

British Journal of Education, Society & Behavioural Science 4(5): 562-572, 2014



SCIENCEDOMAIN international

www.sciencedomain.org

Challenges and Strengths of Early Childhood Education in Sparsely Populated Small Provinces the Case of Lapland, Finland

Satu Uusiautti^{1*}, Iiris Happo² and Kaarina Määttä³

¹University of Lapland, Rovaniemi, Finland. ²Oulu University of Applied Sciences, Oulu, Finland. ³University of Lapland, Rovaniemi, Finland.

Authors' contributions

This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.

Review Article

Received 8th November 2013 Accepted 7th January 2014 Published 15th January 2014

ABSTRACT

Background: Every under-school-age child in Finland is justified to receive day care and early childhood education according to law regardless of the child's place of residence. The nation wants to invest in quality early childhood education because both parents of the vast majority of families with children under school age are in full-time employment. How is this arranged in sparsely populated, remote provinces and municipalities?

Purpose: Due to remote location and long distances between families, the solutions of guaranteeing quality day care services for all children is challenging. In this review paper, the practical realization of early childhood education in the province of Lapland with 6,000 children under school age is discussed.

Conclusion: Suggestions for the future are presented, especially the possibilities of distance education and online peer support for early childhood educators.

Keywords: Early childhood education; lapland; finland; remote areas.

1. INTRODUCTION

The quality of early childhood education can be analyzed different ways when outlining the foundations of good early childhood education [1,2,3]. For example, it is possible to discuss administrative auspices (education, health, social welfare); the age of children served (under 3s, 3- to 6-year-olds, all under compulsory school age); and locus of service delivery (centre or group facility, family day care home, child's own home) and the goal (education, care, socialization and development; or a combination of these) [4]. In addition, Gormley Jr. [5] explains that early childhood education and care regulation can be seen as either provider-focused, child-focused, or facility-focused and that the various foci have a principal difference between the unitary and federal systems. The former is one in which the national government governs sub-national systems, while in the latter, the state or provincial governments have a substantial degree of autonomy. Because of the difference in the fundamental purposes of early childhood services, the workforce in the sector also differs by country [6].

Basically, quality early childhood education depends on the success of many factors. According to Cameraman [4], access (referring to the ease with which parents obtain early childhood education and care for their children), and coverage (in other words the percentage of children enrolled in early childhood education and care) are clearly important indicators of a state's commitment to young children. However, the case is not just about the state's or the nation's commitment. When it comes to small, remote, and sparsely populated areas, the lack of availability and sufficiency of the service as well as the terms of reference make the conditions for the realization of early childhood education especially challenging [7]. These kinds of crucial conditions are, for example, the physical environment and the availability and stability of staff. In comparison, Australia and Canada are good examples of countries where discussions and debate about early childhood programs are most often concerned with supply and demand, affordability, staff salaries and working conditions. Accessibility and affordability are constant problems in remote areas [8] [9]. Naturally, the solutions differ considerably between countries and are based on whether education is provided privately or by the state or county. For example, Elliot [8] highlights a major issue: 'However, gaining a clear picture of provision and participation is not easy because of the complexity of early childhood services and the lack of comprehensive, comparable supply and participation data. The varying legislative and regulatory environments in which early childhood services operate in each jurisdiction and the different applications of standards and quality levels complicate the picture'.

The purpose of this review article is to discuss the realization of early child education in a small province from various points of view: what are the specific characteristics of such areas that make the realization of education so challenging? The analysis is based on our extensive studies about early education in Finland and especially in its remote areas [10] [11,12,13]. We review the realization of early childhood education from a particular perspective, using the Finnish context as the basis of our analysis. The practical realization of early childhood education in the province of Lapland with 6,000 children under school age is discussed. We will start from the provider and enabler, the state and state regulations, and go on by analyzing the situation in a wide area with a small and sparse population, and finally, discuss the future prospects of how to provide quality early childhood education despite the challenging framework factors. The perspective of this article, therefore, resembles a case of early childhood education in Finnish Lapland. It represents a concrete example of the phenomenon of early childhood education in remote and sparsely populated areas.

2. THEFOUNDATION FOR PROVIDING QUALITY EARLY CHILDHOOD EDUCATION

In order to better understand the special challenges of early childhood education in remote and sparsely populated areas in Finland, it is necessary to be aware of the basic policies that guide all (early) education in the country. Every under-school-age child in Finland is entitled to day care and early childhood education according to law. The nation wants to invest in quality early childhood education because both parents of the vast majority of families with children under school age are in full-time employment [14]. As many children spend considerable proportions of their waking hours at day care, a day care centre cannot be just any place where children spend their day while parents are working [12] [13] [15]. Early childhood education and care may be described with the abbreviation of Educare, where care, education and instruction have been combined to form integrated wholeness [16]. Early education is organized and regulated by national government [17].

In Finland, education is a public service and is free of charge. Municipalities (local authorities) are the providers of education. Providers of education and schools set up their own curricula on the basis of the national core curriculum. In curricula, local needs can be taken into consideration [18]. Since the development of Educare, early childhood educators brought the educational dimensions into the various phases and situations of children's day care [16,19,20]. In Finland, children go to day care before going to school and they attend actual preschool education for one year at the age of six, which consists of learning social skills and the basics of reading and writing. Finnish children have the right to participate in voluntary and free preschool education during the year preceding compulsory education, and nearly all 6-year-old children (96% of this age group) do so [21].

Finnish children are also entitled to any welfare services they might need for full engagement in their respective educational programmers, including general health and dental care for all students. All pupils are also entitled to special education when necessary. Before school age, and especially during the lower grades, at-risk children and students are screened for possible learning problems to allow for early intervention. Any student with learning or adjustment problems is entitled to remedial teaching. When feasible, this is realized by inclusion, but also can be arranged through a special education class in regular schools or in a school for students with special needs. An individual teaching and learning plan is made for each student with special needs [22,23].

Well-educated staff is one of the strengths of the Finnish day care system. In the day care centers, the term 'educator' refers to the staff responsible for care, education and teaching. In day care centers, all staff must have at least secondary-level education from the field and one-third of staff must have a post-secondary level university degree (i.e. Bachelor of Education, Master of Education, or Bachelor of Social Sciences). Adult—child ratios in day-care services are: one adult per seven children, aged between 3 and 6 years; one adult per four children up to the age of 3 [16,24,25,26].

As the government's Act on children's day care provides, early childhood education has to be arranged regardless of the place of residence and the number of children who need the service. Due to long distances and the exceptionally low population density in some of the municipalities in Finland, the attempt to achieve equal educational opportunities for children living in the remote areas [27] is a real educational challenge; not only is the aim to provide early childhood education to all, but also to ensure its high quality.

3. THE REALITY: SPARSELY LOCATED BUT VERSATILE CUSTOMERS OF EARLY CHILDHOOD EDUCATION IN LAPLAND

3.1 Challenges

Lapland is the northernmost province of Finland with 183,330 inhabitants. Over one-fifth of the population lives in small villages and the countryside, and the rest in population centres. In Finland, the whole population is approximately 5.5 million (population density 17.70 pop. per km2). Although the province of Lapland covers one-third of the surface area of Finland, only 3.5% of Finns live in Lapland. The population density in Lapland is, indeed, extremely low (app. 1.98 pop. per km2) [28,29].

Due to the abovementioned special features, families live far from each other in Lapland, which challenges the 21 municipalities in that province as they are obliged to provide their inhabitants with welfare services, such as day care and early childhood education. In the largest municipalities, day care can be relatively easily arranged at day care centres, but in the remote and sparsely populated areas, the commute to a day care centre may be unreasonably long for small children. Not all municipalities in Lapland have a day care centre and therefore day care and early childhood education are arranged in a variety of ways.

The number of under-school-age children in Finland is approximately 420,000 of whom about 6,000 live in Lapland. In Finland in general, 61.7% of children go to day care, and of them, 92% attend municipal day care. However, in Lapland, the percentages are lower, close to 40%. Altogether 1,827 children participated in pre-school education in Lapland in 2011 [30,31].

As mentioned above, the Finnish educational system pays attention to children with special needs [32,33]. In Lapland, providing early childhood education services to children of this group necessitates creative solutions. The need for special services may be so minimal that it is not reasonable for a small municipality to hire employees for it and therefore municipalities in Lapland have worked in collaboration. For example, the services of a special early childhood educator, a speech therapist or a psychologist can be purchased from another municipality or from the private sector when necessary. In some remote areas, education is arranged so that an early childhood special educator travels between small villages providing small-group activities to children. However, the availability of special services has not reached a sufficient level in all municipalities of Lapland. The main reason is lack of municipal allowances and coordination of services. Neither is it easy to find suitably qualified staff [34,35].

Furthermore, the indigenous people called the Sámi are also entitled to have early childhood education in their own language [36]. In 2010, four municipalities of Lapland arranged day care in the Sámi language in private day care centers. In addition, at the moment, more Sámi-speaking early childhood education services are being designed in the three northernmost municipalities of Lapland. The Sámi population in Finland (the traditional Sámi residential area expands to the northern regions of Norway, Sweden, Finland and the Kola Peninsula in Russia) is about 9,900, but not all of them live in the Sámi administrative district, located in northernmost Lapland [37,38]. The chance of having, for example, speech therapy in the Sámi language is especially minimal as neither is there appropriate material to evaluate communication in the Sámi language nor to arrange rehabilitation [36].

3.2 Strengths

Despite the challenges, there are factors that are worth mentioning and recognizing as strengths of early childhood education in Lapland. These could be focused on when developing the organization of early childhood education in this area.

Early childhood education in Finland is realized from the perspective of contextual growth, in close connection with a child's everyday life, family, and growing environment. It means that collaboration with parents, together with the societal and cultural context where a child lives, has to be given attention [19,39,40]. In Lapland, this means a unique opportunity to take children as individuals. Most likely, educators get to know the children well and can pay attention to their backgrounds as they probably already know the children's parents well. The remote countryside location provides the possibility to carry out early childhood education in a close connection with nature. Children can safely discover and familiarize with natural phenomena as their day care environment is in the middle of 'real' nature. It is a privilege that is lacking in many urban day care centers and does not cost anything.

In Finland, and especially in Lapland, taking advantage of the natural environments, for example, the woods and its offerings, are a part of the Finnish life style. During early childhood education, knowledge of the forest is fostered [41]. For example, in many of the day care centers in Lapland, environmental and sustainable education is emphasized in the form of 'a nature school' or 'camping'. Children in day care can spend whole days outside dining, walking, and having a nap in a tent or a teepee, or even berry or mushroom picking [42]. Sport or physical education is also part of the Finnish early childhood education. According to the recommendations [14], children need two hours of active exercising a day and they should be able to practice these skills in a variety of environments. In Lapland, various sports can be experienced in multiple ways; children have the opportunity to exercise outside on sand, grass, snow, ice, water and in the woods.

In Lapland, multiculturalism is also richness. Finnish Lapland has borders with Norway, Sweden and Russia, providing many natural opportunities for international and multicultural co-operation in many ways including the field of early childhood education. For instance, some education collaboration between Finland and Norway provides early education services for the Sámi children [28]. The Sámi are a small indigenous population living in the aforementioned four countries, and collaboration between those countries is reasonable and beneficial.

There are also examples of new technology being able to provide the means of enhancing education. In Lapland, an online consultation system was established to support educators in the field of early childhood education, pre-school education, and early childhood special education. Online consultants are professionals in the issue of children's well-being (such as the Virtual Social and Health Service Centre, in Finland) and answer questions concerning early support, special pedagogy, and child welfare. This is an example how in rural and remote areas can benefit from modern technology.

4. THE CONTINUATION: HOW TO ENSURE QUALITY EARLY CHILDHOOD EDUCATION IN THE REMOTE AND SPARSELY POPULATED LAPLAND

Children's day care is the environment where early childhood education is operated mostly and where children are provided with an opportunity to participate in target-oriented and

guided early childhood education. This not only maintains the current level of early childhood education services in Lapland but also promotes their quality. It is important to consider some important issues that concern the organization of education in remote, rural, sparsely populated areas so they can become a means of decision making, for example, in municipalities [27].

In sparsely populated areas, early childhood educators often work alone without any peer support. This is an important aspect because expertise can be collectively created through the processes of reflective dialogue [11,43]. New educators need support, especially when it comes to solving pedagogical problems and in order to develop the work community. Experienced colleagues should mentor novices, but this is not always possible in remote areas. A mentor's role as a listener, supporter, encourager and role model help a novice teacher to focus teaching on children's learning and appropriate practices [44,45]. Yet, many of the educators in Lapland work alone, which makes, for example, selecting appropriate methods of special education quite challenging, and help would be needed in this kind of decision making. An online consultation system for work-related problems in early childhood education could function as an excellent help when solving various problems at work and should be further developed. Indeed, an applied model of early education services designed particularly for sparsely populated areas should be created and employed in Lapland. It could also include cross-border co-operation.

There are also indirect factors affecting the educational process, such as early childhood educators' education and professional growth, and their collaboration with other partners of co-operation [46]. The aim of early childhood education in Finnish universities is to educate experts in early education. During their studies, student educators become familiar with, among other things, childhood and the growth of children, the development of personality and learning, and the aims, content, and methods of early and pre-primary public education. In addition, students gain competence in the analysis, critical evaluation and research-based evaluation of their own work [12]. Education provides an excellent basis to work in the field of early childhood education and the skills to develop professional expertise, but are these educators prepared to work in remote areas alone?

Although early childhood educators are usually highly educated, the actual work at a day care centre or pre-school includes many practical challenges that cannot be taught comprehensively beforehand. Indeed, we have noted that early childhood educators often have the feeling of insufficiency when it comes to their professional expertise [10]. According to Happo's [10] study among northern Finnish early childhood educators, their work consisted of elements that they were not prepared to confront during their education. Some of the elements are, for example, the educational partnership and support for parenting and challenging education situations. According to Hujala, Fonsén, and Elo [3], one essential aim in developing early childhood education is to strengthen the pedagogy of learning and the curriculum contents — but in a child-oriented manner so that it would foster children's physical, cognitive, social and emotional development [22,47]. The integration of an individual early childhood education plan and the curriculum is a new and challenging task [3].

The requirements of early education live and change constantly along with societal changes. It is increasingly difficult to predict the future, and people in all professions are expected to be ready to change. In educators' work, readiness for change is necessary not only because of the substance of the work and the developing and growing child, but also the change in the nature of early childhood education in society [48]. According to Wood and Bennet [49],

educators who are engaged in the reflection process of their everyday practical problemsolving strategies and pedagogical interactions, are able to articulate their professional knowledge and obtain a deeper understanding about their theories and practices. Although educators' expertise develops along with work experience, regular in-service and continuing education is needed [11]. Skilful, expert early childhood educators make the critical realization of quality early childhood education. Therefore, more attention should be paid to providing in-service education or continuing training, along with the abovementioned online peer-support systems, through the possibilities of distance education. As such, distance education has often been connected with social equity as it enables access, participation and outcomes, not only in primary and secondary schooling and higher education, but also as a worthy means of continuing training [50] and a collegial support system. Studies show that there is much to learn; the initial experiences of some European distance teaching universities indicate that other support mechanisms to achieve participation are needed. Distance education as a support for teacher's professional growth can work if there is a wellorganized tutoring system and, for example, if the students are able to make reflective discussions in small groups [51,52]. This would also provide a fruitful ground for preparing for the changing practices of work and the challenges of education in sparsely populated areas.

We have viewed the challenges and strengths of early childhood education mainly from the teachers' perspective. The purpose was to show not only that there are many challenges that influence teachers' work, but also that there are strengths and resources to draw from. The reason why we focus so much on teachers is that our studies have concentrated on them. Simultaneously, we want to highlight that political aspirations do not always work in practice, and that, for example, equality is secured quite differently in Lapland than in the metropolitan area—if at all.

5. CONCLUSION

When it comes to small and sparsely populated provinces and municipalities, the nation's help is crucial in order to guarantee equal opportunities and access to education for all children [53]. It is a fact that in these surroundings, the realization of early childhood education has its unique and special features. Gormley Jr. [5] emphasizes that 'although each nation must build upon its own traditions, valuable lessons can be learned from the experiences of other nations. Whatever the specific regulatory arrangements chosen, young children in childcare need to be nurtured and protected. Existing arrangements need to be examined and evaluated to ensure that this fundamental goal is achieved'. Indeed, rigorous research and constant development are the basic means through which the system can secure the well-being and success of families and children. Early childhood education and care lay the foundation for success in later life [13]. This study aims to highlight some of the special challenges and strengths in early childhood education in remote and sparsely populated areas. Even if Finland wanted to provide equal opportunities for early childhood education for all children, it is crucial to understand that it cannot be realized in the same way in the metropolitan areas as in the remote villages. We present Lapland as a case of a sparsely populated small province as an example of how the quality of early childhood education does not have to be compromised when moving away from urban centre's, but the need for flexible, locally specified arrangements appear necessary.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Boshcee MA, Jacobs G. Ingredients for quality child care. National Network for Child Care, 1997.
 - Available: http://www.nncc.org/choose.quality.care/ingredients.html#anchor143569.
- 2. Hagegull B, Bohlin G. Day care quality, family and child characteristics and socioemotional development. Early Childhood Research Quarterly. 1995;10:505–26.
- 3. Hujala E, Fonsén E, Elo J. Evaluating the quality of the child care in Finland. Early Child Education and Care. 2012;182(3-4):299–314. doi: 10.1080/03004430.2011.646721.
- 4. Kamerman SB. Early childhood education and care: an overview of developments in the OECD countries. International Journal of Educational Research. 2000;33(1);7–29.
- 5. Gormley Jr. WT. Early childhood education and care regulation: a comparative perspective. International Journal of Educational Research. 2000;33(1):55–74.
- 6. Moss P. Training of early childhood education and care staff. International Journal of Educational Research. 2000;33(1):31–53.
- 7. Mayo P. Comparative and international perspectives on education in small states. Comparative Education. 2008;44(2):121–4.
- 8. Elliot A. Early childhood education. Pathways to quality and equity for all children. Victoria: Australian Council for Educational Research; 2006.
- 9. Friendly M, Beach J, Turiano M. Early childhood education and care in Canada 2001. Toronto: University of Toronto; 2002.
- 10. Happo I. Varhaiskasvattajan asiantuntijuus. Asiantuntijaksi kehittyminen Lapin läänissä. Doctoral Thesis, University of Lapland, Rovaniemi, Finland; 2006.
- 11. Happo I, Määttä K. Expertise of early childhood educators. International Education Studies. 2011;4(3):91–9. doi: 10.5539/ies.v4n3p91
- 12. Happo I, Määttä K, Uusiautti S. Experts or good educators or both? The development of early childhood educators' expertise in Finland. Early Child Development and Care. 2012;182(3-4):487–504.
- 13. Määttä K, Uusiautti S. Editorial: How do the Finnish family policy and early education system support the well-being, happiness, and success of families and children? Early Child Development and Care. 2012;182(3-4):291-8. doi: 10.1080/03004430.2011.646718
- 14. Ministry of Social Affairs and Health. Finland's family policy. Helsinki: Ministry of Social Affairs and Health; 2006.
 - Available: http://www.stm.fi/en/publications/publication/julkaisu/1058023#en.
- 15. Kyrönlampi-Kylmänen T, Määttä K. What do the children really think about a day-care centre the 5 to 7-year-old Finnish children speak out. Early Child Development and Care. 2011;182(5):505–20. doi: 10.1080/03004430.2011.557861.
- 16. National Curriculum Guidelines on Early Childhood Education and Care in Finland. Helsinki: Statistics Finland; 2003. Available: http://kasvunkumppanit.thl.fi/thl-client/pdfs/267671cb-0ec0-4039-b97b-7ac6ce6b9c10.

- 17. Act on Children's Day-care. 36/1973. Finlex database.

 Available: http://www.finlex.fi/fi/laki/ajantasa/1973/19730036?search%5Btype%5D=pika&search%5Bpika%5D=laki%20lasten%20p%C3%A4iv%C3%A4hoidosta.
- Jakku-Sihvonen R, Niemi H. Introduction to the Finnish education system and teachers' work, in: R Jakku-Sihvonen, H Niemi, ed., Research-based teacher education in Finland- reflections by Finnish teacher educators. Turku: Finnish Educational Research Association; 2006:7-16.
- 19. Hujala E, Puroila AM, Parrila-Haapakoski S, Nivala V. Päivähoidosta varhaiskasvatukseen. Tampere: Varhaiskasvatus 90; 1998.
- 20. Kronqvist EL, Kumpulainen K. Lapsuuden oppimisympäristöt. Eheä polku varhaiskasvatuksesta kouluun. Helsinki: WSOYpro; 2011.
- 21. Eurydice. National summary sheets on education systems in Europe and ongoing reforms. Finland: European Commission; 2009.
- 22. Kupiainen S, Hautamäki J and Karjalainen T. The Finnish education system and PISA. Finland: Ministry of Education; 2009. Retrieved from: http://www.pisa2006.helsinki.fi/files/The Finnish education system and PISA.pdf.
- 23. Mäensivu K, Uusiautti S, Määttä K. Special needs assistants the special characteristic and strength of the school system of Finland. European Journal of Educational Research. 2012;1(1):23-36.
- 24. Decree on Children's Day care. 239/1973. Finlex database. Available: http://www.finlex.fi/fi/laki/ajantasa/1973/19730239?search%5Btype%5D=pika&search%5Bpika%5D=asetus%20lasten%20p%C3%A4iv%C3%A4hoidosta.
- 25. Heinämäki L. Early childhood education in Finland. Potsdam: LiberalesInstitut; 2008. Available: http://www.freiheit.org/Pro-Kopf/100k840/index.htmlindex.php?id=560&an_additional_parameter=&uid=4348&cHash=d3b965af6c.
- 26. OECD. Starting Strong II: Early Childhood Education and Care; 2006. Available: http://www.oecd.org/dataoecd/16/2/37423404.pdf.
- 27. Bacchus MK. The education challenges facing small nation states in the increasingly competitive global economy of the twenty-first century. Comparative Education. 2008;44(2):127–45.
- 28. Lapland's Welfare Program. Rovaniemi: Lapin liitto; 2010-2015. Available: http://www.lapinliitto.fi/c/document_library/get_file?folderId=51464&name=DLFE-3520.pdf.
- 29. The Official Statistics Finland, (SVT): Esi- ja peruskouluopetus. Helsinki: Statistics Finland; 2012. Available: http://www.stat.fi/til/pop/2011/index.html.
- 30. The Official Statistics Finland, (SVT): Väestörakenne. Helsinki: Statistics Finland; 2012. Available: http://www.stat.fi/til/vaerak/tau.html.
- 31. livonen E. Miten lapset ja perheet voivat? Varhaiskasvatuksen yhteistyöseminaari Earlychildhoodeducationco-operationconference, Helsinki, Finland; 25 January 2012. Available: http://www.jhl.fi/files/attachments/ladattavat/miten lapset ja perheet voivat iiivonen.pdf.
- 32. Antikainen A. In search of the Nordic model in education. Scandinavian Journal of Educational Research. 2006;50(3):229-43.
- 33. Pihlaja P. Erityisen tuen käytännöt varhaiskasvatuksessa näkökulmana inkluusio. Kasvatus. 2009;49(2):146–57.

- 34. Pöllänen R, Knuuti AM. Puheterapiapalvelujen saatavuus Lapin läänissä puheterapeuttien näkökulmasta.Rovaniemi: County Administrative Board of Lapland; 2007.
 - Available: http://www.laaninhallitus.fi/lh/biblio.nsf/149FD793829E0BBDC2257329002B 67F0/\$file/Puheterapiajulkaisu.pdf.
- 35. Sarvela H, Ed. Erityisvarhaiskasvatusta yli kuntarajojen. SYKE-hankkeen loppuraportti; 2007.
 - Available: http://www.sosiaalikollega.fi/poske/julkaisut/julkaisusarja/julkaisu25.pdf.
- 36. Keskitalo P, Määttä K, Uusiautti S. Re-thinkingSámieducation. Linguistics, Culture & Education. 2012;1(1):12–41.
- 37. Magga R. Toteutuuko yhdenvertaisuus ja valinnanvapaus peruspalveluissa. Pohjois-Suomen alueelliset hyvinvointi- ja terveyspäivät, Oulu, Finland. 2010;4-5:11. Available: http://www.laaninhallitus.fi/lh/oulu/hankkeet/hyte2010/home.nsf/files/Ristenrauna%20 Magga/\$file/Ristenrauna%20Magga.pdf.
- 38. Magga OH, Skutnabb-Kangas T. The Saami languages: the present and the future. Endangered Languages, Endangered Lives; 25 Feb 2001. Available: http://www.culturalsurvival.org/ourpublications/csq/article/the-saamilanguages-present-and-future.
- 39. Bronfenbrenner U. The ecology of human development. Experiments by nature and design. Harvard: Harvard University Press; 1979.
- 40. Karila K. Vanhempien ja päivähoidon henkilöstön keskustelut kasvatuskumppanuuden areenoina. Kasvatus. 2005;36(4):285–98.
- 41. Arjanne S, Huldén P, Leinonen M, Liimola A, Lähdesmäki SO, Pirttilä I. Metsän oppimispolku. Metsä- ja puuopetuksen malli. Helsinki: Opetushallitus & Suomen Metsäyhdistys ry; 2000.
 - Available: http://www.oppimispolku.fi/metsa_suomi/polku.nsf/liitteetbyid/002ECBCB8D878C2CC2256B7D004C98A2/\$file/Oppimispolku.pdf.
- 42. Ängeslevä M. Kylälaakson veneellä vakaa suunta. Opettaja. 2002;32. Available: http://www.opettaja.fi/portal/page? pageid=95,82089& dad=portal& schema=PORTA L&key=65049.
- 43. Allen RM, Casbergue RM. Evolution of novice through expert teachers' recall: Implications for effective reflection on practice. Teaching and Teacher Education. 1997;13(7):741–55.
- 44. Bartell CA. Cultivating high-quality teaching through induction and mentoring. Thousand Oaks, CA: Sage; 2004.
- 45. Reilly RC. Is expertise a necessary precondition for creativity? A case of four novice learning group facilitators. Thinking Skills and Creativity. 2008;3:59–76.
- 46. Hujala E, Parrila S, Lindberg P, Nivala V, Tauriainen L, Vartiainen P. Laadunhallinta varhaiskasvatuksessa. Oulu: University of Oulu, 1999.
- 47. Turunen TA. Individual plans for children in transition to pre-school: a case study in one Finnish day-care centre. Early Child Development and Care. 2012;182(3-4):315-28. doi: 10.1080/03004430.2011.646728
- 48. Moss P. Bringing politics into the nursery: early childhood education as a democratic practice. European Early Childhood Education Research Journal. 2007;15(1):5–20. doi: 10.1080/13502930601046620
- 49. Wood E, Bennet N. Changing theories, changing practice: exploring early childhood teachers' professional learning. Teaching and Teacher Education. 2000;16(5-6);635–47.

- 50. Willems J, Bossu C. Equity considerations for open educational resources in the glocalization of education. Distance Education. 2012;3(2):185-99.
- 51. Monk D. Avointen ja etäkäyttöisten opintomateriaalien kehittäminen. Informaatiotutkimus. 2002;21(2):51-6.
- 52. Piesanen E, Kiviniemi U, Valkonen S. Opettajien täydennyskoulutus 2005 ja seuranta 1998–2005. Jyväskylä: Finnish Institute for Educational Research; 2006.
- 53. Uusiautti S, Määttä K. Significant trends in the development of Finnish teacher training education programs (1860-2010). Education Policy Analysis Archives. 2013;21(59). Available: http://epaa.asu.edu/ojs/article/view/1276.

© 2014 Uusiautti et al.; This is an Open Access article distributed under the terms of the Creative Commons. Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here: http://www.sciencedomain.org/review-history.php?iid=409&id=21&aid=3360