



From overeducation to underlearning: a survey of Swedish research on the interplay between education, work and learning



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The aim of this paper is to give an overview of Swedish research on the interplay between education, work and learning ⁽¹⁾. The intention is also to bridge the gap between education research and research where the emphasis is on learning, development and change in the workplace. Our focus is on competence supply, both to and within working life and attention is given to overeducation and underlearning and the age old question of balancing supply and demand. The paper illustrates how occupations, professions and job skill requirements change or remain stable and the different obstacles and conditions that exist for workplace learning.

Overeducation, underlearning and educational inflation: an introduction

This introduction focuses on the current political demand for education expansion, the efforts being made to bridge the gap between work and education and the need for workplace learning strategies. The 'education, education, education' priority for Britain launched by Tony Blair reflects the level of importance attached to this area by politicians and policy-makers all around the world. Another seemingly united policy field covers ideas and strategies for lifelong learning, which has been promoted by the European Commission's Memorandum on lifelong learning. Finally, the Swedish and British 'half of the young generation in higher education' objective is yet another illustration of the current belief in the role of education in modern, or post-modern, societies.

The purpose of this policy of wider admission and higher enrolment levels in higher education is that half of an age group should be in higher studies at the age of 25. This so-called 'the more, the better' presumption, has been questioned in various policy fields by practitioners and in research.

It is not our intention to argue against the demand and need for education in modern societies. Our purpose is a more modest one; to discuss the conceptual foundations and the empirical evidence for various policy perspectives and institutional measures. With reference to our background as scholars in the field of human work science, we will focus on the context for knowledge utilisation at work as well as workplace learning. Furthermore, it is clear that many of these educationally expansionistic policies are developed without reference to, or deeper analysis of, the relationship between education and work or the place of qualification-utilisation in the workplace with regard to supply and demand. Paradoxically it seems that in modern labour markets, overeducation and underqualification operate on parallel, but different segments of the labour market (Green, 1999; Battu and Sloane, 2002).

The conceptual siblings overeducation and underlearning represent quite different theoretical positions and analytical orientations in social science and public policy. While overeducation and the concept of underqualification (or under-education) and qualification inflation is a matter for economists

Policies of educational expansion are enhanced in most European countries. Little attention is, however, paid to skill utilisation at work, learning context and gender-related barriers at work. Oversupply and under-utilisation of skilled labour might create mismatch problems and frustration at the workplace.

The aim of this article is to give an overview of Swedish research on the interplay between education, work and learning. The intention is also to bridge over the gap between education research and research with emphasis on learning, development and change at workplaces. Our focus in the paper is on competence supply to and within working life. Attention is also given to overeducation and underlearning and the classical question of balancing supply and demand. The paper illustrates how occupations, professions and job skill requirements change or are stable and also different obstacles and conditions for work place learning.

⁽¹⁾ The paper is partly based on the book "Utbildning, kompetens och arbete" (Education, competence and work) edited by Kenneth Abrahamsson, Lena Abrahamsson, Torsten Björkman, Per-Erik Ellström and Jan Johansson. The book is written in Swedish and published 2002 at Studentlitteratur, Lund, Sweden.



and sociologists, the term underlearning has a didactic and cognitive focus and a neuro-physiological connotation with roots in the history of psychology. The concept of overeducation highlights the mismatch of employees' education levels and skill requirements within a certain segment of the labour market or the match at individual level within a specific work context. The perfect match between labour supply and skill requirements at work tends to be more dream than fact.

The trust in the social, cultural and economic impact of education is often connected with a stereotyped approach implying that the impact of education is a question of counting up years of education and relating the total to wage structures for different positions in the labour market. There is, however, no direct correlation between years of education and skill levels in various knowledge fields. Some economists argue that behind or beyond the education mismatch there is a skills match under the label of 'more educated, less able' with special reference to shortages in numeric skills at work (Vignoles, 2002). Another concept that has attracted a high level of interest both in policy quarters and in scientific environments is the notion of qualification inflation, i.e. that employers tend to recruit staff with higher qualifications than are needed in a specific occupation setting. The notion of qualification or education inflation can also be seen in a supply and demand context with a falling education premium for longer periods in the economy characterised by a permanent oversupply or increasing number of employees being over-educated for their jobs.

Too much education and too little learning?

Thus, the impact of overeducation could theoretically be both positive and negative. The positive or optimistic view is that overeducation provides a more generic knowledge base that could be used to solve new problems in new situations. The negative or pessimistic view is that overeducated people tend to be less able to fulfil their job tasks than those who have the appropriate level of schooling for the job. The overeducation metaphor has also been related to the above-mentioned concept of educational inflation, i.e. the situation where employers, in times of oversupply of labour, could raise the skill

requirement far beyond that which is needed for specific jobs.

The knowledge inflation idea is difficult to test empirically, but it seems not an unreasonable presumption that overeducation and oversupply of labour might have a negative impact on wages. It seems that the concept of overeducation has a mainly negative connotation in public debate and social science. Overeducation is often related to overspending, to over-consumption and misuse of public expenditure. It is, in our view, however, a too simplified perspective. The relationship between education level, economic performance and social and cultural life is much more complex. It is, of course, also a question of the division of work, skill requirements in various sectors of the labour market and the conditions for utilising the individual's own portfolio of skills, knowledge and more tacit experience.

Underlearning, on the other hand, can be a result of both overeducation and under-qualification. Underlearning in our context is not only an issue of inefficient learning at work, but also a situation in which work organisation and corporate culture is rejecting learning opportunities or supporting a negative learning climate. In our view, underlearning tends to be more common in situations of high skills demands, low level of control and influence as well as a non-supportive social setting (Karasek and Theorell, 1991). Considering the balance between overeducation and underlearning it is our belief that the dynamic interplay between education and work cannot only be solved by an increasing provision of education. More attention has to be paid to the demand structure and conditions at work which will facilitate learning, make better use of an individual employee's own skills portfolio including the idea of valorisation and recognition of prior learning.

Economists often show their admiration for the hidden hand of the market to make seemingly rational selection of human capital, while sociologists prefer to focus on discrimination, social bias and institutional filters. From a work science point of view, however, more attention is paid to work organisation and learning environments in the position under discussion. It might be that some positions are locked into a hierarchical work organisation with low level of influence, a strong gender division of work



and few options to use knowledge of a more reflective or analytic kind. In such cases, the mix between overeducation and under-learning tends to support frustration, disappointment and possibly low motivation and productivity. However our point is that the dynamics in education, work and learning are complex at both individual and structural levels.

One of the most common approaches is to discuss the relationship between education and work as an investment in human capital resulting in economic growth and development for society as well as economic and other benefits for the individual. The rhetorical question 'does education matter?' as formulated by Alison Wolf (2002) cannot, however, be answered by a simple yes or no. It is necessary to focus and condition the question and analyse which education – content- and context-bound – matters for which groups, and under what circumstances.

Another societal function of education is related to equity and social bias. The question of whether or not education or educational expansion is promoting equity and counteracting social bias is not an easy one to answer. History and much empirical evidence has supported the Matthew principle that 'for whomsoever hath, to him shall be given' [Matthew 13:12]. Educational expansion more often attracts students and learners from knowledge-supporting environments with good basic skills and efficient learning strategies than students with weak educational family tradition, low basic skills or insufficient subject knowledge. Education has a socialisation function by transporting and trading values and belief systems between social groups, generations, teachers and students.

The qualifying function, the enduring pattern of social selection and the socialisation function of education also have to be seen and analysed from a gender perspective. In Swedish education today, females outnumber males, but this new majority does not seem to have a strong influence on gender-related occupational choice, wage equity or the control of higher professional positions in the public or private sectors or at corporate board level. Some empirical evidence in Swedish studies shows that there has not been a fundamental change in skill requirements in various jobs in the Swedish

labour market; rather there has been a structural transformation with a decrease in the number of low-qualified jobs.

A different angle for the dynamic interplay between education, work and learning is to focus on the contextual and institutional setting of different learning environments by comparing school-connected learning with work-connected learning. Too often these kinds of comparisons tend to exaggerate the differences between how learning is organised and performed in schools and how learning takes place at work. A third entrance to this analytic arena is to examine education, work and learning connections from different theoretical perspectives in an interdisciplinary context.

'The higher, the better?' macro-views on education demand and supply in Sweden

In this section we discuss whether education functions as an investment for the future or as a sorting machine. Here focus is on the interplay between education structure, labour market and wages. What are the inducements for continuous learning, for moving up the education ladder? Is education really profitable for those being educated? In many cases education and competence are not used in working life. Education investment could contribute to an extensive overeducation because jobs are not changing. The work content average qualification level has not risen as much as is claimed in debate.

The discussion of future developments of education and work can be analysed with respect to different comparative perspectives. One such approach is to look at the long-term labour supply, i.e. the anticipation of skilled workers and higher educated employees in a long-term perspective. With such a demographic focus, unemployment does not seem to be the major problem for the Swedish labour market. The need to replace staff and recycle current workplace skills tends to be a bigger challenge.

Generational variations and changes in birth rate have an effect on the demand for different types of skilled labour. In the long-term, the age structure in Sweden has changed in form from a pyramid to a circle. This change is mainly due to a falling birth rate



during the twentieth century, but the reduction shows no straight line, rather a pattern of oscillation. Variations in birth rate usually have links to major changes in society such as changes in the cost of raising children, women's labour market, the state of the market and family politics and perhaps most of all the recurring baby booms at intervals of 20 to 25 years. Regardless of the reasons, these population changes do affect the labour market (Ohlsson and Brommé, 2002). Therefore knowledge of population changes and the skill history of generations is an important base for predicting competence demand in the next 10 to 12 years.

A second comparative approach is to analyse changes in the education level both in a historical perspective and from an international comparative viewpoint. The education level in Sweden has increased over the last decades. The percentage of people with a low educational level has decreased. The number of jobs requiring a low educational level has also decreased during the same period but, interestingly, the curve has flattened and is expected to rise again (Åberg, 2002). In other words the number of over-educated people will increase and this is a clear trend, not only in Sweden but also in other Western countries. Many people are in work that is below their education level. The changes in educational demands in the Swedish labour market are as a result of structural changes, for example new occupations and trades, and not as a result of changes in the actual qualification content within each occupational group (Åberg, 2002). For the individual, overeducation (having a job below your education level) can be felt as negative, but from a society perspective it can be seen as a productive unused resource.

At the same time there is a trend of under-education. During the 1990s the knowledge intensity in the Swedish economy increased and many people do not have a sufficient educational level for their job (Oscarsson and Grannas, 2002). These undereducated people compensate for their lack of education with their experience. However, there is a clear picture of polarisation between those who get a better education, more development and qualified jobs than those who do not have these advantages.

The education level and skill profile of the work force is normally seen as an important aspect of economic growth and development. In an international comparison it is of high policy interest to identify the Swedish standing with respect to education levels, work place skills and further education options, as well as competence development at work (Aspgren, 2002). In comparison with other OECD-countries, a large proportion of Sweden's population has at least an upper secondary or higher education level. However, Sweden is lagging with respect to the proportion of the work force with longer higher education or degree-oriented programmes. If we look at basic skills, in contrast, Sweden was at the forefront in the IALS-study on literacy and numeracy (as assessed in middle of the last decade). This positive result could be due to the existence of better options for workplace learning and more provision of staff development programmes and in-service training, especially in the public sector in combination with more flexible forms of work. It is evident that there is a strong potential for developing the work organisation and on the job-learning options and much can be done to increase the flexibility of the formal system of education in order to enhance adult learning at work and in everyday life.

The shifting character of job skill requirements and professions

Current trends show that in some sectors of working life competence demands are growing. However, not all jobs will become knowledge intensive. There is an interesting dynamic around competences, qualifications and occupations. This second part of the paper discusses these changes in different sectors, professions and gender. New professions are appearing and others are dying out. Old professions are changing, modernising and being recoded, for example by switching gender. In this paper, therefore, we also examine some of the rhetoric surrounding social competence and other key qualifications.

When the structural transformation of the labour market intensifies, more employees have to be retrained to meet the needs of its new and expanding sectors. The time of a single occupation for life for all education experience is over. Employment training and retraining schemes have become an important tool of modern labour market policies.



□ *The skill demands of the labour market are changing so quickly now that it is even more important to move from passive policy of administrating unemployment to an active policy of equipping people to compete for jobs. In a country like Sweden, more than 90 % of vacancies require skills and qualifications.*

□ *The pace of change is remarkable.*

□ *Experts tell us that by 2005, 80 % of the technology we are using now will have gone. In its place, there will be new and better technology. The information and communication technologies are entering the workplace, and revolutionising daily life, even more quickly (°).*

Three years have passed since Allan Larsson made his statement, in which he shares some of the most common beliefs of modern working life. One of the core issues concerns the continuous increase of skill demands. Another presumption concerns the high level of job turnover and change rate. A third common concept related to the increasing level of turnover is temporary work contracts, often labelled as the contingent work force. Another trend often discussed is work intensification as a characteristic feature of modern work.

Current research and long-term studies of the Swedish labour market question some of these beliefs (°). Skill requirements are not expanding at the pace often mentioned in most occupations. The major change tends to be of a structural character with a decrease in low skilled jobs and a growth in medium- and high skilled jobs, while the changes within occupations have not been so striking. The level of job turnover has been high in Sweden during the last decade due to restructuring, downsizing and a high level of unemployment. The proportion of temporary jobs has increased but not in a dramatic form if we look over a longer period of time. Recently, however, there have been evident changes. The level of work intensification has expanded in most jobs, particularly in the public service and caring sector. In summary, these studies by Swedish scholars raise the need for a more critical debate of ideals and realities in the changing conditions in the labour market and in the workplace.

Thus, one needs to have a longer-term perspective on the process of job creation

and destruction. The transformation of labour market structures and occupations could be seen as a very rapid and dynamic one at surface level but is, to a large extent, a long-term transition. Over the decades, however, old or obsolete occupations will either be refreshed by new content and skill requirements or just fade away. One trend that has to be tested empirically is if the situation in the early 21st century is dramatically different from previous periods. New occupations and professions are constructed and some of the old ones tend to be deconstructed and sometimes deskilled. The borderlines between different occupations are also shifting, and it may be that the labour market is moving towards a more flexible relationship to work, union connections and occupational identities.

The problem of what a vocation or an occupation is, has been analysed by Isacson and Silvé (2002). An occupation can be a tool to understand and control communication and social processes at work or an instrument to exhibit and monitor power and influence. Work or occupations have strong connotations related to experience, occupational pride and being a professional in a group or at work. Thus, work and occupations have a strong identity-formation function in most countries and are also a way of characterising people with respect to gender, age and social origin.

Studies of work and occupations can also be a tool to understand how gender and sexuality are organised in our society. Furthermore, occupational positions can be seen as tools to express and control economic and political power. Finally, occupations can be used to create hierarchies, to encapsulate or to exclude individuals or to set the limits of their scope and range of actions. There are a number of groups and institutions that contribute to the formation, definition and documentation of core tasks and characteristics of occupations and vocations, i.e. trade unions and employers, scholars from social science and humanities, media and museums. They all interact in a social process of constructing, describing and defending content, core functions and culture of what today is perceived as work or a specific occupation or vocation.

(°) These remarks were made by Allan Larsson, former Director General, DG V on Employment Week session on employability. They fit well with a common understanding or conception among policy-makers about the pace of change in the labour market.

(°) See le Grande, C, Szulkin, R. and Tählin, M. (2001) Har jobben blivit bättre? En analys av arbetsinnehållet under tre decennier. SOU 2001:53 Valfärd och arbete i arbetslöshetens årtionde. Antologi från Kommittén för Valfärdsbokslut.



Workplace learning in a lean and mean work organisation

This third part of the paper discusses work organisation and conditions for learning in working life in the light of different production and management paradigms. What are the links between individual and organisational learning? What are the possibilities for creative and innovative learning at workplaces? There are studies indicating there is a risk that lean organisations will get only lean learning. In other words, we can paradoxically see indications of both overeducation and underlearning in Swedish working life.

Workplace learning in modern management concepts

The concept of workplace learning is found in various contexts in working life, in political, academic and popular arenas, and is generally seen as an important mechanism for economic growth, innovation, and competitiveness (see for example Ellström, 2000). Ideas and theories of both individual and organisational learning are central in all the management concepts of the 1980s and 1990s – for example lean production, total quality management, time-based management, the boundaryless organisation, the individualised corporation and business process reengineering. In Sweden both public and industry reports state that companies investing in workplace learning have better profitability and productivity than companies that do not (see for example NUTEK, 2000). In the United States, these trends are even stronger. There is no doubt that knowledge is a word of the greatest interest in the U.S. economy (Lynèl, 2002). This could be found in the fact that more and more U.S. companies choose to start their own universities – corporate universities – and in the very hot current concept of knowledge management (Sveriges Tekniska Attachéer, 1999). This concept addresses how to transform individual knowledge to organisational knowledge in order to control it. It includes methods for company internal measurement, assessment and control of knowledge and attitudes.

With these high ambitions in mind, it would be likely that management literature should examine the problems of the concept of learning and discuss how to organise it. But that is not the case. It is more common to

use learning as a tool among other tools in a management concept (Røvik, 2000; Furusten, 1996). Such a 'black box-perspective' sees learning as a fairly unproblematic process, in which results can be measured and controlled (Ellström, 2000). Learning has, to some extent, been turned into yet another empty buzzword. The kind of learning discussed in modern management concepts and in many studies of workplace learning is planned, intentional, requested and positive learning. This kind of learning has direction and purpose. Employees simply learn certain things or gain knowledge that is good for them or the company. This can be done in different types of formal education, courses and staff training but it can also be within a system for planned situated and informal learning, for example through trainee and apprenticeship programs, or through a changed work organisation with more developing, empowering and learning work tasks (see for example Ellström, 2000; Säljö, 2002). Scandinavian traditions from the 1980s and 1990s around workplace learning and learning organisation show tests and studies of methods built on dialogue and reflection.

Moreover, in the light of the strong focus on knowledge and learning and on the wish to control employee attitudes, behaviours and personalities, it is interesting to ask what employees learn in workplaces and at the corporate universities. Is it general knowledge, useful to the individual even outside the company, or is it company-specific knowledge on the corporate culture and brand, something close to indoctrination? Moreover, a lot of the learning for adults in working life tends to become just-in-time-learning (JITL) (Lundgren, 2002), that is, fast and flexible learning with a major focus on solving daily and pressing problems. However, the other side of the coin is that JITL could remain shallow and adaptation-focused (cosmetic), especially if it is not combined with time and resources for analysis and critical thinking and long-term learning. This could be the case for women to a higher degree than men. Some current Swedish studies show that women still get shorter internal training courses, around 1-2 days and in comparison with 14-30 days for men (see for example Lennerlöf, 2002; Abrahamsson, 2000).



Learning at the workplace

Besides this planned and intentional learning there is always unplanned and unintentional learning at workplaces. All learning activities, either arranged or informal, include this side effect. Another expression for this is the imminent curriculum (Westberg, 1996) or everyday learning which happens through doing the work tasks or as a part of the exercise of a profession (⁴). This kind of situated or contextual learning (Säljö, 2000) can be positive and developmental and is often essential both for the individual and the company. This view on learning is quite modern in research on learning and can also be found in modern management concepts. A learning organisation or knowledge management aims to control this kind of learning; it also has some negative aspects, although these are seldom discussed, especially in modern management concepts. In workplace learning research, the problems of situated learning are examined more often (see for example Abrahamsson et al, 2002). One problem is that situated learning takes place in narrow circles and gives rather context-dependent knowledge. Moreover, this learning can easily become adaptation-oriented with small possibilities for renewal and innovation since it is built, to a large degree, on unreflective imitation.

This kind of informal and unintentional learning can also be seen as a part of socialisation, the process of becoming a full member of an organisation (Lave, 2000; Wenger, 1998; Salminen-Karlsson, 2003). People learn very quickly what counts in the organisation and adapt to it. The members in the organisation create, consciously or not, ideas, opinions, attitudes and actions together. Sometimes this kind of learning directly conflicts with intentional and planned learning at the work place. For example, in the Australian coal mines the workplace culture is so strongly built on risk-taking, competitiveness, violence and aggression that it totally overrides the company's many years of work on education and teaching safety to the mining workers (Somerville and Abrahamsson, 2003). Other examples of 'negative' things that are learned are subordination, passivity and helplessness or accepting a worse workplace environment than that which is appropriate or needed. Moreover, a lot of the attitudes, norms and symbols that are learned are connected to gender. People learn gender and the gender or-

der. In other words there is a difference between what is taught, what is learned and what is practised. This is an important but neglected area in the discussion of workplace learning.

Obstacles towards organisational change

Here we also catch a glimpse of an interesting and central paradox in modern organisational models or tools. In order to promote learning at work, creativity, innovation and development, individuals should not be micro-managed but given freedom instead. This freedom however, provides scope for disobedience and reversion to old practices. Problems and difficulties, passive resistance from both the employees and the employers and even open conflicts, hinder the development of existing work and potential work opportunities. There is a risk that the organisation reverts to previous models although they may be irrational and counter productive (see March and Olsen, 1989; Lovén, 1999; Ackroyd and Thompson, 1999). A similar paradox can be found in the concepts of flexibility, informal organisations, and self-organisation. In management literature, as well in workplace learning research, self-organisation is seen as something desirable, as a part of the flexibility that allows a company to adjust to market demands, globalisation, and new products and technology. Ackroyd and Thompson (1999), however, discuss informal self-organisation as something problematic in organisations. This type of self-organisation, we believe, can also encourage moves back to old ways.

One way to analyse reversionary mechanisms or responses is to study the end result of the regression. Often there are fundamental power structures and status differences in the starting-point that are subsequently maintained, but perhaps with a change in shape and form. One important element in the power structures and status differences is gender or 'the gender order' (Hirdman, 1988; Connell, 1995). If ignored, these gender-based organisational processes can form an almost inherent element that fuels a reversion to previous ways, in spite of the fact that the management aims are to achieve the opposite. (see also Abrahamsson, 2000; Lindgren, 1999; Sundin, 1998; Hollway, 1996; Collinson and Hearn, 1996). This is especially common when companies start implementing the modern organisa-

(⁴) Lave, 2000; Lave & Wenger, 1991; Wenger, 1996; 1998.



tional models that, as a side effect, rummage about in the gender order. There are often discriminatory responses when the organisational change intends to have men and women work on equal terms, such as wage equality, on the same hierarchical level, or participating in the same job rotation (Abrahamsson, 2000; Baude, 1992; Cedersund et al. 1995; Sundin, 1998; Pettersson, 1996).

One explanation of the problem is that many organisational borders (between levels, groups, and positions) and hierarchical levels have a connection to gender (°). The gender order is a pattern one can see when looking at society on a general level (Hirdman, 1988; Connell, 1995). In different cultures, times, local situations and local organisations, there are variations in strength, scope and hierarchy (Thurén, 1996). Despite these variations, one can see two main logics in the gender order: segregation between women and men and between femininity and masculinity and hierarchical separation, with men at the top. On a structural level, a strong gender order in the organisation, for example gender segregation and stereotypical gender-coding of workplaces and work tasks, can be a heavy burden during organisational change at the workplace. Moreover, ideas of gender, femininities and masculinities, are often conservative and can create obstacles to positive learning, both for individuals and on a collective or organisational level, i.e. organisational development. A strong gender order keeps individuals in narrow spaces, both physically and mentally. It hinders dialogue, communication and the mixture and integration of different work experiences and the exchange of different skills and knowledge (Abrahamsson, 2001).

The processes of segregation and hierarchy creation are interesting since they are the opposite of integration and decentralisation, the two main aspects of modern management models. Here we can find some explanations for the reversionary responses, but also for modifications in the gender order.

Gender and skills as synchronised processes

Qualification demands in working life (demands for some specific education, skill and competence) often have close links to gender-marked fields of interest and activities/actions, characteristics, behaviours, com-

petences, attitudes and opinions. Abrahamsson and Gunnarsson (2002) discuss gender and competences as synchronised processes. On their own, skills and qualifications are nothing; they are to a large degree social constructions and are filled with different content, and are valued and adapted depending on the situation, just like gender (°). Moreover, the same skill, knowledge or competence is often valued and named differently depending on whether it relates to women or men. The male version or synonym of behaviour, characteristics or qualifications is usually more positive, important and has more 'competence' (Holmberg, 1996; Lindgren 1999). Qualification demands do not even need to be based on the actual work in question and in some situations can function more as 'gate-keepers'. Job descriptions, qualifications, and competences can be constructed and formulated in a way that gives men preference and marginalises women. In contrast, a lack of male labour often gives women admission to male-dominated industries. During such times, women are often ascribed qualifications that they usually are not thought to have (Fürst, 1998; Gunnarsson, 1994).

It is true that gender order in the workplace culture and unintended learning promote gender-based discrimination but the picture is more complex than that. Abrahamsson and Gunnarsson (2002) discuss some aspects of new organisational patterns and situations where traditional gender pattern and praxis exist in parallel to unexpected gender pattern and praxis. The gender order can be restored on one level in order to give way to changes on another level, for example, the male gender marking of social competence. There are situations where contents and meaning of gender are reformulated and transformed and adapted to the modern management models. In fact, changes in gender construction can be necessary for the implementation of modern management models. Construction of gender and construction of competences have many links and the influences flow in both directions. People are socialised and socialise themselves into both new and existing organisations. This is one part of the learning. It is seen as necessary to learn everything afresh in order to fit in and change – through education, training and courses or by simply changing opinions, attitudes or behaviour – in order to get the competences in demand.

(°) This has been shown, analysed and discussed in extensive gender and work research. See for example Abrahamsson, 2000; Acker and van Houten, 1974/1992; Acker, 1990 and 1992; Baude, 1992; Gunnarsson, 1994; Hirdman, 1988, 1998 and 2001; Kanter, 1977; Korvajärvi, 1998; Kvande 1998, Lindgren, 1985, 1996 and 1999; Pettersson, 1996; SOU 1998:6; Wahl, 1992 and 1996 and Wahl et al, 1998.

(°) The basic principle in this paper is that gender is a social construction and that gender is a verb, an activity, something that is always done. From this perspective gender – femininity and masculinity – is seen as something people do and construct in social interactions and therefore not once for all given, nor safe (Gunnarsson et al, 2003; Korvajärvi, 1998; Gherardi, 1994). Instead they are plastic and changeable. What is seen as masculine and feminine vary over space and time and those constructions are so fragile that they constantly need protection and justification (Connell, 1995).



Towards an integrative perspective: concluding remarks

The purpose of this article, based on the book on the conditions of education, competence and work in Sweden, is mainly of an exploratory nature. We want to discuss whether it is possible to analyse education, qualification supply at the labour market, skills utilisation at work and also work place learning in a more integrated perspective. We feel that we have not been successful on this journey or 'mission impossible'. Economists, sociologists, educationalists and carriers of the work science' traditions, all look at the problems from different angles and discipline-bound perspectives. In one sense we are still dominated by the traditional rigour versus relevance dilemma. The more we dig into the specific conditions of a certain workplace with its cultural codes, work organisation and production systems, and the long pathway for socialising novice or apprentices to master, the greater the distance to the macro-economic theories of human capital and the functioning of the labour market. In spite of the problems facing such interdisciplinary encounters, we still think it is valuable to look at the same phenomenon from different theoretical perspectives. Quantitative and qualitative approaches still seem to live in an isolated academic world with little or no contact, social intercourse or collaboration.

We also favour a common arena or conceptual and theoretical platform for analysing and discussing the interaction and core functions of school-centred learning and work-based learning. We need increasingly sophisticated approaches to analyse the hidden agenda of the interaction between formal education and learning outside educational organisations in non-formal or informal settings. Furthermore, it is our belief that studies of the role of education and learning in the transformation of labour markets and workplaces are vitalised and strengthened by a gender perspective.

So what can be done about the overeducation-underlearning dilemma? Generally, all economies aim for a better balance between supply and demand in respect of the education and training level of the work force. The economic downturn of recent years and increasing unemployment in some countries might, in combination with a more expansive education policy, lead to over-

supply and overeducation in the short-term. A negative scenario that may also influence future generations of students in higher education is the increasing number of highly educated people not having the opportunity to use their qualifications and skills at work. Misuse or abuse of qualifications and skills could also have a harmful influence on productivity and economic growth; the ethnic skill gap in some countries is a typical example.

Thus, we have to deal with the major working life challenge of developing new and flexible work organisations with more scope for self-control, learning and development. Furthermore, attention must be paid to the survival value and sustainability of general education and generic skills as well as vocational education. This applies not only to labour market sectors with decreasing demand but also to future work in general. A new balance between the generalist's profile and the specialist's orientation has to be developed because it is, and always has been, extremely difficult to foresee and anticipate the supply and demand balance in various labour market sectors. Specialisation and generalisation have to go hand in hand with core curriculum approaches and vocationalism (Abrahamsson, 2002).

Ultimately, we need to look more into current management ideals and how they relate to the realities of working life. The working life topic most discussed in Sweden today is the negative occupational health balance and the dramatic development of sick-leave over recent years. Work-intensification, downsizing, under-staffing and continuous organisational change have had a mainly negative impact on working conditions and the social costs of work. In many workplaces, there is a fine line between a lean work organisation and a mean or anorexic work organisation. Time for reflection and learning tends to be very limited in such a context, which more often favours competence destruction over competence development. More flexible working hours in combination with work insecurity and an increase in the use of temporary work contracts, also have mainly negative repercussions on workplace learning and development (Aronsson, 2002).

If an increasing number of higher education graduates live their working lives in low- or medium-qualified occupations, this repre-



sents a competence loss or even competence destruction both for the individual and for society. The phenomenon of underlearning or underutilisation of skills, competences or tacit knowledge is another example of misuse of cognitive assets in society or the economy. Thus, it is important to recognise, document, validate and certify informal learning capacities or skills. It is a way to make invisible learning and informal experiences more explicit and useful in everyday life and at work⁽⁷⁾.

Finally, it is of utmost interest to have a deeper look at the language of education, learning and management in work-related contexts. In high level policy quarters, the language of 'education, education, education' or the rhetoric of lifelong learning are used in an increasing number of contexts, and thereby often lose their meaning. A similar process is taking place in field of organisational learning and management, where a language of cultural and economic domination and control are expressed in a seemingly pleasant and joyful manner. Thus, there is a major challenge for further research in analysing, deconstructing and criticising the new language of education, learning and

management. Another important challenge is to make more solid and empirically-based studies of context, content and outcomes of learning at work.

If the impact of education at individual and societal levels is not as important as leading policy-makers believe it to be, social scientists must take their social responsibility seriously and analyse, clarify and guide both policy and individual actions about the value of education and learning. Education and learning is not necessarily a wonderful, low-cost and rewarding experience. Workplace learning can also be seen as a tool to influence, control and monitor employee work content and processes. Sometimes the learning mission tends to be glorified and described in terms of emancipation, autonomy and self-control. This, in our view, is only one side of the coin. The hidden curricula of workplace learning has another face: the continuing process of qualifying, selecting and attitude-shaping of employees with regard to organisational culture, workplace tasks and occupational health conditions and, not least, the gender structure of the labour market and its micro-reflections in everyday work.

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⁽⁷⁾ See, for example, SOU 2001:78 *Validering av vuxnas kunskap och kompetens samt* Björnvold, J. (2000) *Making learning visible. Identification, assessment and recognition of non-formal learning in Europe*. Cedefop: Thessaloniki.



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