pressures towards academic drift were in force within the vocationally oriented programs at university colleges before the accreditation system, and before the university colleges were merged with, or became, universities. Professional unions and the professional staff at the colleges seem to have contributed to the strengthening of the academic aspect of these programmes relative to the vocational aspect, and for some programmes, like teaching, also to an increased length/academic level of the programme. The professional ambitions of unions and colleges have fitted in well with a growing 'knowledge' rhetoric in the political arena, which have provided support from political parties for such changes and has formed part of their justification. It is possible that such rhetoric may in itself also inspire policies for enhancing the academic quality of vocational programmes. The rationale for such changes is to improve professional skills in a 'knowledge society' with perceived increased skills demands, and thereby providing better quality. For instance, improving the quality of teaching has been a reason for the increase in length of the teacher education, and the increased requirements for entry to the programme. As mentioned above, there has been criticism of the academisation of university college programmes both within the colleges and from employers. Also, the growing number taking master education has been discussed, referring to the debate about the 'master disease' in chapter 2.

Also within the **vocational college sector**, there has been academic drift in the sense that some vocational colleges have become university colleges and thereby a part of the higher education system, with corresponding academic requirements. We are not aware of research on the driving forces behind this development, but it seems likely that the prestige in being a higher education institution, in itself and as a way to attract students, may play a role. However, the colleges with technical, maritime and health programmes which recruit students with upper secondary vocational education, have remained as vocational colleges.

These have not been subject to academic drift, neither through institutional changes or in the content of the programmes.

In governance of university colleges, there are elements of vocational drift in that each institution now needs to have a council for cooperation with work life and that a tripartite advisory body on the national level is introduced. These changes can be seen as an attempt by government and social partners to strengthen work life influence on the programmes. Similarly, a tripartite advisory body exists for vocational colleges. So far there are no apparent effects of these bodies on the programmes offered, or on content and delivery or other matters such as permeability.

In **university and university college** programmes there are examples of vocational drift in the establishment of new 'work-based' bachelor and master programmes. Also, some academic bachelor and master programmes have introduced work practice periods to improve employability of candidates. These changes have mostly been initiated by the universities and university colleges themselves to increase the attractiveness of their programmes. However, there are also some tailor-made work based programs established in cooperation with enterprises, either non-formal or formal, for instance management programmes.

## 6. Zooming in on nursing and Engineering

*Please reflect on the particular situation in the nursing and engineering areas: Which main change processes (in relation to 'academic drift', 'vocational drift', expansion of VET at higher levels outside higher education') can be observed in this area? What are the specificities and differences compared to other areas?*

Nursing colleges and engineering colleges were among those 98 regional colleges that were merged to become 26 university colleges in 1994.

### a) Nursing

Both under right wing and social democratic governments, the ministries of education and health have encouraged colleges to establish alternative pathways from upper secondary VET into higher education programmes in nursing (as established for engineering graduates, see below). The process has until recently been blocked by strong resistance from the university colleges and the professional nurse organisation. However, from the autumn 2017 a pilot project with admittance of people with vocational upper secondary health education to a specifically adapted nursing program has been carried out in the university college in Oslo and Akershus. It will be organised as a three-semester programme for 20 selected students the first year with the ambition that they can follow ordinary nurse education from year 2. This can be seen as an example of vocational drift. The main driver of change is the ministry of education which has gone to the rare step of instructing the college to establish a nursing course for students with a vocational qualification from upper secondary education. The leader of the nurse education in the college has publicly opposed the project though, and has stated that she hopes it will not be continued. <sup>9)</sup> Also, the nurse professional organisation

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<sup>9)</sup> <https://sykepleien.no/2017/01/starter-sykepleierutdanning-helsefagarbeidere>

and the student organisation have strongly rejected the idea, while the encompassing labour union LO, through their member organisation, *Fagforbundet*, which organises health care workers, have supported the project. If implemented on a permanent basis, it may improve career development opportunities for health care workers with vocational upper secondary education and be a signal of recognition of their skills. The resistance against the project is rooted in concerns about lowering of standards and inadequate entry competence and in professional policy interests.

Academic drift seems to be strongly emphasised in nursing programmes. The nursing education is currently a three-year bachelor program. The content of the programme is guided by a national framework (*rammeplan*). A bachelor's degree in nursing is sufficient to work as a general nurse. The amount of practical training has been reduced, but still constitutes 90 out of 180 European ECTS (Credit Transfer System) points. Half the study period in the Bachelor programme is dedicated to the clinical practice: Within the programme there are a total of 60 weeks in practice, of which 50 are clinical practice placements whereas 10 are school based practice (Kyvik 2016, p. 167). As a consequence, nurse training may be considered quite vocationally oriented.

However, the theoretical content in the curricula has increased over time (since the quality reform of 2003, the theoretical subjects include medicine and natural science, social science and nursing science; clinical practice is divided between three years, comprising basic nursing, medical surgical care and mental health care). As a consequence, less time has been allocated to work practice (Kyvik 2009, p. 138). Nursing programmes became part of the university college sector in 1986, and then had a practice component of about two thirds of the programme. It fell in the late 1980s to the present one half of the programme.

Students have criticised the quality as well as the length of practical training. Students have also questioned the number of academic subjects in the curriculum in the relation to the practical skills needs they experience when caring for patients (Kyrkjebø et al., 2002). Most specialisation programmes for nurses require two years of clinical practice after the bachelor's degree. Specialisation programmes often lead to a master's degree and typically take 1,5-2 years to complete.

#### *b) Engineering*

The Master of Science degree in engineering (*sivilingeniør*) in Norway has a long standing as a prestigious technical education. It was established as the first technical education in Trondheim in 1910 and has been a university degree since 1949 (Caspersen et al. 2014, p. 199). The Bachelor Degree in Engineering was formally established in 2003, but was more or less a continuation of the former engineering education. Thus, there are two different traditions within engineering, focusing on different learning outcomes. They differ in their academic orientation, but they both have an applied focus

Some university colleges accept students with specific types of vocational upper secondary education into specific higher education programmes in engineering. This is the so-called 'y-veien' or 'vocational path' to higher education. These engineering students generally do well in the colleges, and they are considered attractive in the labour market after graduation.

Academic drift seems to have been stronger in other programmes, such as teaching and nursing, compared to engineering. Three-year bachelor programmes in engineering are



offered at many university colleges. There are no required practice periods within the programmes and there has not been any since 1969. The question of whether work practice should again become part of the engineering programme has appeared later, but has been dismissed by the Ministry of Education due to high costs. However, the bachelor thesis project is often undertaken in close cooperation between the student, the teacher and a workplace, and the topic for the thesis is often proposed by the enterprise (Kyvik 2016, p. 166).

In Bachelor programmes in engineering, there are different specialisations available within the 3-year programmes, like ICT, construction and machine engineering. With a two-year extension, engineers may also become 'civil engineers' which is a qualification at the master level. A review of the engineering education carried out by a committee appointed by NOKUT, the accrediting institution, highlighted on the positive side that most university colleges cooperated closely with local enterprises in order to secure the practical relevance of the programmes while still maintaining a sound theoretical knowledge base (NOKUT, 2008). On the other side, the teaching staff at each institution was small, and the ambition of teaching being research based was often not fulfilled. Teachers often lacked research competence and sometimes also formal didactic competence. Compared to teaching and nursing, the vocational aspect and relevance to work life needs seem to be more strongly upheld in engineering. Network ties between university colleges and local enterprises seem to mediate academic drift to some extent.

## 7. Current debates and future perspectives

*Please describe main current debates and any trends that can be observed or expectations related to future developments of 'VET at higher levels' (and specifically in the nursing and engineering areas) and provide evidence underpinning trends or expectations.*

- a) *What are the main current debates related to 'VET at higher levels' in your country, if any? Are there any main recent/planned developments or reforms related to 'VET at higher levels'?*

There are at least three debates and policy processes regarding VET at higher levels.

*First*, there is the debate surrounding the long and still **ongoing restructuring process within higher education**. The number of university colleges has been reduced considerably, and the distinction between universities and university colleges has diminished. Colleges have merged with universities, colleges have become universities, and a number of other changes have blurred the boundaries between university colleges and universities, including common legislation, financing system, academic career system and grade system (following Bologna). Generally, there has been an increased emphasis on theoretic and research based knowledge in the college programmes over the past two decades. Kyvik (2016) claims that academic drift in the **college sector** has been the most powerful driving force behind the reduced differences between universities and university colleges. Some have raised concerns that academisation of university colleges goes too far and that students are not sufficiently prepared for the labour market due to a lack of integration of theory and practice.

Colleges may not perform their function for the labour market if there is no differentiation between them and universities. This type of criticism has come from employers, college lecturers and students, particularly teaching and nursing students, who struggle to relate theory to practice. University college lecturer Karl Fredrik Tangen at Kristiania University College in Oslo stated: 'Now there will be a strong reward for being a disciplinary academic, but no reward for practical experience. [...] (College lecturers) need to publish so and so much... I can understand that universities should (be) run like this, but that particular way is now the only way. Everything becomes the same.' <sup>(10)</sup> The following statement was made by Jens C. Smeby, head of the Centre for the Study of Professions at Oslo and Akershus University College of Applied Science: 'There may be a tendency that *fag* (*fach*, or professional knowledge) is taught in a way that does not take into account how it shall contribute as one of several building blocks in the professional knowledge base and where knowledge about the field of practice may be discounted relative to academic knowledge'. <sup>(11)</sup> Yet, among government and the main social partners, there has been relatively little debate about these aspects of the restructuring process (see more about the process itself in chapter 3.1).

*Second*, there has been a debate since 2013 about the level and type of qualifications society needs, especially surrounding the term '**the master disease**' following an article in the main business daily *Dagens Næringsliv* Sep.28<sup>th</sup> 2013 by the leader of the main, encompassing employer organisation *Næringslivets hovedorganisasjon* (NHO). Her position was that society in general, and the education system in particular, encourages too many students to take general higher education on master level and too few to take vocational education, either on the upper secondary level or higher-level VET. This is a kind of academic drift in students' educational aspirations. She referred to forecasts of labour needs by the central statistics bureau, Statistics Norway, that show a future lack of skilled workers and an oversupply of people with general higher education (for latest forecast, see Dapi et al., 2016). Her criticism was also directed towards employers: '...too many (employers) require master education also for positions that do not require competence on a master level' (speech on the NOKUT conference Nov. 7<sup>th</sup> 2013). <sup>(12)</sup> The availability of many with master education pushes formal competence requirements upwards. Other employer organisations expressed similar concerns, but the position has also been heavily criticised by professional unions and some higher education institutions, economists, and employer organisations. A recent public committee analysing productivity changes claim the opposite, that too few take

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<sup>10</sup>() March 6th 2017, web paper Forskerforum, <http://www.forskerforum.no/a-vaere-universitet-er-som-a-vaere-restaurant-med-rene-doer/>. Our translation. Original quote in Norwegian: «Nå blir det en voldsom belønning for de som er disiplinære akademikere, men ingen belønning for de med praksiserfaring. Du skal ha så og så høy kompetanse og så og så mye publisering. Jeg kan skjønne at noen universiteter skal drive på den måten. Men det som burde være ett spor, blir det eneste sporet. Alt blir likt.»

<sup>11</sup>() May 8th 2014, web paper Khrono <https://khrono.no/debatt/hvordan-star-det-til-med-profesjonsutdanningene>. Our translation. Original quote in Norwegian: «Det kan være en tendens til at fag formidles på en måte som i liten grad tar hensyn til hvordan de skal bidra som en av flere byggeklosser i det profesjonelle kunnskapsgrunnlaget og der kunnskap om praksisfeltet kan nedvurderes i forhold til akademisk kunnskap.»

<sup>12</sup>() <http://studenttorget.no/index.php?show=6513&artikkelid=13780>

education on master and doctoral level. Their position is based on OECD-data that shows that the share with master or above in Norway is on the OECD average (NOU, 2016, p. 3). Most with academic higher education do find work (Støren et al., 2016), but many are overqualified, according to Lai (2011), who was the first to use the term 'master disease' as a newspaper columnist. The core of the 'master disease' debate is whether the increase in the number of academically qualified and the academic content of these educations (see chapter 4) reflect increased needs of this type of competence in the labour market, or whether it is driven by academic drift in education institutions combined with selection and signalling/credential mechanisms.

*Third*, there is a debate about **the role of the vocational colleges**. The government and the main social partners, the LO and the NHO, have publicly attached high importance to vocational colleges and have expressed commitment to developing this sector further. Vocational colleges are seen by these actors as important in addressing current and future competence needs in the labour market, as well as being an alternative to academic higher education and a career path that may increase the attractiveness of vocational upper secondary education.

A public committee was charged with the task of assessing the role of vocational colleges and how the quality and attractiveness of vocational colleges could be strengthened. The committee's report was delivered in late 2014 (NOU, 2014). As mentioned above, the vocational college sector is relatively small, with about 15,000 students. However, the committee sees a larger potential in the vocational college sector. It argues that vocational colleges need to be developed as an equivalent alternative to higher education. This touches a central dimension in the debate about vocational colleges. Many emphasise that vocational colleges should not become academic, but retain and further develop their vocational nature, including a stronger cooperation with working life/social partners. This does not preclude developing better opportunities for further skills development for vocational college candidates, also within the higher education system.

The committee proposes that vocational colleges are merged into larger units with strong ties to the local labour market. These colleges should receive institutional accreditation by NOKUT (and be allowed to establish their own programmes). The committee proposes that the state should take over and increase funding considerably for accredited colleges. The committee further suggests that the state should take responsibility for determining the number of study/training places in each field on the national level, in cooperation with new national vocational councils within each field (that should be placed under the existing national council of vocational colleges).

A government White Paper, Meld.St.9 (2016-2017), about vocational colleges was sent to parliament in 2016. In the White Paper, the government shared the committee's vision of developing the vocational college sector as an attractive vocational alternative to universities and university colleges. However, some of the more radical proposals from the committee were not incorporated in the White Paper. The most important proposals in the White Paper were that completed vocational college education should give credit points for entry to higher

education (provided that the students have general entry qualifications) <sup>(13)</sup>, a new financing model and a proposed development fund to develop new programmes in cooperation with working life or improving quality. The paper also proposes new student rights and a new national admissions system more similar to higher education. All these changes were adopted by parliament in May 2017.

There is little public debate about **non-formal higher qualifications outside the formal education system**. However, there are different views on the inclusion of non-formal qualifications in the NQF. Some of the largest employer and employee organisations press for inclusion of such qualifications to increase visibility and recognition of such qualifications. These organisations include the encompassing organisations LO (labour) and NHO (employer) and other large organisations on the employer (Virke) and labour (YS) side. On the other hand, the labour organisations which organise people with higher education, together with employer organisations in the public (municipal) and semi-public sector, oppose inclusion of non-formal qualifications. A committee established by the Ministry of Education was unable to reach a joint conclusion <sup>(14)</sup>, and the inclusion process has so far stalled. The difference in views reflects that such qualifications play a larger role in the private sector, in particular industry and construction, than in the public sector.

- b) *Can any trends related to future developments be observed? (e.g. in terms of increasing or decreasing use of 'VET at higher levels'; changes in regulations, types of providers offering 'VET at higher levels', profile of learners/teachers, involvement of labour market stakeholders, partnerships/cooperation; development of new types of 'VET at higher levels'; coverage of 'emerging' fields)?*

Government policy for the **vocational colleges** is that these educations should be vocational in the sense that they should provide students with competence that matches specific needs in the labour market (Meld.St.9 (2016-2017)). The term 'higher vocational education' has now (May 2017) been established as an official term for the vocational college programmes. The ambition for both government and the social partners has been to raise the esteem (and student number) of the vocational colleges while at the same time preserving their vocational identity. There is a possibility that the academic drift of university colleges has made the policy actors more determined to keep vocational colleges vocational and closely linked to the labour market. By strengthening the vocational college sector and its esteem in society, some actors among the social partners hope to stem the tide towards unwanted academic

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<sup>13</sup>() These extra points will increase students' chances of getting the study place they want if the number of applicants exceeds the number of available study places. Military service similarly gives extra points, so does *Folkehøgskoler*.

<sup>14</sup>() See the committee report: Innplassering av kvalifikasjoner fra ikke-formell opplæring i Nasjonalt kvalifikasjonsrammeverk (2015).

[http://www.nokut.no/Documents/NOKUT/Artikkelbibliotek/Norsk\\_utdanning/NKR/kd\\_kvalifikasjonsrammeverksrapport\\_org.pdf](http://www.nokut.no/Documents/NOKUT/Artikkelbibliotek/Norsk_utdanning/NKR/kd_kvalifikasjonsrammeverksrapport_org.pdf)

drift of vocational education. As mentioned above, there will be moderate changes for the vocational college system following a recent government White Paper.

As far as we are aware there are no immediate plans for moving non-formal qualifications like **the master craftsman certificate** into the vocational college system. The process of including non-formal qualifications in the NQF has also stalled, maybe temporarily.

Within **higher education**, most of the institutional restructuring has now taken place. However, it seems likely that recent institutional changes, and the stable incentives provided by the academic career system and the accreditation system, will continue to contribute to academic drift, at least in the sense that the academic achievements of the staff in the traditional vocational programmes will be important, both to the institution and the individual staff member. Although there is a reaction and debate about unwanted academisation in society (see chapter 2), the fact that much of higher VET is within higher education, and even within universities, means that it is subject to a system that provides incentives for academic drift. That also includes engineering which up to now has 'resisted' this drift more than for instance nursing.

*c) Please add any further information and concluding remarks!*

The largest vocationally oriented programmes, measured in number of students, have traditionally been found at university colleges, and include nursing, engineering, teaching and social work. The institutional context of these programmes has changed gradually. Government higher education policy has aimed at creating larger units with larger professional staff to improve quality. First, the programmes were outside the higher education sector until the 1970-1980s when they became university colleges. Then there was a regional integration of colleges in 1994. The last two decades have seen many colleges being merged with other colleges, being merged with universities or becoming universities in their own right. The institutional changes mean that vocationally oriented programs in nursing, engineering, teacher education etc. now increasingly are being offered by universities. This development has gone along with a harmonisation of structures between university colleges and universities regarding for instance degrees, career systems, financing systems etc. The introduction of an accreditation regime from 2004 has also required university colleges to conform to requirements regarding academic competence within staff.

Academic drift is in this report a concept that characterises both institutional changes as well as changes in the content and delivery of the programmes. As such, these institutional changes can be seen in itself as academic drift. It is also clear that this development combined with the harmonisation of rules create clear incentives for academic drift in a narrower sense, in the content and delivery of the programmes. All vocational programmes within higher education are expected to be research based educations and college staff is expected to do research, which they also actually do more than before. Despite the ideal of research based education, the 'belief in [the merits of] research based education is not research based' according to an interviewee. Previous research and critical public debate seems to indicate that the programmes have indeed become theoretically oriented in a way that relates less to the practical tasks that students face during practice. A recent book

chapter (Messel & Smeby, 2017) compares curricula for these programmes over the last decades though, and present a mixed picture, where what they call ‘research drift’ at higher education institutions does not automatically lead to ‘academic drift’ in curricula.

Although there are obviously interaction effects between institutional/rule changes and professional ambitions, all institutions within higher education face a set of regulations and systems that provide incentives for academic drift regardless of the interests of a single profession. So even if academisation may be a strategy for some groups’ professional project, a key interviewee tends to consider the general changes in higher education a stronger driver for academic drift than professional interests within each occupation/programme. Still there are differences between for instance the nursing and engineering programme. There is a possibility that strong networks between engineering teachers and local enterprises have made the engineering programme ‘resist’ such academic influences to a greater degree than the nursing programme, but the difference may also be due to different labour markets, where engineers face less competition with other occupations, and differences in how closely wage and career ladders are related to formal education.

Vocational colleges are outside higher education, but are increasingly ‘institutionalised’ as a part of the education system, starting with legislation in 2003 regulating it as tertiary education, and just recently being termed ‘higher vocational education’ by parliament. The political ambition is to raise their profile and develop the sector as an alternative to academic higher education. Some vocational colleges have become university colleges since 2003 (academic drift), but the colleges with technical, maritime and health programmes that build upon upper secondary VET has remained within the vocational college sector.

## 8. Overview

*This table should provide an overview of what types of changes due to ‘academic or vocational drift’ or ‘expansion of VET at higher levels (outside higher education)’ can actually be observed in the country.*

*Please indicate the main processes and phenomena identified during the last 20 years in the table below – referring to the direction of change, the object of change, the context of change (or target area of change), the key processes observed and the results of these processes as well as their time frame and indicate the sections in which they are presented! Examples of key processes/results are presented in table 1 of the guidance note.*

Table 1 **Overview**

Direction of change	Object of change	Context/target area	Key processes observed / results	Timeframe	Section
<b>Academic drift</b>	<b>Higher Education</b>	professionally-oriented HE	<ul style="list-style-type: none"> <li>- University colleges: Increased emphasis on theoretical knowledge and research based education, less on practical relevance -driven by institutional changes in HE (mergers, joint / unitary systems) and possibly professional ambitions.</li> <li>- University colleges: increased length of some programmes, teaching has become a master programme.</li> <li>- University colleges: strengthened focus on academic background of teachers</li> </ul>	1990-	4.1.a, 4.2.a  2  4.2c
		traditional (or academic) HE programmes			
	<b>VET (outside HE)</b>	VET transformed to HE	<ul style="list-style-type: none"> <li>- Some vocational colleges have become university colleges.</li> </ul>	2003-	1.; 3.1
		VET offered at higher levels outside HE	<ul style="list-style-type: none"> <li>- Some vocational colleges offer programmes at EQF level 6</li> </ul>		; 4.1b
<b>Vocational drift</b>	<b>Higher Education</b>	professionally oriented HE	<ul style="list-style-type: none"> <li>- University colleges: New work-based and part-time programmes that can be combined with work</li> <li>- University colleges: Attempts to create formal arenas for cooperation with enterprises and social partners, both at institution and national level (from 2011, each university and university college has been required to have a council for cooperation with working life + new national advisory body on higher education with representation from the social partners.).</li> <li>- University colleges: Attempts to increase permeability from VET by providing alternative access routes.</li> </ul>	2000	3.1; 4.2.a  3.2.1  3.2.2
		traditional (or academic) HE programmes	<ul style="list-style-type: none"> <li>- University: Work practice introduced as an element in some programmes.</li> <li>- Attempts to create formal arenas for cooperation with enterprises and social partners, both at institution and national level (see above).</li> </ul>	2000-	4.2a  3.2.1
	<b>Expansion of VET at higher levels (outside HE)</b>	<b>VET at higher levels (or 'higher VET') offered outside HE</b>	<ul style="list-style-type: none"> <li>- Vocational colleges: Tripartite advisory policy body on national level.</li> <li>- Ambition to strengthen the vocational college sector as an alternative to traditional higher education.</li> </ul>	2010- '	3.2.1  3.1; 7.b,c

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