

Herrera, L., Broberg, Å. & Osman, A. (2023). From work force immigration to inclusion: A study of vocational education & training development in relation to society changes and immigration in a historical perspective. In V. Tütlys, L. Vaitkutė & C. Nägele (Eds.), *Vocational Education and Training Transformations for Digital, Sustainable and Socially Fair Future. Proceedings of the 5th Crossing Boundaries Conference in Vocational Education and Training, Kaunas, 25. – 26. May* (pp. 196–206). European Research Network on Vocational Education and Training, VETNET, Vytautas Magnus University Education Academy, Institute of Educational Science. <https://doi.org/10.5281/zenodo.7821763>

From Work Force Immigration to inclusion: A study of Vocational Education & Training Development in Relation to Society Changes and Immigration in a Historical Perspective

Herrera, Lázaro Moreno

lazaro.moreno@edu.su.se, Stockholm University

Broberg, Åsa

asa.broberg@edu.su.se, Stockholm University

Osman, Ali

ali.osman@edu.su.se, Stockholm University

Abstract

The presentation in this paper is based on a research project funded by the Swedish Research Council. The focus of this study is to examine the role that vocational education and training (VET) played and still plays in relation to the challenges that stem/ed from structural changes and immigration that Sweden has experienced from the 1950s to today. From the mid-1800s to the 1990s, Sweden experienced major structural changes: a shift from an agrarian economy, to and industrial based economy and labour market and finally to a post-Fordist knowledge intensive economy and labour market. In this study, we investigate how VET responded to labour market needs that resulted in the shift from industrial economy and labour market to a post- industrial labour market. In addition, the focus is on the role that VET play/ed in the inclusion of immigrants/refugees from the 1950s to today.

The project is grounded on frame factor theory as presented by Lundgren (1989). The project consists of two interrelated studies: a historical study of VET and the changes in the VET system from the 1950s to today and two interview studies. The historical study will examine how the delivery and provision of VET has changed over time because of structural changes and immigration, and the role VET has played in the inclusion of immigrants to the labour market from the 1950s to today. In this study we will also look at changes in the organization and curriculum of the car mechanic vocational training from the 1950s to 2020. The historical study will not only shed light on how VET respond(ed) to structural changes and inclusion of immigrants in the Swedish work life from the 1950s to today but will also help to contextualize the interview studies and enrich our analysis of the interviews.

Key words

immigration, integration, work force, vocational education and training



1 Introduction

The focus of this study is to examine the role that vocational education and training (VET) played and still plays in relation to the challenges that stem/ed from structural changes and immigration that Sweden has experienced from the 1950s to today. From the mid-1800s to the 1990s, Sweden experienced major structural changes: a shift from an agrarian economy, to an industrial based economy and labour market and finally to a post-Fordist knowledge intensive economy and labour market. In this study, we investigate how VET responded to labour market needs that resulted in the shift from industrial economy and labour market to a post-industrial labour market. In addition, the focus is on the role that VET played in the inclusion of immigrants/refugees from the 1950s to today.

The so-called golden years of the Swedish model were characterized as the peak of the industrial economy; the labour market was characterized by relatively stable employment conditions: labour market regulations, employment protection, collective bargaining and the like. It was also a watershed period for the VET system. In 1971 VET was integrated into the upper secondary school (gymnasium). At this time, immigration was characterized by labour market immigration. The 1980s were similarly characterized by low unemployment and economic growth. In contrast, an economic crisis, a high rate of unemployment, and the advent of globalization characterized the 1990s economy and the labour market (the third revolution) (see Magnusson, 1999). This coincides with a decision to decentralize education, and at the beginning of the 1990s upper secondary education went through a reform which expanded VET into a three-year program, qualifying students for higher education. This period of the 1980s and 1990s was characterized by ebbs and flows of refugee immigration.

The shift from an industrial economy to a post-Fordian economy and labour market in Sweden meant that a large number of industrial jobs disappeared (Magnusson, 1999; Björklund, 1999). This shift in the labour market created a dilemma for industrial countries. How should they deal with the miss-match between supply and demand? Suddenly a substantial number of industrial workers were unqualified to participate in the post-Fordian labour market, and a large number of them had an immigrant background. In other words, the deindustrialization of the Swedish labour market in the 1990s created a large number of unemployed workers whose skills were irrelevant in the post-Fordian economy and labour market (Björklund, 1999; Magnusson, 1999). Thus, to deal with the structural miss-match between supply and demand in the 1990s, Sweden, unlike Denmark or the Netherlands, chose a strategy of massive investment in education (kunskapslyftet) to upgrade the skills of the marginalized groups. Denmark and the Netherlands opted instead to reform their unemployment insurance and expanded the service sector, thus creating a large number of jobs for the less well-educated workers (Björklund, 1999). From 2000 until today we have been in the grip of a globalised economy and labour market, intense technical and digital advances, and a labour market that demands different skills from the labour market of the 1960s and the 1980s. At the same time there was a substantial increase in the number of asylum seekers and labour immigrants from EU countries. In 2011 VET was again reformed, and in this reform the influence of trade unions and industry was strengthened.

The post-Fordian labour market of today is characterized by a high and low-paying service sector, and a decline in the demand for low-skilled labour in advanced economies. In the UK and the United States this structural change has led to a decline in long-term employment relations, or the emergence of what is called the 'gig economy' (Friedman, 2014). However, this change is not yet as dramatic in Sweden as it is in the USA and the UK. In other words, Sweden, like all advanced democracies, is experiencing profound economic restructuring, which has created new social problems and challenges for the Northern European welfare state model (Silver, 1994). In addition to the above-mentioned structural changes, Sweden has experienced and is still experiencing substantial spikes of immigration from the beginning of

the industrialization right up to today. For instance, in the 1950s and 1960s immigration to Sweden was dominated by organized labour forces (Silver, 1994). From the 1960s to today, immigration to Sweden has been diverse, consisting of asylum seekers and labour immigration from outside and inside the EU. Structural changes, technological development and immigration, and more importantly, the interplay of these aspects, have had and are currently having an impact on the strategies for competence development and skill requirements in the labour market (Nilsson, 2010).

2 Background

At the peak of the industrial economy, the labour market was characterized by relatively stable employment conditions; labour market regulation, employment protection, collective bargaining or what is referred to as the “golden years” of the Swedish model. The shift from industrial economy to post-Fordist economy and labour market Sweden, like most of the European countries, a large number of industrial jobs disappeared (Magnusson, 1999; Björklund, 1999). The shift from industrial to post-Fordist labour market created a dilemma for industrial countries on how to deal with the miss-match between supply and demand. Suddenly a substantial number of industrial workers were unqualified to participate in the post-Fordist labour market and a large number of these workers were of immigrant background, which in accordance with the acknowledged influence of migrants works in the car industry internationally (c.f. ILO, 2020). In other words, the deindustrialization of the Swedish labour market in the 1990s created a large number of unemployed workforces whose skills were irrelevant in the post-Fordist economy and labour market (Björklund, 1999; Magnusson, 1999). Thus, to deal with the structural miss-match between the supply and demand in the 1990s, Sweden, unlike Denmark or the Netherlands, chose a strategy of massive investment in education (kunskapslyftet) to upgrade the skills of the marginalized groups. Denmark and the Netherlands opted instead to reform their unemployment insurance and expanded the service sector, thus creating a large number of jobs for the less well-educated workers (Björklund, 1999).

3 Present context, aims and research questions

The post-Fordist labour market of today is characterized by a high and low paying service sector, and a decline in the demand for low skilled labour in advanced economies. In the UK and the United States this structural change has led to a decline of long-term employment relations, or the emergence of what is referred to as the ‘gig economy’ (Friedman, 2014). However, this change is not yet as dramatic in Sweden as it is in the USA and the UK. In other words, Sweden like all advanced democracies, is experiencing a profound economic restructuring which has created new social problems and challenges for the Northern European welfare state model (Silver, 1994). In addition to the above-mentioned structural changes, Sweden has experienced and still experiences substantial spikes of immigration from the beginning of the industrialization to today. For instance, from the 1950s and 1960s immigration to Sweden was dominated by organized labour force (Silver, 1994). From the 1970s to today, immigration to Sweden has become much more diverse and consists of asylum seekers and labour immigration from outside and inside the EU. The dynamics of structural changes, technological development and immigration and more importantly the interplay of these factors, had and currently has an impact in the strategies for competence development and skill requirements in the labour market (Nilsson, 2010).

The aim of this research project is to examine how VET responded to the structural changes in the labour market and immigration and particularly what role VET played in the inclusion of immigrants in Sweden from the 1950s to today. Research questions are:

- How the organization and the practice of vocational training changed in the different periods to meet the needs of the labour market?
- How VET as institution played a role in the inclusion of immigrants in the labour market from the 1950s to today?
- How is vocational education experienced by immigrants as a mechanism for participation in the Swedish car industry in the past and today?
- What can be learned from the responses of VET from the 1950s to today?

4 State of the art

The relationship between VET provisions and the inclusion of immigrants in the labour market and society has received little research attention, both in Sweden and also internationally. This agrees with the conclusion drawn by an in-depth literature review by a group of Swedish researchers (Rosvall, Ledman, Nylund & Rönnlund, 2019). Rosvall and his colleagues (2019) concluded in their review that there are very few studies that have investigated how VET pedagogical practices deal (or fail to deal) with the challenges of immigration and ethnicity in Sweden and other countries. While stressing these limitations in Swedish research, their findings also show that most empirical studies on race and ethnicity published in international journals that cover VET have had an Anglophone focus and setting. Even in the Anglophone context, a historical analysis of the impact of VET provisions on the inclusion of immigrants in the labour market and society seems non-existent, a limitation that we could also verify in the literature review produced for this application. Research in the field of VET has generally focused on vocations at the meso and micro level from a variety of perspectives and vantage points, for instance, the social and economic return, productivity effect at the company level, promotion of social cohesion (focused usually on class), and as a remedy for youth unemployment (Rauner & Maclean, 2008; Richardson & Van den Berg, 2002; Silver, 1994). In industrialized societies the educational system, and specifically VET, is perceived as a critical institution in supplying a qualified and skilled work force for the labour market, irrespective of time and space, particularly in a knowledge-intensive economy and labour market. There are, however, some studies from a historical perspective that have looked at the development of the vocational education sector at different times (e.g., Broberg 2014; Olofsson, 2005; Olofsson & Panican, 2019).

The role of vocational education in this regard has been the subject of various European council declarations, such as the Lisbon European council meeting and declaration, the Copenhagen declaration, and the Stockholm European council meeting. The Stockholm meeting, for instance, emphasized the important role of education as an integral part of economic and social policies, and as an instrument for strengthening Europe's competitive power worldwide, to ensure the cohesion of the European societies and the advancement of its citizens. The European Council set the strategic objective for the European competitive in the global economy requires not only state-of-the-art vocational education but also the power to attract skilled migrants. This role and function of vocational education is stressed in the Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen in 2002, and in "Enhanced European Cooperation in Vocational Education and Training", a document from the Lisbon European council in 2000. In addition, in Sweden VET is and has been given an important role to counteract the effect of structural changes and facilitate the transition between education and the labour market for individuals at risk (Lindell & Johansson, 2003; Kuczerai & Jeoni, 2019).

As we noted above, while there is some research about structural changes and its relation to the development of the labour market in Sweden (e.g., Nilsson, 2010; Olofsson & Panican, 2019), there is still a scarcity of research that examines the role played by VET in relation to changes in the labour market and the inclusion of migrants in the work force and society. A

historical analysis of the response of VET to the inclusion of migrants, as well as their experiences at different times, as intended in our study, has not been made before. In this research project we intend to analyze and understand the changes in VET as a response to the challenges which stem(ed) from the different structural changes particularly related to immigration, which Sweden has experienced and is still experiencing (cf. Waara, 2012).

5 Significance and scientific novelty

A study of this kind in Sweden, where models have changed over time, will generate valuable results for both national and international contexts concerning the relationship between structural changes, the provision of VET and its inclusive role. This will be accomplished by revealing how different models have functioned as a response to different challenges in different times. The results of the study will contribute to our knowledge of the importance of the social context for the functioning of VET and its potential as a tool for inclusion, regardless of the governance model. The study is particularly valuable as it will investigate how similar conditions from a governance perspective give different consequences depending on the current social context. Likewise, the study will generate knowledge of the way VET has historically contributed to including immigrants in the labour market and Swedish society, knowledge that will be very valuable when dealing with current challenges. The study is also important for international comparative policy research, which, in relation to VET provisions, rarely has a historical perspective. In general, policy analysis of integration focuses on current policy(ies) and integration measures. However, we believe that in order to understand today's problems and challenges, we need to look at and learn from past developments.

6 Theory

To analyse the data in this study we adopt theoretical approaches that pay attention to context and make sense of immigrants' experiences. Thus, in this study, we will combine curriculum theory, in specific frame factor theory by Dahllöf (1999) and developed by Lundgren (1979) and Goffman's frame theory (1974). Curriculum theory will be used to examine how VET responded to the structural changes in the labour market and immigration.

Goffman's frame theory will be used to examine the experiences of immigrants that work(ed) in the industry in the two qualitative studies. We will focus on how they (the migrants) framed their participation in the car industry in general and in becoming car mechanics. In addition, how they framed the role VET played at different times in the inclusion of migrants in the car industry. According to Goffman (1974) 'frame' is a 'schemata of interpretation' to define situations, experience, meaning and the like. According to Persson (2014) frame refers to: (1) an actor's knowledge and experience, (2) the individual's social interaction, focusing on shared definition of situations and (3) the dynamic which shapes social interaction in a specific context. Hence, frame theory can be used to examine how individuals perceive, communicate and mentally organize their reality and experiences; this can be understood as "underlying structures of belief, perception, and appreciation" (Martin & Schön, 1996, p. 23).

Goffman's frame analysis (1974) will be used to make sense of the experiences of migrants in the car industry in the past and today. In other words, Goffman's theory of frames will be used to examine: (a) the experiences of immigrants who worked in the car industry from the 1960's up to 2020, and (b) immigrants currently working in the industry as car mechanics in this sector. In the interview studies we are interested in their experiences of how structural changes and immigration "impacted" on the inclusion of immigrants in the labour market and Swedish society, and how they experienced working in the industry, particularly how structural and technological changes shaped their experience in the field. In the two qualitative studies we will also focus on the way their prior competence and knowledge was perceived, what challenges they encountered and how they coped with these challenges, and if and how VET

played any role in their inclusion in the labour market, particularly in the car industry (production and service sectors of the industry). Hence, framing Goffman's perspective is about the way individuals define a common situation that they share(d); that is, what it meant to learn, and the experience of working in the car industry at different times. However, even if individuals share a common situation, they can define this differently. This analytical focus is in line with our interest to delineate and understand the experience of immigrants who worked in the car industry from the 1950s up to 2020.

Curriculum theory will be used in the historical study of how structural changes and immigration shaped the way in which VET responded not only to immigration at different times but also to the needs of the labour market as consequence of the various structural changes. To capture the changing structural condition(s) structural, immigration, and VET's response in the historical study, we will examine documents produced at different levels. These levels are the formulation, transformation and realization arena; frame factors are produced at the formulation level. These are political formulations that "affect" the everyday operation of VET schools, but which teachers and head teachers have no control over, for instance the allocation of resources or the financing of the system, curriculum, directives, targeted measures for different types of VET, and related activities and VET political goals at the national and local levels (Lindensjö & Lundgren, 2014; Persson, 2015). It is at the macro/national level that ideas, arguments for change are formulated (the formulation arena). Arguments are often presented in documents such as white papers and evaluations of the status of the system. This includes a formulation of what needs to be changed in order to meet the past and present needs of the labour market, and how VET can be organized to facilitate the inclusion of immigrants. On the second level (the arena of transformation) the investigations, governing bills and parliamentary decisions are medially interpreted and transformed into solutions to be implemented as organization and practice at the micro level. Then and content. The relationship between macro and micro is mediated through the transformation arena (Lundgren, 1989). The realization arena is where the changes formulated in the formulation and transformation arenas are put into operation. It is the 'free space' (Berg, 1995) that the school staff have for making their own decisions. Some researchers argue that the coupling between the arena for formulation and the arena for realization is a loose one (Weick, 1976; Ball, 1994; Tyson, 2017).

Curriculum theory, as noted above, is used to examine factors that are determined outside the school as a system but which shape the everyday running of VET as an institution, for instance teacher competence, space, organization, rules, curricula, and various steering documents (Persson, 2014).

7 Method

The aim of this research project is to examine how VET for the car industry responded to the structural changes/challenges and the role it played and is playing in the inclusion of immigrants in the sector from the 1950s up to today. The project consists of three interrelated studies: a historical study of VET and the changes in the VET system from the 1960s up to today and two qualitative case studies. The historical study will examine how the delivery and provision of VET has changed over time due to structural changes and immigration, and the role VET has played in the inclusion of immigrants in the labour market from the 1960s up to today. In this study we will also look at changes in the organization and curriculum of the vocational training for car mechanics from the 1950s to 2020. The historical study will not only shed light on how VET responded to structural changes and inclusion of immigrants in the Swedish work life from the 1950s to today; it will also help to contextualize the study.

The study consists of three interrelated empirical studies: the first is a historical study, examining how the structural changes affected the organization, the contents of VET and how VET has played and is playing a role in the inclusion of immigrants in general and in particular

in the car industry from the 1950s up to today. This historical study will examine how structural changes and immigration affected the VET system at macro, meso and micro levels. Furthermore, how the inclusion of immigrants was conceptualized during the various structural changes in the Swedish labour market from 1950 up to 2020. This study will not only form the backdrop of the qualitative studies; it will also contribute to a more nuanced analysis of the interview studies to make sense of the experiences of immigrants who work and worked in the industry during the different structural changes identified earlier. In other words, how the structural changes and migration created new conditions in the labour market, which in turn called for a change in VET.

The qualitative study consists of two studies. The first will examine the experiences of migrants in the car industry (the production side) from the 50s up to today (the golden years of the Swedish model). The second qualitative study will examine immigrants who work as mechanics in the industry today. There are a number of studies that have examined the production side of the industry. However, few studies have examined the experience of immigrants from the 50s up to today in the car Industry. How the structural changes affected VET in relation to the industry, the role VET played in the inclusion of immigrant in the industry, and the role the industry played in the integration of immigrants into the labour market. Moreover, there are no studies that have examined the service dimension of the industry. The combinations of these studies will allow us delineate the relation between migration and VET on both a structural and an individual level across the period in order to understand the role the industry and VET played in the inclusion of migrants. In addition, we will examine the role the car industry played and plays in the integration of immigrants in the labour market. A core interest is to identify if and what we can learn from the past to manage the challenges we currently face in the inclusion of immigrants.

8 Data collection strategy

Data collection in this study will be conducted in three stages. The first stage is the collection of data for the historical study aimed to identify and collect relevant documents. Primarily we will study, at the macro level (formulation arena), the documents which formed the basis of the reforms of VET from the 1950s to 2020, such as SOU, propositions, governmental reports and a sample of comments (remiss) from critical actors such as political organizations, trade unions, the employers' unions, the trade organization and universities. This will be followed by collecting steering documents at the transformation level, such as directives, curricula, courses and the like.

Our objective is to identify how the proposed changes are framed and legitimized and to identify the set of arguments that are used to frame the purposes of VET at different times. The analysis of the system is expected to meet the changing conditions in the labour market. To complement the data collected at the two levels described above, we will collect a sample of work descriptions and

qualification requirements, job announcements and advertisements in the vocations for the 30 years, 1960- 1990 and 1990-2020, representing Fordian and post-Fordian periods. In this context, it is important to point out that the 1960-1970 is a transition period from an old VET system to reformed VET, which was a profound reorganization of the VET system in Sweden.

The first step of the process data collection for the qualitative studies is to identify the informants. To identify the informants we have contacted Scania/ Volvo in Södertälje and Torslanda Motorbranschens riksförbund (MRF) (a trade organization with 1500 members in various areas of the car industry, including authorized car workshops). To complement the list of workshops that we have got from MRF, we will identify through Eniro car workshops in the Stockholm area that are not members of MRF. We will create a complete list of car workshops in the Stockholm region. We will then contact these workshops and present the study to a

minimum of 24 companies: 6 brand- owned workshops, 6 workshops owned by first generation immigrants, 6 car workshops owned by second generation immigrants and 6 car inspection companies, and ask them to participate in the study.

We have already established contact with Scania/Volvo and associations of national groups like Finns, Yugoslavians, Turks, and Greeks to help us identify potential informants. These national groups were the major labour force migrants in Sweden from the 1950s to the 1970s in the Swedish car industry. It will be difficult to get informants that were employed in the car industry in 50 and early 60s. Some have moved back to their country of origin, many be in their late 90s, and have died etc. To make sense of the experience this group we rely on different types of empirical materials such as: archives materials on car industry and migration, film and TV documentaries, different types of literature such as: official reports, and news articles etc. We will complete the data with interview migrant who are in the late early 70s and early 80s that have worked in the industry of what it meant to work in the car industry (production side).

Once we have identified potential informants, we will send a short questionnaire to 150 individuals.

This questionnaire will focus on the following data: age when they came to Sweden, educational background prior to coming to Sweden, vocational training in their country of origin, vocational training or education acquired in Sweden and Swedish language education. For the interview 30 will be selected to be interviewed in qualitative study 1. In qualitative study 2 we will send out a relatively similar questionnaire. The interview selection will be based on a number of criteria:

- Age of arrival, young adult (18-25), adults 26 upwards, gender. The latter group/category depends on how many are still alive, and if they are still living in Sweden.
- Vocational background - those who trained in their vocation in Sweden, those who worked in Volvo/Scania, and those who started their own car workshop after working in Volvo/Scania or in some other vocation.
- Those who worked in workshops for different makes of car, such as Toyota, Volvo and Mercedes.

For both the first and the second qualitative study we will strive to identify a wide variety of individuals who worked for different makes of cars. We will look for a pool of informants that have different backgrounds in terms of nationality, vocational training in and outside Sweden, gender (although men dominate in the car industry, particularly in the workshops).

9 Concluding remarks

We intend to present in the context of the paper the framework and some of the preliminary outcomes of the project. Much research is work is still to be done in the frame of this project, we hope that this first presentation will first stimulate appreciated feedback from the academic community in the field. Secondly, an equally relevant, the authors would like to stimulate debate about the convenience of similar studies in national VET contexts others that the Swedish

As indicated in the state of the art, there are no preliminary or previous results directly linked to the aim and research questions in focus in this study. Earlier studies, as highlighted in the introduction, provide knowledge of context-related aspects that is relevant to the implementation of this study. Furthermore, it is worth noting that findings from earlier research argue that Sweden, contrary to many other countries, shows less path-dependency through time and has implemented different models of VET during the 20 st and 21 centuries (Nilsson, 2010). In addition, Sweden, like many advanced economies, has experienced the challenges of structural changes in the past but is also in the midst of a post-Fordian economy that is creating challenges for the Swedish/Nordic model. To address the challenges of structural changes and

immigration, Sweden is also notable for its “flexible” approach to structural reforms of its VET organisation. In short, Sweden has transformed its VET from a non-integrated, semi-dual model to a largely school-based system. This change is of particular interest for this project specifically because of initiatives and responsibilities concerning VET for marginal groups. In the early 20 century industrial companies had the means (juridical, financial and ideological) to create their own VETs. From 1970 to the early 1990s these possibilities were taken away in the reform that integrated VET into a centralized, state- controlled upper secondary education. In the decentralization and marketization of the early 1990s the opportunity returned and industries like Volvo and Scania are again organizing VET, sometimes in cooperation with municipalities but with the financial and juridical support of the government (Rojas, 1991).

References

- Bacchi, C. L. (2009). *Analysing policy: what's the problem represented to be?* Frenchs Forest, N.S.W.: Pearson.
- Ball, S. J. (1994). *Education reform –a critical and post-structural approach*. Buckingham: Open University Press.
- Broberg, Å. (2014). *Utbildning på gränsen mellan skola och arbete. Pedagogisk förändring i svensk yrkesutbildning 1918-1971*. Doktorsavhandlingar från Institutionen för pedagogik och didaktik 31.
- Broberg, Å. (2016a). Negotiating the value of school and work – a historical perspective on pedagogical development in VET. In Gonon, P. & Berner E. (red.) *History of VET: Concepts, Cases, Challenges*. (pp. 165-184). Bern: Peter Lang
- Broberg, Å. (2016b). Verkstaden som skola eller skolan som verkstad: Om produktion som pedagogisk praktik i svensk yrkesutbildning. *Nordic Journal of Vocational Education and Training* 6(2), 46-65.
- Björklund, A. (1999), Utbildningspolitik och utbildningens lönsamhet. I Calmfors, L. & Persson, M. (red.), *Tillväxt och ekonomisk politik*. Studentlitteratur, Lund.
- Dahllöf, U. (1999). Det tidiga ramfaktorteoretiska tänkandet [Early thinking inside frame factor theory]. *Pedagogisk forskning i Sverige*, 4(1), 5–29.
- Friedman, G. (2014). Workers without employers: shadow corporations and the rise of the gig economy. *Review of Keynesian Economics*, Vol. 2 No. 2, Summer 2014, (pp. 171–188). Good research practice (2017). Stockholm: Swedish Research Council.
- Goffman, E. (1974). *Frame analysis: an essay on the organization of experience*. Cambridge, MA: Harvard.
- Helms Jörgense, C., Olsen, O.J & Persson Thunqvist, D. (2020). *Vocational Education in the Nordic Countries - Learning from diversity*. London: Routledge.
- ILO (2020). *The future of work in the automotive industry: The need to invest in people's capabilities and decent and sustainable work*, Issues paper for the Technical Meeting on the Future of Work in the Automotive Industry (Geneva, 15–19 February 2021), International Labour Office, Sectoral Policies Department, Geneva.
- Krauss, E.S. (2005). Research Paradigms and Meaning Making: A Primer. *The Qualitative Report*, 10(4), 758-770.
- Kuczera, M. & Jeoni, S. (2019). *Vocational Education and Training in Sweden*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://doi.org/10.1787/g2g9fac5-en>.
- Lindensjö, B. & Lundgren, U.P. (2014). *Utbildningsreformer och politisk styrning*. Stockholm: Liber.

- Lindell, M. & Johansson, J. (2003). Meeting the Demand? Students within Swedish Advanced Vocational Education Entering the Labour Market: Reflections from an Ongoing Research Project. *European Educational Research Journal*, 2(1), 107-125.
- Lundgren, U.P. (1972). *Frame Factors and the Teaching Process. A contribution to curriculum theory and theory on teaching*. Stockholm: Almqvist & Wiksell.
- Lundgren, U.P. (1989). *Att organisera omvärlden. En introduktion till läroplansteori*. Stockholm: Liber förlag.
- Magnusson, L. (1999). *Den tredje industriella revolutionen – och den svenska arbetsmarknaden*. Stockholm: Norstedts.
- Moreno Herrera, L. (2000). *Worldwide Sloyd. Curriculum Development in Sloyd and Technology Education as an Expression of Social Demands. A Comparative Study. Report I. Publications from the Faculty of Education, No. 5/2000*. Vasa: Åbo Akademi University, Department of Teacher Education.
- Moreno Herrera, L. (2015). Vocational education and training in Sweden: from work-based-learning to school-based-learning – and back again? *Paideia* N° 57 julio-diciembre, 119-137.
- Moreno Herrera, L. (2017) Yrkesutbildningsutmaningar i nya tider – vilken väg ska vi ta? *Nordic Journal of Vocational Education and Training*, 6(2), 66-83.
- Nilsson, A. (2010). Vocational education and training – an engine for economic growth and a vehicle for social inclusion? *International Journal of Training and Development*, 14(4), 251-272.
- Olofsson, J. (Ed.) (2005). *Den tredje arbetslinjen*. Lund: Agora.
- Olofsson, J. and Panican, A. (2019). Labour market regulations, changes in working life and the importance of apprenticeship training: A long-term and comparative view on youth transition from school to work. *Policy Futures in Education* 17(8), 945-965.
- Osman, A. (2013a). Popular education in the service of “integration”: empowerment or internalization of dominant cultural ethos. In Laginder, Nordvall, & Crowther (Ed.), *Popular education, power and democracy* (pp. 263-268). Leicester, UK: NIACE Renaissance House.
- Osman, A. (2013b). Popular education in the service of “integration”: empowerment or internalization of dominant cultural ethos. In Laginder, Nordvall, & Crowther (Eds.), *Popular education, power and democracy* (pp. 263-268). Leicester, UK: NIACE Renaissance House.
- Persson, (2015). Framed School – Frame Factors, Frames and the Dynamics of Social Interaction in School. *Scandinavian Journal of Educational Research*, 59(5), 499–514, <http://dx.doi.org/10.1080/00313831.2014.932305>
- Rauner, F. and Maclean, R. (2008). *Handbook of Technical and Vocational Education and Training Research*. London: Springer.
- Rein, M. and Schon, D. T. (1996). Frame-critical policy analysis and frame-reflective policy practice. *Knowledge and Policy*, 9, 85–104.
- Richardson, K. & Van den Berg, G. (2002). The effect of vocational employment training on the individual transition rate from unemployment to work, No 2002:8, *Working Paper Series*, IFAU Institute for Evaluation of Labour Market and Education Policy, https://EconPapers.repec.org/RePEc:hhs:ifauwp:2002_00.
- Rojas, M. (1991). The Swedish model” in historical perspective. *Scandinavian Economic History Review*, 39(2), 64-74, DOI: 10.1080/03585522.1991.10408217
- Rosvall, P-Å, Ledman, K., Nylund, M. & Rönnlund, M. (2018) Construction of ethnicity, immigration and associated concepts in Swedish vocational education and training, *Journal of Education and Work*, 31(7-8), 645-659,

- Silver, H. (1994). *Social exclusion and social solidarity: Three paradigms. International Labour Review*, 133(5-6), 531-578.
- Tyson, R. (2017). *The Rough Ground: Narrative explorations of vocational Bildung and wisdom in practice*. Stockholm: Stockholm University Press.
- Waara, J. (2012). *Svenska Arbetsgivareföreningen och arbetskraftsinvandringen 1945-1972*. Akademisk avhandling. Gothenburg studies in economic history 7.
- Weick, K. E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21, 1-19.

Biographical notes

Dr **Lázaro Moreno Herrera** is a professor in education sciences and the scientific leader of the research group Vocational Education & Training (VETYL) at the Department of Education, Stockholm University, Sweden. His research interests focus on various dimensions of VET notably policy issues, didactics and comparative international aspects. He has done significant research on technology education in the compulsory schools.

Dr **Åsa Broberg** is an Associate Professor in education with a focus on educational history and has a background as a historian and a teacher. She received her PhD in 2014 on her thesis *Education on the border between school and work: Educational change in Swedish vocational education 1918–1971*. Research interests revolve around the challenges of vocational training.

Dr **Ali Osman** is an Associated Professor at the Department of Education, Stockholm University, Sweden. His research interests are migration recognition of prior learning and labour market issues transition from education to working life.