

Model of Attractiveness for Vocational Education in Global Context

Lena Siikaniemi, PhD (Educ.)
Lahti Region Educational Consortium
Lahti, Finland
lenna.siikaniemi@phkk.fi

Abstract: This paper focuses on the current problem that VET does not attract enough students. The research question is: What model would represent the relationship between and inter-play of the elements and factors of attractiveness in ways that might help to find ways to improve the attractiveness to students in global context? The theoretical framework for the research consists of three focal theories of career choice and development that place an emphasis on both individual and contextual factors and influences. These theories are the Systems Theory of Career Development by Patton and McMahon (1999), the Social Cognitive Career Theory by Lent, Brown and Hackett (1994) and Krumboltz's Social Learning Theory of Career Development (1979). Globalization perspectives in education and global changes are studied among others from Istance and Packalen (2005), Short and Kim (1999), Sjøgaard (2000) and Baldwin (2006). Internationalization perspectives are studied among others from Knight (1996; 1999a; 1999b). The researcher defines attractiveness of vocational upper secondary education and training, as well as the elements and stakeholders of attractiveness in global context. The explanatory factors are the detractors from and contributors to attractiveness. The research strategy is a constructive case study (Lukka 2000) and it uses multiple triangulation, in which both qualitative and quantitative research methodology is used. The structure of the model in terms of observation levels, elements and detracting and contributing factors provides a construct for further scientific research. Stakeholders can use the model for decision making and also as a framework for mutual development work.

Introduction

The purpose of this paper is to describe the construction of the model of attractiveness for VET in global context. This paper reports the results of two distinct but associated studies (Siikaniemi 2005; 2007). The integrated research question from these studies is: What model would represent the relationship between and inter-play of the elements and factors of attractiveness in ways that might help to find ways to improve the attractiveness to students in global context?

The phenomenon of attractiveness of vocational education - or rather the lack of attractiveness - has been an important development focus in VET during the last decade. However, the concept of attractiveness of VET has not been defined earlier. The dissension over the concept has obviously led to misspent development resources and activities. The concept of attractiveness was defined in the first study as follows: *the attractiveness of education and career is the inter-play of contributors to and detractors from the individual career choice and development process, which guide the individual towards satisfaction with educational and career pathways* (Siikaniemi 2005, 176).

Globalization processes have powerful economic, political, cultural and social impacts. Educational impacts have often left of from the debate and research. However, vocational education and training has a critical role in contributing towards harmony between individual, local, national and global objectives. Globalization effects depend also on local and regional decisions. This viewpoint is rarely underlined in the discussions and research on internationalization and globalization of education. Shifting the emphasis of the discussions to the local and regional perspectives would bring the phenomenon closer to our everyday work. (Siikaniemi 2007, 5.)

To answer the question “What model would represent the relationship between and inter-play of the elements and factors of attractiveness in global context”, the researcher begun to investigate the local, regional and national context in Finland and based to this study she constructed the first model for attractiveness with context levels, stakeholders, elements and influencing factors. The extended model of attractiveness (Siikaniemi 2007, 64) is the fundamental model complemented with global level. The both studies are constructive case studies, the methodology is discussed in detail later in this paper.

Research context, context levels and stakeholders

The research context is the global context for young Finnish students applying to and studying in vocational education and training. The regional context is the Lahti Region in Southern Finland.

The immediate focus of the first study (Siikaniemi 2005) was on local and regional stakeholders which affect the attractiveness of VET. Members of stakeholder groups may be from the private or the public sector, including, for example, educational institutions and companies as well as students and their social networks. The national stakeholders are the National Board of Education, the Ministry of Education, the Ministry of Labour, and the national associations of employer and employee organizations. The model of attractiveness in global context (Siikaniemi 2007, 64) is the fundamental model complemented with global level or megalevel stakeholders, elements and factors. The definition ‘megalevel’ is adapted from Näsi (2002, 31), who has included an additional level to his study of the business world: ‘megalevel’ refers to globalization as a context level.

Table 1. describes the key stakeholder categories in the field of educational attractiveness for the model of attractiveness in global context. The table is based on the first study (Siikaniemi 2005, 28) and adapted from Kotler and associates (1999, 67) and is complemented with European stakeholders and global stakeholders.

The central European stakeholders on megalevel are Commission of the European Communities, European education providers, networks of education providers on European level, European labour market, multinational companies and media. The central global stakeholders are global education providers, networks of education providers on global level (e.g. Association of International Education Administrators), global labour market, multinational companies and media. The national stakeholders and factors on microlevel, institutional level and macrolevel are discussed in detail in the prior research (Siikaniemi 2005, 136-141). European and global stakeholders affect the development of the global and European labour markets and education markets.

Figure 1. describes the context levels as observation levels in the model of attractiveness. Each context level contains elements of attractiveness. The elements are the general categories which contain specific factors that contribute to or detract from the attractiveness of the machinery and metal technology field. In the center there is the individual and his or her interests, which cause him or her to persevere in acting and career decision making. Thus, also in the global context, the young student will still remain the primary stakeholder.

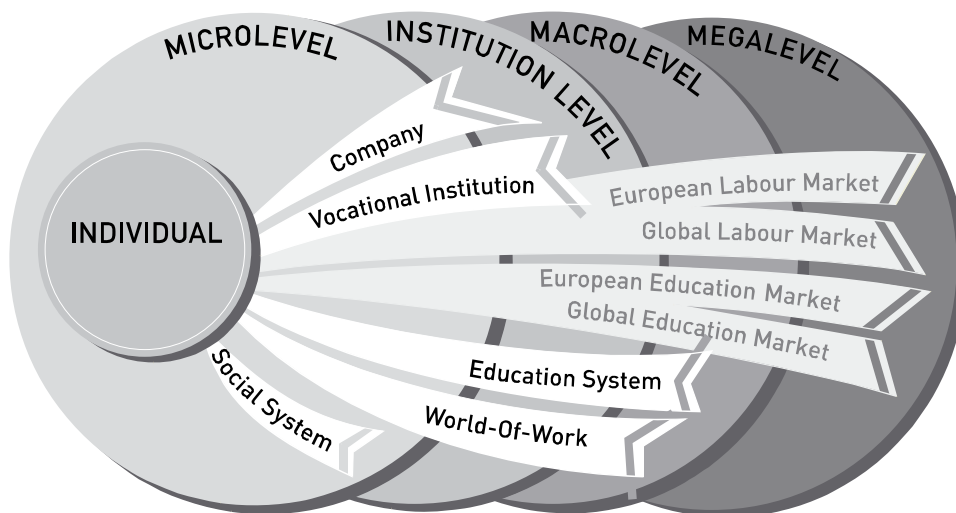


Figure 1. Context levels (Siikaniemi 2006,7)

Table 1. *Key Stakeholders in the Field of Educational Attractiveness (Siikaniemi 2007, 60, adapted from Siikaniemi 2005, 28)*

<i>Stakeholder group</i>	<i>Stakeholder</i>
Local stakeholders	<ul style="list-style-type: none"> ▪ Lahti Region Educational Consortium ▪ Salpaus Further Education (vocational institutes) ▪ Comprehensive schools ▪ General upper secondary schools ▪ Companies ▪ Media (newspapers, radio, TV, Internet) ▪ Students ▪ Families ▪ Peers
Regional stakeholders	<ul style="list-style-type: none"> ▪ Lahti Region Educational Consortium ▪ Salpaus Further Education ▪ Finnish Metalworkers' Union ▪ Technology Industries of Finland ▪ Lahti Chamber of Commerce ▪ Lahti Region Business Center Ltd. ▪ Confederation of Finnish Industry and Employers ▪ Media (newspapers, radio, TV, Internet)
National stakeholders	<ul style="list-style-type: none"> ▪ National Board of Education ▪ Ministry of Education ▪ Ministry of Labour ▪ Ministry of Finance ▪ Finnish Metalworkers' Union ▪ Technology Industries of Finland ▪ Confederation of Finnish Industry and Employers ▪ Media (newspapers, radio, TV, Internet)
European stakeholders	<ul style="list-style-type: none"> ▪ Commission of the European Communities ▪ European Centre for the Development of Vocational Training (Cedefop) ▪ Centre for International Mobility (CIMO) ▪ European Education Providers ▪ Networks of Education Providers on European Level ▪ European Labour Market ▪ Multinational Companies in Europe ▪ Media (newspapers, radio, TV, Internet)
Global stakeholders	<ul style="list-style-type: none"> ▪ United Nations Educational, Scientific and Cultural Organization (UNESCO) ▪ International Labour Organization (ILO) ▪ Organization for Economic Cooperation and Development (OECD) ▪ Global Education Providers ▪ Networks of Education Providers on Global Level ▪ Multinational Global Companies ▪ Media (newspapers, radio, TV, Internet)

Theoretical framework for attractiveness – career choice and development theories

The theoretical framework in the model of attractiveness is based on career choice and development, in which the context levels of attractiveness (megalevel, macrolevel, institutional level and microlevel) operate as observation levels. The theoretical framework for the first study consists of three focal theories of career choice and development that place an emphasis on both individual and contextual factors and influences. These theories are the Systems Theory of Career Development by Patton and McMahon (1999), the Social Cognitive Career Theory by Lent, Brown and Hackett (1994) and Krumboltz’s Social Learning Theory of Career Development (1979). Globalization and internationalization perspectives in education and global changes in the second study are examined among others from Istance and Packalen (2005), Short and Kim (1999), Sjøgaard (2000) and Baldwin (2006). Internationalization perspectives are examined among others from Knight (1996; 1999a; 1999b).

Figure 2. shows the interrelationship of the three extensive theories of career choice and development that are used in the research. Systems Theory relates individual level and context level factors and presents essential content influences and stakeholders of each level. Social Cognitive Career Theory emphasizes person, contextual and experiential factors that affect career interests and career choices. The Social Learning Theory of Career Development defines the process and factors affecting occupational selection.

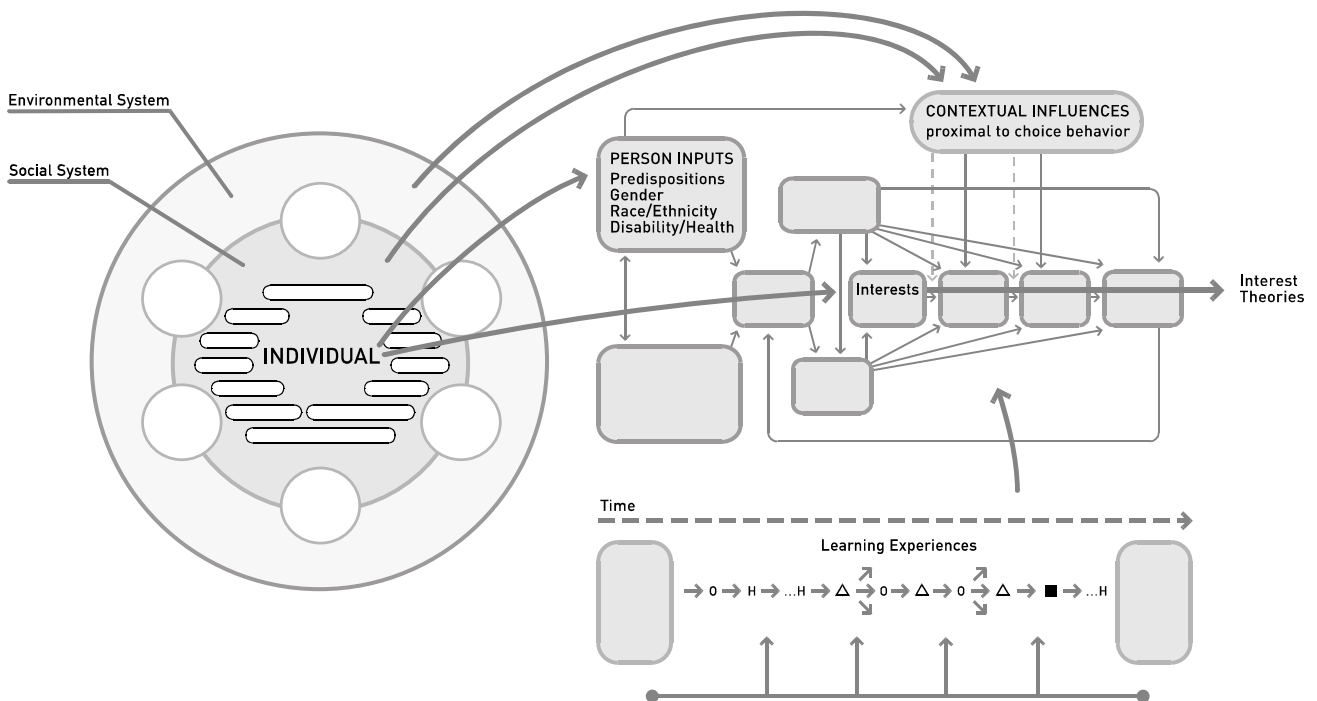


Figure 2. Interrelationships of the Three Career Choice and Development Theories (Siikaniemi 2005, 51)

Research objectives and methodology

The main research questions of the first study (Siikaniemi 2005) was: What model would represent the relationship between and inter-play of these elements and factors in ways that might help to find ways to improve the attractiveness to students in the Lahti Region of vocational upper secondary education and training in machinery and metal technology?

The latter research (Siikaniemi 2007) arose from the first research. The research aimed to create new knowledge concerning the attractiveness of vocational upper secondary education and training in global context. The main objective of the present research was to extend the model of attractiveness of vocational education and training (Siikaniemi 2005, 175) with global level (megalevel) stakeholders, elements and factors.

The research strategy in both studies was constructive case study. Figure 3. describes the key elements of constructive research as conducted by Lukka and Tuomela (1998). The researcher has employed the figure with core features of constructive research, which are presented and stressed in later literature on constructive research by Lukka (2000).

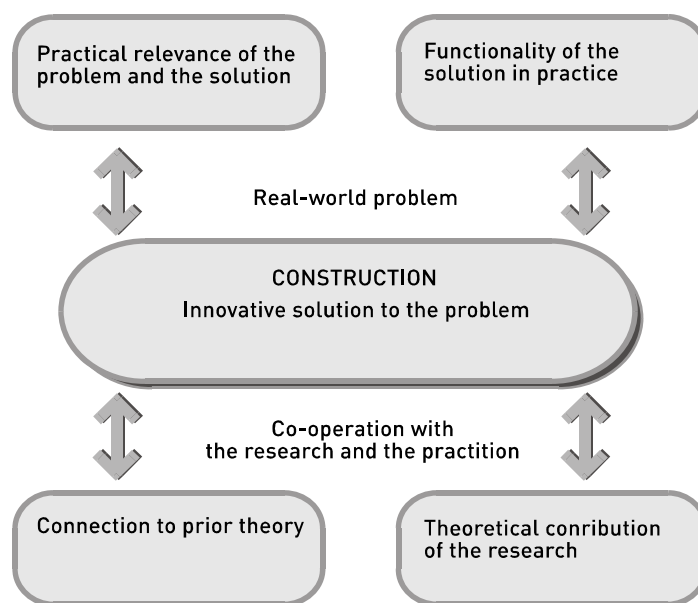


Figure 3. Key Elements of Constructive Research (Siikaniemi 2005, 103, adapted from Lukka & Tuomela 1998, 25)

Constructive case study is a relevant research methodology also in educational research, although its main application has been in business economics. According to Lukka (2000) the core features of the constructive approach are that it:

- focuses on real-world problems felt necessary to be solved in practice,
- produces an innovative construction to solve the initial managerial problem,
- includes an attempt to implement the developed construction and thereby test its practical applicability,

- implies a very close involvement and cooperation between the researcher and practitioners in a team-like manner, in which experiential learning is expected to take places,
- is explicitly linked to prior theoretical knowledge, and
- pays particular attention to reflecting the empirical results back to theory; the nature of the theoretical linkage varies, and—due to the partly heuristic nature of the constructive research process—cannot be predicted beforehand. (Lukka 2000, 114)

The researcher used multiple triangulation, and both qualitative and quantitative research methodology were used. The research data were collected from various local stakeholder groups in general schools, vocational institutions and companies. The empirical data were gathered in two studies, in 2003 (Siikaniemi 2005) and 2006 (Siikaniemi 2007). The qualitative data were derived from short essays of students in vocational institutions (n=80, 2003) and focused interviews with students, career counselors, teachers, head masters, educational managers and representatives from the industry (n=13, 2003). The questionnaires were completed by students in vocational institutions, comprehensive schools and general upper secondary schools (n=640, 2003) and by questionnaires to students in vocational institutions (n=129, 2006).

The main product of the research - the model for attractiveness

The main product is the model for attractiveness of VET, which is a prominent model for explaining and understanding the multidimensional VET in the global context (Figure 4.). The model is composed of three sequential phases in the attraction process, four observation levels, elements and factors of attractiveness and of three functional pathways.

The three phases in the process are: educational and career choice, education and training, and transition from school to occupation. Each phase includes four observation levels: microlevel, institutional level, macrolevel and megalevel. The elements of attractiveness in the extended model are Individual, Social System, Comprehensive School, Vocational Institution, Company, National Education System and the National World-of-Work, European and Global Education Markets as well as European and Global Labour Markets. Elements are general categories that contain ‘factors’ which contribute to or detract from the overall attractiveness of an educational field and career. The three pathways in the model are: satisfaction with education and career, development path from workplace to educational institution and the interaction path between these settings.

The model shows how the elements and factors on the megalevel influence the individual student. However, these effects are influenced by the elements and factors on lower level. Thus the argumentation by Grant and Short (2002, 8) that place is central to many of the circuits through which globalization is constituted, is apparent also in this model. The view of globalization as the movement of information, people, commodities (services and products) and capital over various borders is evident in the model (Harisalo & Miettinen 2000, 33; Knight 1999b, 12; Short & Kim 1999, 4). One of the primary borders is the national borders, but also borders of regions and institutions influence the education and career development of young students. The viewpoint of the above mentioned researchers that globalization is a movement that is kept in motion by national and local choices can also be explained by explaining the interaction of the different processes, elements and context levels inside the model. (Siikaniemi 2007, 83.)

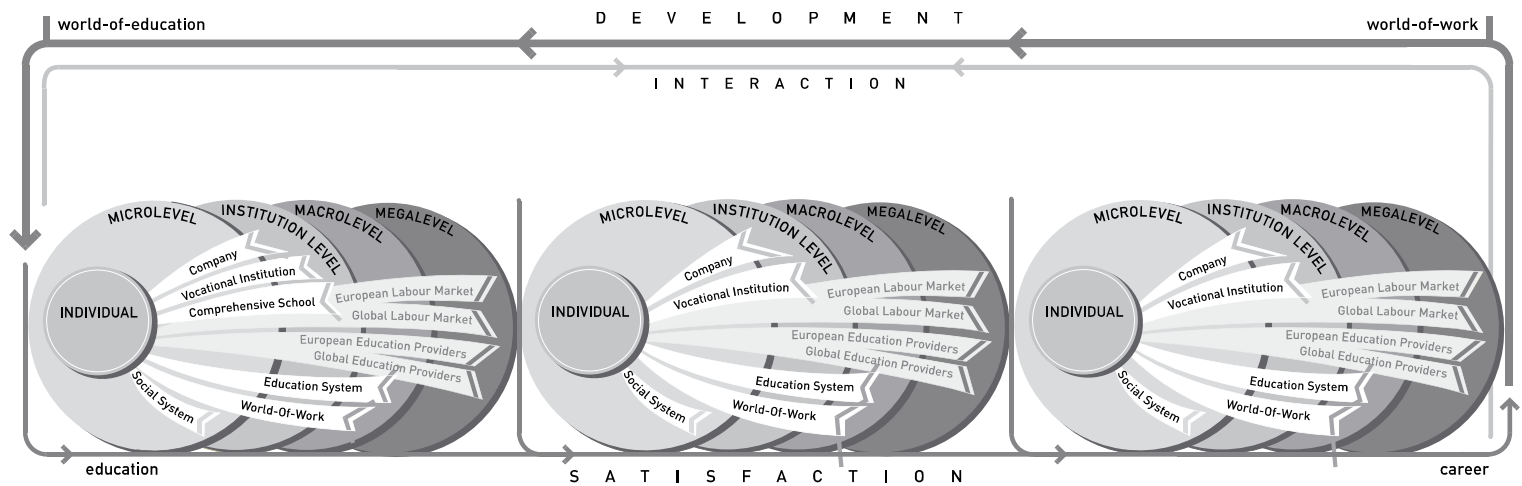


Figure 4. *Extended Model for Attractiveness of Education and Career (Siikaniemi 2007, 64)*

Conclusions

The world-of-work, occupations, the world-of-education and theories of career development are all undergoing related changes along with globalization. The model proposed on the basis of this research brings new knowledge to the integration and convergence of theory within this dynamic context.

The results of the second study show that educational institutions have not yet succeeded in including internationalization into their curricula as a penetrating and participatory theme. Students realize the importance of good language skills and the familiarity with foreign cultures, although their awareness of intercultural competencies is relatively limited. The distinguished professional competencies are not discussed and understood as a focal competence area of international qualifications. Work is considered to be the primary context of opportunities and threats of globalization. One of the positive results was that neither special fear of globalization (globafobia) as the source of bad nor special love of globalization (globafilia) as the source of wealth and welfare was found. (Siikaniemi 2007, 5.)

The model for attractiveness originates from a real life problem that VET does not attract young students. The structure of the model in terms of observation levels, elements and detracting and contributing factors provides a construct for further scientific research. Stakeholders can use the model for decision making and also as a framework for mutual development work.

References

- Baldwin, R. 2006. Globalisation: the great unbundling(s). Helsinki: Valtioneuvoston kanslia. Available at: <http://www.vnk.fi/>. Printed in 24.9.2006.
- Grant, R. & Short, J., R. 2002. (Eds.) Globalization and the Margins. New York: Palgrave Macmillan.
- Harisalo, R. & Miettinen, E. 2000. Globalisaatio – avoin vai suljettu maailma. Helsinki: Art House.
- Istance, D. & Packalen, P. 2005. Futures thinking in OECD/CERI – University Futures and Schooling for Tomorrow. Tulevaisuusluotain seminaari 16.9.2005. Helsinki: Elinkeinoelämän keskusliitto.
- Knight, J. 1996. Selected Bibliography on Internationalization of Higher Education. Available at: <http://www.ryerson.ca/iag/referenc/reports.html>. Printed in 11.12.2005.
- Knight, J. 1999a. Issues and Trends in Internationalization: A Comparative Perspective. In S., L. Bond & J-P., Lemasson (Eds.). A New World of Knowledge. Canadian Universities and Globalization. Canada: International Development Research Centre (IDRC). Available at: <http://www.idrc.ca/en/>. Printed in 17.7.2006.
- Knight, J. 1999b. Internationalisation of Higher Education. In Quality and Internationalisation in Higher Education. Paris: OECD-Publications.
- Kotler, P, Asplund, C., Rein, I. & Haider, D. 1999. Marketing Places Europe. How to attract investments, industries, residents and visitors to cities, communities, regions and nations in Europe. Harlow: Pearson Education Limited.
- Krumboltz, J.D. 1979. A Social Learning Theory of Career Decision Making. In A. M. Mitchell, G. B. Jones & J. D. Krumboltz. Eds. Social Learning and Career Decision Making. Cranston: The Carroll Press, 19-49.
- Lent, R.W., Brown, S.D. & Hackett, G. 1994. Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice and Performance. Journal of Vocational Behaviour, 45, 79-122.
- Lukka, K. 2000. The Key Issues of Applying the Constructive Approach to Field Research. In T. Reponen. Ed. Management Expertise for the New Millenium. In Commemoration of the 50th Anniversary of the Turku School of Economics and Business Administration. Publications of the Turku School of Economics and Business Administration, A-1:2000, 113-128.
- Lukka, K. & Tuomela, T-S. 1998. Testattuja ratkaisuja liikkeenjohdollisiin ongelmiin: konstrukttiivinen tutkimusote, Yritystalous, No.4, 1998, 23-29.
- Näsi, J. 2002. Arvot ja strategia. Inhimillinen tekijä strategia-areenalle. In P. Juuti. Ed. Ethosta etsimässä. Puheenvuoroja johtamisen ja yrittämisen etiikasta. Jyväskylä: PS-kustannus, 28-37.
- Patton, W. & McMahon, M. 1999. Career Development and Systems Theory. A New Relationship. Pacific Grove: Brooks/Cole Publishing Company.
- Short, J. R. & Kim, Y-H. 1999. Globalization & the City. New Jersey: Prentice Hall.
- Siikaniemi, L. 2005. Magnetic Metal - Toward a Model for Satisfaction of Education and Career in Vocational Upper Secondary Education and Training of Machinery and Metal Technology in the Lahti Region. Doctoral Dissertation. Tampere: Tampereen yliopisto. Available at: <http://acta.uta.fi/pdf/951-44-6298-X.pdf>.
- Siikaniemi, L. 2006. Ammatillinen koulutus kohtaa globalisaation haasteet. Ammattikasvatuksen aikakausikirja 4/2006. Helsinki: Okka-säätiö. 6-15.
- Siikaniemi, L. 2007. Vocational Education Meets Globalization. Lahti: Lahti University of Applied Sciences.
- Søgaard, J. 2000. Internalisation - what are the possibilities? In J. Søgaard & N. Wollschläger. (Eds.) Internationalising vocational education and training in Europe. Prelude to an overdue debate. Thessaloniki: CEDEFOP – European Centre for the Development of Vocational Training . 28-42.