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TEACHERS' READINESS TO IMPLEMENT THE ACQUISITION OF TRANSVERSAL SKILLS IN THE CONTEXT OF THE NEW STANDARD

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Abstract. *In today's rapidly changing world, when information technologies are developing very fast, a new change of the paradigm of the educational system is needed. It means that a teacher's pedagogical activities also have to change – from an educator to a cooperation partner in the teaching/learning process. National Centre for Education (NCE) has worked out a new "Competence approach to teaching/learning content", the aim of which is to ensure the acquisition of the content of general education based on competence approach, and which embraces all stages in education.*
The objective of the article is to reveal the essence of competence approach and the readiness of primary school teachers to implement the acquisition of transversal skills in teaching/learning process and when planning curricula.
In order to obtain data, semi- structured interviews, observation, the analysis of documents have been used. According to the research results, part of the teachers finds it difficult to change their style of conducting the teaching/learning process. Explanation and task formulation dominate without involving pupils in discussions.
Keywords: *competence, integrated teaching/learning process, transversal skills.*

Introduction

In society, media and among teachers, it is a topical issue – how ready the teachers are to turn from a frontal, authoritative teaching method to the methods focused on cooperation. They need a desire and skill to collaborate, work in a team with the other subject teachers, the ability and desire to use IT in pedagogical process.

The essence of the New Standard has been revealed in the Project School 2030. The task is to promote a pupil's harmonious development, improve skills to be aware of his/her and other's responsibility for health/self-cognition and self-regulation; ensure the possibility to master the basic skills of learning and using information technologies/digital skills; ensure the possibility to obtain the experience of creative activity/cooperation and participation.

The acquisition of correlation skills in teaching/learning process in primary school features pupils' ability *to* be aware of him/herself as an individual. He/she

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understands his /her desires, needs and interests; is able to manage emotions, develop positive relationships, set real goals, take responsible decisions. A pupil is able and motivated to learn independently and constantly, and develop him/herself, can understand and follow the learning process.

The competence approach comprises the use of knowledge in varied practical activities, situations and contexts; not testing the knowledge but checking the use of knowledge in various situations; not summative evaluation but a meaningful feedback on the teaching/learning process which includes a pupil's self-assessment. When implementing the competence approach to meeting the Standard requirements in pedagogical process, we have to talk about teachers' professional development.

The mentioned approach at the early school age has to be implemented in the integrated teaching/learning process.

Methodology

The theoretical basis of the research consists of the description of transversal competences-skills in educational systems of Latvia and Finland, the outline of multidisciplinary approach in the context of transversal competences

In Finland, the educational reform was introduced in 2014 (Reconceptualizing and Repositioning Curriculum in the 21st Century). The shift of paradigms in the educational system of Finland is reflected in the national plan. In the 2014 core curriculum, 'transversal competence' denotes knowledge, skills, values, attitudes and desire. 'Competence' also means the ability to apply knowledge and skills in a given situation. How students use their knowledge and skills is influenced by the values and attitudes they have adopted and their willingness to engage, (Halinen, 2017).

Transversal competences are: thinking and learning to learn; taking care of oneself, managing daily life; cultural competence, interaction and expression;

Taking care of oneself, managing daily life; working life competence, entrepreneurship; digital competence; Participation involvement, building a sustainable future.

One of the main goals of the curriculum reform was to promote an integrative approach to teaching and learning. The purpose of this approach was to enable students to see the relationships and interdependencies between the subjects studied at school and the phenomena of life outside school. This approach should help students to link the knowledge and skills from different disciplines, to structure their learning into meaningful entities, come up with new questions as well as to create new knowledge by working together. The most important tools for this purpose, defined in the core curricula, were transversal competencies, multi-disciplinary learning modules, and pu pupil assessment (Halinen, 2017).

In Latvia, the goal of revision of curricula and teaching approach was to reduce the dominant fragmentation and passive, distracted from real life situations acquisition of knowledge in isolated school subjects, where the focus is on the curriculum, not on meeting pupils' individual needs and respecting their interests.

The New Standard of Education envisages the acquisition of knowledge and skills in seven learning areas, four transversal groups, and the values for the development of certain character traits, (MK noteikumu projekts, 2018).

In the New Standard, transversal skills are defined as skills although by their nature they correspond to the explanation of competences because the main emphasis is on pupils' abilities to do, plan and conduct their learning process.

The acquisition of transversal skills is implemented in all teaching/learning areas.

V. Purens (2016) believes that teachers have to pay the most attention to correlation competences for several significant reasons. Firstly, correlation competences are universal and can be used in all subjects. Secondly, it is the acquisition of correlation competences that allows pupils to learn independently also outside the school and do it lifelong. It is important for teachers to prepare tasks and tests based on correlation competences. This is confirmed by observations in practice and the analysis of literature.

The above-mentioned approaches can be successfully implemented in integrated teaching/learning model, this approach helps pupils see correlations between teaching/learning areas.

The integrated approach to teaching/learning process has been analysed by scientists from various countries in the context of different periods of time. In the 1980ties and 90ties a concept in integration of programmes – multidisciplinary, interdisciplinary and transdisciplinary approaches – were started to be used.

A lot of scientific research on diversity of integrated approach has been carried out (Fogarty, 2009). T. Kerry (2015) substantiates the essence and planning specifics of different ways of integration, emphasizes the possibilities of the acquisition of learning skills, when implementing the integrated approach.

All of them have researched and interpreted diverse integrated models (interwoven, related, thematic, interdisciplinary, multidisciplinary, correlated, holistic).

The result of integrated study and pupils' benefits in many ways depend on the quality of the implemented integrated study process. In its turn, the quality is affected by the teacher's understanding of the essence of integrated discovery study. Otherwise, instead of the expected progress the teacher can experience a serious disappointment.

In the teaching/learning process in primary school, a teacher has to provide pupils with:

- looking for sense through a systemic action,

- positive emotions in learning process,
- a challenge for pupils to check their abilities while taking part in planning the teaching/learning process,
- expanding the learning experience beyond separate subjects,
- integration of content and skills ensuring pupils' development, based on the inner logics of the development (Petere, 2013)

This article uses the concept of integrated learning model in primary school which manifests itself as a unity of familiar multidisciplinary and transdisciplinary approaches which focuses on satisfaction of a pupil's learning needs, discovering certain relationships within the framework of the issue to be explored.

It is a characteristic feature of multidisciplinary approach that topics, themes, issues or great ideas bring together outcomes from more than one subject area. Transdisciplinary approach focuses on children's-initiated questions and projects, (Primary Programs Framework, 2017).

Research process

13 primary school teachers from different Latvian schools took part in the research. The teachers who participated in the interview had been familiarized with the competence approach during the training course, and part of them had been involved in the pilot project. 11 primary school teachers from different schools agreed that their lessons are observed and analysed according to the competence approach. Out of them 4 teachers often planned teaching/learning process according to integrated approach.

The research comprised 2 stages: 1. The teachers' opinions on transversal skills and their use in the acquisition of curriculum in the context of the New Standard. 2. Determination of teachers' readiness to implement teaching/learning process which embraces the acquisition of transversal skills.

During the free interview, the questions were related to the essence of competence approach. Question1 – to find out teachers' opinions on the usefulness of implementation of competence approach in teaching/learning process. Question2- to specify how teachers evaluate the possibilities to involve pupils as cooperation partners in planning, organization of teaching/learning process and research. Question 3- to get to know teachers' opinions about a meaningful use of IT in teaching/learning process. In its turn, in order to evaluate teachers' readiness to implement the acquisition of transversal skills in teaching/learning process, lesson observation was used.

The indicators for the observation of the acquisition of transversal skills were chosen according to theoretical guidelines of School 2030.

Table 1 ***Transversal skills and indicators to specify them***

Transversal skills	Indicators
Self-cognition and self-regulation	Pupils' ability to set a goal and offer steps for achieving it
Thinking and creativity	Pupils' ability to independently offer various solutions to the problem, generate ideas
Cooperation and participation	Pupils 'ability to cooperate, agree on the conditions of task solution
Digital skills	Pupils' ability to find information in various web pages, use mobile phones in teaching/learning process under certain conditions

Table 2 ***Teachers' views on implementing the competence approach***

Question for the talk	The most characteristic views
How do you evaluate the benefits for pupils when implementing the competence approach	… Pupils get more involved in the teaching/learning process. A teacher has greater possibilities to work creatively. Unfortunately, we, teachers ourselves cannot abandon the desire to prompt and allow a pupil to look for solutions by him/herself. …I positively evaluate the requirement to connect the learning content with the real life and school environment. It is particularly applicable to the acquisition of science and maths content. ….I consider that teachers are not ready yet to change their teaching style so radically. I think that we exaggerate that pupils have to master the content with the help of research. I think that pupils will not gain comprehensive knowledge. …Teachers lack material base for research. During a science lesson which lasts 40 minutes, it is not possible to go out and do investigations
Supervision of the teaching/learning process Planning of the learning process by involving pupils, ensuring cooperation during cognitive research activities	…I have tried to invite pupils to set tasks by themselves, envisage steps for accomplishing them. I was surprised by the pupils 'ability to offer logical proposals and certain steps for the task solution. I have to admit that in order to implement such approach, it is not possible to work with traditional books and workbooks.... Pupils really like to work in groups and cope with the task together. Admittedly, it is necessary to attain that all pupils participate equally in the group…. With such a salary teacher cannot be required to prepare additional materials. In group work, pupils do not learn anything.
Use of meaningful IT	…Pupils with great interest take part in opinion discussions about the event or situation seen on the video.... The use of IT provides pupils with the possibility to see the real life, different natural phenomena.... There are video projectors only in some classrooms, so it is not possible to use them in lessons. Our school does not permit to use mobile phones.

As we can see from the table, teachers' views differ a lot. Basically, a positive view on the mentioned approach was expressed by the teachers who engaged in the pilot project; however, from 13 teachers 3 of them also considered that the requirements of the New Standard are not more successful than the requirements of the previous one. The answer was based on the fact that previously it was written what pupils had to master, now it is not so clear.

Table 3 ***Lesson observation analysis about the implementation of transversal skills in teaching/learning process***

Transversal skills and indicators	Description of teaching/learning process
Self-cognition and self-regulation. Pupils' ability to set the aim and plan steps for achieving it	- The teacher together with pupils are looking at fruit and vegetables. During the group discussions, the pupils come to the conclusion that they could examine cells. During the group work, they come to the conclusion which steps have to be taken in order to reach the aim. - Within the framework of the learning task the teacher has to introduce the culture and language of one country. By voting, the pupils come to the conclusion that they will learn in detail about Portugal. In common talks they plan what each pupil will do ((look for materials online, in the library) in order to prepare the presentation materials about Portugal. They together impose criteria. - The teacher herself determines the goal of the lesson only informing the pupils about it. She herself assigns learning tasks and determines what the pupils have to do. The presentation criteria are also imposed by the teacher. - The teacher sets the learning goal – to enhance the pupils' experience about animal shelters –herself. She introduces a video to the pupils. The pupils have the possibility to express their thoughts about it.
Thinking and creativity. Pupils' ability to independently offer various solutions to the problem, generate ideas.	The pupils are given a problem situation how to decrease expenses for different family budgets, which expenses are urgent, which not, what options there are for planning. The pupils work in pairs and present their achievements to others. The pupils get acquainted with the text about the differences between islands and peninsulas. They do a task in their workbooks where they have to find the correct answer about the differences between islands and peninsulas.
Cooperation and participation. Pupils 'ability to cooperate, agree on	After long work at the computer, the pupils together in groups design tasks for solution. They express their opinions, argue when justifying their proposals in order to produce a common group result. The group work envisages that the pupils, on the basis of their knowledge and experience, will discuss why the temperature changes, and what affects it however, while observing the lesson,

the conditions of task solution	only 2 pupils from the group expressed a thought fearfully, but 2 others kept silent.
Transversal skills and indicators	Description of teaching/learning process
Digital skills. Pupils themselves look for information in order to solve the problem. Pupils have no possibility to use IT in lessons.	In 2 science lessons the pupils went outside in order to take a photo of the selected plant. The first teacher gave the following task – to go to the computer room and find information about the chosen plant. Prior to that, group work was organized on designing common criteria for compilation of the information. In 7 observed lessons, the pupils used IT according to the teacher's sample. In 2 observed lessons IT were not used at all.

When asking teachers about engaging pupils in planning the teaching/learning process, there are positive answers which show that teachers are ready to experiment and change their usual teaching style. Undoubtedly, it requires additional work as emphasized by the teachers. A purposeful supervision of group work which facilitates the acquisition of necessary cooperation skills, makes a teacher objectively consider the tasks ensuring an active involvement of all pupils. Undeniably, it is easier for a teacher to conduct the teaching/learning process without organizing pair or group work.

When answering the question about the use of IT in teaching/learning process, views differ a lot. Part of the teachers evaluate it as indispensable in contemporary society. The conversation revealed that the teachers used also mobile phones when carrying out research activities in nature. It must be admitted that the technical support in various schools also is different. Not all teachers are ready to exchange rooms so that to be able to use the video projector for a definite time.

In order to get acquainted with teachers' skills to organize the teaching/learning process in such a way that the pupils master correlation skills, the observation was made.

Findings in the observed lessons

Out of 11 teachers 4 teachers organized the teaching/learning process making use of the conditions of integrated approach for content selection and also, focusing on the cooperation between both the teacher and pupils and pupils themselves. Analysing transversal skills during the teaching/learning process, we could conclude that these teachers implemented transversal skills, which the New Standard envisages, more than the teachers who conducted a conventional lesson.

Self-cognition and self-regulation. According to the lesson observation, what must be positively evaluated, is the fact that from 11 observed lessons 3 teachers' pedagogical activities resulted in most of the pupils' capability to set a goal for

the given task and offer ideas, steps for achieving it. It must be added that these pupils were able to generate self-evaluation criteria for completing the task. During the lesson, there was a positively emotional atmosphere, cooperation among the pupils. However, in 4 teachers' pedagogical activities there was a desire to help the pupils and prompt the procedure of completion of the task. In the pedagogical activities of other teachers, the teachers' instructions predominated without giving the pupils an option to offer ideas themselves and discuss.

***Thinking and creativity*.** 4 teachers' pedagogical activities in the lesson demonstrated the skill to create situations where the pupils engage in problem solving, offer and discuss ideas, justify their views. In their pedagogical activities, 3 teachers demonstrated the skill to create a problem situation for completion of the task where the pupils justified, defended their idea. The pedagogical activity of other teachers did not comprise tasks for developing critical and creative thinking.

***Cooperation and participation*.** While observing the lessons, we could conclude that the phrase ''correlation competences'' or skills to do - really justifies its name. It is difficult to separate them because pupils' skill to purposefully set an aim, offer ideas for achieving it comprised both critical and creative thinking and also the skill to cooperate. We could conclude that only 4 teachers' pedagogical activities were directed in such a way that, prior to group work, the pupils together with the teacher purposefully give equal tasks to each group member. The pedagogical activities of 4 teachers also included group work; however, they did not achieve active participation of each group member. The pedagogical activities of 3 teachers included neither pair nor group work. The pupils did not have the opportunity to discuss with each other, offer their ideas. It should be noted that the mentioned teachers were not involved in the pilot programme.

Digital skills. In the observed lessons, it was especially pleasant to watch the pupils' delight about the opportunity to take a picture of the plant found in the lesson outside and justify why the plant was photographed, why it is special. I observed the given opportunity in the pedagogical activities of 2 teachers.3 teachers used the interactive board in their pedagogical activities. During the observation, it was clear that the solution has to be found how to engage other pupils while one is working at the board. It must be added that during the lessons, where a video projector was used, and the pupils observed and analysed various nature phenomena, the pupils' emotional experience was better.

***Cooperation and participation*.** While observing the lessons, it can be concluded that the phrase ''transversal skills'' o really justifies its name. It is difficult to separate them because pupils' skill to purposefully set an aim, offer ideas for achieving it comprised both critical and creative thinking and the skill to

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Conclusion

Getting acquainted with the theoretical statements about competence approach to teaching/learning process in Latvia and Finland, it could be concluded that the explanation of transversal competences is different. In Latvia, the New Standard defines learning areas, transversal skills and values; however, in Finland transversal competences are defined more broadly including both the acquisition of certain skills and values and the importance of school culture. There are also common features, for example, the National Basic Education Standard, which has been approved in the Cabinet of Ministers, envisages interdisciplinary, approach to teaching/learning which prevents from the fragmentation of content and facilitates teachers' cooperation in the organization of teaching/learning process. In its turn, in Finland, one of the main goals of the curriculum reform was to promote an integrative approach to teaching and learning. The purpose of this approach was to enable students to see the relationships and interdependences between the subjects studied.

According to the research results, teachers' readiness to implement the requirements of competence approach and transversal skills in teaching/learning process is different.

The teachers, who took part in the implementation of the pilot project, considered that introducing the competence approach in teaching/learning process has to be evaluated positively.

From their answers and their conducted lessons, it can be concluded that a number of teachers implement the acquisition of transversal competences in teaching/learning process. At the same time, some teachers who were not involved in the pilot project want to determine requirements without giving a possibility for cooperation. In order to successfully implement competence approach, teachers have to be trained in various courses.

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