

## The Learning Environment in Today's School in the Context of Content Reform of Curriculum

**Rudite Andersone** Dr. paed.  
University of Latvia, Latvia  
[rudite.andersone@lu.lv](mailto:rudite.andersone@lu.lv)

**Abstract:** The learning environment nowadays has changed dramatically. Thanks to the rapid digitalization and globalization, it has enlarged and reaches out beyond the classroom. Children already with their first steps find themselves in the environment filled with different digital toys. The adults have to ensure that they are applied usefully in the acquisition and construction of new knowledge. The reform of the teaching/learning content envisages the implementation of the competence approach. This means that the focus on self-regulated learning, construction of knowledge and its application in diverse situations increases. Possibilities should be ensured for learners in the learning environment to apply their knowledge in diverse situations. Many researchers have studied the learning habits of the young generation and perception peculiarities that are characteristic to the pupils of modern digital age. This has influenced the changes in the teaching/learning environment. However, the teaching/learning environment in school has preserved also such elements that have been known for several generations – desks and blackboards, although their design and application have changed. The aim of the article is reflect on some of the theoretical aspects of the learning environment and the findings of the empirical study on the experience of forming the learning environment in the practice of today's schools.

**Key words:** learning environment, curricular content reform, school education.

### Introduction

Education development guidelines 2014 – 2020 (Izglītības attīstības..., 2013) states that the quality of education is significantly influenced by modern educational environment and educational process that promotes the perception and acquisition of the content. The content of education, its reform has experienced intrinsic changes having started the elaboration of the competence-based learning content which envisages developing such competences as learning to learn, mathematical, science competences, communication in different languages, social and civic competence, self-actualization, self-initiative and entrepreneurial competence as well as digital and cultural competence. It is planned to introduce the competence-based learning content till 2022 (Āboltiņa, 2016). A significant role will be given to the use of modern technologies in the teaching/learning process that allows flexibility and more individual performance of tasks for the concrete learner. The implementation of the teaching/learning reform is ensured by a modern educational environment.

The basis for such a content reform is found in the idea that the modern teaching/learning process is still rooted in the model of the industrial era which envisages the transfer of knowledge to learners from some external source- the teacher, book, school. However, today the experts on education all over the world discuss the necessity to transform the learning environment making it more adequate to today's learners who learn and gain experience continuously - on-line, in the classroom, concert, library, and every life situation. The research shows that the learning environment that is arranged in accordance with modern requirements can improve students' achievement even by 25 % (Gribusts, 2016).

The learning environment is characterized by three essential components: human resources (pupils and teachers), mental circumstances (mutual relations) and the surrounding environment (premises of the educational institution, their arrangement and the methodological provision for learning and teaching).

Besides, it should be taken into consideration that there is no just one correct answer in today's learning situations. There is only a continuous process of cognition developing the skills, acquiring the experience and improving the knowledge. The same refers to a modern learning environment which reflects the formation of today's knowledge society. There is no longer one correct way of how and what to teach. The learning environment should be formed so that it would support different ways of learning – discussions, empirical inquiry, and reflection. Active learning through cooperation is very important for the implementation of the competence approach and the space should support authentic lessons embedded in the project method and inquiry (Gribusts, 2016).

**The aim of the article** is to reflect on some of the theoretical aspects of the learning environment and the findings of the empirical study on the experience of forming the learning environment in the practice of today's schools.

### Methodology

The learning environment has different explanations. The learning environment is a purposefully organized set of physical, social and informative conditions in which the pupil forms and implements his/her experience: knowledge, skills and attitudes to oneself and the surrounding world (Šūmane, 2012).

The learning environment includes the buildings for learning, sports halls, relaxation rooms and everything that ensured the teaching/learning activities (Radhakrishnan, 2009).

According to Wilson the learning environment contains the learner and a setting or "space" in which the learner acts using tools and devices, collecting and interpreting information, perhaps interacting with others (Wilson, 1995).

A learning environment consists of the physical, mental, and learning material framework and prerequisites for goal-oriented learning. These can be provided by the organizer of education or selected by the learner him/herself (Pantzar, 1995).

A new learning environment is a holistic and integrated environment with the goal of promoting opportunities for life-long learning and individual study. Its characteristics include openness and flexibility in terms of time, place, method and the right to study. It is an environment which is not yet fully established and contains many new elements which are still being experimented with. Typical features also include new forms of action and student group, made possible by novel approaches and educational policy, together with the possibilities offered by new technology (Pohjonen, 1997).

The learning environment is also defined as the interaction of three factors (Learning Environment, 2013; Bates, 2015):

- diversified physical space (not only the classroom),
- context for what the pupil is learning,
- culture of what and how the pupil is learning (cooperation, relations, attitude).

**The physical space** in which education takes place in today's school in the context of the content reform forming and implementing the competence-based curricula is really being diversified. This is not only the classroom itself, the learning takes place in the school library, school yard, the nearby business company, the city park and forest, the arrangement of the classroom allows changing quickly the pupils' working forms: in groups, individual work, the whole class work using diverse learning materials, including the digital, internet, mobile phones.

**The context** in the learning environment is largely connected with the teaching/learning content which at present is being reformed. Here are several aspects of importance (Bates, 2015).

- Aims of the learning content (Is the teaching/learning content and aim or means for achieving other aims? Is it important to know facts in order to understand the phenomena or is it important to know where to find them in case of need?).
- The scope and depth of the learning content (It is not possible to acquire all knowledge. Therefore, one should concentrate on the acquisition of skills how to manage the knowledge (to know where to find it), to solve problems and make decisions).
- Sources for the acquisition of the learning content (To what extent the sources for the acquisition of the content are defined by the teacher and to what extent by the pupil him/herself? How are sources used for the acquisition of the content in today's school – libraries, internet, social networks, mass media, and teacher's "performance"?).
- Structure of the learning content (Selection and sequence of the content, focusing on particular content areas, content integration is important. Besides, the new information technologies allow the pupil him/herself structure the content).
- Assessment according to the aim (if the aim is memorising then automatized tests/tasks are used; if the aim is applying the content for the formation of arguments then practical activities are used; if the aim is knowledge management then such tasks are selected that require assessing, comparing, analysing).

**Culture** is the dominant values and views that influence the decision making. It is based on (Bates, 2015):

- mutual respect,
- openness to different views and opinions,
- evidence-based arguments and judgements,
- learning is made attractive, interesting, even fun,
- each school subject emphasizes core values,
- clear assessment criteria,
- cooperation and mutual support.

The culture of an effective and modern learning environment that promotes the introduction of the learning content reforms is characterized by several features (Heick, 2014):

- pupils in the teaching/learning process ask questions that developing their curiosity and forming meaningful interaction with texts, media and classmates;
- pupils' questions are assessed more than the answers because questions lead to deeper understanding of the content;
- teaching/Learning resources are being diversified: not only textbooks, media are used but also the professional environment of different fields, content experts outside education, culture mentors, people popular in the society;
- diversification of learning models: inquiry-based learning, project-based learning, direct instructions, e-learning, mobile learning;
- learning should not be polluted with the "real world" concept but learning starts and ends exactly there;
- learning is personalized with different criteria, not only in assessment but also in facilitating the interest, perception of the content;
- assessment is clear, adequate and transparent. It is followed by the support system (scaffolding);
- achievement criteria are balanced and known; then a pupil will involve meaningfully in the common learning of the class;
- learning habits are developed continuously. Learning habits are connected with inquisitiveness, perseverance, flexibility, priorities, creativity, cooperation, reflection;
- there is continuous support for the practice, pupil's learning activity because each term can be explained differently and they can be contradictory. This way a deeper understanding of the content is formed.

A vital context of the 21<sup>st</sup> century learning environment is that learning should promote each pupil's sense of community and interaction in which there are several important conditions: technologies, space, time, culture and politics. Their impact is cumulative (21st Century..., 2009). Besides, each pupil's needs have to be observed. Therefore, learning should be viewed as a complex activity in which several ways of learning can be implemented simultaneously (Osborne, 2013):

- personalized learning (a way how we learn is as unique as our fingerprints);
- socially constructed learning (deeper understanding of the learning content is developed as a result of cooperation);
- differentiated learning (pupils need different level challenges, speed, content);
- learning initiated by pupils themselves (the pupil forms his/her own learning experience and finds out more);
- learning that is connected with the physical world and authentic context (e.g., the ecosystem of the pond is better understood if it is seen in nature).

Changes of the learning environment in the curriculum reform context were analyzed in the empirical studies. The experience in eight schools and three municipalities, and the result in the one European Social Fund project and one international study has been analysed in the present empirical study.

### **Results and discussion**

The obtained findings were grouped in three groups – **physical environment, the context** in which the pupil is learning and **culture** which is characterized by cooperation, relations and attitudes.

### ***Physical environment***

- European Union (EU) funds during this planning period have intended for the modernization of general education schools 162 million euros. It is envisaged to achieve that in the year 2023 every fourth pupil in Latvia will study in a fully modernized environment (Klūga, 2015).
- The City property development committee of Riga Municipality has included in the Investment plan of the Property department for 2016 – 2018 activities – the infrastructure improvement of the learning environment - to make the environment in 31 educational institutions better. Thus, e.g., Riga Zolitude gymnasium will equip the science study rooms, Riga French lyceum will arrange ergonomic learning environment, Riga English Grammar school will have a sports field (Plāno uzlabot..., 2016).
- The Action plan of the education development programme 2016 – 2020 of Alūksne region has stated that the quality of the education environment will be increased carrying out the improvement of the content and developing a respective infrastructure. As a result, education institutions will have taken the necessary measures for establishing an ergonomic environment (change of furniture, lighting, rearrangement and rebuilding of rooms) as well as the learning process will be organized in the environment suitable for pupils' needs using modern teaching/learning means and equipment. The proportion of digital learning means in general education in 2017 will be 15 per cent and in 2020 – 30 per cent of the total number of the teaching/learning means (Alūksnes novada..., 2016).
- The development priorities of Salaspils Secondary school Nr. 2 for 2013-2015 include ensuring the accessibility of the modern, contemporary learning technology environment in study rooms, providing the study rooms with interactive boards, multimedia centres (Bogdāne, 2014).
- One of the action aims of Riga Secondary school Nr. 93 is to ensure qualitative and aesthetically favourable learning environment as it is mentioned in the school's homepage (Mūsu darbības..., 2016).

### ***Context***

- Elementary classes of Ventspils Secondary school Nr. 4 participate in the pilot project of education innovations "Ready for tomorrow!" in order to gain the understanding and insight into how the learning process is taking place when using tablet PCs in lessons (Kārkla, 2015).
- V. Pludonis Kuldīga gymnasium in 2016 participates in Erasmus+ project "Increasing the information technology competence of the teachers of Vilis Pludonis gymnasium for promoting a modern learning environment" (Bebriša, 2016).
- The working plan of Riga Hanza Secondary school which is presented in the school's homepage states that it is intended to seek possibilities for introducing WiFi in the school library (Attīstības plāns..., 2015).
- Cesis City Pastarins primary school is reconstructing the school yard in 2016/2017 school year in order to create a motivating learning environment in which to use research and practical methods in the learning process (Skolas attīstības..., 2015).

### ***Culture***

- It has been stated in the TALIS study performed in 2013 that more than 90 % of teachers in Estonia, Finland, Latvia and Poland consider that teachers and pupils get on well with each other, that pupils' feeling of comfort is important and that teachers are interested in what pupils are saying. At least 94 % of teachers in all the countries participating in the study, work at schools the principals of which agree that relations between pupils and teachers are good (in Latvia –99 %) (Ozola, 2015).
- The programme "Support to positive behaviour" has been developed and implemented in the frame of the European Social Fund project "Development and implementation of support programs for establishing a support system for young people under social exclusion risk" in the period from 2011 till 2013 under the supervision of the academic staff of Faculty of Education, Psychology and Art, University of Latvia. The project participants were 15 municipalities and 25 schools (Balcere, 2012).
- Cesis New elementary school since September 1, 2016 has started introducing the cooperation model "Opportunity Culture" which envisages regular mutual cooperation of teachers, their team teaching, sharing of the experience in order to improve pupils' learning environment (Narvaiša, 2016).

- Ventspils 6th Secondary School is paying special attention to the cooperation with teachers and classmates, specifying each school employee's responsibilities and rights. Positive relationship between students increases the learning motivation and as a result the pupil is happy to go to school (Segliņa–Glušková, 2014).

## Conclusions

The learning content reform envisages the transition to competence-based learning content which brings along not only changes in the learning content itself but also in the way how learning and teaching take place. New technologies that have already entered pupils' everyday life affect the transformations of the learning environment and form new learning habits. Socially constructive learning takes place under the teacher's guidance as well as is initiated by the pupil him/herself. It is also connected with increasingly more active use of e-learning and mobile learning.

Different projects at the municipality and school level are addressed exactly to the improvement of the learning environment. However, more attention is devoted to the improvement of the physical environment. Fewer activities in school practice are devoted to the development of such components of the learning environment as context which is connected with how the pupil learns and culture that is described by cooperation, relations and attitudes.

What the pupil learns is largely defined by the national education standards. However, they do not provide answers to the questions - Is the teaching/learning content and aim or means for achieving other aims? To what extent the sources for the acquisition of the content are defined by the teacher and to what extent by the pupil him/herself? Which are the aims of assessment in each particular case? But the answers to these questions characterize the learning environment.

The effectiveness of the learning content reform is also significantly influenced by such a component of the learning environment as culture which is characterized by cooperation, relations and attitudes in the learning process. Although the learning style, activity of each pupil is very individual, special it, however, does not take place separately but in continuous cooperation, both in face-to-face meetings, on-line and being removed from other people. Pupils' learning habits are more increasingly connected with the use of modern "digital toys" (tablet PCs, mobile phones) in the learning process, in the communication with peers and other people. There exists the risk of narrowing the learning environment perceiving it more on the "on-line regime" which has to be taken into the consideration. Therefore, the diversified physical learning environment, which leaves the concrete classroom and moves to the city park, library, business company or public institution where pupils observe processes, where situations unusual in the pupil's everyday life are modelled, helps to develop true competences that will help the pupil to continue his/her lifelong and knowledge-wide education.

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