Exploring tensions between academic and vocational elements in the education of professions

1. Introduction

Professional and vocational education makes up an increasing share of higher education, measured in terms of students, their study programs and their teachers. Conversely, if we shift our viewpoint from educational setting to occupational structure, training for an increasing number of occupations and labour market positions has been transferred to or arisen within academia. The hegemonic role played by the higher education system for growing numbers of white-collar occupations has led to a new configuration between the occupational structure of advanced capitalism and its systems of higher education.

The aim in this chapter is to contextualise results of research done on a number of academic vocational programs – social work, police, coaching and sports management, human resource management – in a new university in Sweden between 2003 and 2012. In these research projects, we analyse how the students evaluated and handled the different demands of the academic and vocational elements in their education programs. We are thus able to charter the effects of the two tendencies that characterise professional educational programs which are relatively recent arrivals to the Swedish university system – the increasing vocational orientation on the one hand, and the tendency towards an increasing academic orientation on the other. The aim in this chapter is to locate our cases in a broader historical and institutional matrix, and apply this contextualization to our findings. Three preliminary observations serve as point of departure for this contextualization.

(1) The incorporation of vocational education in the university system has transformed that system itself. It has changed the composition of the teacher corps, the

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1 This chapter is based on research carried out as part of a research project financed by the VR/UVK (project number’ 2006-5662). It was also supported and partly financed by the Forum for research on Professions (FPF) at Växjö University/Linnaeus University. In the last decade we have grappled with a large number of these occupations and their programmes of education within three research groups at the Linnaeus University: HERE (Higher Education – Research and Evaluation, FPF (Forum for research on professions) as well as a research project on the academic vocational programs, financed by the Swedish Research Council. Cf. Olofsson & Petersson 2011, Fasth & Olofsson 2013, Olofsson & Persson 2010.
character of the student population, the expectations on educational and research output, and the axes of differentiation within the system. This supplies a grid within which to place Swedish higher education, the university we are studying, and its vocational programs. The historical process through which vocational education has been transferred to the university system serves as basis for our classification of professions into different generations.

(2) The gravitational pull towards the university system has altered the perception of the professions. After the turn of the century 1900, the gradual inclusion of 19th century professions into the university system gave rise to an increasingly tight association between profession and higher education. In the literature on the professions, this is reflected in the way higher education has emerged as a defining feature of modern professions and professionalism – a three year university degree is commonly seen as a precondition for an occupation to be classified as a profession.¹

(3) The incorporation of vocational education in higher education makes the organization of vocational programs a key concern for universities and professions alike. In Eliot Freidson’s felicitous formulation, training credentials is “the hinge between two major institutional complexes – those organizing the performance of work and those organizing training for that performance” (Freidson 2001). When these credentials are acquired in higher education, some trade-off is established, for each vocational program, between the imperatives of working life and those of the university system.

These preliminary observations structure the chapter into four sections. In section two, we provide a historical sketch outlining how different generations of professions were incorporated into the Swedish university system. This topic is dealt with at length in the chapter “Academisation of vocational education”. But a brief account is nevertheless in order, as the precise character, conditions, timing, and consequences of academisation vary across educational systems. Section three then distinguishes three different modes of aligning vocational and academic elements in professional training. In the fourth section, finally, we use this context to discuss findings from our research projects on academic vocational training in a new university.

Before we move on to the historical exposition, a few words are in order to situate Sweden in an international setting and our new university in the national setting. Sweden presents an interesting case since, as we shall see further on, political decisions transferred all post-secondary education to the university system in the second half of

¹ For occupations aspiring to professional status, this has fuelled the notion that anchoring vocational training in higher education is a token in the struggle for jurisdiction and for recognition as a profession. And to new educational programs, arising from within the university system, the successful crystallisation of their alumni streams in particular occupations, organizational positions, or labour market niches can be used as a levy to argue parity with other professions.
the 1970s. Sweden thereby stands out internationally (a) in terms of the method of incorporation – a professionalization from above, as it were – and (b) the scale and timing of mass academisation of vocational training, feeding upon and feeding into the perception of professions as occupations endowed with academic training.

Within this national setting, the new university we are studying – Växjö University – also has interesting properties. The reform that transferred post secondary education to the university also created a host of regional university colleges – Växjö being one of them – while placing old and new units under a single, formally unified university system. This put old and new higher education units under the same obligations and evaluation standards, notably making research-based education mandatory to all units. At the same time, the emerging system was internally stratified. Higher education units differed widely with regard to the academic credentials of the teacher corps. In terms of academic density, Växjö University represents the low end of this system. It caters primarily to vocational education – none of which belong in the more prestigious set of professional educations with a longer history in the university system.

2. Universities and the education of the professions

For the better part of their history, Swedish universities remained distant from professional education, in the sense of specialised and practical training for particular occupations. The education was firmly generalist: until the second half of the 19th century, the curriculum obliged students to matriculate in all disciplines of the philosophical faculty, putting definite limits to both professional specialisation and to the cultivation of scientific research. The 19th century brought changes on both counts, making it particularly important in this context. For to the extent that “academic” means research-oriented, as it presumably does to many a modern reader, both the academic and the vocational pole entered Swedish higher education at this juncture. This, then, is the institutional presupposition of any tension between academic and vocational.

In view of the current liaison between university and profession, we regard – albeit whiggishly – the set of occupations entering higher education in the 19th century as the first generation of Swedish professions. By the same token, we shall identify two younger generations, each shaped by its respective inception point in and relations to

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3 Växjö University College began in 1967 as a university extension under Lund University, became a separate university college in 1979, and acquired full university status in 2000. In 2010 the university amalgamated with Kalmar University College to become Linnaeus University. For the sake of brevity, we shall henceforth refer to it as Växjö University.

4 During the period under study, however, a psychology program was established, and there have been attempts, so far unsuccessful, to found a medical school and a full-fledged civil engineering program.
the university system, in turn conditioning their modes of aligning academic and vocational elements in professional education.

2.1. The first generation: classical professions
In the history of professional groups we find successive generations of occupations. The first consists of those occupations that we today, following Parsons (1939, 1954, 1973), regard as the learned or classical professions: Law, Divinity, and Medicine. These forms of knowledge correspond to the three Higher Faculties in the traditional European universities.5

While these professions were tied to the university, in the sense of sharing their respective fields of knowledge with one of its higher faculties, the link between the two institutional complexes was less than straightforward in the Swedish case. As regards divinity, for instance, it was only in the 1830s that university training became mandatory for priests.6 All would-be clergymen were thus put under the strictures of the same extensive and general theological curriculum at the universities. But many of the practical skills involved in performing as a priest – homiletics, pastoral care, etc. – were left untouched in university education, which was still curiously unconcerned with practical, vocational aspects. As we shall discuss in more detail in section 3, this spawned questions about the place of vocational training: lest acquiring such skills was to be made part of the university curriculum, they had to be learned somewhere else. In this respect, the education of the clergy is representative of a wider set, including the professions of medicine, law, and gymnasium teachers.

A second and important part of the classical professions emerged as a consequence of the development of the natural sciences. Historically they began their life outside the traditional universities, first in “learned societies” and academies and later within new and specialized kinds of training establishments.

During the 19th century the Swedish system of higher education experienced an impressive growth of special institutes and schools for training in medicine, technology, natural and agricultural areas and later also commercial activities. The 19th century expansion of these breeding grounds for new professions has been labelled “the age of the institutes” (Agevall & Olofsson 2013). These new fields of knowledge and their corresponding professional categories include engineering, veterinary medicine, pharmacy, agronomy, odontology, etc. Due to their extra-university pedigree, the institutes were unfettered by the generalist curricula of the universities. In contrast to the latter, then, the practical aspect of vocational training was already part and parcel of education at the institutes, and reflected in personnel structure, curricula, and rela-

5 The “lower” faculty was the philosophical, which later developed into the Humanities, the Natural sciences and the Social sciences. (Cf. Lepenies 1985)
6 Brlioth 1942
tions to the labour market. The modern Swedish system of university based professions thereby has two 19th century parents in higher education, each with its own mode of aligning academic and vocational elements in higher education.

Important as these differences are, the two institutional forms, as well as their professional alumni, converged over time. The institute occupations of civil engineers, veterinarians, agronomists, pharmacists, dentists etc. gradually merged with the university occupations of lawyers, physicians and the clergy to form a knowledge-based social elite. Over time, institutes became more similar to the universities, typically shedding their institute form to become Fachhochschulen, acquiring the right to issue university degrees, and becoming more university-like in terms of personnel structure. Conversely, university curricula became less generalist, allowing room for scientific and vocational specialisation. Both institutional forms came to share in the emerging ideal that research should be a key task for the professoriate (Agevall & Olofsson 2013).

It would take until after the Second World War until the institutes-cum-Fachhochschulen were unambiguously equated with the universities. But in the meantime, the increasing proximity between the two institutional forms already set them apart from another category of educational organisations, later included in the university system: those training the second generation of professions.

2.2. The second generation: welfare professions

The second generation of professions includes school teachers, nurses and social workers. Sociologists in the 1960s, preoccupied with determining the bounds of the professions as well as with the pathways of professionalization, referred to this set as semi-professions, sharing some but lacking other characteristics of the older professions. Training was more practical than theoretical, they held intermediary positions in the organisations where they worked, and their status was less elevated. In the Scandinavian setting, these occupations are nowadays often labelled “welfare professions” (Molander & Terum 2008). This terminology resonates with another feature of the set, viz. their role in fulfilling Post War reform promises of mass education, health services and social amelioration. In our account, it is the timing of their entrance into Swedish higher education that marks them off as the second generation professions.

After the Swedish school reform in 1842, training of teachers for elementary school became an important preoccupation of the State. In contrast to gymnasium teachers,

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7 In later texts in the sociology of education these schools and occupations are defined as “prestige education”. Cf. Gesser 1971, Gesser 1985.
8 Cf. the contributions in Etzioni 1969.
this category of teachers was educated in special schools – the “seminars”, later 
teacher colleges – that were far removed from any university setting. The same holds 
for the nursing schools that began to mushroom from the 1880s. While the history of 
the schools for social work is slightly more complex, training for all three occupa-
tions were formally outside the university system, and in a technical sense also the 
system of higher education in Sweden, when, in the 1960s, the first generation of pro-
fessions had already settled within it. Education for the welfare professions was 
shorter than a university education, not science-based in a systematic way, had lower 
formal entrance requirements, and lay organisationally and physically outside the uni-
versities.

Thus, while first generation professions were trained in institutional forms that had 
long embraced research as a core value, and were staffed accordingly, the educational 
setting of the welfare professions was ruled by the vocational pole alone. Staffing re-
flected the extra-university setting, as a large proportion of the teacher corps was 
drawn from the respective professions and selected on the basis of their vocational 
experiences and skills. Curricula similarly gave strong emphasis on practical skills, 

This structure continued to shape the training of the welfare professions up until 
1977, the year of a sweeping and comprehensive reform of the whole area of post-
secondary education in Sweden. Universities, Fachhochschulen, university exten-
sions, newly founded university colleges, schools for nurses, social workers, and 
teachers for primary school were included in a unified system of higher education, 
administered and governed by the same government agency and the same govern-
ment department. The welfare professions were at the heart of this reform. The inser-
tion in the university system of such large student and teacher groups altered the sys-
tem itself. Formal institutional equality coexisted, however, with major differences in 
access to research funding, competence among teachers, and the social backgrounds 
and cognitive abilities among the students.

This conjunction of formal equality and differentiation worked to produce a bifurca-
tion in the interpretation of “research based education”. In universities and Fach-
hochschulen – long steeped in the ideal of scientific research, staff recruited on the 
basis of academic credentials, amply endowed with research funding, and catering to 
first generation professions – it meant conducting research as well as teaching. Staff 
in the new, second order establishments, on the other hand – often recruited on other 
than academic grounds, barred from research funding, and mainly educating second 
generation professions – were initially expected to concentrate their efforts on under-
graduate teaching, merely conveying the fruits of knowledge.9

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9 In the words of a renowned economist from Växjö, interest in doing research at that time was re-
garded as a personal hobby, comparable to indulgence in golf. (Olofsson 2013b)
Over time, the incorporation of the welfare professions into the unified system of higher education has meant an increase in their reliance on science and the importance of academic components in the education programs. The way this process unfolded has, as we shall see, shaped a particular mode of aligning academic and vocational elements.

2.3. Third generation: vocationalism

The 1977 university reform multiplied the number of higher education units in Sweden, newcomers mostly being built upon existing educational institutions with an extra-university pedigree. With virtually all post-secondary education transferred to the university system, the perception was entrenched that professions are occupations endowed with university education. This had consequences further down the line.

From the early 1990s until today, the enrolment in Swedish higher education has grown rapidly. Today almost 45% of an age group will at some time in their life spend a longer or shorter period in the system of higher education. This expansion has led to swelling numbers of students, especially in explicitly vocational programs: approximately half of all students at the Swedish universities are enrolled in academic vocational education and training programs.

From whence does this expansion derive? First generation professions account for a small portion of it. The programs leading to traditional high-status professions – such as law and medicine, civil engineering, architecture, dentistry and psychology – have grown at a modest rate during the last two decades. The programs leading to the welfare professions, on the other hand, have expanded steadily. Yet, the most striking feature of the expansion is the emergence and rapid growth of a “third generation”, vocational programs catering for the pre-professions. In recent decades we are witnessing a new surge of occupations that have achieved, or are aiming at, a professional status on the level of the welfare professions (semi-professions). Ever more courses in the universities, and especially the university colleges, have a clear vocational bent, announcing their intention to populate specific niches in the labour market and its ever more complex organisations. (Olofsson 2009, 2010)

This trend has two different roots. The first of these can be summed up as occupations in search of academic education. There are a number of established occupations who seek to secure their future through an educational niche within the university setting. The police and the real estate agents are two examples. And the health care authorities have raised the competence levels for some of their key occupations to a three year bachelor program (biomedical assistants are a typical case).
However, the quantitatively more important part of the vocational trend comes from within the university system. This is the second root: *educational programs in search of a labour market niche*. Universities or their departments are actively creating study programs that carve out an occupational niche in an ever more detailed and subdivided occupational structure. Higher education units are looking for new ways to attract students in a fierce, albeit often low-keyed competition for (good) students. Creating study programs that promise a job in a certain sector or in a specific occupational niche is an important strategy.

The stream of vocational education, and the characteristics of its two tributaries, is important for three reasons. It provides our cases with their immediate context, as three out of four programs in our inquiry belong in the third generation, exemplifying the trend towards vocationalism in the university. Furthermore, it situates Växjö University – in terms of institutional history and, by implication, socially – for, to date, second and third generation professions exhaust its range of vocational education. Finally, it raises questions as to whether the provenance of vocational programs shapes the way they align academic with vocational elements. Do they draw on different models, and what models are there to draw upon? In section three, we outline three modes of organising vocational and academic elements in academic professional training.

The increasing and deepening vocational orientation is thus shaping the expanding university system in Sweden. The other side of this development is the systematic and intensified academic character of the training and education of hitherto mid-level occupations, such as teachers, nurses and social workers have undergone. This implies important changes in the training and the kind of knowledge that is defined as necessary in order to enter these occupations. The role of abstract and scientific knowledge, as well as training in scientific methods, including the necessity to write exam papers that will be judged by academic standards, have transformed many of these study programmes. This has been significant for the professionalising ambition of these occupational groups. Furthermore, new forms of systematic knowledge are being developed in relation to these occupations.

### 3. Organizing the Academic and Vocational elements in the education of professional groups

In the education of professions there are three principally different ways to combine the acquisition of the abstract/academic knowledge and the practical/vocational competences that is necessary for future members of a profession to learn and master: (1) as a sequence, (2) as intermittent sequences, or (3) in an integrated form.
3.1. The sequential model

Despite sharing areas of knowledge with the learned professions, university education remained staunchly generalist, with no real concessions to the practical aspect of working life, at least until the second half of the 19th century. With the ongoing systematisation of education, they had nevertheless become necessary entry points for the classical professions. Where, then, should these professionals learn the skills and tricks of the trade needed in their future roles? Since it remained unthinkable that this type of knowledge should be imparted by the university professors, still the only staff category fully on the inside of the universities, there emerged a model where vocational elements were taught after completion of university training, in a setting outside the universities.

This sequential model, then, has the following character:

a) The abstract knowledge is being taught in one type of establishment, the university, structured by academic demands and criteria;
b) Then comes the practical part, preparing for the practical performance of necessary vocational skills.

The legal professions, for instance, neatly illustrates the model. The typical form of vocational introduction was to function, during an extended training period, as a clerk at a district court. The court setting was different from the Faculty of law. An experienced judge was responsible for the practical training of the fresh law graduate.

A similar sequential pattern is found in the education of the Swedish Lutheran clergy. Upon the transfer to the university in 1831, the students first had to absolve a highly academic degree at the university, covering all the classical theological disciplines, including the biblical languages. For the Church it meant grappling with declining numbers of priests. For theology graduates aiming for employment in the Church of Sweden, it meant that a mandatory university education was followed by enrolment in a separate training school. Here they learnt the practical execution of pastoral tasks, such as preaching and leading the congregation in both spiritual and more mundane matters.

The same pattern applies to the university based training of teachers for the gymnasium, where students, upon completing their academic-theoretical studies, got a practical introduction to the job: traditionally in the guise of a year of practical training at a gymnasium.

These three cases are typical examples of a clear separation between the academic and the practical vocational tasks, not only in terms of sequence but also in institu-
tional terms. A key point is that the practical-vocational demands of the future professional tasks did not intervene into or determine the form and content of the academic training in the separate disciplines within the university.

Over time, the pure sequential model gives way to other modes of aligning academic and vocational elements. The model nevertheless has a lasting legacy. The birth of the sequential model coincided and resonated with the ascent of scientific research to the status of academic core value. The separation of academic and vocational training worked as a quarantine, ensuring that the professoriate was free to pursue their research and research based teaching independent of its current usefulness for any particular profession. It is still a vivid ideal among many academics: all things being equal, we should expect career minded academic teachers to invoke this model in negotiations over the content and organisation of teaching. Equally important, the sequential model will continue to serve as starting point in the first stages of forging new vocational programs from resident disciplines within the university.

3.2. The intermittent model: mixing academic and vocational elements

Not all first generation professions were based in the universities. The institutes, that other parent of classical professions, only gradually inched their way into the university system. Vocationally oriented from the start, and neither subject to the strictures of a generalist curriculum nor to the limited variety of teacher categories at the university, the institutes offered a different model of aligning academic and vocational elements.

The case of dental surgeons offers an illustration: after training on non-human objects they had to practise on patients (who got free treatment) while still in dental school. The key to the intermittent model, the feature that allowed theoretical and practical elements to be mixed in professional training, was the presence of practitioners from the field, employed as a special category of teachers within these programs. Those teachers, which we find across the set of 19th century institutes, were recruited as experienced practitioners from the field and were expected to serve as living links to the field of practice.

In principle, and in comparison to the sequential model, the intermittent model extends the reach of occupational practice into the academic educational setting. It also forms the basis of a perennial issue in professional training, viz. vocational versus academic drift. While curricula can be planned to better match current labour market or

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10 The category, it should be noted, became “special” at the same pace and to the same extent that the institutes drew close to the universities, for only in relation to the employment categories of the latter was there something unusual about them.
occupational needs and employer demands, such planning may turn out to be myopic. Conversely, research-led innovations can transform professional practice, but granting researchers a license to pursue specialised research and pass it on in education is fraught with the opposite danger, namely that the training is heavily academised, esoteric even, without yielding any tangible gains for professional practice. This situation calls for trade-offs between academic and vocational elements, negotiated on the inside of the training programs, and played out in a force-field that involves professions, university administrations, and various teacher categories with differential involvement in research.

There are some important variations to the intermittent model. One of these concerns medical education. Its training sequences have for a long time included (theoretical) pre-clinical subjects, then (theoretical as well as practical) clinical subjects combined or followed by practical learning in the context of other occupations and professions in the hospital settings. This is a combination of intermittent and post-graduation vocational exposure, perhaps mirroring how 19th century medical training was shaped in a bitter struggle between universities and institutes.

More important in the context of this chapter are the welfare professions. Up to the last third of the 20th century, the welfare professions approximated the intermittent model of the institutes. In the Schools of social work, for example, representatives from “the practical world” were directly involved in key aspects of the educational program. And lengthy periods of practice were an integral part in the training of the social workers. Such integral periods of practice were typical for future nurses and teachers as well. Here they met the realities of their future work and were supervised and guided by experienced practitioners in their fields. For the teachers, the reality shock of meeting pupils in a real classroom was partly mediated by the supervising school teachers who advised them in the practical arts of teaching and keeping discipline. At the same time, practitioners from the field were also on the inside of these programs. They were recruited as adjunct teachers, on the basis of their vocational skills and insights, representing the “outside” on the “inside”. This gave them a practical authority in relation to the students (since they were seen to represent the “reality”). Yet, their lack of theoretical-academic credentials and knowledge put them in a delicate situation in relation to the academic part of the teaching corps within the programs.

This mode of aligning academic and vocational elements is clearly reminiscent of the old institutes. But there is a crucial difference. The academic density of these Fachhochschulen increased dramatically with their early ascendance into the university system, their teachers were expected to engage in research, and research funding was readily forthcoming. Since none of this applied to the welfare professions, their academic pole was weak. It is the inclusion of these professions in the university system that has spawned a third model of aligning academic and vocational elements.
3.3. The integrated model

With the 1977 university reform, the welfare professions were catapulted into a new, unified system of higher education, thereby coming under systemic pressure to become more academic. In a formally unified structure, with scientific research as legally backed core value, this entailed elevating the scientific competence of program teachers, aligning the program with existing or to-be disciplines that could accommodate bachelor, master and Ph.D. students, and negotiating a new relation between the imperatives of science and working life.

Under that pressure, new disciplines have been forged – including nursing science, social work and educational science (didactics), all of which are now well entrenched in the system of Swedish higher education. With the inclusion of the “welfare professions” as bona fide studies within the universities came a trend that partly contradicted this emphasis on the vocational elements. The demand for a scientific basis of the education programs would have to be based on theory and scientific methods of research. The scientification of the methods and means of interventions is a way to handle the logic of academic inclusion of educational programs with a mix of academic and vocational elements. This can be defined as a vocational turn.

To see why, and in what sense, this represents a novel mode of aligning academic and vocational elements, it is useful to compare it to the two models outlined above. In the sequential model, academic teaching unfolds in splendid isolation from the shifting demands of working life. The time-sequence, in conjunction with institutional separation, prevents vocational considerations from shaping the academic part of education. Academic and vocational elements are expected to be aligned in professional practice. The intermittent model transplants the academic/vocational divide to the inside of the university, both in terms of mid-program stints in vocational practice and in terms of the co-presence of academically and vocationally oriented teachers. Academic and vocational elements are expected to be aligned in professional education.

In the integrated model, by contrast, academic and vocational elements are expected to be aligned in the academic discipline. The influence from the field, and from the practice of professional groups, has had a large impact on the kinds of theory and methods that the future professionals have to learn. They have become the new, systematic cognitive bases for a number of “welfare professions”.

Today, the educational programs of many professions, of varying generations, not only mix academic and vocational courses, with alternating periods devoted to one or the other but present a fused, integrative mode, where borders between the academic and the vocational elements are partly being blurred, sometimes even dissolved.
As a consequence of their inclusion into the university setting, the character of several vocational programs, not least for the “welfare professions” of social work and nursing, has definitely become much more academic. Students have to read much more theory. Scientific methods are emphasized and students have to devote more time and energy writing essays and candidate theses. Social work programs now lay less emphasis on hands-on training during extended periods of practice than before and have acquired the character of a more general social science program (cf. Salonen 2010). This change in the balance between academic and vocational elements can, depending on your point of view, be framed as both “academic drift” and “vocational turn”.

4. Academic and vocational education: cases, explorations, contextualisation

The last section focuses on the tension between the academic-theoretical and the vocational-practical elements in a number of vocationally oriented education programs given at a new university in Sweden. It draws on results obtained in one major and several minor research projects, detailed in footnote 1 above. The basis for these studies is the Växjö panel study, covering the whole student body in Växjö, in which students are followed through education and into the job market (Eriksson 2009). Within this overall framework, our studies comprise eleven vocational programs.11 And within that set, we have conducted more in-depth inquiries of four programs, also including interviews with employers: Social work, Coaching and sports management (CSM), Human resource management (HRM), and Police. The section begins with an analysis of the latter four, and moves on to contextualise and discuss them in relation to the broader group of programs.

The 1977 university reform created Växjö University College out of a university extension. With this reformattting, Växjö became part of a finely woven net of new higher education units, with which it shares two important and interlinked characteristics: low academic density and a predominance of vocational education. While the vocationalisation of Swedish higher education goes beyond these offshoots from the


In a recent collection of essays on students, their study experiences and their chosen programs in Växjö (Fasth & Olofsson 2013) there are also chapters devoted to the experiences – in their studies and the job market - of students with an immigrant background (Broman & Flodin 2013) of the local student culture (Löfqvist 2013b, Larsson 2013b), of the students who prematurely terminated their studies (Wågman 2013) and of the students’ vision of their future (job and family) (Erlandsson 2013). Thus we have large pool of data and experiences to draw upon.
1977 reform, it is in this segment that it is most dominant. That segment, furthermore, is devoid of first generation professional education, which is located exclusively at the old universities and the former institutes. All vocational programs in our population hence belong in the second and third generation.\textsuperscript{12} Some of these belong to the category of “welfare professions” (e.g. social workers, school teachers, and librarians). Most of the others can be characterised as “aspiring professions” or “pre-professions”.\textsuperscript{13} What these vocational programs also have in common is that they exemplify the trend towards \textit{academisation}. The legal framework they were subjected to by the 1977 reform demanded that all higher education be based on scientific research. Thus, Växjö University represents a segment of higher education where we can capture the increasing vocational orientation on the one hand, and the tendency towards an increasing academic orientation on the other.

4.1. Generic skills and labour market requirements in four vocational programs

We will look more closely into data from a comparative case study of four study programs/occupations. They represent different levels of professionalism, in terms of professional autonomy, scientific-cognitive bases, and degree of subordination to the logics of management and bureaucracy within the organisations where will they perform their tasks.

The occupations chosen are social workers, human resource management personnel (HRM)\textsuperscript{14}, policemen and coaches & sport managers (CSM). Policemen and social workers are mainly or exclusively employed in the public sector. Graduates from the HRM and CSM programs are mainly employed in the non-public sectors. Two groups are trained in well-established professional programs in the Swedish university system (social work and HRM) while the training of the other two (police and CSM) are new to the University system. We have one “welfare profession” (social work), one academically well established program (HRM) and two pre-professions, one of which – the police – is a well entrenched occupational group striving for professionalization, the other a new study program aiming at a new occupational niche in society (CSM).

\textsuperscript{12} The exception is the program for gymnasium teachers. They were for a long time trained within the traditional universities. Subsequent changes have, however, merged them with other teacher categories (Persson 2014).

\textsuperscript{13} Or as occupations exemplifying Wilensky’s prophecy from 1964, “the professionalization of everyone” (Wilensky 1964).

\textsuperscript{14} The Swedish acronym PA (personnel administration) and will be used in some figures.
The case study is based on (small) surveys of students\textsuperscript{15}, whom we followed from the start of their education into their first job.\textsuperscript{16} The first was at their \textit{first semester}. Students were asked about their social and educational background, their motives for entering their specific education programme, what they expected from their education and their ideas about the future professional role. We asked them to evaluate the relevance of teaching contents for future work performance, to report their perceptions of the importance of a number of skills and qualities for their future work, and to assess their personal qualities in relation to these. The second occasion was approximately \textit{1,5 – 2 years after graduating} from the university. Apart from following up items from the first phase, we added questions about their work experiences so far. We also added questions about how they valued different aspects of their educations and how useful it had been for them in their jobs.

We wanted to find out how the students evaluated...

- How the content of learning and demands of the job matched;
- The cognitive basis of the program and how important the academic parts of their training was for their job tasks;
- If they identified themselves as belonging to a specific occupation/profession;
- The degree of autonomy they had in their job;
- Their degree of subordination to the logics of management and bureaucracy within the organisations where they worked.

On top of the panel, a number of in-depth interviews were conducted, focusing the experiences of being and becoming a professional, on how they evaluated the role of scientific knowledge in their studies, and how they related the content of their education to their job tasks.

While the case studies thus had a fairly broad remit, covering a number of areas related to becoming a professional, the results we obtained have pushed us to re-contextualise our cases. To illustrate this point, it is instructive to report findings related to student evaluations of the training they got, and their perceived capacity to use these skills in their job. Figures 1-4 show that the students were reasonably satisfied with the content of their training and its applicability to their jobs:

Figure 1-4 here

Since these are general job skills needed for intermediate positions in a public or private work organisation the results seem reasonable enough. The programs are positively evaluated by the students, both in their role as students and as graduates from

\textsuperscript{15} The response rates were: social work 75 \%, HRM 67 \%, Coaching and sports management 63 \%, the police school 58 \%.

\textsuperscript{16} Cf. appendix by Wågman (2011b) in Olofsson & Petersson (2011)
these programs, if we use vocational usefulness as the yardstick. When learning content is judged against the demands they met in their jobs, the students generally reported a good fit between the learning content within their study programs and the demands they met in their job. They also report a good fit between their acquired skills and those they apply in their job, the dots in the diagrams falling mainly in the north-eastern quadrant.

It thus seems as if these educational programs are successful in terms of the competences they transmit to their graduates. But these seemingly unanimously positive results leave us with new questions. How shall we interpret this congruence between acquired and required skills? There are, to begin with, a number of possible explanations:

- The jobs the students got were structured by the programs of education they had endured, i.e. this result is an indication of good planning;
- It could also – or at the same time – be an effect of their training having been structured in advance by work practices within the pockets of the labour markets where they got their jobs;
- The fit that the students experience between their studies and their job could also be interpreted as a vindication of their vocational motivation, guiding them first into and through their studies, and finally into the position in the labour market they wished to reach;
- It could, finally, be a form of a panglossian acceptance of what they received in their studies – since they have got a degree it is therefore both good and useful.

Apart from this issue of indeterminacy, we should also ask what lies beneath the apparent unanimity. Of the four programs singled out here, two are occupations in search of academic education (social work and the police), and two are educational programs in search of a labour market niche (Human resource management and Coaching and sports management). These two situations are subject to different dynamics.

When long established occupations enter academia, entrenched job tasks will, at least initially, put restrictions on the academic superstructure. Whatever else the academised training should accomplish, it must also prepare students for these tasks. In the first phases of academisation, we should therefore expect academic components to be inserted alongside more directly vocational training. But as we have argued in relation to the welfare professions, enforced academisation has worked to produce a new, integrated mode of aligning academic and vocational elements. For these occupations, we should expect the number of years in academia to affect how the trade-off is made between the academic and vocational pole. Social work now has a fairly long
history in the university system, while police training has rather recently been linked to, and formally remains outside, the university.

Educations in search of a labour market niche follow a different dynamics. Launched from inside the universities, such programs are tokens in inter and intra-university competition for students. This entails repackaging resident scientific disciplines into new, marketable bundles. In the earliest phases of such vocationalisation, since there is no clearly defined vocational pole, the relation between academic and vocational elements will resemble the sequential type. In this sense, ontogenesis recapitulates the phylogenetic developmental sequence from sequential to intermittent models: foundling programs commence in a sequential mode before they move on to an intermittent type of organisation. There is, however, strong pressure to shift to an intermittent model, as the survival rate of these innovations is conditioned by whether or not their streams of alumni crystallise in identifiable labour market positions, making it important to set up links to the external world of employing organisations. Time in operation is therefore a crucial variable also in this type of dynamics, for the longer a program has existed, the more likely it is (a) to have found a labour market niche for its alumni, and (b) that there is a loop back from labour market to education program. Among the programs in our inquiry, HRM is comparatively old, being established in the 1980s, while CSM was a new innovation.

Thus, even though Växjö is a new university, catering only to second and third generation professions, its constituent programs are sufficiently diverse that one would expect variation in student valuations of teaching contents. The absence of significant variation, with regard to student evaluations of learning contents and their usefulness in the work setting, should alert us to two things. First, it is likely that the generic skills we have measured are taught and interpreted differently in different programs, so as to fit an implicit contract between university teachers, students and employers. Second, these measurements strongly emphasise vocational usefulness as evaluation criterion, to the neglect of the academic pole. Next, we shall consider how the students evaluate their scientific training.

4.2. General skills versus scientific basis

In the preceding section we saw that there was a good fit between learning content and job demands (as seen by students in their first job), as well as between acquired and applied skills. Växjö students generally valued their training in general job skills and practical vocational skills highly.\(^{17}\) This is consonant with the popular

\(^{17}\) These results are as well supported by the interviews with students and which are reported in the studies by Lund (2010), Larsson (2011, 2013a), Persson (2013).
middle class and working-class) social background of the students at Växjö University, their mostly job oriented type of study motivations, and their tendency to look for a secure position rather than a career possibility (Eriksson 2009). This, in conjunction with the low academic density of the teacher corps (rather few of their teachers have research experience or even a ph.d), is indicative of a strong vocational pole in the educational environment.

On the other hand, the students had a low evaluation of the scientific part of their training – both with regard to its role in their education program, to what they learnt, and the use they had of it in their job.\(^{18}\) In some students, this translates into a view of the university as a detour on the road to the aspired destination on the labour market. As one student put it, she would rather that she got her teacher education degree for Christmas, so that she could get to work immediately (Nilsson-Lindström 2010).

In general, there was widespread appreciation of the formal connection to a university. What is interesting, however, is that such formal affiliation is judged as more important than the academic/scientific knowledge they acquired (or at least had been exposed to).\(^{19}\) This is illustrated by the social work alumni: 81 % considered university competence necessary for the work they perform, while only 41 % thought that they had use for a scientific knowledge base. The same pattern applies to HRM alumni, where the corresponding figures are 56 and 31 % respectively. The only group where we find a different pattern is the police students. Here, only 15 % of the alumni regarded university training as necessary, while 47 say they had use for a scientific knowledge base in their work. The low estimation of university training should be interpreted against the backdrop that police training in Sweden is still not fully on the inside of the university system. Conversely, the high value that police students put on the scientific elements of their studies was in fact limited to forensics (Petersson 2011).

Though our findings are based on a combination of small-N and interview data, the tendency is clear enough. Students – and employers – value the location of their studies at the university much higher than exposure to science and research, which in turn forms the core value of the university institution and the ideal for career track members of staff. This is a potential source of tension in the programs. To illustrate, one teacher student explained that the worst aspect of the program was the “snobbish and unstructured invited lecturers”, referring to lectures held by researchers who were parachuted into teacher training to talk about their own research, rather than being an integral part of coaching the students to become proficient at their future jobs.


\(^{19}\) Interviews in Wågman (2011a), Johnsson (2011), and conclusion in Olofsson (2011b).
4.3. Conclusion: contextualising academic vocational training in Sweden

At this juncture, it is instructive to contextualise our findings, in two respects. First, the 1977 university reform fed upon and fed into the perception of professions as academic vocations. All things being equal, then, the more clearly an occupation aspires to professional status, the more positive it is likely to be towards the location in academia – independent of the role that a scientific knowledge base plays in working life. Pertinent to this issue, there are differences among the graduates from our four programs in how they conceive their identity. The police students see themselves as being part of a corps (the police force), and as an *occupation* (the policemen). On the other hand the social work students clearly identify themselves as being part of a *profession*. Those who graduated from the sports and management program did see themselves as holding a *job* characterised by the management role they gradually fell into. Neither occupation nor professions was in their minds. The HRM students fell in between and related to all three possibilities, i.e. job-occupation-profession. The emerging occupation/profession character of their typical job positions are underlined by the increasing education-related type of recruitment, where HRM graduates from an earlier generation are those that employ the new HRM graduates.

A second important contextualisation concerns the possible tension between research-oriented teachers and vocationally oriented students, as exemplified by the quoted teacher students above. The three different modes of aligning academic and vocational elements provide different means of mitigating such tensions.

In the *sequential* model, students have to take the word of teachers and education planners that what they are served will be useful in working life. This applies to educations in search of a labour market niche, and increasingly so the newer the program is. This expectation seems to be borne out by our data. CSM, the program that best fits the description, are exceptionally unsuspicious that the university is alienated from the realities of working life. Only one in eight of CSM students report such sentiments, compared to one in six among the HRM students. The corresponding figures for established occupations are much higher. Every third nursing student, and every fourth teacher student, for instance, believed that the university is distant from the “real world”. The sequential model, then, mitigates tension by virtue of the absence of a loop from working life to the educational setting.

Over time, however, surviving university founded programs are likely to set up more definite relations with the labour market, and thus to enter the *intermittent* mode. In this model, tension can be mitigated by other means. Retaining or inflating the nonacademic segment of program teachers can compartmentalise and reduce what is perceived to be overly academic elements; intermittent stints of vocational practice can serve similar functions. Individual students can thereby model themselves on, and as-
sociate themselves with, professional practitioners and their avatars inside the university. Organisationally, employer and student representatives in program boards can insist on the removal of such elements that are not suited to occupational requirements.

As pure types, the sequential and intermittent models are, in this respect, different in kind. It is in the latter type of education programs – rather than, say, theology or law – that we would expect to find discussions of “academic drift”. The question remains, however, how the integrated model fits into this picture. Emerging in response to the inclusion of the welfare professions in the university system, this model is a possible prospect for established professions in search of academic education. Nascent disciplines, modelling their stocks of theories upon modes of intervention prevalent in the profession, offer the prospect of keeping in view the same vocational elements that dominated education before academisation, while transforming them into theoretical problematics. We have pointed out above the Janus-faced nature of such transformations, simultaneously being instances of a vocational turn and possible academic drift.
Figure 1. Skills learned in education versus skills used at work; Police

Figure 2. Skills learned in education versus skills used at work; Social workers
Figure 3. Skills learned in education versus skills used at work - HRM

Figure 4. Skills learned in education versus skills used at work; CSM
References


Exploring tensions between academic and vocational elements in the education of professions


