

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 Austria

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

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Disclaimer

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: Austria

Author: Viktor Fleischer

Title of the case study: Highway to VET

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)'.

On the whole, all developments addressed by this work assignment could be observed in Austria within the last 20 plus years. Most obvious and best documented, a **'vocational drift' in Austria's higher education sector** took place which manifested in a **totally new vocational sub-sector** within higher education, the 'Fachhochschulen' or **Universities of Applied Science**. But also, long-established universities experienced a 'vocational drift' which took different forms and showed different outcomes (e.g. the re-structuring of curricula, the establishment of placement centres).

In parallel, Austria's higher education has shown different forms of an 'academic drift': A few specific upper- and post-secondary programmes (from the fields of health care, social work and teacher training) were upgraded into higher education programmes or institutions. Beyond that, they also strengthened and put in the front their academic efforts when aiming for a better standing in research-based rankings and assessments. For private providers, the option of founding a private university was implemented.

The same higher education institutions have left the traditional routes of higher education and entered new fields by offering postgraduate and university course offers. However, the majority of programmes in the sometimes very lucrative field of professionally oriented further education is covered by private institutions placed clearly outside of higher education (by at the same time also showing strong institutional traditions, e.g. of the chambers). It is evident that the number of such offers has grown during the last 20 years but due to high fragmentation a complete overview cannot be provided in this study. Having a nascent NQF in Austria, it is not always clear which of these programmes can be allocated to a higher level. For the same reason, a number of educational pathways which have their clear place within the national understanding of the education system do currently not lead to a (higher-level) qualification in the sense of the NQF. For some of them an allocation to NQF has just or will soon become reality (e.g. engineer's degree, master-craftsperson), for others most probably not (e.g. newly established 'Berufsakademien').

For better understanding developments in Austria, some contextual information has to be considered: Besides of having a prominent apprenticeship system (though weakly linked to higher education), a school-based form of VET exists on upper secondary level of which its higher form falls under the scope of this study (being classified on NQF-level 5 which is referenced to EQF-level 5). Its existence has major consequences for both the slow establish-

ment of VET on tertiary level and the gap between the international and the national understanding of 'VET at higher levels' in Austria.

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! ⁽¹⁾ 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** (e.g. presenting time series), if possible!

This section presents VET pathways in Austria which can clearly or assumedly be allocated to higher levels as defined for this study. Groupings are made which are based on analytical resemblances between pathways in terms of education level or their status towards the higher sector. These groupings often, but not always go along with the Austrian understanding of its education system.

For understanding Austrian qualifications and the status of vocational as well as higher education it is important to stress that Austria has a strong vocational system on upper secondary level. ⁽²⁾ This mainly falls into two strands, one being Austria's apprenticeship system, the other being fully school-based vocational education. While the major form of the fully school-based system (*Colleges for Higher Vocational Education or VET colleges, BHS*⁽³⁾) leads to a double qualification providing both a vocational qualification and access to higher education, accomplished apprenticeships do not automatically provide access to higher education (though such optional pathways have been established in recent years). From the higher education perspective, the lower form of the fully school-based strand (*schools for intermediate vocational education, BMS*) is rather similar to apprenticeships as their pathways into higher education demand comprehensive upgrading programmes which to take up is rather the exception than the norm.

Especially Colleges for Higher Vocational Education (in short: VET colleges) have been discussed as being a major influential factor on the development of VET on higher levels in Austria. Harking back to French educational ideals (based on full-time school-based VET) from the 19th century, VET colleges were institutionalized in the 1960s and growing strong since

⁽¹⁾ 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>

⁽²⁾ Parts of vocational education on upper secondary level are classified as ISCED 5 and EQF-level 5 and thus can be considered as 'VET at higher levels' within this study.

⁽³⁾ Both translations are frequently used (see e.g. <http://www.bildungssystem.at/en/school-upper-secondary/college-for-higher-vocational-education/>). In this study, we will refer to 'VET colleges'.

the late 1970s supported by social-democratic education policies (see also Section 3.2) (Graf, 2015, p. 5). Having the status of hybrid institutions incorporating both vocational and academic education (Graf, 2013), they became an important pathway for young people with low educated family background to higher forms of education. At the same time, their role within education structures reinforced the divide between vocational and academic education: As VET on higher levels was covered anyway by these upper secondary schools, universities could persist on their role as academic elite institutions (Haberfellner and Sturm, 2014, p. 66). Although basically having the option of accessing higher education, take-up rates among graduates of VET colleges are still lower than among graduates from academic schools – also due to their stronger orientation to the labour market. Beyond that, their study choices tend to stay monothematic by mainly continuing their former fields of study and thus disregarding other, more academic study fields (Haberfellner and Sturm, 2014, p. 67). Also, universities (but even UAS) are still reluctant to accredit (parts of) learning outcomes from VET colleges and thereby shortening their studies for VET college graduates.

Taking this into account, it is no wonder that one still can speak of ‘vertical responsibilities’ where ‘academic’ is taken as synonym for ‘university’ and ‘higher education’ whereas ‘vocational’ is not associated with the tertiary level (Schmid, 2014, p. 205). Also, the introduction of UAS did not change this approach profoundly because both in international classifications (ISCED 2011) and in the public perception UAS belong to ‘academic higher education’. ⁽⁴⁾ Opening up towards graduates of apprenticeships and schools for intermediate vocational education (BMS) was initially intended but today these groups are still massively underrepresented among applicants.

Group 1: School-based pathways

According to the Austrian understanding, the following school-based pathways (except *4. Post-secondary VET courses*) belong to upper secondary education. However, they fall into the scope of this study as these pathways are allocated to ISCED 2011 level 5 and will most probably be on EQF level 5. ⁽⁵⁾ VET colleges are the most prominent representatives of this group. If not stated differently, information presented for VET colleges also apply for the other school pathways.

1.1 VET colleges (NQF: 5; ISCED 2011: 5)

VET colleges provide vocational education in various areas of specialisation, such as engineering, industry and trade; business administration, service industries and management and tourism; healthcare, social affairs, education and training; and agriculture and forestry. The number of pupils attending VET colleges has been increasing over the last decade. In their main form, VET colleges are offered as five-year full-time schools for young adults, but they are also offered as VET colleges for people in employment (e.g. in the form of an evening

⁽⁴⁾ This is due to naming ‘applied research’ as one aim of UAS in the initial UAS-law – which is considered as a legislator’s accident by one expert interviewed.

⁽⁵⁾ In Austria, only few qualification types have been mapped to NQF-levels so far.

school) (Schneeberger et al., 2013). VET colleges provide a professional qualification (diploma) and a higher education entrance certificate. Several UAS accredit parts of the colleges' learning outcomes to their programmes.

1.2 Add-on courses

These courses can be attended by graduates from intermediate vocational education (e.g. vocational schools – BMS, apprenticeships, nursing schools) who usually have to complete a preparatory course beforehand. The courses lead to the matriculation and diploma certificate of the corresponding VET college programme (BHS), are organised in a modular design and are often combined with post-secondary VET courses.

1.3 Post-secondary VET courses (Kollegs)

Post-secondary VET courses (Kollegs) are a shortened form of VET colleges and their qualification is identical with the regular VET college qualification. Pupils need to have a higher education entrance certificate to attend these courses. Kollegs are usually provided in daytime or evening formats and complete with a diploma examination (Tritscher-Archan, 2014, p. 20).

Group 2: Universities

2.1 Universities

Universities are relevant for providing vocational education for two reasons: First, they always had a role in preparing for the labour market – both for the academic and for the non-academic (see chapter 3.1.a). Second, those institutions in Austria that will be referred to as 'specialised universities' provide vocational education and mostly prepare for the non-academic labour market (e.g. universities of economy, technical universities). It will be distinguished between academic and specialised universities wherever needed. Universities offer qualifications on the level of Bachelor, Master and PhD.

2.2 Private universities

Private universities differ from public universities insofar as they do not receive financial support by the federal state but are at the same time free to impose student fees and decide upon their entry requirements.

Group 3: Universities of applied science and University Colleges of Teacher Education

3.1 Universities of applied sciences, UAS (Fachhochschulen, FH)

Universities of Applied Science aim to provide professionally oriented higher education to enable graduates to solve vocational tasks based on scientific knowledge (Haberfellner and Sturm, 2014, p. 30). According to the law, UAS “shall offer degree programmes at university level, providing a scientifically rigorous professional education” (Republik Österreich, 1993). Moreover, universities of applied sciences’ defined mission is to support of lifelong learning, permeability and to support non-traditional students. UAS focus on vocational preparation of young academics; their profile is thus different from academic universities. However, the distinction is sometimes blurry, as education and training in traditional professions, as medical education, is located at universities. Also at technical universities, study programmes are often close to applied sciences (Haberfellner and Sturm, 2014). UAS can provide research infrastructure to a lesser extent. They are also only allowed to provide qualifications on the Bachelor- and Master-level. However, some upgraded vocational trainings that were intended to become more scientific have been integrated in UAS (e.g. healthcare, social work) (Haberfellner and Sturm, 2014, p. 33).

3.2 University Colleges of Teacher Education

The more recently established university colleges of teacher education have similar tasks as UAS. They provide education, further education and continuing education for teachers based on scientific research. In relation to research, university colleges of teacher education meet similar challenges as UAS. Educational science is traditionally located at universities (Haberfellner and Sturm, 2014, p. 33).

Group 2/3b: Continuing education at higher education institutions

Most higher education institutions also offer CET qualifications. The Danube University Krems (DUK), which offers solely post-graduate education programmes, is the most important one on this market providing around 50 % of these qualifications (Tritscher-Archan, 2014, p. 33). Higher education institutions offer courses for non-graduates (who fulfil other access requirements, such as professional practice) and graduates from higher education. Courses lead to a Master degree (e.g. Master of Advanced Studies, Master of Business Administration) or a graduate degree (‘Akademische/r...’) and often have high tuition fees (Schneeberger et al., 2013, p. 43). These programmes are offered by formal institutions of higher education but at the same time are not included in the formal system – that is why they form a (sub-)group by themselves.

Group 4: Pathways outside formal school and higher education institutions

In Austria, these qualifications are understood as being part of the education system, however, with a pretty young NQF only a few qualifications are already clearly allocated to a specific level. Based on ongoing discussions and expectations towards the future classification of qualifications belonging to this group they are hereby treated as ‘higher VET outside of high-

er education'. However, it is currently not clear which of these qualifications will actually be included in the NQF and allocated to a 'higher' level.

4.1 Master craftsperson schools - Industrial master colleges (Werkmeisterschulen) and building craftsperson schools (Baumeisterschulen)

These schools are a special form of schools for intermediate vocational education (BMS), in engineering and crafts. They provide subject-specific continuing education and training. Programmes are between one and two years in duration, have a minimum age requirement of 18 years and typically require completed vocational training or professional practice (Tritscher-Archan, 2014, p. 28). Their curriculum is governed by public law, but courses are offered at CET providers. After final examination, graduates are allowed to train apprentices and are entitled to exercise a relevant trade in self-employed capacity after four years of relevant experience (Tritscher-Archan, 2014, p. 32).

4.2 Qualifications awarded based on an examination by a certifying authority or an interest group (Master craftsperson exam, Proof of competence exam)

Professionals can take exams to prove their advanced knowledge, e.g. the master craftsperson exam, civil engineering exam, exam for certified financial accountants – very recently also engineer's degrees based on a revision of the Austrian engineer's law (Ingenieurgesetz 2017) (the latter have been allocated to NQF-level 6 / EQF level 6 in September 2017). These exams are part of continuing vocational education, but most candidates take them to become self-employed in a regulated profession. Under certain conditions, holders of the qualification can be admitted to a Bachelor course at a UAS. The CET institutions of the social partners provide preparatory courses (Tritscher-Archan, 2014, p. 32). Master craftsperson exams are organised by the offices for master craftsperson exams, located at the regional economic chambers (Schneeberger et al., 2013, p. 26).

4.3 Qualifications offered by specific employers

Moreover, there are qualifications which are provided by the respective employers, such as training programmes for professional fire fighters, national defence (at the Austrian Armed Forces), police force training (at the Security Academy SIAK which is subordinated by the Federal Ministry of Interior), emergency medical technicians (e.g. paramedical training at the Red Cross). Other qualifications are care assistants, home-helpers or childminders.

Group 5: New higher education pathways

Although following a strong international trend, the following pathways' status in Austria is still pending and it is unclear in how far they will manage to connect to formal pathways. Both are attached to existing institutions – either to formal (short cycle programmes at UAS) or non-formal ones ('Berufsakademie' at CET providers).

5.1 Short cycle programmes were introduced at a few UAS. The three-semester course is open for students without a higher education entrance certificate, if they meet special re-

quirements (such as a certain professional experience). Graduates can transfer their credits to a Bachelor programme.

5.2 Berufsakademie (college of advanced vocational studies): The model of a 'third pillar' of tertiary education (in addition to universities and UAS) had been discussed by the social partners for some time, and a first pilot was introduced in 2014. Access requirements include completed vocational training, at least two years of professional experience, for the two-semester course leading to the title '(Akademische/r...)' and at least one year in a leadership experience or a higher education diploma and one year of professional experience for the additional two-semester course leading to a Master (Msc) degree.

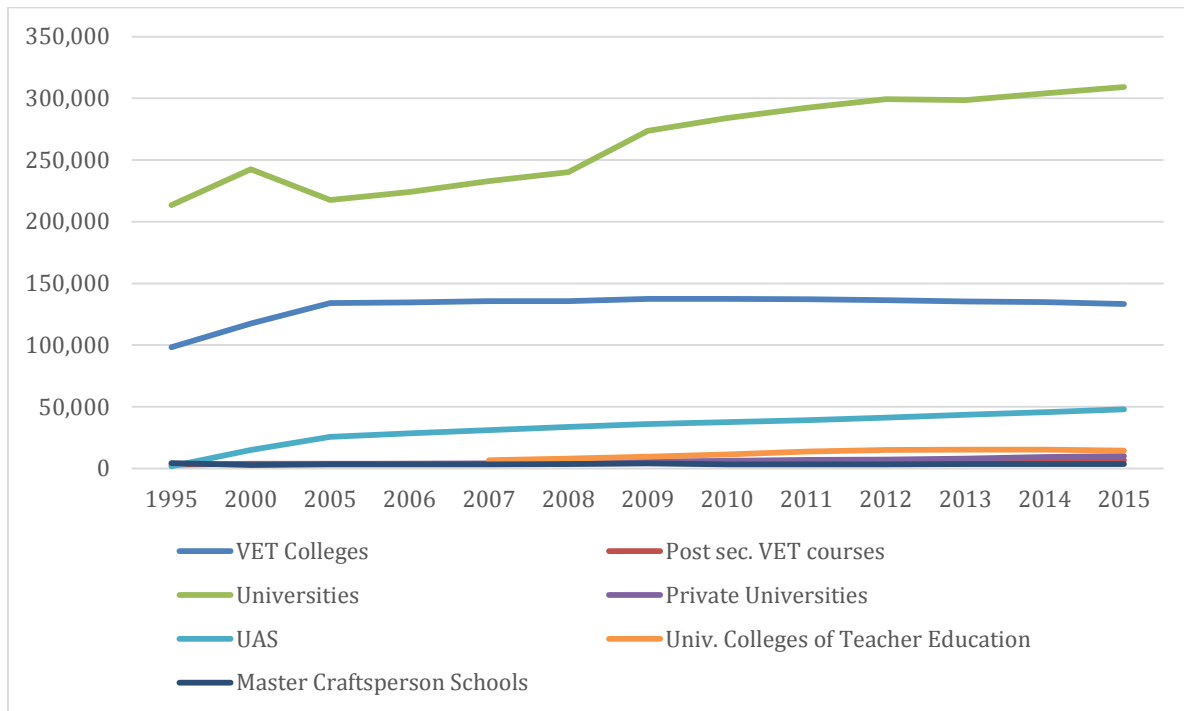
Group 6. Non-formal courses and programmes offered by/in CET institutions

About 1,800 institutions of continuous education and training (CET) offer a wide range of programmes. Besides commercial providers, the CET institutions of the social partners are particularly active in the area of CET. The most relevant ones are the Institute for Economic promotion (WIFI, by the Economic Chamber), the Vocational Training Institute (bfi, by the Chamber of Labour and Austrian Trade Federation) and the Institute of Agrarian Education and Training (Ländliches Fortbildungsinstitut, LFI). Education and training courses and qualifications are designed by the providers themselves and are mostly geared strongly towards labour market and sectoral requirements and usually very practically oriented (Tritscher-Archan, 2014, p. 33).

A large number of programmes and add-on CET courses in the business, tourist, technical, social, healthcare and security sectors, are not covered by the ISCED system (Schneeberger et al., 2013, p. 38). Examples include: 'preparatory courses for accounting diploma', 'qualified social counsellor', 'certified media designer', but also qualifications in the leisure industry, such as 'mountain and ski guides', 'ski/snowboard instructors', air traffic qualifications as 'air traffic controller' and 'civil pilots' or courses in the agricultural sector.

The figure below presents the students enrolled in the main forms of VET programmes on higher levels as well as in universities programmes for the last 20 years. Within higher education, the introduction of UAS has not compromised participation numbers of universities but led to an overall growth of higher education in Austria. In contrast to, for example, Germany, where UAS acquire more than one third of higher education students, the share of Austrian UAS students is below 20 %. In terms of participation, VET colleges are also an important element of VET at higher levels showing more or less stable participation numbers since 2005. All other programmes introduced in this study are of much lower importance.

Figure 1 Students enrolled in main VET programmes at higher levels and in university programmes (1995-2015)



Source: Author based on Statistics Austria – data on formal education

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)?

For Austria, a number of initiatives can be reported that relate either to academic or vocational drift or to the expansion of higher VET outside of HE. Most striking of these developments are those that led to the establishment of new institutions or at least new types of educational programmes. Bearing that in mind, one of the most central innovations is the **introduction of ‘Fachhochschulen’ (Universities of Applied Science, UAS)** from 1993 on. Largely, their implementation included the formation of completely new institutions and programmes for which reason this development can be regarded as vocational drift within higher education (Lassnigg, 2011, p. 19). In the beginning, the implementation process started with forming new programmes which was then followed by embedding them into the new founded UAS-institutions. The programmes established in this first phase mainly related to the fields of engineering and commercial management. Later they expanded also to other fields (e.g. social sciences, health care) and showed other forms of establishment (e.g. upgrading of secondary programmes). More recently, a more subtle and inherent form of academic drift can be noted for UAS programmes as they now tend to achieve a more ‘academic’ standing by, for example, trying to extend study programmes to doctoral grades, stronger emphasising scientific research in their curricula or aiming to bring their junior researchers into scientific structures (Sterrer et al., 2015).

A more obvious form of academic drift, namely the **upgrading** of existing secondary level or post-secondary to higher education programmes, can be observed only for very few occupational fields, namely registered nursing, training of primary and general lower secondary teachers and social work. ⁽⁶⁾ For these fields, the transfer to higher education does not only represent an institutional change but also a much stronger implementation of basic research (Haberfellner and Sturm, 2014, p. 76). However, in teachers training new curricula are not only characterised by more research but also by more and earlier confrontation with practical teaching, thus a stronger vocational orientation.

Overall, the decision on which programmes are upgraded into higher education and which are not is very much inconsistent and, according to experts, often rely on power structures and the distribution of interests in single professions.

Also, the option of founding a **private university** which was introduced in 1999 is a form of an academic drift. It has been realised in both forms founding entirely new institutions and transforming institutions outside of higher education into private universities. In contrast to the establishment of UAS, this process was less a politically managed process but rather an

⁽⁶⁾ Registered nursing and social work is transferred to UAS programmes while teachers are trained at specific university colleges of teacher education.

answer to the commercial intention of these institutions to offer their programmes under a clearly academic label.

Since 2000, **dual studies** were introduced at some UAS representing a form of vocational drift in several aspects. Based on the model of 'Berufsakademien' in the German province of Baden-Württemberg ⁽⁷⁾ (Bode, 2012, p. 13), they are currently offered by four UAS-providers and can take different organisational forms. While policy makers refer to this form of study as model of success, only minor expansion can be expected – due to Austria's economic structure.

Although **universities** always had the (sometimes underestimated) function of preparing for the labour market besides of purely academic careers (Schmid, 2014, p. 206), universities have opened up towards labour market needs in the last 20 years (vocational drift). The introduction of Bologna-structures can be considered as one major driver for this as specifically the Bachelor-degree was communicated as particularly preparing for the labour market. According to experts, universities reach out to both schools (as their pre-runners) and the labour market (as the students' destination). One concrete outcome of this development are universities' service- and placement-centres which increasingly try to arrange career pathways for their graduates, e.g. through career fairs or similar events. There are examples of Austrian universities actively practicing the exchange with the Public Employment Service especially during economically rough times from 2008 on. Interestingly enough, institutions and programmes in the fields of arts, social or humanity sciences seem to be the most vivid actors in this respect. ⁽⁸⁾

But also, developments running against a vocational drift can be identified: While the university law of pre-2002 made it mandatory to consult labour market representatives for each new programme (which was mostly fulfilled by contacting the social partners), it is now in the duties of the (more autonomously acting) universities' management how to answer labour market considerations required by the performance regulations. ⁽⁹⁾ Also, more recent recruiting practices could be interpreted as academic drift: As international rankings give bad evaluations to Austrian universities' research activities, now more staff is recruited being exclusively dedicated to basic research.

Within the last 20 years, well established higher education institutions (universities as well as UAS) implemented a number of **programmes leading to CET qualifications**. This development can easily be related to new policy approaches giving higher education institutions more autonomy and responsibility towards their financial issues. Thus, also universities want to get a piece of the cake of the constantly growing CET market. For universities, this development can easily be interpreted as vocational drift. But it also might be named 'vocational drift' for UAS (who also offer such programmes) as it can be argued that these programmes have closer relations to labour market needs in some respect. However, Austrian higher education institutions in this respect face hard competitors showing international reputation and, thus, some of these efforts have already shown moderate success. Dealing with this envi-

⁽⁷⁾ Not to be confused with the recently introduced Austrian version of a 'Berufsakademie'.

⁽⁸⁾ Expert interview 4

⁽⁹⁾ Expert interview 4

ronment, they are sometimes criticised to not present clear enough to potential learners that there is a difference between holding e.g. in a full Master's programme and in a postgraduate Master.

For other new forms of institutions and programmes within higher education representing expansion of higher VET it is still not clear to what extent they will have an impact on the overall education system: The recently (in 2014) introduced **colleges of advanced vocational studies ('Berufsakademien')** are offered to individuals with completed vocational education and working experience and lead to a Master's degree within 4 semesters. At the moment, graduates cannot participate in further education at higher education institutions as their certificates are not recognised as adaptable to the Bologna-structures. Furthermore, there seem to be concerns that learners without general knowledge at a higher level (e.g. in mathematics or German language) receive a Masters-degree within a short period of time. There is also no formal recognition available for **short cycle programmes (SHE)** beyond giving credits for continuing Bachelor-programmes.

The field of **non-formal vocational education on higher levels** which is covered by a high number of CET institutions is much less well regulated and also not yet covered by the NQF. Thus, it is much more difficult to decide whether these programmes can be considered as VET on higher levels. Overall, it is assumed that this kind of vocational training has largely expanded over the last 20 years however systematic evidence is lacking.

Even more than other developments, the reform of **the engineer's degree** is related to the ongoing implementation of a National Qualifications Framework (NQF). In order to legitimate an allocation on level 6, the requirements for the exam were set by a new law enacted in early 2017. Rather than a vocational drift, this reform can be seen as step of increasing transparency and internationalisation as the main motivation was to enable Austrian companies to explain this qualification in an international context. The main target group for this qualification are graduates from technical and agricultural vocational colleges, however, a similar qualification is planned for commercial college graduates also.

b) Can any different phases or stages of this development over time be identified?

Referring to phases of development, it makes sense to draw a line from the start of post-war Austria in the late 1940s and early 1950s until today: The **1950s and 60s** were setting the scene for later developments by strengthening the school- (i.e. theory-)based part within apprenticeship training and the implementation of schools for intermediate vocational education and (higher) VET colleges in their current form ⁽¹⁰⁾. Ideas to upgrade VET colleges to university level or to enlarge them with post-secondary academies (as it happened in other European countries) were not put into effect (Haberfellner and Sturm, 2014, p. 66).

An academic drift related to higher education ⁽¹¹⁾ can be reported for the **1970s**: "In 1970, a new government came into power, that strongly emphasised higher education as a field of

⁽¹⁰⁾ VET colleges as the only of the institutions named in this paragraph being allocated to VET at higher levels as defined in this study.

⁽¹¹⁾ Following the Austrian understanding: In this period, only university studies.

policy. Apart from the Art Colleges, all existing higher education institutions were integrated into a more or less unified university system” (Pfeffer, 2000, p. 2). Also, totally new universities were founded in some of the provinces capitals (e.g. Linz or Klagenfurt) At the same time, universities were strongly reformed and therefore opened for a wider range of Austrian population including representatives of less educated social groups. Under the regime of social-democratic education policies politicians of that period strongly relied on the university sector as for providing skilled labour force on higher levels. For all vocational qualification demands not covered by universities, VET colleges were seen as strong enough to provide them.

This island position in providing qualifications on higher level put universities more and more under pressure in the **late 1980s**: “While the demand for qualified staff grew and the types of qualification changed with increasing speed, it became obvious, that the universities were neither able nor willing to satisfy the needs for vocational education” (Pfeffer, 2000, p. 3). Advancing towards the EU in the early 1990s provided better insights into different European education systems and as a consequence the establishment of a vocational sector in higher education came into discussion.

Referring to this rough classification of phases, **the last 20 years** can be considered as one phase: The establishment of UAS as (vocational drift of higher education), the vocational drift of universities (e.g. by providing postgraduate CET programmes), the academic drift of upper- and post-secondary offers or the expansion of (assumable) higher forms of VET outside of higher education have to be named here (and are described in more detail in chapter 3.1.a). Very recently, these developments might come to a period of saturation where especially the establishment of new programmes (at UAS or universities’ CET centres) slows down remarkably. However, very recently, 100 Million Euros stemming from new banking fees were announced to be dedicated to create around 450 new study places at UAS. On the other hand, the vocational portfolio of higher education institutions still enlarges by the upgrading of selected upper-secondary programmes into UAS (in the health care sector).

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)?

As far as the formal education system is concerned, again the implementation of **UAS** had the greatest impact on system specifications. Although UAS differ from universities in terms of governance (see chapter 3.2.1.a), financing structures (see chapter 3.2.1.c) and providing entities (see chapter 3.2.1.d), they can be considered as new sub-sector within higher education (see chapter 3.2.1.a). Therefore, their implementation led to a stronger diversification of higher education in Austria as before 1993 this sector was mainly, if not totally dominated by universities.

Other system relevant changes include the augmenting **number** of vocational qualifications from **outside of higher education** which are considered as linked to higher levels. However, rather than representing the establishment of a new education sector these developments

are of a rather formal character: In the course of the NQF implementation, some certificates or training programmes are and will be reworked into 'qualifications' (as defined by the NQF) with the aim of increasing transparency and 'market value' (see chapter 5.c). Such a new sector rather comes into being via the expansion of a market of non-formal offers – either provided by institutions of higher education or private organisations. However, it is open whether this will develop into an autonomous sector with its own organisation structures. As already mentioned, these new offers cannot be unchallengedly be named as being on higher level as they lack formal classification. Also, this market is rather confusing and hard to assess.

The education system is also mainly influenced by **new pathways into higher education**, especially for vocational graduates at medium level such as apprentices (e.g. 'Berufsmatura', see chapter 3.2.2.a) They have the potential to change deadlocked corridors in the Austrian education system, e.g. from vocational colleges into UAS.

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?*

Given the fragmented character of VET at higher levels in Austria, this field is governed by different entities: Today, the political responsibility for higher education in Austria is borne by the Federal Ministry of Science, Research and Economy (¹²). Here, the most striking changes regarding the actual practice of governance are related to the establishment of the UAS sector. While up to the late 1980s universities had been governed according to a 'Kulturstaat'-tradition understanding universities as autonomous state agencies for whose freedom the state was mainly responsible, the UAS were organised around a **new public management** approach. The initial implementation of the UAS' organisational structures reflected this new attitude by elements as that UAS, for example, showed no legal ownership restrictions; academic and non-academic staff were employed and appointed directly by the UAS; decisions on the curriculum were made by the responsible academics in cooperation with institutional management etc. For the whole sector of higher education, this implicit development can clearly be addressed as vocational drift. Final responsibility for the quality within the UAS-sector was – until 2012 – in the hands of an external professional body, the 'Fachhochschulrat' (UAS council). This organisational entity guaranteed minimal standards of quality (Pechar, 2005).

(¹²) The compilation of responsibilities in federal ministries has changed several times during period of observation.

At the same time (around 1993), also universities were intended to be transferred to new public management governance providing them with more or less full autonomy. Because of the resistance of most of the academics this step was not fully implemented. However, from what was realised, the rectors of universities receiving significantly more power was one major consequence. Rectors were now the central representatives of universities and thereby replaced senior academics who now rather took the role of mediators between internal and external interests put on universities. Backed by this new power group, further steps towards strengthening of universities' autonomy could be realised with a new university law in 2002: Despite still being state agencies regulated by public law, universities now received full legal entity and were also granted more freedom towards their organisational structures. The rectors' position again was improved by making it more independent of collegial academic bodies (Pechar, 2005). By granting more autonomy, universities were increasingly treated like an education provider on the free market being (partly) responsible for its own earnings and being determined to cooperate more closely with the labour market (when acquiring third-party funds). Such a change in their relationship to labour market actors can be considered as vocational drift within governance.

In terms of **quality assurance**, up to 2012 two separate institutions were responsible for universities and UAS: The *Austrian Accreditation Council (ÖAR)* was a non-ordained authority in the Ministry of Science for the accreditation and supervision of public and private universities. The already above mentioned '*Fachhochschulrat*' (UAS council) accredited new UAS-programmes and -institutions. In 2012, these two bodies were merged into *AQ Austria (Agency for Quality Assurance and Accreditation Austria)* who now fulfils accreditation duties and conducts audits for all institutions of higher education in Austria. ⁽¹³⁾ This change in structures of quality assurance can be interpreted as unification process of higher education in Austria.

While UAS **quality regulations** always showed clear labour market orientation, the ones of universities have not emphasised very much that up to now. That might be due to the good labour market perspectives graduates consistently had during the last decades. With (modestly) raising unemployment figures amongst academics today, this might change in near future. ⁽¹⁴⁾

Governance structures of VET colleges did basically not change in the period of observation. They are part of the duties of the Federal Ministry of Education, healthcare schools relate to the Federal Ministry of Health and Women. Several initiatives have been implemented in terms of quality assurance: From 2004 on, education standards for VET ⁽¹⁵⁾ were and a quality initiative for VET (QIBB) ⁽¹⁶⁾ was established, the latter as strategy of the ministry for im-

⁽¹³⁾ <https://www.aq.ac.at/en/> [accessed 15 June 2017]

⁽¹⁴⁾ Expert interview 4

⁽¹⁵⁾ <http://www.bildungsstandards.berufsbildendeschulen.at/home.html> [accessed 22 June 2017]

⁽¹⁶⁾ <https://www.qibb.at/home.html> [accessed 2 July 2017]

plementing quality management at vocational schools in Austria. Again, these initiatives can be seen as strengthening vocational aspects (in VET).

CET institutions providing non-formal qualifications act on their own responsibility as long as they do not provide formal qualifications (i.e. qualifications regulated by law).

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?

Austria shows a strong **tradition of social partnership** which was, up to the 1990s, strongly involved in nearly all kinds of political and/or legal initiatives. Generally, this role was challenged after 2000 by the then conservative/right-wing government. However, up to today they play a strong role when it comes to questions of labour market, vocational training etc. Many of the developments which can be described as vocational drift were backed by single organisations or the whole cooperation of social partners.

Social partners are **providers** of education institutions in most of the relevant fields. They run VET colleges, UAS and are the major providers for CET qualifications. Especially in the field of CET, the Federal Economic Chamber (Institute for Economic Promotion, WIFI), the Chamber of Labour and Austrian Trade Union Federation (Vocational Training Institute, bfi) and of the Chamber of Agriculture (Institute of Agrarian Education and Training, LFI) play a major role. For the first representative of the rather new forms of colleges of advanced vocational education (Berufsakademien) again the Federal Economic Chamber acts as provider. Being designed as 'third pillar' of Austria's higher education, it will depend on the future of this institutional form whether the Federal Economic Chamber's importance will rise among providers of VET at higher levels.

When it comes to drafts of school legislation, curricula for VET colleges, social partners are entitled to express their opinion. On a voluntary basis, this is also true for UAS programmes. Furthermore, they have been active in educational counselling and career guidance and they support cooperation between VET schools and the business sphere.

c) What are the funding sources (and with what share) for these types 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?

In respect of the changes in governance described in 3.2.1.a, the turn towards new public management also affects financing issues – however, the process of funding rather than its sources: For UAS, a more **autonomous approach** was implemented from the start by providing them with a lump sum based on student numbers. Besides of this basic funding from the federal government, UAS receive funds from multiple public sources. Not only the federal state, but also provinces and municipalities, and in some cases chambers, play a significant role (Pechar, 2005, p. 9).

Going into a similar direction, the university-law from 2002 keeps the federal government as main responsible entity for basic funding, but universities receive a lump sum budget under their own discretion. As basis for this regulation performance agreements are implemented

and around 20% of the budget is allocated on the basis of specific indicators (Pechar, 2005, p. 10). Overall, this approach includes much more self-responsibility of universities than before. Again, more financial autonomy will require a stronger acquisition of third-party funds (for all institutions of higher education) and can therefore be considered as vocational drift).

For all other pathways, no significant changes or drifts towards a more academic or vocational orientation can be reported: Basically, school-based offers are mainly public financed, but private providers are allowed to levy tuition fees; the non-formal and post-graduate field is mainly financed by the fees of its participants, however with great differences in costs and modes. For the whole field of VET, the range of **financial support** available for both individual learners and enterprises has expanded in the last 20 years. For higher education students, substantial public study grants are available mostly linked to requirements regarding an age limit or a fast progress in studying. ⁽¹⁷⁾ The federal Public Employment Service, the Austrian provinces and the Chambers of Labour provide funding offers targeting different forms of adult learning (not exclusively on higher levels). ⁽¹⁸⁾ However, the expansion of these funding measures cannot clearly be connected to one form of drift.

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?*

This topic is already covered by the chapters above. In brief:

Schools on upper secondary level (according to national classification)

- VET colleges have public (federal) and private (e.g. Fund of Viennese merchants' community) providers (the latter also subordinated to the Federal Ministry of Education).
- Add-on courses and post-secondary VET courses are normally offered by the same providers.

Tertiary pathways

- UAS providers (see also chapter 3.2.1.a and 3.2.1.b) are 'quasi-private' associations or corporations. Social partner organisations play an important role among them.
- Universities are today (since 2002) legal persons under public law' (Körperschaften öffentlichen Rechts) (see also chapter 3.2.1.b)
- University Colleges of Teacher Education today show a similar status to the one of universities. Until 2007, they were education academies (post-secondary level).
- Providers of continuing education at higher education institutions are mostly universities and UAS. The Danube university is also a public provider in many respect regulated by university law, however also restricted in some aspects by a specific law implemented for this specific university (e.g. by only being allowed to award PhDs in some selected fields of study).

⁽¹⁷⁾ <https://www.stipendium.at/studienfoerderung/studienbeihilfe/> [accessed 14 June 2017]

⁽¹⁸⁾ <http://erwachsenenbildung.at/bildungsinfo/kursfoerderung/> [accessed 6 July 2017]

Pathways outside formal school and HE institutions

- Master craftsperson schools - Industrial master colleges (Werkmeisterschulen) and building craftsperson schools (Baumeisterschulen) are mostly offered by technical vocational colleges or by CET providers (for both see above).
- For master craftsperson and proof of competence exams, CET institutions of the social partners provide preparatory courses. Master craftsperson exams are organised by the offices for master craftsperson exams, located at the regional economic chambers. The same applies to exams for engineer's degrees.
- For CET institutions, outside of higher education see chapter 3.2.1.b

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? 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?*

For UAS and universities, the possession of a school-leaving exam or an equal qualification is required. The latter refers to newer pathways into higher education for people holding a vocational qualification but no higher education entrance certificate (**'non-traditional access'**): They can be admitted to UAS programmes based on relevant professional experience. Several UAS offer preparation courses for these applicants specifically designed for access to study programmes in these institutions. Furthermore, for this target group, the 'Berufsreifeprüfung' was introduced in 1997. It is a post-secondary qualification providing general access to higher education for skilled workers and for graduates of three- to four-year full-time VET schools as well as apprenticeship graduates. Individuals can sit an exam, which consists of 5 modules.

Although opening up higher education for people holding a vocational qualification can be considered as vocational drift, pathways into higher education as the one described above are still a minor access routes and thus holders of a school-leaving exam (from either an academic upper secondary school or a vocational college) are still the main target group for higher education. As already mentioned, UAS were originally intended to provide simplified pathways into their programmes for alternative target groups, however, this has only been implemented rudimentary. Even more, the upgrading of specific upper- or post-secondary level programmes in health care, education and social work equated their entry requirements with the ones from other offers of higher education. The relative increase of offers showing an extra-occupational organisation can be interpreted as a more vocational orientation towards the target group. While basically referring to the same population, these offers might reach target groups who would otherwise not be considered entering higher education (e.g. students from regions with no offer of higher education).

With around 10% of students accessing via 'non-traditional access routes', i.e. 'Berufsreifeprüfung' or similar approaches, private universities show higher rates in this respect than universities or UAS. Also, the share of foreign students is higher at private universities (Schmid et al., 2017).

CET or postgraduate offers target people who already have some work experience and/or hold some educational degree. Very often they are already active on the labour market and thus complete these courses extra-occupational.

- 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?*

The most relevant change in this respect is the introduction of (a relatively small number of) dual studies at UAS. Although the organisational forms slightly differ, they always require a **tripartite arrangement** between student, UAS and an employer. Thus, the student always also holds the status of an employee. In comparison to all other programmes which have not shown any major changes in this respect this labour market involvement can be seen as vocational drift. However, also in other forms many learners will, besides of being students, also hold the status of an employee or a self-employed person (labour law). This will particularly be true for UAS programmes which are explicitly organised in an extra-occupational form but also for most of the non-formal offers at higher levels. The same offers can also be accessed by unemployed persons, especially if the Public Employment Service grants them financial support and thus recognises the offer as being relevant for labour market (re-)integration.

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?*

As for VET colleges, they provide their graduates (as already described) with a double qualification **allowing both** directly entering the labour market and accessing higher education. There is no clear tendency on whether graduates will enter higher education. Today, around 55% of all graduates decide for a higher education programme (whereas around 85% of academic upper secondary schools). After an increase of related transfer figures in the 1990s and early 2000s they tend to slightly decrease since around 2010 (Statistik Austria, 2006-2015).

Since the introduction of the Bologna regulations, both UAS and universities follow their structures. So, when progressing within the (higher) education sector, **converting between UAS and university** is a thinkable option (within one field of study). The most common exchange takes place when applicants who fail to enter one study pathway temporarily sidestep to the other. ⁽¹⁹⁾ Beyond that, pass-overs happen quite rarely and because of the universities resistance there are still some structural barriers in place, so e.g. for graduates of

⁽¹⁹⁾ However, the direction of these sidesteps has changed several times. For example, years ago unsuccessful applicants for medical programmes at UAS bridged one year studying medicine at the university. Today, as entry test were established for medicine, it is sometimes the other way around.

specific master studies at UAS, a prolongation of the study period is needed when entering a PhD course at a university. ⁽²⁰⁾ Regarding the greater diversity in Austria's higher education, different types of study careers can be distinguished at UAS and (private and public) universities: finishing studies with a Bachelor-degree; deepening a Bachelor- with a Master-degree at the same kind of institution (traditional) or at a different one (non-traditional); complementing a Bachelor-degree with a Master in a different study field; accomplishing several studies on the same level but in different study fields. ⁽²¹⁾

Universities were traditionally seen as preparing for research-oriented professions while UAS graduates would rather approach more practice-oriented segments of the labour market. It has already been said that this distinction is not entirely appropriate as universities always had a role (which has recently been growing – vocational drift) in preparing for the (non-academic) labour market while UAS nowadays also orient towards academic careers (academic drift) (for both see chapter 3.1.a). And even if official communications draw a clear distinction between universities and UAS, also programmes of specialised universities (e.g. technical universities and universities of economy) consist of skills sets that are very close to the vocational needs of the labour market.

Generally, it is clear that some study programmes prepare for a very specific selection of **occupations** while others target broader occupational fields on the labour market. In terms of occupational rights, universities (today also some private universities) traditionally have to role of preparing for specific regulated occupations. The fact that some of these occupations lost their traditional destinations (e.g. public service for jurists) they opened up their profiles towards broader labour market fields (e.g. consultants for business law) and accordingly influenced their curricula. At the UAS, some programmes that were more recently upgraded from secondary or post-secondary level target restricted occupations, e.g. registered nurses and social work. Also, the teachers' profession targeted by (also upgraded) University Colleges of teacher Education are regulated.

For some degrees acquired outside of higher education which include some **specific occupational rights** in their field of activity (e.g. civil engineers or balance accountants) changes in the course of the NQF implementation (like they were described for the engineer's degree) remain to be seen. They often represent development steps in more or less clearly predictable career pathways.

b) What is the occupational status of graduates? E.g. will they be technicians/professionals? To what extent and how has this changed?

The upgrading of upper and post-secondary trainings goes along with changes in the occupational status. These are implemented by respective new occupational regulations. So, for example, the new occupational regulation for teachers foresees the title 'professor' for all types of teachers and not only for the ones at upper secondary schools. The new law on health care and nursing even introduces a new structure of occupations also enhancing the status and responsibilities of their highest grade, the registered nurses.

⁽²⁰⁾ <https://www.studienplattform.at/doktoratsstudium-fuer-fh-absolvent-innen> [accessed 3 July 2017]

⁽²¹⁾ Expert interview 3

The implications for the everyday reality at schools or hospitals can be discussed. It gets obvious that, due to the alternation of generations, the professionals with the 'new' status step-by-step replace the ones with the old status. However, for a while, they exist in parallel by generally fulfilling the same tasks and receiving the same salary.

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?*

Overall, the perception of the described VET programmes is equal, if not higher than the one of academic pathways. For higher education graduates, UAS graduates are often valued higher by employers towards than its university counterparts – the same applies for VET college graduates in comparison with upper secondary academic school graduates. ⁽²²⁾ Within higher education, both universities and UAS are considered as being part of the academic field (see synopsis of chapter 2). Very often the transferability of qualifications into prestigious and well-paid jobs is taken as benchmark in public discussions. In this respect, UAS graduates have not only closed the gap to their university counterparts but have – in some fields – even passed by. When discussing study programmes of UAS and specialised universities that are considered to be rather similar (e.g. in the technical field), UAS are assessed as being more practical, closer to the needs of the economy and therefore providing better prospects.

These tendencies might have increased in the last 20 years due to a fiercer situation on the labour market which tightens competition around existing jobs and thus makes education institutions to take labour market needs stronger into account. Also, for traditionally high-ranked occupations being associated with academic higher education (e.g. medical doctor, lawyer, university professor) working conditions have become less solid during the last two decades. Thus, the bourgeoisie educational model of an academic career has rapidly lost attractiveness. The same is in the main also true when contrasting graduates from VET colleges to the ones of academic secondary schools (upper level).

For some qualifications that have a high esteem on national level, reproducing this perception on an international level is a major driver for current change. Especially discussions around the classification of specific qualifications in the NQF (and thus the EQF) but also within ISCED have to be seen under the light of international competition and the advantageous presentation of these qualifications within this context (e.g. engineer's degree, master craftsperson).

⁽²²⁾ See for example http://diepresse.com/home/bildung/universitaet/1259500/Arbeitsmarkt_FH-Absolventen-haben-bessere-Chancen [accessed 19.9.2017] based on Statistics Austria's monitoring of employment careers.

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?*

Developments towards a vocational drift at Austrian **universities** can be observed as consequence of the introduction of the Bologna-structures, however, with very different consequences for different study fields. For example, study programmes in the fields of social science, humanities or arts moved those learning outcomes that can clearly be applied on the labour market (e.g. learning outcomes related to the application of methods) into the early phases of studying in order to give more value to their Bachelor-programmes. In the technical fields, Bachelor-programmes were (over)loaded with contents in order to strengthen their status against other qualifications from outside of higher education or from VET colleges and thus became rather demanding.

Generally, **UAS** were more practice-oriented from the beginning and they put much effort into investigating the best possible approach of 'practice-oriented higher education' (Markowitsch et al., 2004). In the course of the adaption to the Bologna-structures, the overall extent of internships had, however, to be reduced: In a Bachelor-programme it was no longer possible to include a whole 'praxis-semester' (internships) as it was the case with the initial diploma-programmes (Humpl, 2011). Today internships are compulsory for a duration of at least 15 weeks. Thus, it can be claimed that the work-based share of UAS programmes was reduced.

The introduction of **dual studies** at UAS and their strong consideration of work-based learning is clearly a vocational drift within higher education. There are three versions of how work-based learning is considered in dual studies: First, training-integrating dual studies are a combination of education and study. Graduates of this version have both a recognized bachelor's degree and a recognised VET degree. Second, practice-integrating dual studies are a combination of long-term internships and study. Students of this version receive high practical knowledge and experience as well as theoretical know-how. However, this study model concludes with the degree of a Bachelor. Third, extra-occupational studies are less aimed at school graduates than those already working for many years. ⁽²³⁾ Certainly, in comparison to Germany there are only a few of them in Austria and looking at the small and medium-sized structure of Austrian economy their further dispersion has to be questioned. ⁽²⁴⁾

⁽²³⁾ <http://www.studieren.at/duales-studium> [accessed 28 June 2017]

⁽²⁴⁾ Expert interview 1.

Curricula of VET colleges are constantly reformed and labour market demands play an important role in these processes, e.g. through the consultation of social partners.

- 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?*

No changes can be observed in that respect: The most occupation-specific vocational programmes in Austria are within the apprenticeship system where each programme trains for a specific predefined trade. Such a distinct system is not known in the field of higher education although also here single programmes train for **regulated professions** – lawyers, medical doctors at universities, teachers at education universities, registered nurses or specific technical occupations at UAS (or at specialised universities), engineer’s degrees or balance accountants outside of higher education. Other programmes cover broader vocational fields. Generally, most of the programmes in the formal field also include transversal learning outcomes such as (subject-specific) language skills, social skills etc.; curricula of post-graduate offers and non-formal programmes are rather only focussed on their field of professions.

VET colleges have a specific role in this respect as they provide a double qualification: While the vocational learning outcomes refer mostly to broader vocational fields, colleges also include a relevant share of general and transversal skills within their curricula.

Learning outcomes orientation at universities is supposed to lead to a stronger orientation on employability, however, according to experts its implementation is carried out only superficial, lacking the professional support of the management and also any remarkable consequences for didactics, contents or curricula. ⁽²⁵⁾

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?*
- 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 contrast to Austria’s apprenticeship system, all learning programmes discussed in this study show high shares of **classroom learning**. The most obvious incorporation of work-based learning at companies is provided by the (few), rather recently introduced dual studies available at UAS with however showing different forms and amounts of on-the job training.

⁽²⁵⁾ Expert interview 4.

At universities where there is a manifold and unclear situation in this respect, no general increase of **mandatory internships** can be recognised despite an “overall increasing practice-orientation at Austrian universities” (Eichman and Saupe, 2011, p. 32). The slight reduction of the internship parts in UAS studies has already been discussed (see Section 4.1).

Practical lessons at VET colleges take place in the institutions’ own workshop facilities or in practice companies. While for technical VET colleges **internships** had already been mandatory, for commercial VET college students this has been true since 2014. This is to strengthen their vocational orientation which had occasionally been criticised as too weak.

- 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?*

All institutions offering higher VET employ teaching staff with different functions and thus different requirements. Teachers for general subjects might only have to show pedagogical and subject-specific training. At the other end of the spectrum, teaching staff only responsible for workshop training might only have to show a minimum of pedagogical training but major work experience.

As for all types of schools, a new regulation for teachers’ training was implemented also for upper secondary schools (i.e. also VET colleges) starting in 2016. For most of the profession-specific teachers (so not for the ones teaching general subjects such as English or maths) the new forms of training include **theoretical and pedagogical training** to greater extend (60 – 240 ECTS) than before thus experiencing an academic drift. Finally, those teachers hold a ‘Bachelor of Education’. Teachers for these subjects also have to show professional experience of several years when starting their training. ⁽²⁶⁾ Similar regulations as for VET colleges apply for the other school-related offers as well as for industrial master colleges (Werkmeisterschulen) and building craftsperson schools.

Professional background and experience of university teachers is very diverse and depends on the sort of university and the field of study. Changes in this respect can be led back to the ‘massification’ process of universities taking place during the last 30 to 40 years: Due to a growing offer of teaching services, a big number of teaching staff had to be recruited. As this happened in a rather ad-hoc manner, today’s staff structure shows **a variety of contract forms or connectiveness** to the university and teachers are enabled or even forced to seek for other professional obligations outside of university. The same is true for private universities. (Schmid et al., 2017)

At UAS, around 15% of teachers are mainly working as teachers while the rest teaches **additionally to other professional activities** – again to a varying extent. Of this second group, around 30% are employed at some company and a further 13% are self-employed; around 14% work in the public or NPO-sector while the rest comes from other education institutions (Österreichischer Wissenschaftsrat, 2012, p. 31). At some point in the late 1990s it was di-

⁽²⁶⁾ <https://www.bmb.gv.at/schulen/lehr/lfb/bbs.html> [accessed 15 June 2017]

rected by the then responsible 'Fachhochschulrat' that teachers from VET colleges were not allowed to teach at UAS in parallel. Thus, the higher level of UAS studies should be made clear and an explicit distinction should be made to non-tertiary programmes (by causing at the same time heavy controversies between local representatives of these two institutional forms). ⁽²⁷⁾ In contrast, the option to teach at universities and UAS at the same time opens up new career pathways for academics who have come to a dead-end of university structures.

Examiners for qualifications such as engineer's degree or master-craftsperson are appointed by the certifying authority. Professional experience is one important factor for their selection.

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?*

Generally, education policies are clearly pushing towards a vocational drift in higher education, e.g. by incorporating institutions outside of higher education into higher education in the 1970s. Prompted by neoliberal governance approaches and an increasing pressure on the labour market, later **new management approaches** were implemented within higher education aiming to bring it closer to labour market needs. More autonomy, performance agreements, study fees for students, etc. intended to give higher education institutions the shape of 'private' providers of education being dependent on the demand of potential learners and their graduates' prospects on the labour market. The establishment of UAS can clearly be seen in the context of joining the **EU** in 1994 as window of opportunity answering the over-stress of universities as only provider of (formal) higher education (within higher education) (Pechar, 2005, p. 4). However, politics only partly managed to crack the specific Austrian dispersion between academic and vocational higher education as well as between secondary and tertiary vocational education. Transferring selected degrees from outside of higher education into qualifications that fulfil the requirements of the NQF is a process mainly driven by European policies (see also Section 5c).

⁽²⁷⁾ Expert interview 3.

- 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?

The general discussions around changes in the field of higher education often show similar patterns: Reforms such as the establishment of the UAS or greater autonomy of universities were throughout legitimised by arguments of **cost effectiveness and labour market relevance** of study programmes. In the same breath, there was always criticism that reforms would not go far enough and would only be conducted half-heartedly. The budget provided by the federal state was often considered as much too low to implement reforms properly and to prepare higher education for future needs.

As discussed above, UAS are intended to foster individual and social progression by providing entry pathways for non-traditional students. However, this aim was lost on the way.

Although the same arguments might apply for the area outside formal education, an official argumentation cannot be recognised because this area develops largely unregulated and alongside commercial interests. However, the rationale for reforming and introducing a formalised the engineer's degrees' exam was to improve international competition, as already described above (see Section 3.1.a).

- 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)?

Before describing drivers of change, drivers of persistence have to be addressed: ⁽²⁸⁾ As in many other European countries, higher education institutions and particularly universities underwent a process of 'massification' turning them from elite academic institutions into education (and training) providers for broad parts of the population. This unwanted development might also be the cause for the barely strategically planned handling of many of the developments of universities discussed in this study. However, different to other countries, Austrian universities (at least the main ones, to a lesser extent the specialised technical or commercial universities) stick to a **traditional self-perception** referring to the 19th century's Humboldtian model of higher education ('Humboldtsche Bildungsideal') aiming to serve a well-educated bourgeoisie. While this self-perception already stood in opposition to the social democratic up-valuation and widening of universities in the 1970s, it is even more inopportune for the developments from the 1990s on characterised by neoliberal policies and a tremendously changing labour market. Despite approaching new management approaches and granting them lots more autonomy, this self-perception is still prevailing and that also includes a blurred perception of what vocational education and training is. The existence of VET colleges and UAS both being 'responsible' for covering VET at higher levels has made it easier for universities to abandon from this field and to stick with their well-tried views. Also,

⁽²⁸⁾ Expert interview 1.

the focus of Austrian economy representatives on SME-structures might underexpose the role basic research coming from universities has for big enterprises.

All of this also becomes visible when referring to one potential driver for making VET at higher levels visible and enhancing the parity of esteem – the implementation of the Austrian **NQF**: From the beginning, universities opposed having their qualifications allocated to the same level as vocational qualifications and therefore, for example, the development of two parallel strands of level descriptors for the NQF-levels 6 to 8 had to be implemented to capture the differences between higher education (Bologna) and VET qualifications at these levels (Hippach-Schneider and Schneider, 2016, p. 202; Schmid, 2014, p. 205). In other respect, this transparency tool can definitely be named as driver for reforms, e.g. for introducing a formalised engineers' degree exam. Today, the positioning of some qualifications is still not decided (e.g. master craftspersons). Some decisions already made (e.g. VET colleges at NQF level 5) are results of lively debates and lobbying at national and international level. It is currently still unclear, in how far these processes (NQF mapping) will affect the recognition of qualifications offered in the non-formal context.

Overall, the **Bologna-process** in Austria is assessed as being hesitantly and ambiguously implemented (Lassnigg and Unger, 2016). Especially for the Bachelor-degree it was hard to develop a profile being clearly distinguishable from a VET college qualification and not only representing an intermediate step on the way to the Master's degree. ⁽²⁹⁾ All in all, the Bologna-process can clearly be considered as 'driver' for change – but the direction cannot clearly be identified in terms of academic or vocational drift.

Other potential drivers having an influence also on the Austrian situation are however too general to be described here in detail: the technological change and the (related) change on the labour market (higher qualification requirements, employability); new management approaches related to generally neo-liberal tendencies; demographic developments including migration; etc.;

d) How are the change processes perceived in the country? (e.g. are they generally welcomed, are there critical remarks?)

Changes in the Austrian education system are always hard to achieve and related to heavy and controversial discussions between stakeholders. Reforms in the higher education sector that refer to a vocational drift happen mainly according to economy and labour market driven argumentation. Thus, they were welcomed by representatives of the economy but also the wider public mostly supported the argument of making higher education more effective and supportive for the country's economy. Counter arguments were consistently produced by universities (both by teachers and students) insisting on their academic status or claiming a potential decline in quality of teaching. The structures of power at universities were changed (from the basis of parity to more management-led structures), thus several stakeholders at universities opposed these ideas. Also, the implementation of UAS and their clear allocation to higher education was seen as threat for the academic field as such.

Strengthening the academic parts of education is not that much welcomed by economy representatives: For example, the increase of pedagogical elements in the training for teachers

⁽²⁹⁾ Expert interview 4.

at VET colleges was criticised as threat for the commercial location as a lack of teachers was expected.

Upgrading processes from secondary or post-secondary level to higher education are mainly discussed within the specific occupational field. For example, when transferring training for registered nurses into the tertiary sector, many health care representatives feared a lack of practical experience for future graduates. Again, economic arguments play an important role as the new structure of Austrian health care professions might lead to an increase or decrease of costs for public health care spending – depending on the actual division between single occupations.

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?

a) Nursing

The field of nursing is a classical and very recent example for an academic drift which affects both the institutional and the content side of studies. With the new healthcare law from 2016, the training of registered nurses at UAS accomplishing with the Bachelor degree has been made compulsory. Already since 2008, Bachelor programmes for nurses had been established at UAS. With the secondary level schools of healthcare and nursing existing at the same time, these parallel structures were accused to involve threats for the whole occupational field (Haberfellner and Sturm, 2014, pp. 80). Therefore, a clear regulation was implemented in 2016, however with granting transition periods until 2024. At the secondary schools, programmes for two levels of health care assistants will be offered in the future.

With the transition described above, Austria catches up with the majority of other European states offering training for nurses at tertiary level. Also, the Austrian singularity whereby the training for psychiatric and paediatric nurse are specific programmes existing in parallel to the ones of general registered nurses is now replaced by a common general basic training for all sorts of registered nurses. A problem of the former school-based system could also be overcome: As the nurses’ training was only allowed to be started at the age of 17, there was a systematic gap to the end of compulsory school (which used to be at the age of 15). Against the background of a strongly raising demand towards health care professionals, it is hoped to make the profession more attractive with these new developments (Haberfellner and Sturm, 2014).

With the reform, a number of aspects changed: The main target group are now graduates of academic secondary schools and VET colleges who are entitled to undertake a course of study at higher education. Graduates will now be able to enter both the practical work of a nurse and a more scientific career pathway within higher education or in other fields of the labour market. Thus, their curricula now include a higher share of research-oriented subjects (e.g. evidence-based nursing). Some practitioners are afraid that future nurses would lose contact to the actual work with the client, although the share of practical teaching has not declined with the introduction of the new structure.

b) Engineering

Engineering is a broad field covering different levels and sorts of work. Although access pathways were opened to enable graduates of the still strong traditional apprenticeship system to enter higher education, their more common destination would lead them to further education outside of higher education (e.g. a master-craftsperson exam). As already discussed, these VET qualifications offered at higher levels outside higher education might be included into the NQF in the future providing them with a clearer status towards other qualifications and (so far only theoretically) improving permeability into other fields of training. The same is true for a qualification which can be obtained by VET college graduates in the technical fields based on professional experience and a certification process, the engineer's degree (see chapter 3.1). These developments mainly aim at making engineering degrees visible by turning them into qualifications and can thus not be directly interpreted as one sort of 'drift'.

After transforming technical institutes in higher education into specialised universities in the 1970s, the next most important step was the introduction of the UAS. Developments described for the UAS were, especially in the early years, particularly affecting the field of engineering, e.g. attempts to discriminate the teaching staff of UAS and VET colleges (see section 4.1.c). However, especially technical programmes at UAS still struggle with establishing their status clearly distinguishing them from VET colleges and universities. Overall, the engineering field experienced a clear vocational drift.

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.

Please provide general information and refer to the particular situation in the nursing and engineering areas.

- 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'?*
- 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)?*

A current debate and a possible future trend refers to the transformations of degrees awarded outside of higher education into qualifications that can be allocated to **NQF levels**. As demonstrated e.g. by the recent introduction of the engineer's degree, international competition and international transparency tools might raise the pressure to enhance the visibility of these qualifications and to clarify their value and position as qualification in an unambiguous way. It remains to be seen whether the sector of higher VET outside of higher education can become and stand its ground as an important (and visible) component of the Austrian education system.

The chances of other more recently developed programmes and qualifications of successfully increasing their visibility and standing are – following today’s political preferences – assessed differently: While experts do not see much chance for ‘Berufsakademien’ to receive Bologna-accreditations anywhere soon, short cycle programmes might get promoted for some specific fields of study (technical fields, health care). ⁽³⁰⁾ However, one expert sees the threat of locally dominating enterprises implementing tailor-made short-cycle programmes at publicly funded education institutions.

The somehow bumpy implementation and usage of the **Bologna structure** in Austria will furthermore lead to discussions on how to improve, e.g. the relevance of the Bachelor-degree as labour market relevant qualification. As matters of rumours, there are discussions to commit all Bachelor-degrees or all vocational study programmes (and therefore a big majority of students) exclusively to the UAS and to concentrate universities on purely higher and/or academic education. However, this is more or less pure speculation. The extension of Austria’s UAS sector is however common sense among the relevant political actors.

Higher education institutions will continue to try to establish their offers of **further education**, both in the non-formal sector and regarding post-graduate courses. It is yet not clear in how far they will succeed in competing with purely commercial providers or high-profile competitors from abroad.

Also, a moderate expansion of the **private universities** can be expected. They are expected to succeed if they manage to focus on profitable sectors (e.g. medicine, STEM), guarantee an advantageous support service for their students and to acquire students from abroad (Schmid, et al, 2017, pp. 155).

The role and shape of **work-based learning** in vocational education will further be discussed in Austria. Given the big attention that work-based learning receives at the moment, it can be expected that its shares will raise within also in VET at higher levels. On the other hand, the traditional work-based system (apprenticeships) can be expected to provide a better theoretical basis in order to e.g. prepare for higher education. Thus, it is the goal of major stakeholders that work-based activities are better connected and embedded into school-based learning pathways. Also, existing bridges between the apprenticeship system and higher education are intended to be strengthened, improved and by this to become ‘normal’ pathways within the Austrian education system.

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
Academic drift	Higher Education	professionally-oriented HE	__ transformation of vocational HE institutions into specialised universities* (e.g. Vienna University of Economics and Business; Technical University Vienna) __ strengthening academic aspects at UAS (establishing PhD programmes, placing junior researchers in scientific positions)	1970’s recently	3.1
		traditional (or academic) HE programmes	__ recruitment of academic staff solely dedicated to research tasks (because of international rankings)	recently	3.1
	VET (outside HE)	VET transformed to HE	__ upgrading of specific upper and post sec. programmes into HE programmes	2004 – 2024	3.1
		VET offered at higher levels outside HE		2016 - ongoing	3.1.a,b; 3.2.4a; 5b
Vocational drift	Higher Education	professionally oriented HE	__ establishment of UAS __ implementation of organisational and financial autonomy of specialised universities	starting 1993 1994 – 2002	3.1
		traditional (or academic) HE programmes	__ increase of organisational and financial autonomy of universities __ curricular shifts putting the development of labour market relevant skills to early phases of BA programmes	1994 – 2002 2000	4a; 5c
Expansion of VET at higher levels (outside HE)	VET at higher levels (or ‘higher VET’) offered outside HE		__ (re-)classification of VET colleges (on ISCED11- and EQF-level 5) (only formal change)	2011 / 2017	3.1
			__ increasing visibility of some VET offers’ higher level through the NQF mapping process (already mapped: VET colleges, engineers’ qualification)	2016 - ongoing	3.1.a,b; 3.2.4a; 5b
			__ expansion of (assumably) higher VET programmes and institutions outside HE	ongoing	3.1
			__ expansion of potentially formal (though not (yet) accredited) higher VET outside HE (‘Berufsakademie’, short-cycle programmes)	2010 – ongoing	3.1

*depends on the perspective: can be considered as academic or vocational drift.

9. Sources of information

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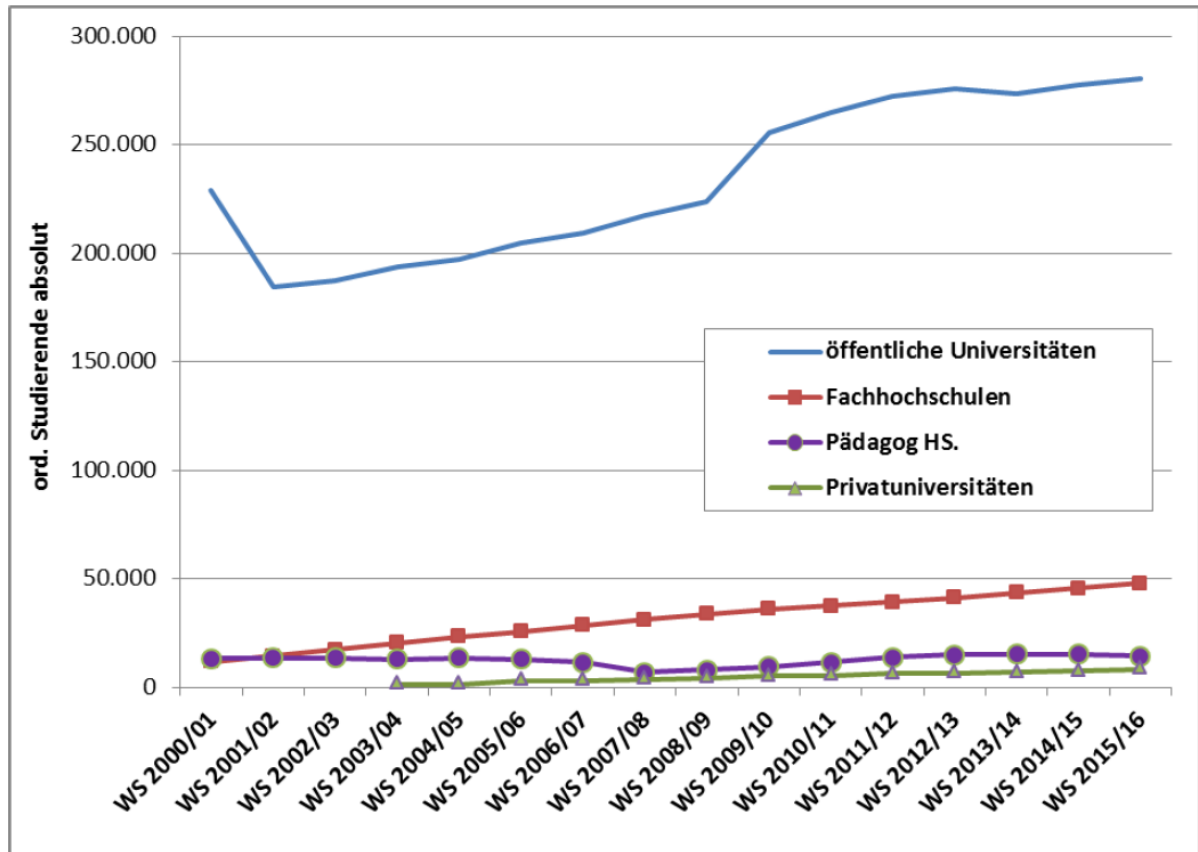
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10. Annexes

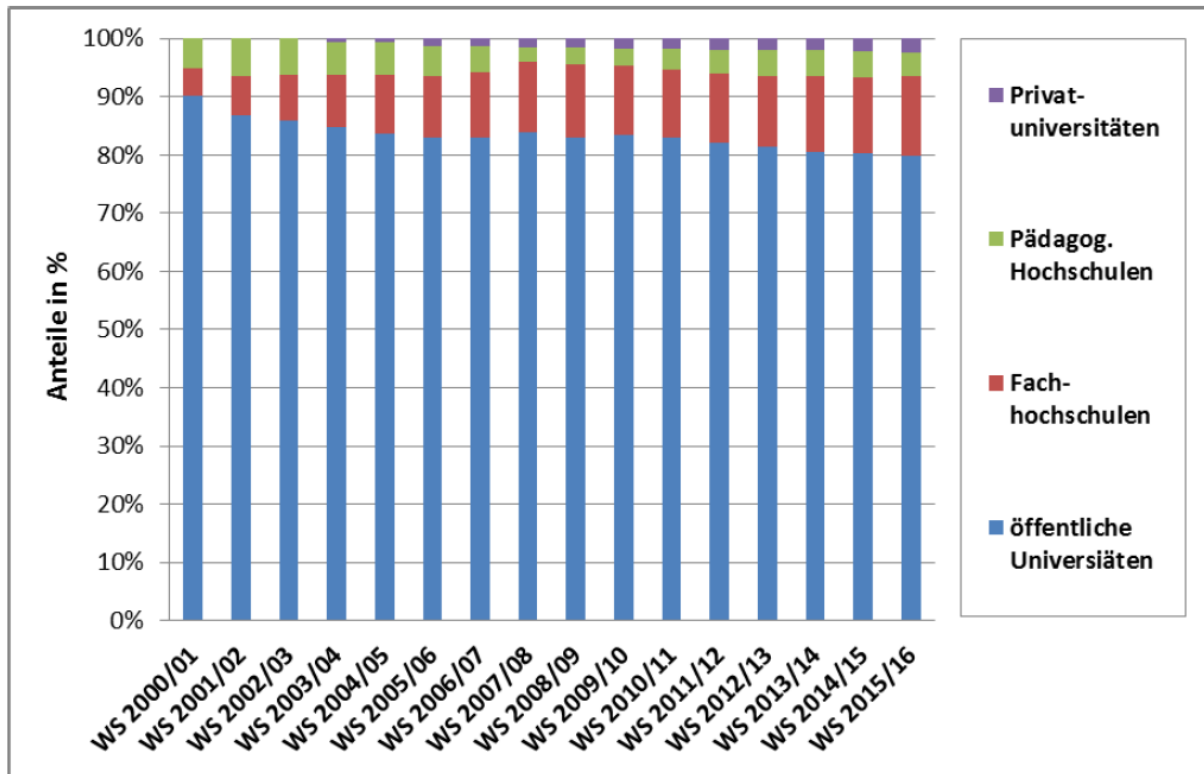
Figure 2 Development of the number of ordinary students by sector of higher education*



Source: Schmid et al., 2017, p. 145

*Reading help: Öffentliche Unviersitäten = public universities; Fachhochschulen = UAS; Privatuniversitäten = private universities; Pädagogische Hochschulen = Universities of Education; WS = winter semester

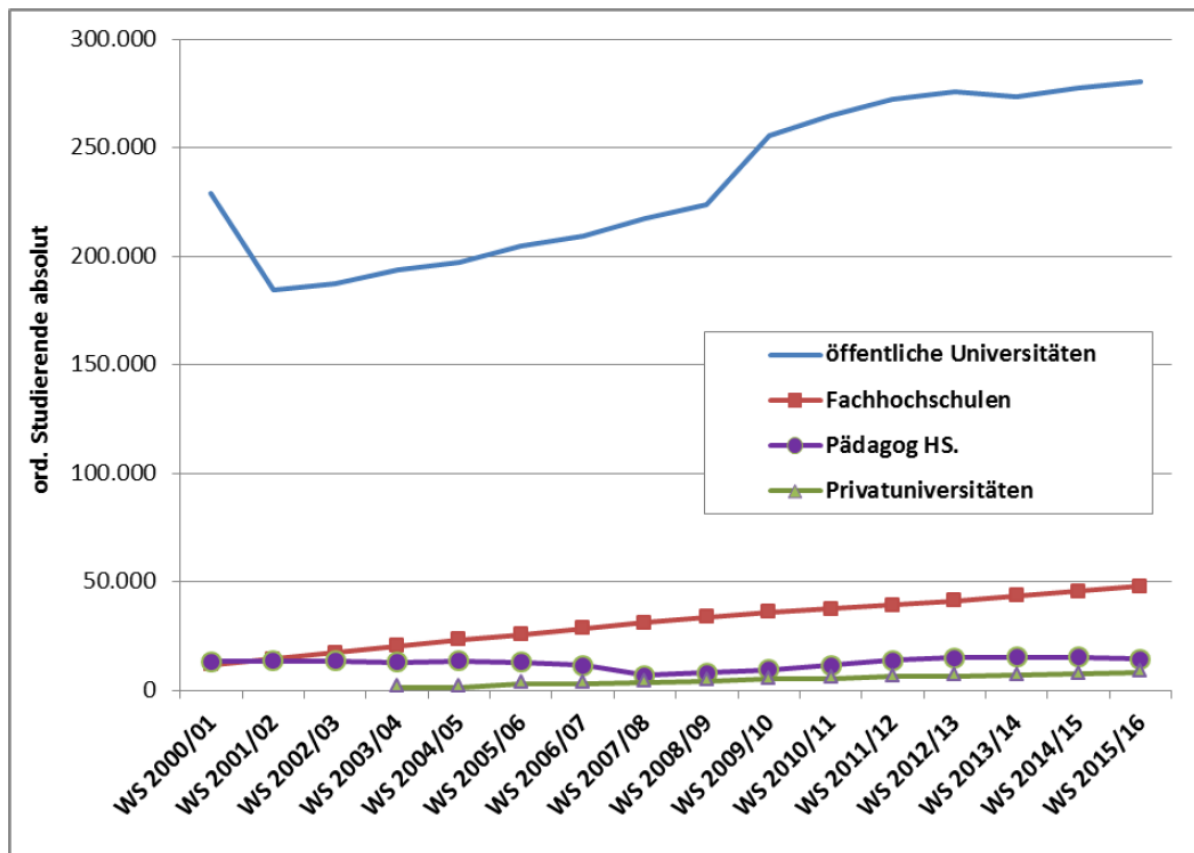
Figure 3 **Distribution of ordinary students by type of higher education institution ***



Source: Schmid et al., 2017, p. 26

*Reading help: Öffentliche Unviersitäten = public universities; Fachhochschulen = UAS; Privatuniversitäten = private universities; Pädagogische Hochschulen = Universities of Education; WS = winter semester

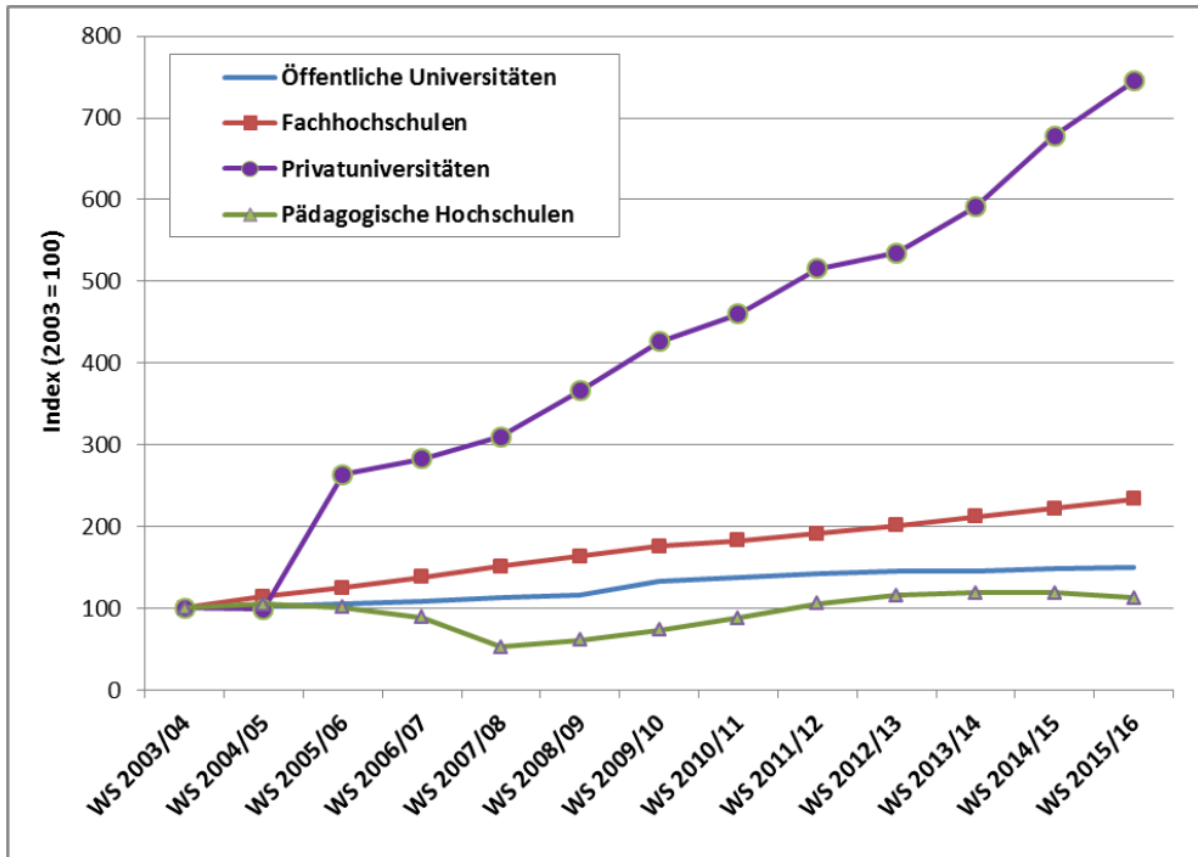
Figure 4 **Development of the number of ordinary students by higher education institutions***



Source: Schmid et al., 2017, p. 27

*Reading help: Öffentliche Unviersitäten = public universities; Fachhochschulen = UAS; Privatuniversitäten = private universities; Pädagogische Hochschulen = Universities of Education; WS = winter semester

Figure 5 Index of the development of student numbers (full-time and extraordinary) by higher education sector*



Source: Schmid et al., 2017, p. 26

*Reading help: Öffentliche Unviersitäten = public universities; Fachhochschulen = UAS; Privatuniversitäten = private universities; Pädagogische Hochschulen = Universities of Education; WS = winter semester