

Innovation, Recreation, Interpretation? A Case Study on the Origins and Implementation of Transversal Core Competencies in Finnish Basic Education Core Curriculum Reform 2016

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ABSTRACT

This qualitative study on the Finnish basic education curriculum (2016) had two goals. First, to survey the origins of first two new curriculum competences: 1) thinking and learning to learn, and, 2) cultural competences. Second, to analyse the local curricular implementation and comprehension in a rapid socio-cultural change. To reveal the possible data trends, two research questions were addressed: 1. What was the background of first two 2016 transversal core competencies? 2. How were those competencies implemented into a local curriculum 2016-19? The Data included basic education curricula (1985-2016), and a local curriculum. Relevant legislation, official information (e.g. PISA), parental feedback, and a questionnaire to an anonymous implementing principal comprised the curricular data. The Data triangulation was completed with a wide range of educational, cultural and ideological research. Regarding ethics, the individual sources and educational provider remained anonymous. Findings were surprising. "Modern" thinking and learning skills were created in early 20th century American society by Deweyan comprehension. However, an immigration had changed the long-lasting interpretation on the origins of Finnish culture. Moreover, local curriculum implementation was more successfully comprehended and supported. Conclusions were obvious: more identifiable research and teachers' training were needed for curricular reforms and competences. The socio-cultural comprehension in the era of AI asked for sound arguments.

Key words: Curriculum, Core Competences, Thinking and Learning, Culture, Comprehension and Interpretation

INTRODUCTION

Goals, Importance and Research Questions

The goal of this qualitative case study was, first, to discuss the origins of selected transversal core competencies in the curriculum reform of Finnish basic education and, second, analyze their gradual curricular implementation in recent cultural and social transition (2016-19). Much more than a conventional social development, years in scope have appeared to be uncontrollable, rapid transition caused by outstanding challenges, and permanent socio-cultural changes. Tellingly, massive immigration, economic regression, and internationalization emerged into Europe, and Finland (European Commission, 2016; European Council, n.d.; PISA data, n.d.). Apart from narrow, disciplined academic studies, which normally keep their own, familiar methodology, this paper analysed certain curricular transversal competencies and their implementation as phenomena in a reform process. Consequently, selected approach meant broader, hermeneutic and phenomenological toolbox and specific Data design for discussing, analyzing and comprehending the

topic qualitatively (Heidegger, 1993; Hobsbawm, 1992; Johnston, 2019; Landridge, 2007; Miller, 1996; Peim, 2018; Van Manen, 2006; Van Manen, 2011).

The importance of this study arose from various aspects. First, there were no particular studies on the origins of transversal competencies *and* their local curriculum implementation apart from an international comparison on 21st century skills in teacher education programmes (cf. Vibulphol, Loima, Areesophonpichet, & Rukspollmuang, 2015; Pyhältö, Pietarinen, & Soini, 2014). Second, Finnish de-centralized education structures and their 3-step curricular implementation process offered an interesting model for further discussion (Lamb, Maire, & Doecke, 2017). Third, according to Finnish National Agency of Education (FNAE) website releases and data, PISA (Programme for International Student Assessment, 2018) data and public conversation (FNAE, 2019a; 2019b; PISA 2018 n.d.; Readers' various comments in *Helsingin Sanomat* 2017-19) it seemed that curriculum reform has temporarily "failed" in one of its legislative main goals: to promote social and regional equity of students (FNAE, 2019a, 2019b, 2016, 2014; Basic Education Act, Section 2, 1998; cf. Atjonen et al., 2019; Kortekangas,

Paksuniemi, & Ervast, 2019; Pirinen, 2015). Given these main importances, there was an evident need to study the Finnish curricular process qualitatively to comprehend mentioned phenomena, at least in the light of main (two) core competencies.

This qualitative study aimed to find data trends by answering the following research questions (RQs):

1. What was the background of first two 2016 transversal core competencies?
2. How were those competencies implemented into a local curriculum 2016-19?

The Data, Methodology, Discussion and Limitations of this Study

The Data as whole comprised, first, relevant legislation, basic education core curricula (BEC) (FNBE, 1985, 1994, 2004; FNAE, 2016), a single local curriculum and parents' assessment feedback on it, and a questionnaire. In addition, the Data included the PISA Data 2000-18, FNAE releases, newspaper editorials, articles and writings (Helsingin Sanomat, n.d.), and international, relevant academic research for triangulation, discussion, and analyses. To start a curriculum process, the national BEC was provided by Finnish National Agency of Education and local curricula were officially produced and administratively confirmed by local educational providers (i.e., municipalities). As has been generally known, there are only a very few private schools in Finland (e.g., EURYDICE, 2017; PISA n.d.). Existing ones are mainly preprimary. The local curriculum was analysed here as an implementation and interpretation case. Geographical location for the local document in this study was a Southern Finland municipality.

The essential transversal core competencies in BEC were originally listed to be seven, and they were to belong to all basic education subject teaching, being assessed subject wise (FNAE, 2016; Appendix 1).

1. Thinking and learning to learn
2. Cultural competence, interaction and self-expression
3. Taking care of oneself and managing daily life
4. Multiliteracy
5. ICT competence
6. Entrepreneurial and working life competencies
7. Participation, sustainability and social involvement

Source: FNAE 2014, 2016; Lamb, Maire, & Deocke, 2017; Loima, 2019; Wing & Tan, 2018; cf. Darling-Hammond, 2010; Gardner, 1999; about entrepreneurship competences, see also Kyrö, 2008.

As was already told, this study took the listed first competencies (1-2) for further analysis, thus following the BEC order. The scope of this study remained qualitative, since, first, the cities (or municipalities) as educational providers have independent roles. Accordingly, they have regional educational policies in Finland (FNAE, 2016; cf. Rokka, 2011; Pirinen, 2015). Second, to reach deeper comprehension than just a brief description, the competencies selected to further analysis were limited to the most meaningful two. Meaningfulness was, first, taken from BEC and, second, from contemporary socio-cultural change characterized by

immigration, internationalization, and economic regression. Academically speaking, it would be quite impossible to discuss successfully hundreds of local curricula, and/or all the listed competencies, in a single phenomenologically oriented contribution.

In addition to the previous Data criteria, the selected education provider had a functioning Reception Center for refugees and asylum seekers in 2016-17 (Finnish Immigration Services, n. d.). Consequently, educational provider had to convert and adjust the local curriculum for immigrants, since immigrating refugee children have an immediate right to attend to schooling (e.g., Kärkkö, 2019; Puukko, Vuori & Kuukka, 2019). Furthermore, the assessment feedback had several ethnic views. Last but not least, the Data included questionnaire information from a crucial principal, who was planning and implementing the particular, local curriculum 2016 onwards in an exceptionally multicultural school. Apart from other provider's principals, the selected person had not implemented previous curricula. Principal was asked anonymously, how the local curriculum reform was implemented in changing circumstances. Moreover, s/he was asked to assess the renewed curriculum core competencies implementation in the light of local resources (2016-19) and their institutional development. In terms of research ethics, these Data sources – commenting readers, parents, and a principal – remained anonymous, as did the municipality.

Methodologically, hermeneutic phenomenological approach aims to understand phenomena (Heidegger, 1993; Heidegger, 1962; Gable & Yin, 2014; Landridge, 2007; Miller, 1996; Sloan & Bowe, 2014; Van Manen, 2011). When comprehensive interpretation is emphasized, hermeneutic discussion aims to offer more “new insights” than a description. On the other hand, hermeneutic phenomenology also accepts the obvious connection of any description as an existing lingual interpretation as such. A concrete example of multiple comprehensions could be Basic Education Act (1998). It is contextually understood in different ways by 1) an administrative lawyer applying it, 2) a politician ruling it, 3) a civil servant implementing it, or 4) by a parent who tries to promote students' subjective rights. Pre-comprehension, in the sense of already-established understanding may prevent one from seeing the other dimensions of phenomena, acting even as a “barrier on the path to new knowledge” as Nick Peim put it (Peim, 2018; Heidegger, 1993; Johnston, 2019; Landridge, 2007; Miller, 1996; Van Manen, 2011; also Van Manen, 2006; cf. Gayle & Lambert, 2018). To avoid this ‘repercussive comprehension circle’ as this contribution named it, the Data were collected from various stakeholders and sources. As was introduced above, the comprehension groups for this study comprised central administration, current local administration and experts, parents (private and media), and recent surveys, or contributions. The previous curricula, a long timeline of published earlier contributions and assessment feedback represented, in turn, the other comprehension Data for trend discussion (Goble & Yin, 2014; Loima, 2008; Nind et al., 2016; Peim, 2018; cf. Gayle & Lambert, 2018; Sloan & Bowe, 2014). Finally, the information from a principal with no curriculum implementation history – and

possible earlier pre-realisation – was seen relevant. Other principals in the same municipality also implemented the same local curriculum, but they already had experienced at least a single curriculum process. They thus had some kind of professional pre-comprehension of this particular process (Heidegger, 1993; Johnston, 2019; Loima, 2008; Nind et al., 2016; Peim, 2018; Van Manen, 2006).

The Data discussion followed methodologically qualitative (hermeneutic and phenomenological) guidelines, giving space for different approaches and interpretations. Keeping the focus in presented research questions the triangulation – of the Data, related contributions and researcher – aimed to find “roots” and trends from transversal competencies and their implementation process (Albrecht & Kavabenick, 2019; Atjonen et al., 2019; Butler, 2019; Dewey, 1938; Gordon, 2006; Hobsbawm, 1992; Johnston, 2019; Landridge, 2007; Miller, 1996; Moe et al. 2015; Nind, Curtin, & Hall, 2018; Sloan & Bowe, 2014; Van Manen, 2006; cf. Kyrö, 2008).

Limitations of this study for an English-speaking reader may occur as linguistic (some Finnish sources) but terminological interpretation followed official versions. Another limitation was analytic space, or a lack of it in a qualitative case study. On the other hand, this current limitation of space may, in turn, offer an opportunity for a later comparative review on competencies. To mention a single limitation more, FNAE has unfortunately aborted most of its English material on websites during the summer 2019, thus censoring the sources of previous research (FNAE 2016, 2019b; Lamb, Maire, & Doecke, 2017; Loima, 2019; Pyhältö et al., 2014). In addition, FNAE has removed previous core curricula (in English) from its websites.

Context and Related Literature

By and large, prompt humanitarian crisis and immigration had hit all the EU social and educational sector systems, which needed a sound respond on federal and national level (e.g., European Commission, 2016; Finnish Immigration Services, n.d.). Politics and uncontrollable immigration affected into on-going national curriculum reform, which had been prepared by stakeholders since 2011. However, none of above named political or social scenarios were taken into consideration in national curriculum reform preparations. Accordingly, this indicated, how sudden the emerging socio-cultural changes were. On national level, invited 150 participants had a curriculum start-up autumn seminar 2011 in a familiar sense of national consensus, being invited by Finnish National Board of Education (Memorandum of the author; Speech and Presentation of Ms. Halinen, and Mr. Jorma Kauppinen in the seminar, FNBE). The central administration teamwork product, steering national core curriculum was ready in 2014 (FNAE, 2014, 2016).

Meanwhile, as an overall reaction for changes in immigration, slower economics and sinking trade caused by EU sanctions against Russia (European Council, n.d.), the Government of Finland suggested for the state budget 2016 even 200 million euros of cuts. Those were targeted, e.g., to public sector, including education and social services

(Ministry of Finance, n.d.). Consequently, savings limited the Ministry’s funding of educational providers in all levels.

Structurally, the Finnish educational system has had three curricular layers since 1990s. National core curriculum as a steering document came first. Second, implementing layer has been the local retranslation of it, which has been provided and confirmed by educational provider(s). Local curricula were mostly done in years 2015-18. Finally, closest to the students there has been a school-level curriculum based on previous layers (FNAE, 2014, 2016; EURYDICE, 2017; see also Lamb et al., 2017). The school-based curriculum was merely an opportunity for the local emphases and specialization of schools, but not a necessary document. In particular, smaller education providers may use local (municipality) curriculum for all their schools (FNAE, 2016; cf. FNBE, 2004; FNAE, 2004).

Since the very first PISA results, there has been numerous studies on 21st century educational reforms, core competencies, and needed skills by well-known education researchers as Howard Gardner, Linda Darling-Hammond and Ann Lieberman (Darling-Hammond, 2010; Darling-Hammond & Adamson, 2014; Darling-Hammond & Lieberman, 2005; Darling-Hammond et al., 2005; see also Dede, 2010; Gardner, 1999, 2000; Gordon, 2006; Gornick et al., 1999; Gonida & Lemos, 2019; Lamb et al., 2017; Pearlman, 2010; Pyhältö et al., 2014; Tucker, 2019; Vibulphol et al., 2015; Wing on Lee & Tan, 2018; see also Moe et al., 2015). Furthermore, Pasi Sahlberg has twice summarised noteworthy ideas in what may be globally learned from Finnish education, and has been – quite surprisingly – left with no attention in Finland as it comes to the ideological and research-based background of Finnish education and learning comprehension (Sahlberg, 2015; Gardner, 1999, 2000; cf. Paksuniemi & Keskitalo, 2019; Niemi et al., 2018; see also Atjonen, 2019; FNAE, 2014, 2016).

In addition to various categories and suggestions for 21st century competencies, or abilities as Darling-Hammond also has called them (2010), skill-related motivation and learning have also been widely studied worldwide for a few decades. Main outcomes of these numerous contributions have revealed that motivation, especially so called internal (intrinsic) motivation, is crucial for any remarkable learning, including skills. External motivation, like e.g.,m rewarding circumstances, may also enhance short-termed learning in some occasions. Apart from previous ones, a state of amotivation doesn’t promote meaningful learning. Moreover, learners’ autonomy-supporting practices of teachers, but also of parents, seemed to increase motivation and performance in all age groups. In addition, recent studies conducted by Borman et al. (2016), Butler (2019), Hecht et al. (2019) and Kaplan et al. (2019) have indicated that even brief socio-cultural, or psychological, interventions may increase intrinsic motivational factors by preventing stereotypic ‘threats’, confirming identity and promoting the sense of belonging (Alderman, 2008; Albrecht & Kavanick, 2019; Borman et al., 2016; Burton et al., 2006; Butler, 2019; Chirkov & Ryan, 2001; Gottfried et al., 2001; Grolnick et al., 1999; Hecht et al., 2019; Kaplan et al., 2019; Kim et al. 2010;

Kirjavainen & Pulkkinen, 2017; Loima & Vibulphol, 2014; 2016; Loima, 2019; Niemiec & Ryan, 2009; Palmer, 2009; Pearlman, 2010; Reeve et al., 2002; Smith, 1991; Um, 2005; Vansteenkiste, Niemiec & Soenens, 2010).

DISCUSSION ON COMPETENCIES AND THEIR LOCAL IMPLEMENTATION: WHAT AND HOW?

Thinking and Learning to Learn

Thinking and learning to learn was located to the first place of transversal competencies' list. Basic education curriculum estimated it to be "crucial" for the development of other core competencies and learning. Pupils' self-assessment, interactive learning and working environments, active peer (and other) observation, adjustment, knowledge-oriented processes and encouraged idea-innovations were included to relevant thinking and learning to learn development scenarios in the steering document (FNAE, 2014, 2016; cf. Albrecht & Kavabenick, 2019; Kim et al., 2010; Borman et al., 2016; Butler, 2019; Niemiec & Ryan, 2009; Palmer, 2009; Pearson, 2010; Sloan & Bowe, 2014; Vibulphol et al., 2015).

Apart from being the first and foremost "new" transversal core competence in BEC 2016, these activating and motivating methods for thinking and learning had been presented already by John Dewey in 1930s. Later-on, they were reapplied, for example, as *Philosophy for Children (P4C)* to "elevate critical thinking skills" (Dewey, 1938; Palmer, 2009; Pearlman, 2010; Williams, 2017; see also Lim, 2006; Wing on Lee & Tan, 2018; cf. Sahlberg, 2015; Darling-Hammond, 2005; 2010; Darling-Hammond & Adamson, 2014). Meanwhile, these skills were called as plain 'critical thinking' (FNBE, 2004; FNAE, 2004; Lamb et al., 2017; Williams, 2017). Conclusively, an old idea was again reformulated to a new curriculum core competence, replacing e.g. previous learning-to-learn skills in BEC (2004). In terms of intellectual history, this kind of phenomenon has been called a *supra-local transfer*: an idea, contextually here a competence, is copy-pasted and transferred to another social environment and time dimension, in which it has started to "belong" (Dewey, 1938; Johnston, 2019; Palmer, 2009; Hobsbawm, 1992; Hobsbawm & Ranger, 1983). Educational studies have recognized this kind of transferred pre-understanding as somewhat unintentional effect of existing 'cultural lenses' that originate from so-called "hidden curriculum" (Johnston, 2019; Rokka, 2011; Gordon, 2006; see also Gayle & Lambert, 2018; Heidegger, 1993; Miller, 1996; Peim, 2018).

The obvious connection with Dewey and later *P4C* returned, and relocated, this 21st century Finnish core competence 'thinking and learning to learn' to the late 19th - early 20th century America and its emerging industrialisation era. Notwithstanding the unintentional anachronism in its "newness", this recreation underlined the importance of timeless thinking and learning skills, instead of being something just "new" (cf. Darling-Hammond, 2010; Dede, 2010; Gardner, 1999; Gordon, 2006; Johnston, 2019; Lamb et al., 2017). Phenomenologically, this finding connected the comprehensive 'now' to that 'previous' understanding, thus

presenting simultaneously those time-related dimensions of this particular competence (Dewey, 1938; Albrecht & Kavabenick, 2019; Gordon, 2006; Palmer, 2009; Pearson, 2010; Peim, 2018; Van Manen, 2006; see also Johnston, 2019; Vansteenkiste et al., 2010). In other words, the thinking and learning skills needed in early industrialising society seemed to be similarly valued by a 21st century steering curriculum in the post-information era of exponentially increasing artificial intelligence (AI). The 'repercussive comprehension circle' of innumerable research approaches and socio-intellectual paths had finally processed same outcomes under a slightly different name. It was a recreation and repeated interpretation more than summarizing innovation.

Second, how did the local curriculum implement and moderate thinking and learning to learn competence? Local interpretation emphasized unspecified participatory methods in developing thinking and learning to learn-competence (cf. Dewey, 1938; Albrecht & Kavabenick, 2019; Johnston, 2019; Niemiec & Ryan, 2009; Loima & Vibulphol, 2016; Vansteenkiste et al., 2010; Wing on Lee & Tan, 2018). Social belonging, school assessment culture and supported, recognized individual learning strategies (including individualised plans for learning) were listed to enhance, or develop, this competence (cf. Albrecht & Kavabenick, 2019; Alderman, 2008; Borman et al., 2016; Burton, 2006; Dewey, 1938; Darling-Hammond, 2010; Grolnick et al., 1999; Palmer, 2009; Loima & Vibulphol, 2016; Vansteenkiste et al., 2010). In conclusion, local curriculum enabled and encouraged motivational factors, which were in line with research-based positive intrinsic motivation environmental enhancers. Moreover, it retransferred the implementation methods to school and classroom level. This, in turn, appeared to be an intrinsic motivation factor for teachers according to other contributions (Atjonen et al., 2019; Borman et al., 2016; Hecht et al., 2019; Loima, 2019; Vansteenkiste et al., 2010; Vibulphol et al. 2015). Thinking skills were locally subjected to a meaningful comprehension level: the relevance to understand the world from various interests and viewpoints (cf. Albrecht & Kavabenick, 2019). This seemed to have increased locally both mutual collaboration and interest.

According to local implementing principal, more instructions and in-service-training could have clarified the local curriculum process as whole (cf. Atjonen et al., 2019; FNAE, 2019b, n.d.). On the other hand, the principal also told that local municipality authorities, including the teams of educational sector, should have implemented more courageously their own curriculum interpretation. In principal's opinion, the implementation of transversal core competencies was on "satisfactory" level (cf. Alderman, 2008; Dede, 2010; Gordon, 2006; Hecht et al., 2019; Kaplan et al., 2019; Palmer, 2009; Pearlman, 2010; Vansteenkiste et al., 2010; Wing on Lee & Tan, 2018). Phenomenologically, local experts could have produced more specific, relevant curriculum content, if they had been encouraged more to do so (Borman, 2016; Dewey 1938; Kaplan et al., 2019; Lim, 2006; Peim, 2018). Apart from this, local assessment process enabled actors to revise their curriculum annually. Their version presented development discussions and school-based assessment, including

motivating socio-cultural interventions and supportive education programs, as crucial curriculum evaluation and quality assessment tools (Atjonen et al., 2019; Butler, 2019; Hecht et al., 2019; Gordon, 2006; Holm & Zilliacus, 2009; Kaplan et al., 2019; Kirjavainen & Pulkkinen, 2017; Loima, 2019; cf. Borman et al., 2016). In sum, local responsibility for *thinking and learning to learn* transversal core competence was taken constructively, in a proactive way.

Cultural Competence, Interaction and Self-expression

Second transversal core competence was cultural competence, together with interaction and self-expression skills (FNAE, 2014, 2016; cf. Lamb et al., 2017; Loima, 2019). Given the years of BEC implementation as hectic chain of changes in uncontrollable, unpredictable immigration, the competence was in a proper place in curriculum. Notwithstanding previous curricula, BEC 2016 told that national education curriculum cornerstone was a 'diverse, Finnish cultural heritage'. Moreover, BEC told it to have grown from the interaction of various cultures. Steering text formulated general cultural goals followingly: a) growing into a culturally diverse world of cultures, languages, religions, ethics and values, b) sustainable cultural lifestyle, c) respectful interaction and self-expression (FNAE, 2016; cf. FNBE 1985, 1994, 2004; cf. Vitikka et al., 2012; Lamb et al., 2017). In this contribution and analysis, the focus was in the understanding of diversity in 'cultural' competence.

First, surprisingly different, comprehension emphasis was a completely changed interpretation of Finnish culture and its origins. National culture had officially been seen as exceptionally homogenous since 1918, and still firmly united in BEC 1994. The 1985 curriculum had heavily emphasized national cultural unity, while BEC 1994 described internationalization as "a challenge" for Finnish education. Quite suddenly, Finnish national culture was found to be born from cultural interaction, and multiple, diverse origins (FNBE, 1985; 1994, FNAE, 2016; Rokka, 2011; cf. Hobsbawm, 1992; see also Albrecht & Kavabenick, 2019; Hobsbawm & Ranger, 1989; Holm & Zilliacus, 2009; Kolbe, 2003; Kirjavainen & Pulkkinen, 2017; Kirmayer, 2019; cf. Kolbe, 2003; Pyhältö et al., 2014; Virta, 2009).

Interpretational change in the long tradition of 20th century national curricula for unity reflected, first, contemporary social situation and prompt internationalizing changes inside the country. Second, it was the national matter of purposefully underlining the political "belonging" to the European Union, and its immigration policy – as a member state. Third, escalating humanitarian crisis had hit to national understanding of "us" also in Finland (FNBE, 1985, 1994, 2004, FNAE, 2014, 2016; European Union, n.d.; Albrecht & Kavabenick, 2019; Kirjavainen & Pulkkinen, 2017; Nieto & Bode, 2008; Loima, 2006; Mahon, 2006; Rokka, 2011; Virta, 2009). The contemporary situation, and policy, had changed the long-lasting national understanding of culture, when it was socio-culturally needed and politically urgent. In terms of its meaning and expressed comprehension, this transversal competence was a new creation.

What had been the reason for prolonged single-minded national understanding? In brief, modern nationalistic

thinking of 19th - 20th centuries had created, or invented as Hobsbawm (1992) put it, national "us" to support, justify and fortify national self-esteem and existence among the European nations. In particular, this togetherness had been crucial, and empowering, for statesmen in the countries that got their independency in the early 20th century. To have a proper, comprehensible and (often) virtuous national "us", a different but comparable "other" had also been needed from outside. BEC 2016 was the first Finnish curriculum that broke this educational document tradition of united national "us" (FNBE, 1985, 1994, 2004, FNAE, 2016; Hobsbawm, 1992; Albrecht & Kavabenick, 2019; Kaplan et al., 2019; Kirjavainen & Pulkkinen, 2017; Kirmayer, 2019; see also Loima, 2006; Mahon, 2006; Smith, 1991; Virta, 2009; cf. Vitikka et al., 2012). In this sense, the 'repercussive comprehension circle' had changed the long-lasting national understanding of culture, when socio-cultural circumstances were appropriate. Rapid social changes, together with previously unseen immigration and emerging humanitarian crisis, had changed the educational cultural comprehension rapidly, while social sciences had tried to update national cultural understanding already since 1980s with no particular outcomes in education (Alapuro, 1995; Heiskanen, 1983; cf. Albrecht & Kavabenick, 2019; Gardner, 1999; Hobsbawm, 1992; Loima, 2006). Finally, the immigrant manpower was also needed for domestic labor markets. It thus had to be "us".

How was this renewed cultural competence implemented locally? In brief, local curriculum was like a good gold mine – offering something for everyone. Individual, school-based, and local cultural competences were supported by a specific cultural education program as an umbrella, and tool, for specific local curriculum competence implementation activities. Kaplan et al. (2019) and Hecht et al. (2019) had also recently restated the importance of supported cultural "belonging" and identity (cf. Alderman, 2008; Grolnick et al., 1999; Smith, 1991). By offering a cultural education program for all basic education grades and pupils, local curriculum appeared to be culturally more proactive than the steering BEC had been. Especially local implementation was successful, when promotive and protective support for local, ethnocultural and gender equity was questioned. The program also guaranteed annual minimum lessons for pupils' cultural studies. Consequently, cultural education document enhanced intrinsic motivation of multicultural schools and supported pupils' skills to comprehend diversity locally, thus enhancing cultural interaction and opportunities for new means of identifiable togetherness and 'belonging' (Albrecht & Kavabenick, 2019; Butler, 2019; Hecht et al., 2019; Kaplan et al., 2019; Kirjavainen & Pulkkinen, 2017; Kirmayer, 2019; Loima, 2006; Mahon, 2006; Smith, 1991; see also Virta, 2009). In addition to previous dimensions, there were no documented signs of local inequity.

In general, this kind of supporting, implementing tools had seemed to motivate teachers (cf. Atjonen et al., 2019; Wing on Lee & Tan, 2018; cf. Gardner, 1999; Pyhältö et al., 2014). Furthermore, several national surveys and reports had shown the competence performance gap of native Finnish and immigrant pupils from PISA 2012 onwards, as well as problems in recognizing and arranging individually needed

support for learning. Local cultural education program was thus a declaration of cultural rights, and an acceptable, individual learning aid, for immigrated and all families. By and large, cultural swift to diversity in steering curriculum had been an outstanding strategic attempt to diminish structural and socio-cultural inequity countrywide from the very beginning (Albrecht & Kavabenick, 2019; Alderman, 2008; Kaplan et al., 2019; Kärkkö, 2019; Kirjavainen & Pulkkinen, 2017; Kirmayer, 2019; Pirinen, 2015).

The Data offered by principal revealed the similar situation at school. Competences were implemented on a satisfactory level, but more could still have been done locally. Especially in the multicultural school, in which the principal worked, emerging problems and growing needs of targeted in-service training for teachers were already obvious before the research had revealed them to FNAE and/or general audience (cf. Kirjavainen & Pulkkinen, 2015; Kirmayer, 2019; Kärkkö, 2019; Pirinen, 2015; FNAE, 2019a, 2019b). As Albrecht and Kavabenick (2019) had stated, an increase to the volume of individualised intrinsic motivation factors, and active student-based reasoning, could have resulted more enhancing comprehension factors. In particular, added intrinsic input may create a better comprehension for educational relevance among domestic and immigrant students, and their parents, since the very beginning (Albrecht & Kavabenick, 2019). After all, simultaneous multicultural viewpoints, beliefs, and contemporary mix of cultural origins, languages, religions and social roles was a new situation. It was new for all stakeholders at schools, homes, media and existing social support structures. However, economic regression had limited the education sector resources, including in-service training and e.g., substitute teachers' hiring (Ministry of Finance, 2016). Due to limited resources and their time-outs, FNAE had announced the in-service training for curriculum 2016 implementation and competency assessment to start in the spring 2020 (FNAE, 2019a, 2019b). Timing could have been better already five years earlier.

CONCLUSIONS AND SUGGESTIONS

This contribution has aimed to discuss – and comprehend – the origins for two selected basic education 2016 curriculum transversal core competences, and their local gradual implementation. Consequently, the Data were similar but also different, as was the related literature to some extent. In addition to educational studies, other socio-cultural contributions have also highlighted the origins, and comprehensions, of competences.

Main findings have been specifically competence-related. *Thinking and learning to learn* was found to descend from early industrialising society of America, having roots in late 19th century education. The Deweyan understanding of individual learning by doing had reappeared to the renewed core competencies of 21st AI century. The “repercussive comprehension circle”, as the development of (any) comprehension was named for this study, revealed ageless importance and needs for recreated thinking and learning skills. They were still necessary and, moreover, urgently needed. As it came to thinking competence implementation, local actors did well enough. However, they could have performed better, if they

had been actively encouraged and supported to do so. In other words, some local capacity was left unused.

Cultural competence broke out of its previous long-lasting comprehension circle, as did the whole definition of it. In rapidly changed socio-cultural circumstances during the implementation, the core curriculum had established totally new “roots” for previously united Finnish cultural origins. Instead of national single-mindedness grown from modern nationalism and its policy-makers during the 20th century, Finnish culture suddenly was grown from political, social and cultural diversity. Previously unseen immigration had changed the central education administration policy from unity to plurality, following the EU policy and rapidly increasing domestic needs. Apart from the steering curriculum guidelines, even more confirmative and affirmative measurements took place in local implementation. Local cultural education program was a success story from the very beginning. In an institutional level, the growing needs for added in-service training to teachers were predicted faster than reports officially told. So was the growing number of individual learning support, as well. Apart from local needs and ‘online’ situation, adequate in-service training arranged by FNAE was too late to be proactive.

Conclusively, the needs and weak points of the curriculum 2016 core competencies implementation were obvious already by September 2017, when 7th graders started their studies according to 2016 curriculum. The weaknesses, and targets for additional input, could have been identified earlier, if the “weak signals” of gradual curricular implementation process would have been promptly heard. Regardless of this central administration delay, the local actors seemed to react proactively. Nonetheless, the budget savings were limiting the possible corrections. Finally, carefully targeted curriculum implementation and competence assessment in-service trainings arranged by FNAE were to start in the spring 2020 – four years after the implementation.

Out of the various suggestions for this chapter, there was a particular one worth of presenting first, and foremost. If the Finnish teacher education, curricula reform, and in-service training were publicly claimed to be research-based, they all should – accordingly – rely on identifiable and contemporary research. Second, curriculum and other core competencies will need their updated studies as well. None of those should be published without a proper argumentation. Clear, recognizable connection with educational and socio-cultural research would also promote mutual comprehension of all stakeholders in the era of AI. Furthermore, it would serve the mankind, as education acts state.

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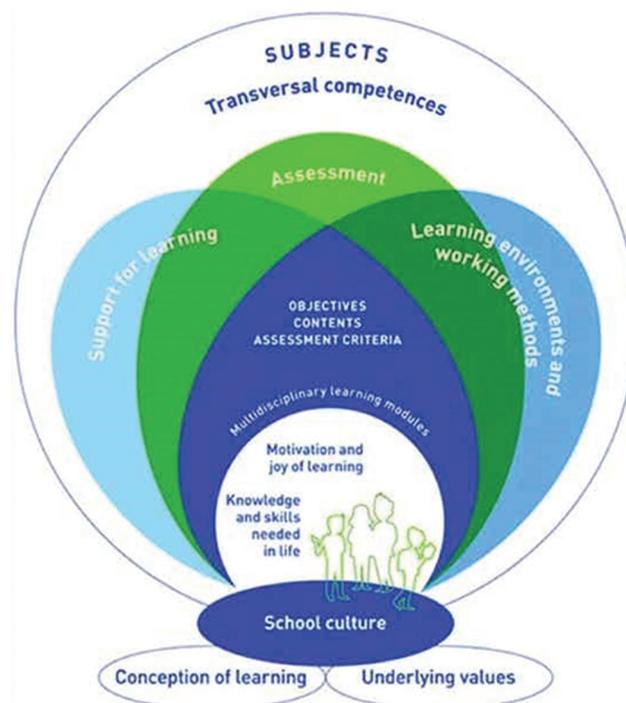
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APPENDIX 1

Transversal competencies in Finnish Basic education Curriculum 2016.



Source: Basic Education Curriculum, 2016; Loima, 2019.