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This is the published version of a chapter published in *From Vocational to Professional Education: Educating for Social Welfare*.

Citation for the original published chapter:

Agevall, O., Olofsson, G. (2014)

Tensions between academic and vocational demands.

In: Jens-Christian Smeby, Molly Sutphen (ed.), *From Vocational to Professional Education: Educating for Social Welfare* (pp. 26-49). London and New York: Routledge

N.B. When citing this work, cite the original published chapter.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-38605>

### 3 Tensions between academic and vocational demands<sup>1</sup>

*Ola Agevall and Gunnar Olofsson*

Measured in terms of students, their study programmes, and their teachers, professional and vocational education makes up an increasing share of higher education (Brint *et al.*, 2005). Higher education is undergoing a vocational turn in light of student, employer, and government expectations of a smooth transition from university to professional practice (Billett, 2009). Conversely, shifting our viewpoint from an educational setting to an occupational structure, it seems clear that training for an increasing number of occupations and labour market positions has been transferred to or occurs within academia. For growing numbers of white-collar occupations, the hegemonic role played by the higher education system has led to a new configuration between the occupational structure of advanced capitalism and its systems of higher education. Three aspects of this transformation deserve special attention.

- 1 The incorporation of vocational education into the *university system* has transformed that system itself, with accompanying changes to the composition of the teacher corps, the character of the student population, the expectations for educational and research output, and the axes of differentiation within the system.
- 2 The gravitational pull towards the university system has altered *perceptions of the professions*. From 1900 onwards, the gradual inclusion of nineteenth-century professions into the university system prompted an increasingly tight association between the professions 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 classifying an occupation as a profession.
- 3 The incorporation of vocational education into higher education makes the *organisation of vocational programmes* a key concern for universities and professions alike. For Freidson (2001), training credentials are ‘the hinge between two major institutional complexes – those organising the performance of work and those organising training for that performance’. When these credentials are acquired in higher education, some trade-off is established, for each vocational programme, between the imperatives of working life and those of the university system.

These observations underline the importance of understanding what shapes the trade-off between vocational and academic elements in professional training. To the extent that higher education has emerged as a precondition for professionalism, occupations aspiring to professional status are provided with a clear benchmark and an impetus to enter into that particular institutional form. Upon entering higher education, training is subjected to demands shaped in an institution with a logic of its own.

Qualification for a professional career, then, is subject to interchanges between two institutional complexes. When and why do these result in tensions between academic and vocational demands? Where, and by whom, are those tensions felt? This is a vast area of research, tangential to several other contributions to this volume. In this chapter, analysis is limited to the case of Sweden. The aims are: (a) to delineate how vocational training has found a place in academia; (b) to chart how this has shaped relations between academic and vocational elements; and (c) to apply this contextualisation to the analysis of students and alumni of vocational programmes in a new university. By these means, we can hope to chart the effects of two tendencies characterising professional educational programmes, which are relatively recent arrivals to the Swedish university system – an increasing vocational orientation on the one hand, and the tendency towards an increasing academic orientation on the other.

In section two, we offer a brief historical sketch of 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’ (Smeby, this volume), but a brief account is nevertheless in order, as the precise character, timing, and consequences of academisation vary across educational systems. Section three distinguishes three different modes of aligning vocational and academic elements in professional training, providing a context for discussion in the fourth section of findings from research on a number of academic vocational programmes – social work, police, coaching and sports management, human resource management – at a new university in Sweden. Here, we analyse how the students evaluated and handled the different demands of academic and vocational elements of their programmes.

## **Universities and the education of the professions**

For much of their history, Swedish universities remained distant from professional education, in the sense of specialised and practical training for particular occupations. Education was firmly generalist: until the second half of the nineteenth century, the curriculum obliged students to matriculate in all disciplines of the philosophical faculty, placing definite limits on both professional specialisation and the cultivation of scientific research. In this context, the nineteenth century was of considerable significance as it brought changes on both counts. To the extent that ‘academic’ means research-oriented, both academic and vocational strands entered Swedish higher education at this juncture, and this is the institutional presupposition of any tension between academic and vocational.

In view of the current liaison between universities and the professions, those occupations emerging from higher education in the nineteenth century can be regarded as the first generation of Swedish professions. We go on to identify two subsequent generations and their respective approaches to aligning academic and vocational elements in professional education.

### ***The first generation: classical professions***

The history of professional groups encompasses successive generations of occupations. The first of these consists of those occupations that we today regard, following Parsons (1939, 1954; Parsons *et al.*, 1973), as the learned or classical professions of Law, Divinity, and Medicine. While these professions were tied to the university, in the sense of sharing their respective fields of knowledge with the higher college faculties, the link between the two institutional complexes in the Swedish case was less than straightforward.<sup>2</sup> As regards divinity, it was only in the 1830s that university training became mandatory for priests (Brilioth, 1942), bringing all would-be clergymen 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, and so on – were left untouched by the university syllabus, unconcerned as it still was with the practical and vocational aspects of the profession. This raised questions about the place of vocational training: if acquiring such skills was not to be a part of the university curriculum, they would have to be learned elsewhere. The education of the clergy is representative of a wider set that includes the professions of medicine, law, and gymnasium teachers (see p. 00).

A second and important segment of the classical professions emerged as a consequence of the development of the natural sciences. Historically, their trajectories began outside the traditional universities, first in ‘learned societies’ and academies and later within new and more specialised training establishments.

During the nineteenth century, the Swedish system of higher education underwent a rapid growth of special institutes and schools for training in the fields of medicine, technology, and agriculture and later also in relation to commercial activities. The nineteenth century expansion of these breeding grounds for new professions has been labelled ‘the age of the institutes (Agevall and Olofsson, 2013). Among others, these new fields of knowledge and their corresponding professional categories included engineering, veterinary medicine, pharmacy, agronomy and odontology. Their extra-university pedigree meant that these institutes were unfettered by the generalist curricula of the universities. The practical aspect of vocational training was already part and parcel of education at the institutes, and this was reflected in personnel structure, curricula, and relations to the labour market. The modern Swedish system of university-based professions, then, has two nineteenth-century parents in higher education, each with its own mode of aligning academic and vocational elements.

Important as these differences were, the two institutional forms, and their professional alumni, converged over time. The institute-based occupations of civil

engineers, veterinarians, agronomists, pharmacists, dentists and others gradually merged with the university-based occupations of lawyers, physicians, and the clergy to form a knowledge-based social elite.<sup>3</sup> Over time, institutes became more like universities, typically shedding their traditional form to become *Fachhochschulen*, acquiring the right to issue university degrees, and becoming more university-like in terms of personnel structure. At the same time, university curricula became less generalist, allowing room for scientific and vocational specialisation.

After the Second World War the institutes-cum-*Fachhochschulen* were unambiguously equated with the universities. This increasing proximity between the two institutional forms had already set them apart from another category of educational organisations: those training the second generation of professions.

### ***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 professionalisation, 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.<sup>4</sup> In the Scandinavian setting, these occupations are nowadays often labelled ‘welfare professions’ (Molander and Terum, 2008), a characterisation that resonates with another feature of this set – their role in fulfilling post-war reform promises of mass education, health services, and social amelioration. On this account, it is the timing of their entrance into Swedish higher education that marks them out as second generation professions.

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 continued to be dominated by the vocational pole. Staffing reflected 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. Similarly, curricula placed a strong emphasis on practical skills and much less on abstract theory (cf. Olofsson, 2010; 2011a; 2011b).

This structure continued to shape the training of the welfare professions up until 1977, the year of sweeping and comprehensive reforms of post-secondary education in Sweden. The newly unified system of higher education included universities, *Fachhochschulen*, university extensions, newly founded university colleges, schools for nurses, social workers, and teachers for primary school, all administered and governed by the same government agency and department. The welfare professions were at the heart of this reform. The insertion in the university system of such large student and teacher groups altered the system itself, and formal institutional equality coexisted with major differences in access to research funding, teacher competence, and students’ social backgrounds and cognitive abilities.

This conjunction of formal equality and differentiation produced a dual interpretation of ‘research based education’. In universities and *Fachhochschulen* – long steeped in the ideal of scientific research, with staff recruited on the basis of academic credentials, amply endowed with research funding, and catering to first generation professions – this meant *conducting* research as well as teaching. Staff in the new, second order establishments – often recruited on grounds other than the strictly academic, barred from research funding, and mainly in the business of educating second generation professions – were initially expected to concentrate their efforts on undergraduate teaching, conveying merely the *fruits* of knowledge.<sup>5</sup>

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 education programmes. How this process unfolded has shaped a particular mode of aligning academic and vocational elements.

### ***Third generation: vocationalism***

The 1977 university reform multiplied the number of higher education units in Sweden, with newcomers built mostly on 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, enrolment in Swedish higher education has grown rapidly. Today, almost 45 per cent of an age group will at some time in their life spend a longer or shorter period in the higher education system. This expansion has led to swelling numbers of students, especially in explicitly vocational programmes: approximately half of all students at the Swedish universities are enrolled in academic vocational education and training programmes.

So where does this expansion originate? First generation professions, such as law, medicine, civil engineering, architecture, dentistry, and psychology, have grown at a modest rate. Programmes leading to a career in the welfare professions have, in contrast, expanded steadily. Yet, the most striking feature of the expansion is the emergence and rapid growth of a ‘third generation’, vocational programmes catering for the ‘pre-professions’. Recent decades have witnessed a new surge of occupations, achieving or aiming at a professional status equivalent to the welfare professions. 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 forms (Olofsson, 2009; 2010).

This trend has two different roots. The first of these can be summed up as *occupations in search of academic credentials* – established occupations who seek to secure their future through an educational niche within the university setting. The police and estate agents are two examples in this category. Similarly, the health authorities have raised the competence levels for some of their key occupations to a three-year bachelor programme; 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 programmes in search of a labour market niche*. Universities or their departments are actively creating study programmes that carve out an occupational niche in an ever more detailed and subdivided occupational structure. As higher education units look for new ways to attract students in a fierce if often muted competition for (good) students, creating study programmes that promise a job in a certain sector or in a specific occupational niche has become a key strategy.

The stream of vocational education, along with the characteristics of its two tributaries, is important for two reasons. First, it raises questions as to whether the provenance of vocational programmes shapes how they align academic with vocational elements. Do they draw on different models, and what models are there to draw upon? Second, vocational education provides the cases to follow with their immediate context – three out of four programmes in our inquiry belong to the third generation, exemplifying the trend towards vocationalism in the university sector.

This deepening vocational orientation shapes Sweden's expanding university system. The other side of this development is the systematic and *intensified academic character* of the training and education undergone by hitherto mid-level occupations such as teaching, nursing and social work. This trend brings important changes in the kind of training and knowledge considered necessary for entry to these occupations. The increased emphasis on abstract and scientific knowledge, and on training in scientific methods – including the requirement to write exam papers that will be judged by academic standards – has transformed many of these study programmes. This is significant for the professionalising ambition of these occupational groups, leading to the development of new forms of systematic knowledge. In the next section, we will outline three modes of organising vocational and academic elements in academic professional training.

### **Organising academic and vocational elements in the education of professional groups**

In the education of the professions, there are *three principal ways* of combining the acquisition of abstract/academic knowledge with practical/vocational competences considered essential for future members of those professions to learn and master: (1) as a *sequence*; (2) as *intermittent sequences*; or (3) in an *integrated* form.<sup>6</sup>

#### ***The sequential model***

Despite sharing areas of knowledge with the learned professions, university education until the second half of the nineteenth century remained staunchly generalist, with no real concessions to the practical aspects of working life. With the ongoing systematisation of education, the universities 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 university professors (still the only staff category fully integrated within the universities), a model emerged in which vocational elements were taught *after* completion of university training, in a setting *outside* the universities.

This sequential model, then, has the following characteristics:

- (a) the abstract knowledge is taught in one type of establishment, the university, structured by academic demands and criteria;
- (b) the subsequent practical training is set in a different type of establishment, and prepares graduates for the practical performance of necessary vocational skills.

The legal profession neatly illustrates this model. The typical form of vocational introduction was to serve for an extended training period as a clerk at a district court. The court setting was quite different from the faculty of law, and an experienced judge was responsible for the practical training of the new law graduate. Similar patterns are found in the education of the Swedish Lutheran clergy and the university based training of teachers for the gymnasia.

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

Over time, the pure sequential model gave way to other modes of aligning academic and vocational elements, but it has left 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 research and research-based teaching, independent of its current usefulness for any particular profession.

Of equal importance, the sequential model continues to serve as a starting point in the first stages of new vocational programmes forged from resident disciplines within the university.

### ***The intermittent model: mixing academic and vocational elements***

Not all first generation professions were based in the universities. The institute, that other parent of classical professions, only gradually inched its way into the university system. Vocationally oriented from the start, and with a greater variety of teacher categories, the institutes offered a different model of aligning academic and vocational elements.

The case of dental surgeons provides a useful case in point. After training on non-human objects, trainee dentists had to practise on real patients (who got free treatment) while they were still in dental school. The key to the intermittent model,

allowing theoretical and practical elements to be combined during professional training, was the presence of practitioners from the field, employed as a special category of teachers *within* these programmes.<sup>7</sup> Those teachers, found right across the range of nineteenth-century institutes, were recruited as experienced practitioners from the field, and were expected to serve as living links to the field of practice.

In comparison to the sequential model, the intermittent model extends the reach of occupational practice into the academic educational setting. It also accounts for a perennial issue in professional training: vocational versus academic drift. While curricula can be planned to better match current labour market or occupational needs and employer demands, such planning may turn out to be short-sighted. Conversely, research-led innovations can transform professional practice, but granting researchers a licence to pursue specialised research and then to pass it on in an educational setting is fraught with the opposite danger, namely that the training may be heavily academised, without yielding tangible gains for professional practice. This situation calls for trade-offs between academic and vocational elements, negotiated inside the training programmes and played out in a field of competing forces that involves the professions, university administrations, and various teacher categories with differential involvements in research.

Of great importance in the context of this chapter are the welfare professions. Up to the last third of the twentieth 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 programme, and lengthy periods of practice were integral to the training of social workers. Such integral periods of practice were typical for future nurses and teachers as well, as they encountered the realities of their future work and were supervised and guided by experienced practitioners. At the same time, practitioners from the field were also operating inside these programmes; recruited as adjunct teachers, on the basis of their vocational skills and insights, they represented the 'outside' on the 'inside', giving them a practical authority in relation to the students as they were seen to represent 'the real world' of working life. Even so, their lack of theoretical-academic credentials and knowledge put them in a delicate situation in relation to the academic teaching corps within the given programme.

This mode of aligning academic and vocational elements is clearly reminiscent of the old institutes – but there is a crucial difference. With their early ascent into the university system, the academic density of these *Fachhochschulen* increased dramatically; 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 component was weak. The inclusion of these professions in the university system has spawned a third model of aligning academic and vocational elements.

### ***The integrated model***

As a consequence of their inclusion in the university setting, the character of several vocational programmes, not least for the 'welfare professions' of social

work and nursing, has become visibly more academic. Students have to read much more theory, scientific methods are emphasised; more time and energy must be devoted to writing essays and candidate theses. Social work programmes now place less emphasis than before on hands-on training during extended periods of practice and have acquired the character of a more general social science programme (cf. Salonen, 2010).

The 1977 university reforms catapulted the welfare professions into a new, unified system of higher education, with an accompanying systemic pressure to become more academic. This entailed a need to elevate the scientific competence of teachers to aligning programmes with existing or incipient disciplines that could accommodate bachelors, masters and PhD students. In short, they had to negotiate a new relation between the imperatives of science and working life. New disciplines have been forged – including nursing science, social work, and educational science (didactics) – that are now well embedded in the Swedish system of higher education.

With the inclusion of the ‘welfare professions’ as bona fide areas of study within the universities came a trend towards a new type of discipline, conceived as a theoretical linchpin in professional training. The abstractions that constitute theory in such disciplines are – ideal typically – moulded from, and are rationalisations of, the methods and means of professional intervention. This is one way to handle the logic of academic inclusion with a mix of academic and vocational elements. It can also be defined as a second order vocational turn, this time in the realm of theory.

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 previously. 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 to be aligned *in professional practice*. The *intermittent* model transplants the academic/vocational divide inside the university, through both mid-programme stints in vocational practice and the co-presence of academically and vocationally oriented teachers. Here, academic and vocational elements are to be aligned *in professional education*. In the *integrated model*, by contrast, academic and vocational elements are to be aligned *within the academic discipline*. Influences from the field, and from the practice of professional groups, have had a large impact on the kinds of theory and methods that future professionals must learn, as the new systematic cognitive bases for a number of ‘welfare professions’.

There is a long-term tendency to move from sequential to intermittent and integrated modes. Today, the educational programmes of many professions, of varying generations, not only mix academic and vocational courses but present a fused, integrative mode where the borders between academic and vocational elements are being blurred and sometimes even dissolved. Yet none of these modes has been rendered obsolete: they are all available as models, potentially pitted against each other by different groups of teachers and stakeholders. The

teacher corps is, indeed, the main locus of felt tensions between academic and vocational demands. For many vocational programmes, one part of the teacher corps performs as a living link to occupational practice while another part represents academic credentials, tastes and ambitions. Any tension between such groups is structural, and differently structured according to the specific mode of aligning academic and vocational elements.

Our analysis in the following section switches the focus to students and alumni. In all professional education, some trade-off needs to be established between academic and vocational elements. The results of such trade-offs are negotiated and mediated through student perceptions and valuations.

### **Academic and vocational education: cases and contextualisation**

The argument above infers no one-to-one correspondence between mode of alignment, tensions and student perceptions. Each mode of aligning academic and vocational elements can instil in the student a sense of programme or transitional coherence, but the conditions under which that sense is produced may differ widely between modes. For instance, while transitional coherence can be obtained in the sequential model by means of several different mechanisms, the presence of occupational representatives in the educational setting is not one of them. It is only in the integrated mode that blurred boundaries between theory and practice can explain why students report having acquired more theoretical knowledge in their first years at work than during their education (cf. Smeby *et al.*, this volume). In this light, the models of alignment are best conceived as an interpretive frame for the empirical studies reported below.

In the remainder of this chapter, we draw on results obtained in one major study and several minor research projects. The basis for these studies is the Växjö panel study, covering the whole student body in Växjö, in which students were followed through education and into the job market (Eriksson, 2009). Within this overall framework, our studies comprised 11 vocational programmes.<sup>8</sup> Within that set, we conducted more in-depth inquiries into four programmes: social work, coaching and sports management, human resource management, and police training, asking how tensions between the academic-theoretical and the vocational-practical elements are played out and handled in a number of vocationally oriented education programmes at a new university in Sweden (Växjö University).

### **Materials and setting**

The study was based on (small) surveys of students, whom we followed from the beginning of third-level education into their first job.<sup>9</sup> In their first semester, students were asked about their social and educational background, their motives for entering their chosen programme, what they expected from their education, and any ideas they had about their future professional role. In their sixth term, we asked them to

evaluate the relevance of teaching content 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. A third interview was conducted approximately 1.5–2 years after graduating from the university, with questions about their work experiences so far, how they valued different aspects of their education, and how useful it had been for them in their jobs. In particular, we wanted to find out how the students evaluated:

- how the content of learning matched the demands of the job;
- the cognitive basis of the programme and how important the academic part of their training was for their job tasks;
- whether they identified themselves as belonging to a specific occupation or profession;
- the degree of autonomy they had in their job; and
- their degree of subordination to the logics of management and bureaucracy within the organisations where they worked.

While the case studies clearly had a fairly broad remit, the results lend themselves to more specific interpretation. To what extent were there tensions between academic and vocational demands? Which pole – academic or vocational – was more prone to yield, thereby attenuating tensions? We addressed these issues by asking both how students assessed the usefulness of their education for their current job tasks and how they evaluated the theoretical elements of their education.

To first situate the university and its programmes in the broader institutional and historical matrix outlined in the second section of this chapter, the 1977 university reforms created Växjö University College from a university extension. Under this reformatting, 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. In the main, these characteristics were preserved after Växjö became a university in 1999.

While the vocationalisation of Swedish higher education goes beyond these offshoots from 1977, it is most dominant in this segment. Växjö University is in the vanguard of vocationalism: all the vocational programmes in our study belong in the second and third generations.<sup>10</sup> Some are ‘welfare professions’ (e.g. social workers, school teachers, librarians), while most of the others can be characterised as ‘aspiring professions’ or ‘pre-professions’.<sup>11</sup> These programmes also exemplify the trend towards academisation. The legal framework they were subjected to by the 1977 reforms required that all higher education must be based on scientific research. Within Växjö University, the increasingly vocational orientation and the tendency towards an increasing academic orientation interact in a pure form.

By limiting our inquiries to Växjö University, we had a relatively homogeneous sample. Even so, there is important variation along the axes we have sketched above. To bring this out, it is instructive to consider how the four programmes

Table 3.1 Varieties of vocationalism

	Established university course	New to the university
Occupation in search of university credentials	Social work	Police
University education in search of labour market niche	Human resource management	Coaching and sports

that were the subject of our in-depth studies are distributed across the spectrum of vocationalism.

The occupants of the property space exemplify all three modes of alignment. As a recent innovation from inside the university, coaching and sports management has yet to crystallise as a labour market position. At the outset, then, the programme is close to the sequential mode, as there is no clear labour market destination that can be represented on the inside. In the opposite corner, discipline formation has rendered social work susceptible to an integrated mode of aligning academic and vocational elements; human resource management and police training both represent the intermittent mode, although arriving there from distinct positions.

Low academic density is a global feature of Växjö University, giving it a weak academic pole. Although the range of professional programmes is rather narrowly circumscribed, there is sufficient variation to warrant an expectation that tensions between academic and vocational demands are played out differently across programmes. Do these tensions translate into student perceptions? We explore this in the following sections, focusing the exposition mainly on the narrower four-programme set, supplemented with observations on other vocational programmes.

### ***Generic skills and labour market requirements in four vocational programmes***

One area where tensions between academic and vocational demands may be felt is in the workplace settings where alumni find employment. This is, after all, the thrust of indictments that education is subject to academic drift. How, then, do alumni from these programmes perceive the education they received, if we use vocational usefulness as the yardstick? As Figures 3.1–3.4 show, the students were reasonably satisfied with the content of their training and its applicability to their jobs:

Since these are general job skills required for intermediate positions in a public or private work organisation, the results seem reasonably positive. When learning content is judged against job demands, students generally reported a good fit between the learning content from their study programme and the demands they encountered in their job. They also reported a good fit between acquired skills and those they apply in their job, with the dots falling mainly in the north-eastern quadrant of the diagram.

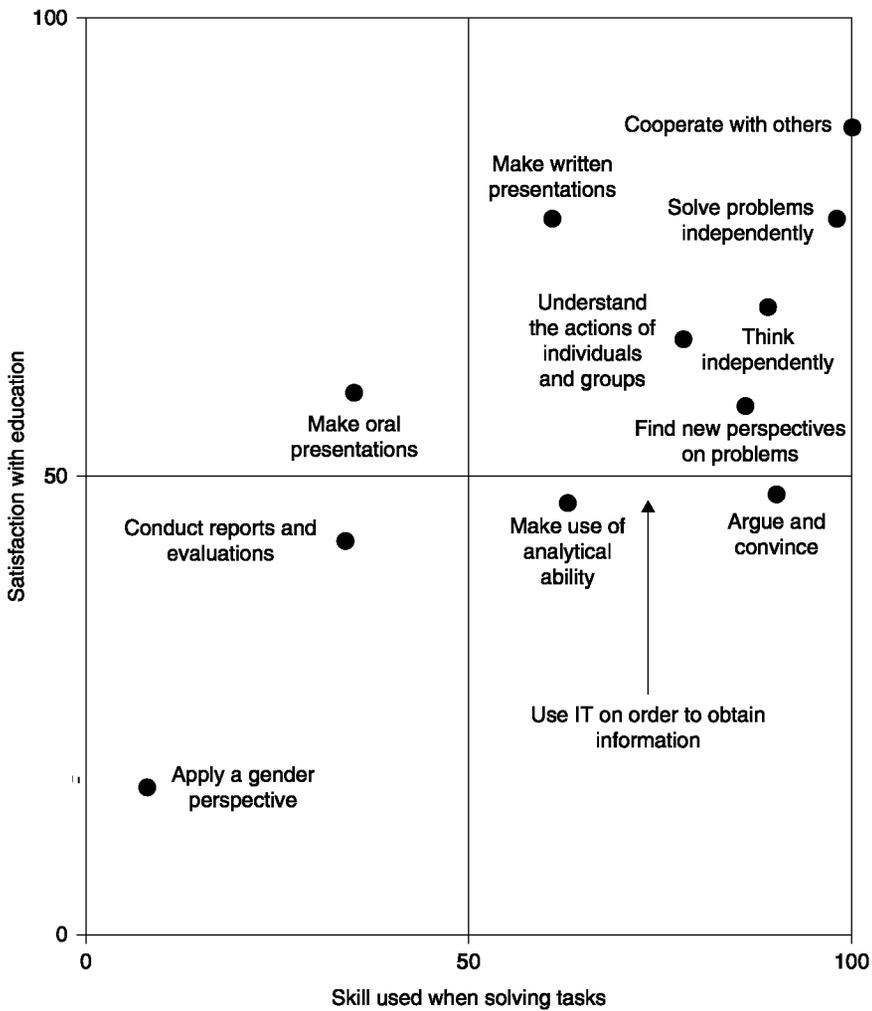


Figure 3.1 Skills learned in education versus skills used at work: Police.

How are we to interpret this congruence between acquired and required skills? There are, to begin, a number of possible explanations:

- The jobs the students moved into were structured by the programmes of education they had completed – implying that congruence is an indication of good planning.
- Congruence could also – or at the same time – be an effect of their training having been structured in advance by work practices within those parts of the labour market where they found employment.

- Congruence could also be interpreted as a vindication of their vocational motivation, guiding them first into and through their studies, and ultimately into the position in the labour market they aspired to reach.
- Congruence could, finally, be a form of a Panglossian acceptance of what they learned during their studies – as they have a degree, it must therefore be both good and useful.

Not all of these explanations are applicable to all four programmes. Unsurprisingly, students in coaching and sports management had ‘vague and hazy ideas about their future job market’ (Wågman, 2011, p. 158). The one certainty for these students upon admission, and the main selling point of the programme, was a general and passionate interest in sport. Students could, and did, end up in widely different organisations, performing very different tasks. In fact, while the alumni were content with their jobs, and with the education that got them there, they were not necessarily

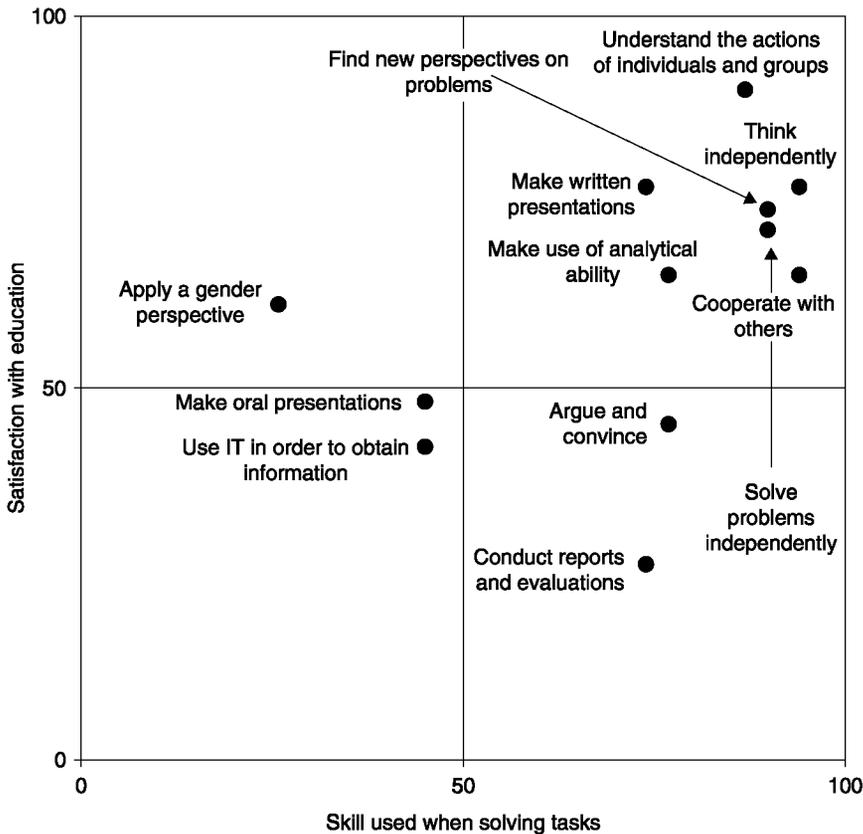


Figure 3.2 Skills learned in education versus skills used at work: Social workers.

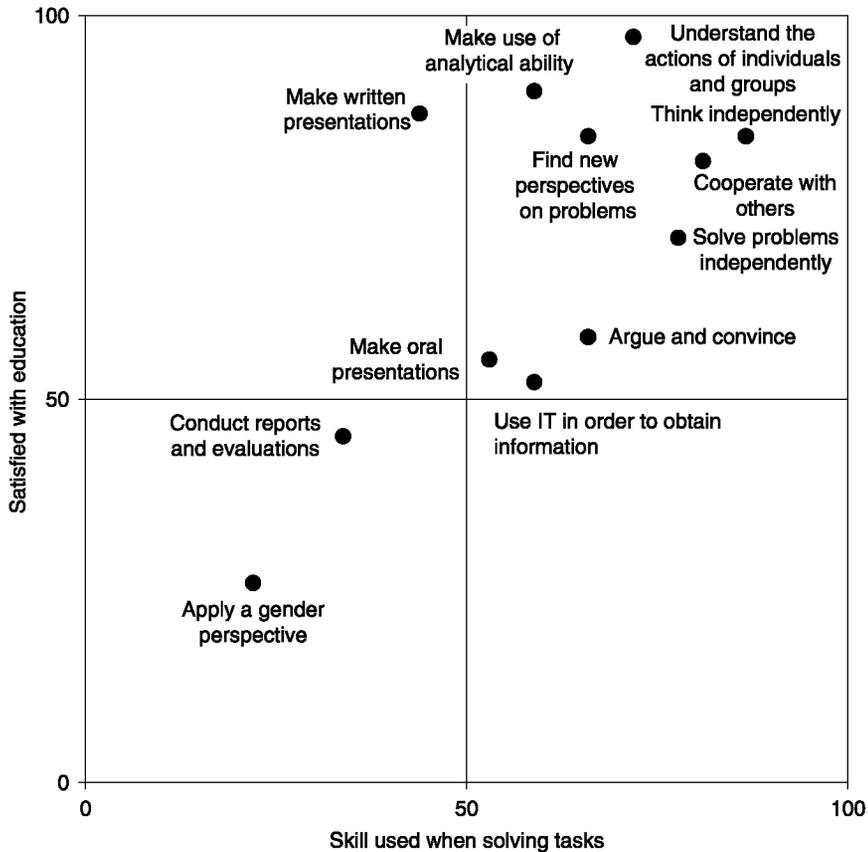


Figure 3.3 Skills learned in education versus skills used at work: HRM.

in jobs that had anything to do with sport (Wågman, 2011, p. 185). Jobs were not structured by the education programme, and neither was the programme structured by work practices within a specific area of the labour market.

Launched from inside the universities, programmes of this type are tokens in the inter- and intra-university competition for students, which entails repackaging resident scientific disciplines into new, marketable bundles. Since there is no clearly defined vocational pole, the relation between academic and vocational elements will tend to resemble the sequential mode. As most generic skills can indeed potentially be useful, student ratings tend to be compressed in the north-eastern quadrant (Figure 3.4).

University invented programmes commence in a sequential mode, but are not likely to remain there. Practicums and internships are programme selling points, pushing towards an intermittent mode. Human resource management exemplifies

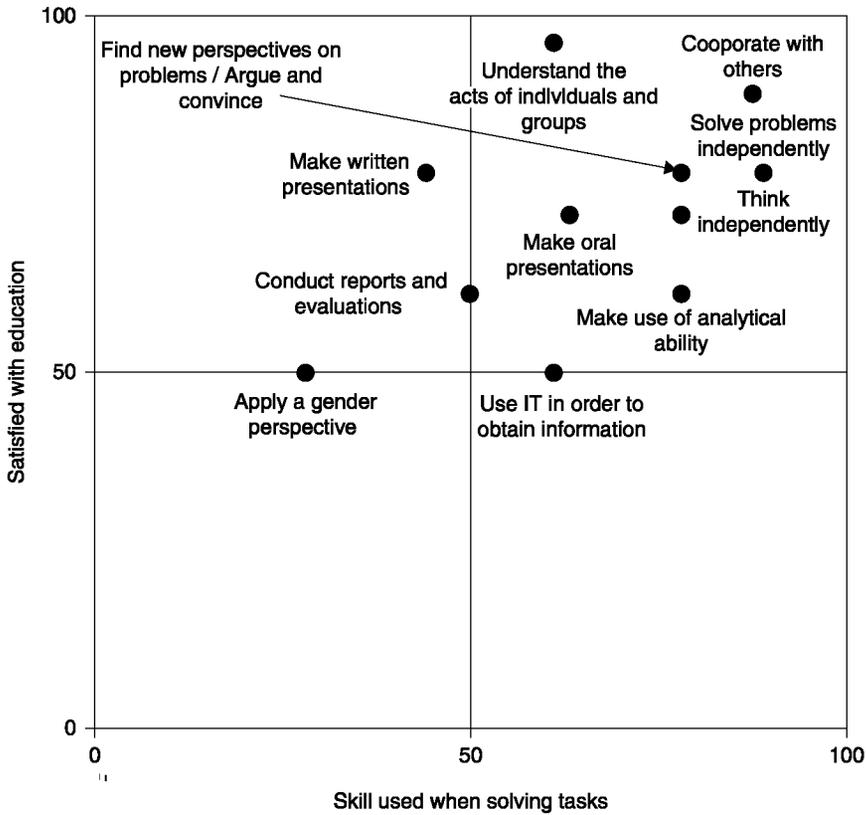


Figure 3.4 Skills learned in education versus skills used at work: CSM.

that trajectory. Established in the 1980s, the programme has secured a niche in the labour market, with alumni streams crystallising in key positions in personnel administration. Crucially, these positions include hiring functions. The following quote, in which an alumnus from the human resource management programme reflects upon the value of theory versus practice, offers a condensed illustration:

The relation between practical experience and theoretical education [ . . . ] is a really interesting question, which we discussed a lot when we were in the process of hiring a new personnel secretary. In my opinion, you should have an academic education, equivalent to the one at Växjö University. That is a requirement if you ask me. But then again, should it count for nothing that you have twenty years' worth of job experience? A lot boils down to the ability to think analytically. That is the main thing I take with me from the programme. If you have that ability, experience can be almost as valuable – but then we are

looking at, say, twenty rather than two years of work experience. [. . .] But, of course, with a few exceptions I am of the opinion that you should have an education, an academic education.

(quoted in Larsson, 2011, p. 196)

Here, we get a glimpse of a mechanism that assists programme alumni in securing employment: required competencies are modelled on the educational background of the hiring alumnus. With the job comes a more defined set of tasks and competencies, which can interact with learning content. As the vocational pole becomes more defined, the intermittent mode gives students an opportunity to acquaint themselves with future tasks, and to lobby programme boards with a view to shaping learning contents in their image.

For occupations in search of a university education, the vocational pole is clearly defined from the outset. When long-established occupations enter academia, entrenched job tasks will, at least initially, place restrictions on the academic superstructure. Whatever else the academised training is to accomplish, much energy must be expended on preparing students for these tasks. Police education is a case in point.

Police schools are now co-located with universities, with which they share teaching staff, but a considerable proportion of police training is delivered by active police officers (Pettersson, 2011, p. 67). This setup constitutes a strong vocational pole in conjunction with a weak academic pole. Ratings by police students exhibit the same pattern as human resource management: they are satisfied with what they have learned to the extent that it is useful in occupational practice.

Human resource management and police training both exemplify the intermittent mode. If police training were to be fully integrated in the university, however, we hypothesise a shift towards the integrated mode of aligning vocational and academic elements (e.g. in the form of ‘police studies’). This is what has occurred in the welfare professions, where academisation has worked to produce a new, integrated mode of aligning academic and vocational elements. Nascent disciplines, modelling their stocks of theories on modes of intervention prevalent in the given profession, offer the prospect of keeping in view the same vocational elements that dominated education before academisation while transforming them into theoretical problematics. Yet, once the disciplines are entrenched in the university system and populated with career-minded researchers, they take on a life of their own.

Social work is a good example of this effect. The entrenchment of social work as a discipline, and its place as linchpin in the social work programme, signals a deepening academic orientation. At the same time, alumni are destined for well-defined labour market niches. The more wedge-shaped plot in Figure 3.2 can be interpreted along these lines. When students are satisfied with learning skills for which they have little use in working life, this is an indication that academisation is turning social work into a more general social science programme. Their well-defined labour market niches, on the other hand, make lacunae easily discernible:

if academisation crowds out such elements as are useful in working life, students and alumni are likely to notice.

Though our findings are based on a combination of small sample size and interview data, a few tentative conclusions can be drawn. First, there would appear to be some small differences in programme profiles, which can meaningfully be interpreted along the lines of the general models we have outlined. Second, there is a reasonably good fit between learning content and job demands, so long as we use vocational usefulness as a yardstick.

This tendency extends to Växjö University as a whole. Växjö students generally placed a high value on their training in general job skills and practical vocational skills.<sup>12</sup> This is consonant with the generally lower middle class and working class social background of students at Växjö University, their mostly job-oriented study motivations, and their tendency to look for a secure position rather than a career possibility (Eriksson, 2009). It is also consonant with the low academic density at Växjö University, and such homologous position Växjö in the vanguard of vocationalism.

So far we have focused on the vocational pole alone, with measures strongly emphasising vocational usefulness as an evaluation criterion to the neglect of the academic pole. Next, we turn to consider the academic aspect of education, and ask how the participating students evaluate their scientific training.

### ***General skills versus scientific basis***

It is useful here to differentiate between different dimensions of student attitudes to academic involvement, one of which concerns the location of a programme in the higher education system. On this score, there was widespread appreciation across programmes of the formal connection to a university. This may seem self-evident, given that academic education has emerged as a defining trait of professionalism, the general rank order from lower to higher education, and the value of invoking academic standing in fending off competitors. However, two observations should temper this sense of triviality.

First, when virtually all post-secondary education was transferred to the university system in 1977, attitudes were far from unanimous. Not without reason, teachers and students alike sensed that this would alter the conditions of vocational education. Among the 1977 inclusions, apprehension of this sort is long gone. For instance, 91 per cent of our social work alumni consider a university education necessary for the work they perform. For courses in search of a labour market niche, the problem does not arise in the same form: they are university courses before they are identifiable labour market destinations. Although only 56 per cent of the human resource management alumni regard a university level education as necessary for their current jobs, this is because they have not yet been assigned to an appropriate position. But we do get an echo of 1977-like hesitation in our sample in relation to police training: a relatively small fraction (15 per cent) of police alumni think of their work tasks as requiring a university education.

Second, students enrolling in vocational education are really opting for a vocation rather than an education. In some students, this translates into a view of university as a detour on the road to their desired destination. That sentiment is expressed with exemplary clarity by one of the interviewed teacher students:

After the weeks I spent in a school [during practicum] I did not want to return to the university. Because I felt so at home and it was so rewarding to be a teacher, I wanted to get the teacher exam as a Christmas present.

(Nilsson-Lindström, 2012, p. 55)

In the current context, the import of this lies in the potential conflict between vocational orientation and the requirement that higher education should be based on scientific research. In this form, tensions between academic and vocational demands are played out in the *educational setting*, as a manifestation of resistance to vocationally superfluous scientific schooling.

This tension is visible in our data: participants indicated a low evaluation of the scientific part of their training with regard to its role in their education programme, to what they had learned, and to the use they had made of it in their job.<sup>13</sup> Students and employers valued the location of their studies at the university much more than the exposure to science and research, which forms the core value of the university institution and the ideal for career-track members of staff.<sup>14</sup> To illustrate, one teacher student explained that the worst aspect of the programme was the ‘snobbish and unstructured invited lecturers’, referring to lectures from 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.

If tensions between academic and vocational demands were modest to non-existent when focusing on generic skills and vocational usefulness, a different picture emerges when the emphasis shifts to the academic pole. Student perceptions that certain parts of their training were irrelevant fuel a sense that the most important learning processes go on somewhere else, in practicums and professional practice. Programmes differ in this regard: students in coaching and sports management are exceptionally unconcerned that the university might be removed from the realities of working life. Mirroring the results in the previous section, only one in eight of these students reported such sentiments, compared to one in six among the human resource management students. The absence of a crystallised labour market niche is conducive to Panglossian acceptance. The corresponding figures for the welfare professions are, however, much higher. Every third nursing student and every fourth teaching student believed that the university is distanced from the ‘real world’. These are programmes where discipline formation follows in the steps of academisation, and where the alignment of academic and vocational elements has moved into an integrated mode.

In respect of the type of programme and educational setting we have investigated, vocationalism clearly keeps the academic pole in check. Tensions between

academic and vocational demands are more acutely felt at the academic pole and within the programmes than at the vocational pole or in working life. The cases reported in this last section may at first blush appear peripheral, but in fact Växjö University represents the cutting edge of vocationalism (cf. Brint *et al.*, 2005). The specific kinds of tensions we have discovered apply to a large share of the expanding higher education sector – not only in Växjö, and not only in Sweden.

## **Conclusion**

In this chapter we have outlined a simple model for analysing how tensions between the academic and vocational elements are present as well as produced, handled as well as transcended, in the education and training of professions. By tracing the history of the Swedish case, we have shown both how vocational training was introduced in the university system in successive steps, thus forming the basis of tensions between academic and vocational demands, and that these phases yielded distinct modes of aligning academic with vocational elements. We suggest that the resulting matrix can be used as a key instrument to analyse many aspects of such tensions.

Among the three principal modes of alignment, *the sequential model*, with its temporal and institutional separation of academic and vocational training, is the first to emerge in the university setting and the historical tendency is that it is supplemented by other forms. Yet, the vocationalism of recent decades has reintroduced a version of it on a massive scale. For new, university-invented programmes the initial absence of a crystallised labour market niche invites a mode of alignment that approximates the sequential model. The absence of a clearly defined vocational pole removes such friction as arises from a perceived mismatch between learning content and professionally useful skills. The prospect of populating a labour market niche is, however, important for recruiting students, situating the tension between academic and vocational demands in programme planning. Further studies should, against this background, be conducted on how labour market crystallisation affects programme mortality in this segment of academic vocational education.

The *intermittent model* introduces a feedback mechanism facilitating the coordination of academic and vocational elements within the programme. Practicums, and the presence of teacher categories representing the outside on the inside, furnish students with a notion of their occupational future and its specific demands. Tensions between academic and vocational elements here emerge within the programmes: in the relative status of different teacher categories, in student evaluations of teacher categories and in their perception of where the real learning is going on, in grievances that teacher drift towards the academic pole is detracting from vocational training. In the era of vocationalism, the intermittent mode is arrived at from two very different points of departure. But the conditions for handling within-programme tensions between academic and vocational demands differ, depending on whether we are dealing with a university education that has sought and found a labour market niche, or whether we are dealing with an

occupation in search of university credentials. This should be a fertile area for further comparative studies.

The third, *integrated model* of aligning academic and vocational elements is, in the Swedish setting, the result of the almost wholesale incorporation of post-secondary education in a formally unified university system, brought about by the 1977 university reform. In the welfare professions, the ensuing scramble to academically upgrade the teaching staff fuelled discipline formation, and those disciplines were turned into theoretical linchpins of the respective programmes. In this model, the key operational principle of a profession, or the modal type of intervention characterising the professional practice, governs the structure of the education programmes. In this process, the welfare professions have acquired a stronger academic pole, which may become a source of friction in the encounter with a well-defined vocational pole. Constructing a discipline around the mode of professional intervention is no guarantee that students will accept these learning contents as a proper preparation for their future work. Once formed, disciplines lead a life of their own. At the same time, foundational disciplines of this order also make claims that concern the very relation between theory and professional practice, making the theoretical elaboration of that relation part of the academic pole of programme education. This complex is suggestive of a new approach to the otherwise well researched welfare professions: the comparative study of discipline formation in response to rapid academisation, and the ensuing need to resolve tensions between academic and vocational demands.

## Notes

- 1 This chapter is based on research carried out as part of a research project financed by the Swedish Research Council (grant no. VR-UVK 2006–2729). It was also supported and partly financed by the Forum for research on Professions (FPF) at Växjö University/Linnaeus University (cf. Olofsson and Petersson, 2011; Fasth and Olofsson, 2013).
- 2 The ‘lower’ faculty was the philosophical, which later developed into the Humanities, the Natural Sciences and the Social Sciences. (cf. Lepenies, 1985).
- 3 In later texts in the sociology of education these schools and occupations are defined as ‘prestige education’ (cf. Gesser, 1971; Gesser, 1985).
- 4 Cf. the contributions in Etzioni (1969).
- 5 In the words of a renowned economist from Växjö, ‘interest in doing research at that time was regarded as a personal hobby, comparable to indulgence in golf’ (Olofsson, 2013b).
- 6 Our conceptualisation relates to, but is not co-terminous with, the distinction between a ‘consecutive’ and a ‘concurrent’ model, common in discussions relating to teacher education (see e.g. Laursen’s contribution in this volume). First, obviously, the concurrent model is replaced by two distinct modes in our account. This is not only a matter of producing a more fine-grained typology. While academic and vocational elements do indeed concur in the educational setting in the intermittent and integrated modes, the distinction between modes primarily turns on where academic and vocational elements are supposed to be aligned: in the course of the programme or in a master discipline. Incidentally, this also produces a subtle difference between our sequential mode and the consecutive model – which, for reasons of space, must be postponed here.
- 7 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.

- 8 Social work (Johnsson, 2011), Human Resource Management (personnel work) (Larsson, 2011), Cultural management (Lund, 2010), Coaching and sports management (Wågman, 2011a), The police school (Petersson, 2011), Librarians (Fath *et. al.*, 2011), Elementary school teachers (Nilsson-Lindström, 2012), Gymnasium teachers (Persson, 2009, 2013, 2014), Engineers (BA level) (Larsson, 2013a), Business students (Selberg, 2013), Social science programmes – internationally oriented (Löfqvist, 2013a).
- In a recent collection of essays on students, their study experiences and their programmes in Växjö (Fath and Olofsson, 2013), there are also chapters devoted to the experiences – in their studies and the job market) – of students with an immigrant background (Broman and Flodin, 2013), of the local student culture (Löfqvist, 2013b; Larsson, 2013b), of students who prematurely terminated their studies (Wågman, 2013), and of students' visions of their future (job and family) (Erlandsson, 2013). Thus we have a large pool of data and experiences to draw upon.
- 9 Cf. appendix by Wågman (2011b) in Olofsson and Petersson (2011).
- 10 The exception is the programme 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).
- 11 Or as occupations exemplifying Wilensky's prophecy from 1964, 'the professionalization of everyone' (Wilensky, 1964).
- 12 These results are as well supported by the interviews with students and as reported in the studies by Lund (2010), Larsson (2011, 2013a), Persson (2013).
- 13 Interviews reported in Johnsson (2011), Nilsson-Lindström (2010, 2012), Selberg (2013) and Petersson (2011).
- 14 Interviews in Wågman (2011a), Johnsson (2011), and conclusion of Olofsson (2011b).

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