

9th ICEEPSY 2018
International Conference on Education and Educational
Psychology

SUPPORTING STUDENTS' KEY COMPETENCES IN VISUAL
ART CLASSES: THE BENEFITS OF PLANNING

Helen Arov (a)*, Edna Vahter (b), Erika Löfström (c)

*Corresponding author

(a) Institute of Art and Culture, Estonian Academy of Arts, Kotzebue rd 1, Tallinn 10412, Estonia, E-mail
helen.arov@artun.ee

(b) School of Educational Sciences, Tallinn University, Narva rd 25, Tallinn 10120, Estonia, E-mail
edna.vahter@tlu.ee

(c) Faculty of Educational Sciences, University of Helsinki, Brobergsterassen rd 5A, Helsinki 00014, Finland, E-mail
erika.lofstrom@helsinki.fi

Abstract

This paper highlights the role of an art teacher in shaping the overall learning process and potential in supporting not only students' artistic skills, but also skills to thrive in a contemporary world. The aim of this study is to develop and implement strategies that support students' key competences in basic school visual art classes and to provide opportunities for students to be engaged with visual art in a more meaningful way. A preliminary questionnaire with 77 of Estonian basic school second level art teachers revealed that teachers support key competences rather implicitly and view these as a natural part of lessons that do not need extra planning. Basing on the action research cycle conducted with two 5th grade classes, we argue that explicit key competence support provides a more meaningful interaction between the teacher and students, and that planning plays a vital role in materialising key competences in the teaching.

© 2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Key competences, visual art, basic school, study unit planning.



1. Introduction

Researchers dealing with questions of art education have faced a difficult dilemma of whether to emphasize art education as a possibility to develop skills that serve learning in other subjects or to focus on art and its intrinsic values. Using art in education for instrumental purposes has been largely criticized and many art educators hold the notion of art for art's sake ("l'art pour l'art") in great regard (Biesta, 2017; Bresler, 1995; Smilan, 2016). The discussion of the purpose of art education has also been sparked by the rising tendency towards assessment-based education (Smilan, 2016) as also a turn towards looking beyond the basic skills and focusing more on the skills needed to thrive in a contemporary world (Nickerson, Perkins & Smith, 2014; Perkins, 2014). This change affects the teachers' role in the classroom as well as the study content and teaching methods. Smilan (2016) describes situations where art teachers feel they must learn or re-learn skill sets that they have previously perceived as outside the art discipline to keep up with the district or school requirements. Smilan and Miraglia (2009) encourage art teachers to embrace the possibility of discovering new pathways to support students' knowledge acquisition and to purposefully engage students in learning through the arts.

Elliot Eisner (2002) has distinguished four types of arts integration in the school environment:

1. Using visual art to support a better understanding of different time periods and cultures;
2. Comparing visual arts principles with other disciplines;
3. Creative problem solving that involves combining knowledge from different disciplines;
4. Following the principle of relevance to student's life. This approach follows the goal to integrate a variety of academic areas in order to enhance meaning making through authentic connections.

Intentional key competence support has the possibility to have tendencies from all four categories. Within this research we will link key competence support mostly with the fourth category, as this approach expresses the need to evoke students at an individual level and seeks to make the connections between different subject areas more transparent. Perkins (2014) also includes 21st century skills, which share the main body with key competences reflected in the educational policies, such as the European Parliament and the Council Recommendations on Key Competences for Lifelong Learning (2006) in his framework of six beyonds that reflect the trends spotted in the educational systems around the world. Perkins (2014) calls educators to strive towards learning situations in the classroom that are what he calls lifeworthy, in other words likely to matter to the lives of the learners.

This research strives to show the framework of key competences as means of bringing out the value of artistic endeavour. Therefore, creating a common vocabulary to discuss the benefits of learning visual arts, as well as seeing the common goals that come above of the subject specific level. Key competences were included in the Estonian National Curriculum (both in basic school and high school documents, hereafter referred to as National Curriculum) from 2011 and have been refined and complemented in 2014. From 2014 there are eight different competences listed as key competences in different Estonian policies – such as the National Curriculum and the Estonian Lifelong Learning Strategy 2020. In these eight competences eight recommendations from the European Parliament can be clearly recognized. This is illustrated with Table 1.

Table 01. Comparison between the European Parliament and Council recommendations for key competences and the framework listed in the Estonian National Curriculum (2014)

European Parliament and Council recommendations	Estonian National Curriculum (from 2014)
Communication in the mother tongue	Self-management competence
Communication in foreign languages	Communication competence
Mathematical competence and basic competences in science and technology	Mathematics competence
Digital competence	Digital competence
Learning to learn	Learning to learn competence
Social and civic competences	Social competence
Sense of initiative and entrepreneurship	Entrepreneurship competence
Cultural awareness and expression	Value competence

In some cases, the competences are followed word by word and others are pinpointed through different words. For example, in the EU framework, the cultural awareness is linked with expression and social with civic competence. In the Estonian framework these approaches are divided and phrased a little differently – as value, social and self-management competency. In this article we will elaborate more on the competences that this research focuses on in the research methods and findings chapters.

Morris (1991) points out that “an active attitude towards art has to be learned, while it is not just about the student’s attitude towards art, but also the teacher’s attitude, the status of the subject in school, and the social attitude towards art in general” (ibid., pp.684–685). This notion expresses the need for art teachers to open up about their understandings and opinions of a given question, in this case the topic of supporting students’ key competences in art classes.

Teachers are guided to support students’ key competence in every subject (Kikas & Toomela, 2015). However, Estonian school teachers have expressed hesitation towards the concept of key competences and expect guidelines for supporting students’ key competences in different subject areas (Aus, Malleus, & Kikas, 2016). An enquiry with 388 Estonian school employees (Aus et al., 2016) showed that they judge their own knowledge in key competences mainly as average and they expressed a need for guidance and practical examples in supporting students’ key competences in different subject areas. Research also shows that Estonian art teachers feel hesitant about explaining the meaning of learning skills and ways how they support these in art lessons (Arov & Jõgi, 2017) pointing to the need of understanding the challenges that teachers experience.

In Estonia in the first stage of basic school art is taught mostly by class teachers. The second stage of basic school is when the change between the class teacher and art teacher takes place. In some cases, also the teachers of craft and technology teach art at this level. The first and second stage of basic school is equivalent also with the term middle school in other countries. Middle school level is viewed as the most critical period to integrate these 21st century dispositions to art education, while this is the period in student development where they seek opportunities for purposeful investigation, collaborative interaction and unique interpretations (Smilan, 2016). These are the skills that are viewed as integral for math, science and language classes, but are also as foundational to studiobased learning (Hetland, Winner, Veenema, & Sheridan, 2014; Smilan, 2004).

The age between 9 to 12 is, according to Lowenfeld and Brittain (1987), called the gang age as the children discover that they are members of the society, they discover the society of their peers and anticipate independence from adult domination. Children realize that one can do more in a group than alone (Lowenfeld & Brittain, 1987). Therefore, supporting the ability to work in a group, organizing the work process and establishing group work habits is especially necessary in this period. This is also the period when children begin to develop an understanding of themselves as individuals and their abilities. This may also evoke a critical stance towards self and others. Helping children to form a positive self-concept is essential for establishing attitudes of growth to facilitate learning (Lowenfeld & Brittain, 1987). A longitude study in social competence development showed that the growing ability to share and understand others' thoughts and feelings during adolescence are reflected also decades later in self-reported social competences (Allemand, Steiger, & Fend, 2015). Since this is the period of rising self-awareness and a quest for purposeful interactions for the students, our aim was set for intentional planning and implementing of key competence support in art classes.

2. Problem Statement

As previous studies in Estonian teacher comprehension of key competences have shown a hesitation towards supporting key competences in different subject fields, it is important to start the investigation of the key competence supporting strategies from the art teachers' point of view in order to form a precise focus for the implementation phase of the study.

3. Research Questions

The overarching research question is "how to meaningfully plan and implement key competency support in basic school visual art classes?"

4. Purpose of the Study

The aim of this study was to plan and implement strategies that support students' key competences in basic school visual art classes in order to provide opportunities for students to be engaged with visual art in a meaningful way.

In order to reach the aim, specific objectives were created:

- Determining how art teachers plan and implement key competence support in their work, based on teachers' experiences.
- Identifying the key aspects of explicit key competence support in art classes.

5. Research Methods

Pedagogical action research approach was chosen, since the research question stems from a practical need to develop the teaching of key competences in line with Estonian National Curriculum (2014), to identify the challenges that art teachers experience, and based on those experiences develop ways in which key competences may be more effectively taught. The goal is to empower the students' learning, improve

teaching practice and to share the findings and strategies with other art teachers facing the same situation to contribute to their understandings (Löfström, 2011; McNiff & Whitehead, 2011; Norton, 2009).

To identify what the educational reality is regarding Estonian art teachers' notions and opinions about supporting students' key competences in art classes, it was necessary to begin by conducting a background survey. The aim of the background survey was to provide argumentation and focus for subsequent implementation and evaluation in a visual arts class. The second stage of the basic school was chosen as the focus point, as this is the period where we could possibly bring out a multitude of opinions from teachers with different educational background.

5.1. Preliminary questionnaire

A web-based questionnaire was designed and a stratified random sampling method was used to contact as many teachers as possible. The questionnaire was sent out to every basic school headmaster for distributing to the teachers that teach art at the second level of basic school. A total of 478 school heads were contacted. We do not have a way of knowing how many heads of schools forwarded the survey to the teachers. 77 answers were received from the teachers. The questionnaire consisted of eleven questions, both closed-ended and open-ended questions that directed teachers to open up about their attitudes and understandings about supporting key competences in art classes, their planning methods and classroom activities that support different key competences.

The data from the survey was analyzed with the NVivo program, which was used to form themes and codes of qualitative data. The statements were looked at individually and categorised into themes. Possible interconnections of different themes were also identified.

5.2. Action research cycle

The action research cycles were conducted by the first author of the paper and the second and third author served as critical friends to the first author. The role of a critical friend was to balance the factor of teacher-researchers' subjectivity and to give a second opinion to the work (cf. McNiff & Whitehead, 2011). This paper presents the first cycle of an ongoing action research. The first cycle was implemented within a full course of 35 academic hours of art lessons, which were held with two sets of 5th grade classes, altogether 48 students.

The cycle focused on three different key competences listed in the National Curriculum (2014). Social competence, entrepreneurial competence and self-management competence were chosen for the first cycle. The permission of the school head to conduct the research was asked. Parents for the selected classed were asked for informed consent for their child's participation in the research. Also, permission to publish student artworks as a representation of the research was collected from the parents. This was done in the opt-in method to make sure that the parent had got the information and given his/her consent. Participation in the research was voluntary. The research does not constitute medical research and consequently does not require ethics review in the Estonian context. Qualitative data, such as reflections from the research diary, classroom action recordings, student artwork and art journal entries, were collected. In Table 2 different data collection types, collection methods and operational aspects for the first cycle are shown.

Table 02. Example of action research cycle data collection plan

Type of data	Collection method	Competence it reflects	Operationalization
Research diary	Teacher-researchers' reflections; student remarks	Social competence	Overall effectivity or the learning unit.
Classroom action observations	Photos (by teacher)	Social competence; Entrepreneurial competence	Students working methods, process overview.
Student art journals	Photographed art journals	Entrepreneurial competence; Self-management competence	Students planning for the artworks, goal setting, reflective assignments, artistic skill development.
Student artworks	Photographed artworks	Entrepreneurial competence; Self-management competence	Student ideas and emotions and effort levels.

Data collected from the classroom were prepared for analysing by transcribing the field notes and grouping the data collected from student artworks and art journals into thematic groups, based on assignments and competences it reflected. A general sense of the material was formed and analysed during the process as well as after each study cycle. This was followed by the coding and forming of major and minor themes. Also, possible interconnections between different themes were looked for.

6. Findings

The findings of this paper are divided into two sub-chapters as they entail two different research questions and the preliminary questionnaire serves as an input for the following action research part of the study.

6.1. Art teachers' experiences of teaching key competences

The sense of constant change that teachers have reported to feel (Smilan, 2016; Smilan & Miraglia, 2009) is also apparent in the answers to teacher survey. The two following statements illustrate the whirlwind of choices and responsibilities that the teachers face:

“The educational system is changing constantly, and someone somewhere always seems to be smarter than the subject teacher.”

“It is difficult that such a large part is left for the teacher to invent. There is a shortage of teaching materials. Sometimes inventing is fun, but it just takes so much time.”

The question that reflected the teachers' attitudes towards implementing key competence support in practice the most was the question of how teachers take key competences into consideration during the planning of their teaching. The most common view (N= 26) was that supporting key competences is such a natural part of art education that the teachers do not feel a need to concentrate on planning the integration of competences in lesson planning. Therefore, they have recognized situations where key competences have emerged during the learning process and valued these occasions, but this notion is received in hindsight and not through an intentional process. A group of teachers, who are mostly those who answered that “key

competences come as a natural part” (N=16) also express that supporting key competences is so much rooted in choosing the overall teaching approach and in alternating the learning methods. This leads to the teachers’ viewpoint that they are supporting key competences even when they have not thought of it explicitly. Another subgroup of teachers (N=13) see themselves supporting students’ key competences implicitly in most cases and find that the connection between subject specific skills and competences are to be made in the moment, during the lesson. This was recognized as the place when it could be determined what kind of general skills, knowledge or attitudes are being supported in the lesson.

There was also a set of teachers (N=13) who expressed that supporting students’ key competences should be done through integration with other subjects as it is strongly insisted on from the heads of schools. Only nine individuals stated explicitly that they do not factor key competences in during the lesson planning in any way at all. On eight occasions teachers gave such vague answers that it was not possible to determine their view on the teaching of key competences. The vagueness may be an indication that the notion of key competences is obscure to these teachers.

In a few cases, teachers (N=7) who expressed that they explicitly focus on supporting key competences and factor key competences in during lesson planning, also stated that they usually choose one or two key competences to focus upon and remain focused on the same competences. Value competence, and social and digital competences were mentioned the most. This kind of approach can lead teachers to come up with their own take of art education, where they focus on their prior knowledge and competences that they value the most. The following quotations reflect how these teachers support a certain set of key competences more intentionally than others:

“I do take all of the key competences into consideration in some way, some more than others. Some come more naturally to artistic practice, some to students’ self-reflection and some in evaluations. I have mostly planned activities around the cultural and value competence and social competence. These are very much related to different cultural occasions, folk traditions and social questions. Also, digital competence is being supported when the activity demands something extra than the use of a personal device.”

“I do not integrate all of the competences intentionally, but I have explicitly supported social and self-management competences in my lessons, as I see that students struggle with these the most.”

The popularity of certain key competences may be associated with the conciseness of the description of these competences in the national curriculum and other supporting documents providing teachers a better understanding and more confidence to implement these competences. Regarding competences with a more complex description and an intertwined nature, such as self-management competence and learning to learn competence for example, could evoke a more hesitant expression from the teachers. Some teachers could also lack the vocabulary and skill necessary for formulating a view of their contribution to each competence. The number of answers (N=8) that gave vague answers may indicate a lack in confidence in how to support key competence. This notion is also supported by previous research in Estonian teacher awareness about key competences (Aus et al., 2016), which shows that the teachers’ understanding of each competence substantially.

6.2. Action research cycle

Based on the results of the survey an explicit focus on planning to support students' key competences was set to the action research cycle. Three from eight key competences stated in the National Curriculum (2014) were chosen for the cycle. Social competence, entrepreneurial competence and self-management competence were first chosen as the literature (Allemand, Steiger, & Fend, 2015; Lowenfeld & Brittain, 1987; Smilan, 2016; Wang, 2009) showed a good connection with age specific developmental aspects of the 5th grade students. The planning started before the school year and entailed working with literature and discussions with the critical friends.

Social competence consists of knowledge and skills required to interact and relate with others effectively and satisfactorily (Salavera, Usán, & Jarie, 2017). The National Curriculum (2014) describes social competence as "the ability to become self-actualized, to function as an aware and conscientious citizen and to support the democratic development of society; to know and follow values and standards in society and the rules of various environments; to engage in cooperation with other people; to accept interpersonal differences and take them into account in interacting with people". In this cycle cooperation skills and interpersonal differences, in particular, were taken into focus. Research has shown that promoting autonomy, class discussions, and teachers' emotional support contributes to better social competence as well as helps to avert behavioural problems and support positive school adjustment (Wang, 2009). Therefore, support on students' autonomous decision-making and regular discussions were planned as an integral part of the students' learning process.

According to the definition and recommendations provided by the European Commission (2018), entrepreneurial competence is the ability of an individual to translate ideas into practice and the ability to plan and manage projects, which include creativity, innovation, sense of initiative and risk-taking. The National Curriculum (2014) also accentuates the importance of setting one's own goals, to show responsibility for results and to react flexibly in terms of change. Jůvová, Čech and Duda (2017) stress that these crucial skills are teachable and should be integrated into educational subjects at all levels, starting from the primary level. Teachers are advised to take the role of a counsellor and activity coordinator. Activities are meant to support students' autonomy and teamwork, responsibility, self-reflection and the ability to flexibly respond to problems (Jůvová, Čech & Duda, 2017). This led to the decision to include an individual project based on the individual art goal to the learning process. Also, self-reflective assignments and time-management support were intentionally planned to the study units, for example, in the students' process planning as a landscape task (Figure 2.).

A certain overlapping can be recognized with the entrepreneurial competence and self-management competence, as self-management techniques include self-monitoring, self-recording, self-evaluation, goal setting, and self-reinforcement (Mooney et al. 2005). Jones and Davenport (1996) highlighted the process journal as a core instructional practice that helps to retain self-regulative behaviours in art studies. A process journal (also called portfolio) is a purposeful collection of student work that exhibits students' effort, progress and self-reflection (Paulson, Paulson & Meyer, 1991). Getting a variety of feedback, from the teacher as well as from fellow students is also important for supporting the ability to evaluate oneself (Jones & Davenport, 1996). From this, a decision to use art journals was made. This allows not only to collect the work, but also encourage students to plan and evaluate their progress. A principle of integrating the

possibilities for the students to reflect on their strengths and weaknesses in the journals and to talk about it was identified as one of the key aspects of supporting self-management.

For children, visual art is not only the representation of objects, but also the expression of understandings and feelings about the objects. Children at the age between nine and twelve are beginning to deal with abstract concepts, such as emotions and relationships between people and objects. They also form a more complex representation of space. This is illustrated by moving away from a single base line, which usually is the bottom of the paper, to the use of a plane and beginning to deal with questions of three-dimensional representation and interrelationships between objects. Prior to this age children have little understanding of maps, as two-dimensional configurations and cartographic symbols are hard to read for children before the age of eleven or twelve. To support this sense of map comprehension and spatial awareness, assignments in creating their own maps are suggested as beneficial. (Lowenfeld & Brittain, 1987; Vygotsky, 2004) This resulted in the plan to use a landscape as a reoccurring topic of art class.

The pre-planning phase resulted in four larger study units that would take up the whole art course of the year, but also allow flexibility and changes within the process. Table 3 reflects the process and the focus points of the planning phase, as well as the main themes for the four study units that emanate from the competence descriptions (cf. National Curriculum for the basic school, 2014) and the supporting strategies.

Table 03. Example of action research cycle planning to support key competences

Competence	Sub-skills focused on the action research cycle	Supporting strategy	Study unit topics
Social competence	To engage in cooperation with other people and to accept interpersonal differences.	Providing the possibilities for cooperation and dealing with similar tasks individually and in group.	<p><u>“Hometown Tallinn”</u> What makes a city? What do people do in a city? Discussions and collaborative artwork.</p> <p><u>“People and emotions”</u> How do people show their emotions? What are the big emotions? How are modest emotions presented? Discussions and individual artwork.</p> <p><u>“My personal city map”</u> Discussion on meaningful places for one another.</p>
Entrepreneurial competence	To set goals and carry them out; to organize joint activities, show initiative and take responsibility for the results.	Creating possibilities for individual goal setting and directing students to plan a longer process, directing students to self-evaluate themselves.	<p><u>“Setting a personal goal for the art course”</u> Planning the process as a landscape, taking time to work on the individual goal.</p>
Self-management competence	The ability to understand and evaluate oneself, one’s strengths and weaknesses.	Providing a possibility for a collected body of work that reflects process (personal art journals). Directing students to self-evaluate themselves and providing different methods for that.	<p><u>“My personal city map”</u> Places of personal importance. Discussions and individual artwork.</p> <p><u>“People and emotions”</u> How do you show your emotions? Discussions and individual artwork.</p>

Based on the main foci that emanated from the abovementioned theoretical sources, five principles were formed to create a basis for supporting students' collaboration skills, entrepreneurial competence and self-management skills and carrying out the lessons. These were:

- Providing a possibility for the student to set an individual goal in art and carry it out.
- Providing room for discussions and choice between methods and art materials.
- Providing a possibility for working on a similar task individually and collaboratively (in this case the landscape).
- Having a possibility to self-evaluate oneself regularly through different methods (such as a questionnaire, personal art journal, discussion, grading oneself, giving feedback for the future etc).
- Talking as explicitly as possible about the different competences and aims for the lessons and with the teacher taking the role of a supporter and activity coordinator.

The physical space of the art classroom was set up differently from an auditorium-type classroom setting that the students were used to. The art classroom was set up for work in groups of four and the art materials were laced on open shelves for the students to use. This enabled the students to move around more freely and to access the materials they needed. Students' artworks were exhibited on the walls and discussions could be held in front of the works. Therefore, the classroom setting supported the objectives of the study process.

Working with individual art journals was new for the students, as was the possibility to set a larger individual goal in art. The students appeared to embrace the opportunity to work on their journals. The journals could be kept in school or taken home and in many cases the journal became a place where the students also sketched in their spare time. Figure 1 shows examples of students work done as an addition to the lesson assignments in their art journals. These works reflect their interests, emotions and show signs of self-encouragement.



Figure 01. Examples of six 5th grade students' individual artworks as an addition to the art journals done in their spare time. First author's photographs from 5th grade art journals.

Collecting the planning, sketching and in few cases also the final artworks in the journal provided the students from an entrepreneurial competence aspect the possibility to plan and determine their own

progress in art. Giving the planning process an artistic outlet, in this case using a landscape format to plan their way towards the individual goal in art, was also a new idea for the students, but was well received. Figure 2 shows a part of the individual art goal planning process from four different art journals. This assignment guided students to split a bigger process towards the goal into smaller steps and to reflect upon the difficulties that could emerge from the process, as well as different sources that could help and support them in their work. Setting a more specific goal than “*I just want to learn how to draw!*” was hard for some students at first, but with the help of questions such as “*What does a nice drawing for you look like?*” and “*From what could you tell that someone can draw?*” they also reached a more specific goal. It was also important to stress to the students that sketching is a way of practice and making mistakes is a normal part of learning.



Figure 02. Examples of four 5th grade students' solutions for setting one's own individual goal in art. First author's photographs from 5th grade art journals.

Figure 3 shows four student artworks on the assignment “My personal city map”. From the representational aspects the task challenges students' map comprehension skill and dealt with the question of how to express distances and interrelationships between objects (Lowenfeld & Brittain, 1987; Vygotsky, 2004). In case of the self-management competence, the learning unit gave students the opportunity to, first, think of the places that are meaningful for them personally and the places that they visit the most. Therefore, providing an opportunity to analyse what the places are where they spend their days and which places have influenced them the most. From the social competence aspect, the personal city map task sparked a lively exchange of meaningful places between desk mates. This was not in any way disturbing to the task, but rather vivified the students' scope and bond with each other. In the progress of the course, a growing exchange of opinions and experiences between the classmates emerged.



Figure 03. Examples of four 5th grade students’ solutions for the “My personal city map” learning unit. First author’s photographs from 5th grade art journals.

A stronger sense of authorship and personal connection was apparent by the end of the study cycle. Figure 4 illustrates artworks that were the result of the work with an individual art goal. The students’ goals varied from the wish to master different art materials to expressing individual interests or combining different art media. A change towards a deeper self-reflection and independents was recognized by the teacher-researcher, which reflected a meaningful connection with the art process and self-discovery. In the beginning of the course, questions that sought information could be heard from the students, for example the question “*Can I make the grass purple?*” and a surprising relief when free choice was given to the students. The search for confirmation subsided considerably by the end of the course. Self-reflection could be recognized in student remarks such as “*This was too difficult of a goal for me and I had to change it a little.*” and “*Using art journals helped me plan my steps and see my progress in art.*” Likewise, a growth in self-assurance when talking about their work in front of the classroom could be detected in the course of time.



Figure 04. Examples of four 5th grade students’ artworks that reflect their individual goal in art. First author’s photographs from 5th grade artworks.

The process was mostly focused on two-dimensional artworks, even though a few groups chose to explore also the possibilities of a three-dimensional landscape. As a point for improvement, students could be guided to take even more risks and have courage to explore different art materials and media. Since this is an ongoing action research, in the following cycles more focus is directed towards having choice as an integral part of the lessons and supporting students to analyse their risk-taking in art.

The intention to support key competence had an impact in directing the planning and overall objectives and methods of the learning process. Social competence was supported by promoting autonomy and regular class discussions about the work and the process. The role of the teacher-researcher was more of a supportive bystander and a coach, providing the students with an opportunity to take the lead in their learning and make more decisions. Art journals were used to support the entrepreneurial competence through giving the means to organize one's work and process remarks in one place. An individual goal setting assignment was designed to give even more ownership to the learner and enable them to plan a larger artistic process. Self-management was supported through the task of investigating one's emotions and ways of expression. Integrating the possibilities for the students to reflect on their strengths and weaknesses in the journals was a means to support self-reflection. The regular discussions gave an opportunity to express worries and accomplishment, providing the students with an emotional outlet as well as a means for feedback.

7. Conclusion

Key competences have had a place in the Estonian National Curriculum from the beginning of this decade (2011). Teachers are guided to support students' key competence in every subject (Kikas & Toomela, 2015). However, Estonian school teachers have expressed the need for guidelines in supporting students' key competences in different subject areas (Aus et al., 2016). This research concludes that Estonian art teachers mostly support students' key competences implicitly and view key competence support as something that happens without the need for intentional planning. The tendency to deal with key competences based on one's own choosing was also detected. More work on clarifying the sub-skills of each competence and how these can be manifested in different subjects is needed, in order to give teachers the courage to recognize and express the actions that they take in supporting students' key competences in their classrooms.

This led to the intention to conduct an action research in order to determine planning strategies for intentional key competence support in art classes. Social competence, entrepreneurial competence and self-management competence were chosen as foci in two 5th grade art classes during one school year. Social competence was supported through enabling students' autonomous decision-making, possibilities for group work and regular classroom discussions. Entrepreneurial competence was attended to by including an individual project based on the individual art goal in the learning process. Also, self-reflective assignments and time-management support were intentionally planned into the study units. Self-management and entrepreneurial skills were supported by providing students with individual art journals. The journals helped not only to collect the work, but also encouraged students to plan and evaluate their progress. A principle of integrating the possibilities for the students to reflect on their strengths and weaknesses in the journals and to talk about it was identified as one of the key aspects of supporting self-management. Expressing the

aims and objectives on supporting students' key competences and open discussions on that is also integral to the key competence support. These strategies led students to express authorship and meaningful connection with their artworks. Even more, the communication between the students and the teacher moved from students looking for confirmation from the teacher towards self-analysing one's learning in art.

The present study has some limitations. One of the limitations is the low response rate of the teacher survey. Therefore, the data from the survey was used as an indication for the action research, rather than a true reflection of Estonian art teachers views and strategies for key competence support. A second methodological weakness is the reliance on the teacher-researchers' observational data without video recordings or an external observer. Video data would have allowed second raters to assess the emergence of key competences among students in process. This study was limited to specific key competences. In subsequent cycles of the action research, other key competences will be explored.

Acknowledgments

The authors would like to thank all the teachers who participated in the questionnaire and the students involved in the action research.

References

- Allemand, M., Steiger, A. E., & Fend, H. A. (2015). Empathy development in adolescence predicts social competencies in adulthood. *Journal of Personality*, 83(2), 229-241.
- Arov, H., & Jõgi, A. L. (2017). Supporting learning skills in visual art classes: The benefits of teacher awareness. *Journal of Elementary Education*, 10(2-3), 145-162.
- Aus, K., Malleus, E., & Kikas, E. (2016). Õpetajate teadlikkus üldpädevustest. *Artiklid üldpädevustest*. Retrieved from https://oppekava.innove.ee/wp-content/uploads/sites/6/2017/03/Yldpadevuste_kontsept.pdf (July 21, 2018)
- Biesta, G. (2017). *Letting art teach*. ArtEZ Press.
- Bresler, L. (1995). The subservient, co-equal, affective, and social integration styles and their implications for the arts. *Arts Education Policy Review*, 96(5), 31-37.
- Eisner, E. W. (2002). *The arts and the creation of mind*. Yale University Press.
- European Commission. Council Recommendation on Key Competences for Lifelong Learning. (2018). *European Commission*. Retrieved from <https://ec.europa.eu/education/sites/education/files/recommendation-key-competences-lifelong-learning.pdf> (July 23, 2018)
- European Parliament (2006). Recommendation of the European Parliament and of the Council of 18th December 2006 on key competences for lifelong learning. *Official Journal of the European Union*, 30.
- Hetland, L., Winner, E., Veenema, S., & Sheridan, K. (2014). *Studio thinking 2*. Teachers College Press.
- Jůvová, A., Čech, T., & Duda, O. (2017). Education for Entrepreneurship—A Challenge for School Practice. *Acta Educationis Generalis*, 7(3), 63-75.
- Jones, J. E., & Davenport, M. (1996). Self-Regulation in Japanese and American Art Education. *Art Education*, 49(1), 60-65.
- Kikas, E., & Toomela, A. (2015). Õppimine ja õpetamine kolmandas kooliastmes. Üldpädevused ja nende arendamine.
- Lowenfeld, Y., & Brittain, L. (1987). *Creative and Mental Growth* (81th ed). New York.
- Lõfström, E. (2011). Tegevusuuringu käsiraamat. *Digar*. Accessed <https://www.digar.ee/arhiiv/ru/download/107855> (July 21, 2018)
- McNiff, J., & Whitehead, J. (2011). *All you need to know about action research*. Sage Publications.

- Mooney, P., Ryan, J. B., Uhing, B. M., Reid, R., & Epstein, M. H. (2005). A review of self-management interventions targeting academic outcomes for students with emotional and behavioral disorders. *Journal of Behavioral Education, 14*(3), 203-221.
- National curriculum for basic schools (2014). *Riigi Teataja I*. Retrieved from <https://www.riigiteataja.ee/en/eli/524092014014/consolide> (July 21, 2018)
- Nickerson, R. S., Perkins, D. N., & Smith, E. E. (2014). *The teaching of thinking*. Routledge.
- Norton, L. S. (2009). *Action research in teaching and learning: A practical guide to conducting pedagogical research in universities*. Routledge.
- Paulson, F. L., Paulson, P. R., & Meyer, C. A. (1991). What makes a portfolio a portfolio? *Educational Leadership, 48*(5).
- Perkins, D. (2014). *Future Wise: Educating our children for a changing world*. John Wiley & Sons.
- Salavera, C., Usán, P., & Jarie, L. (2017). Emotional intelligence and social skills on self-efficacy in Secondary Education students. Are there gender differences? *Journal of Adolescence, 60*, 39-46.
- Schmuck, R. A. (2008). *Practical action research: A collection of articles*. Corwin Press.
- Smilan, C. (2004). The impact of art integration as an intervention to assist learners' visual perception and concept understanding in elementary science. *Florida Atlantic University*.
- Smilan, C. (2016). Developing visual creative literacies through integrating art-based inquiry. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 89*(4-5), 167-178.
- Smilan, C., & Miraglia, K. M. (2009). Art teachers as leaders of authentic art integration. *Art Education, 62*(6), 39-45.
- Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian & East European Psychology, 42*(1), 7-97.
- Wang, M. T. (2009). School climate support for behavioral and psychological adjustment: testing the mediating effect of social competence. *School Psychology Quarterly, 24*(4), 240.