

EdCW 2020**International Scientific and Practical Conference Education in a Changing World: Global Challenges and National Priorities****CHALLENGES IN EDUCATION DURING PANDEMIC:
TRANSFORMATION OF PUPIL AND TEACHER INTERACTION**

Kristīne Niedre - Lathere (a)*, Alīda Samuseviča (b)

*Corresponding author

(a) Liepaja University, Liepaja, Latvia, kristine.niedre-lathere@liepaja.edu.lv

(b) Liepaja University, Liepaja, Latvia, alida.samusevica@liepu.lv

Abstract

The rhythm of modern life requires from a human to be resilient and ready for challenges in order to be able to develop knowledge and skills successfully and adapt to needs of labour market. Knowledgeable and professional teachers' pedagogical activity is based on political guidelines set by the Latvia State towards a knowledge-based society. In the publication challenges and contradictions in distance learning process provision during the pandemic have been analysed, highlighting potential and impact of digitalization on intervention of subjects involved in the transformation context. Research priority and topicality have been focused on both the amount and quality of knowledge and wellbeing of subjects involved in the learning process, as they are important human resources and preconditions in order to promote individual and national growth, implementing entrepreneurship or creating new practical/theoretical knowledge. Goal of the article is to identify transformation factors affecting quality of distance learning process in the learning process and pedagogical communication digitalization, describing the most essential contradictions and potential resources for the enhancement of pedagogical interaction efficiency. In the research EDURIO survey platform has been applied which guarantees credibility of obtained results and provides a more profound data analysis. Target audience of the survey are teachers, pupils and parents. In the publication suggestions as the research results are offered to the responsible specialists of Liepaja City Municipal Education Department and city administration for high-quality development of school collectives in the implementation of pedagogical processes of digital transformation in their daily work.

2357-1330 © 2021 Published by European Publisher.

Keywords: Challenges, change management, digitalization, distance learning, interaction, wellbeing

1. Introduction

Nowadays educational priorities focus on not only the volume of knowledge and skills, but also on their quality and application in practical activity, as they are an important resource and precondition for human growth in order to promote the individual and national growth, acquiring necessary skills and knowledge, realizing oneself in professional career, implementing entrepreneurship or creating new practical/theoretical knowledge.

Formal education is essential in every human being's development in any country. It is meant to develop competitive pupils in the world market, and it has got a potential to be a strong tool for social progress. Qualitative education can make the person stronger and happier; it can create more peaceful and sustainable societies with a greater economic progress and honesty, consisting of people who are fulfilled in all welfare dimensions. Acquisition of universal values and different social or life skills is implemented in the whole education process in compliance with the national education and subject standards. In educational institutions educating and upbringing activities are performed during lessons and extracurricular activities which is a mutually related, inseparable and united process. In the educational process pupils' learning achievements are evaluated: pupils' knowledge, skills and abilities. Nevertheless, the assessment (measuring) of pupils' attitudes causes confusion. Pupils' behaviour is not evaluated as there is no unequivocal opinion of the society and teachers whether behaviour should be evaluated in general, how objectively and according to what criteria it can be carried out.

Globally, development of sectors will depend on field specialists who will need multidisciplinary skills. Knowledge, skills, modern life rhythm requires from the human to be resilient and ready for changes in order to develop their own knowledge and skills successfully and adapt to the needs of labour market.

2. Problem Statement

The authors of the article encourage the society to think about problem statement that education success is not any longer just reproduction of the knowledge content, but rather practical application of knowledge. The world rewards no longer people just for what they know – search engines know everything, but for what they are able to do with what they know. Education emphasizes creativity, critical thinking, communication and cooperation more and more; modern knowledge, including the ability to acknowledge and apply the potential of new technologies; and finally, but not less importantly, the personalities that help individually fulfilled people live and work together, establishing a sustainable humanity that thinks about its wellbeing.

To reinforce a climate of psychological safety, it is imperative that leaders – at all levels – respond productively to the risk people take. Productive responses are characterised by three elements: expressions of appreciation, destigmatizing failure, and sanctioning clear violations (Edmondson, 2019).

The core framework of wellbeing consists of 4 components: PERMA (Positive emotions, Engagement, Relationships, Meaning and Accomplishments) (Seligman, 2011). Implementation of every component mentioned above is related to personal responsibility and desire to interact in the processes of

change and in the desire to change oneself, positive achievements – accept the living conditions, in which you have descended, and adapt in order to develop. Personal responsibility emphasizes the individual and our common role in accomplishment development. It serves as a growth catalyst and practical tool that allows each of us to add a tremendous value to our workplace and our lives. It also forms leadership qualities. Leaders play the key role in the implementation of innovations. Leaders are characterized by the way of thinking. It is a constant self-control, disciplined thinking, development of personal thinking in oneself and desire to provide valuable contributions in a common cause.

The rapidly changing 21st century offers the modern human different challenges- the individual's choice is either to get engaged in proposals for change or watch the changes remotely – without any self-involvement, participation and equality. The educational process and institutions providing education are characterized by globalization, constant development of information technologies and diversity of values. In the future, students will have to create their own unprecedented and unknown economic, political, social and cultural environment.

During the time of changes, teachers are also encouraged to work in a different way, being aware of the individualization, personalization and differentiation approach in education. The teacher's task has always been to direct students the way they understand their potential, they are aware of their abilities and reveal in themselves new assets and qualities. The teachers' mutually purposeful work planning is a part of pupils' success factors in skills and knowledge manifestation. The learning process has to be organized so that the pupil would be forced to act enthusiastically, getting involved fully, taking upon responsibility, learning to cooperate and communicate face-to-face on all intervention levels.

In relation to competence education, the term digital pedagogy can be recognised whose tool is information technologies which are applied in order to enhance the learning and teaching methods and their variety. The pandemic intensified the use of e-learning in order to complete successfully the school year 2019/2020. However, it has to be admitted that not on all education levels and age groups the process was organized, managed and monitored in an appropriate quality.

3. Research Questions

- What factors influence significantly the quality of pupils' distance learning education?
- How to promote wellbeing and academic progress involved in the learning process?
- What changes and transformations are necessary in the distance learning process to improve the pupils and teachers' pedagogical interaction?

4. Purpose of the Study

Identify the influencing transformation factors of the quality of the distance learning process in the study process and pedagogical communication digitalization, describing the most essential contradictions and potential resources in order to increase the efficiency of pedagogical interaction.

In the internationalized and technologized modern production and service society a necessity has emerged for new skills which in the education science context are raised as “*the individual’s self-organization, self-regulation, self-responsibility, self- management*, etc.” and which characterizes the topical qualities of the changeable learning process. Despite the dynamic trends in the development of a changing society, both school administrators and heads of education encounter contradictions and issues on a daily basis in the educational processes which are directed towards the activation of the subject’s self-determination orientated approach (Bloom, 1982; Boensch, 1991; Kokare, 2013; Maslo, 2019; Ročāne, 2019) in the pedagogical process. The issues have become especially topical during the implementation of distance learning practice. The indicators of teachers and pupils’ cooperation efficiency and quality change improving the concept of democratic school operation (Rubene, 2015). Learning becomes as a tool of experience acquisition only then when the *pupils’ growth or learning needs* are fulfilled or in the educational process context they are called as the conditions of pedagogical interaction. The most important of them are:

- need for the emotional and social belonging, love and security;
- need of cognition and the need for new experience;
- need for praise and recognition;
- need for responsibility and independence;
- need for transparency and coherence (Balsons, 2011; Dreikurs, 1964; Erikson, 1968; Kellmer-Pringel, 1979).

During the pandemic several needs mentioned above were under a threat, causing uncertainty anxiety and in some situations even fear. Educators, pupils and their parents had to play new and unlearned roles in the distance learning process. In this particular real situation, the educators’ *cognitive resilience* has a great significance – “the ability to take into account lots of indicators, which is closely related to the individual’s feelings and action” (Škuškovnika et al., 2014, p. 9). The qualities of specialists’ professional activity in several educational sectors become topical: increase of responsibility, balance and management of emotions, for as Gullone et al. (2000) emphasize: the level of anxiety in extraordinary situations is a lot more unstable and changeable in children than in adults.

5. Research Methods

The whole process of changes is more enhanced with the purposeful application of the digital generation’s digital skills. Purposeful application of IT tools and digital resources has a potential to support and organize pupils’ in-depth learning. The information technologies can be applied in a productive way in order to develop self-managed learning skills, so that every pupil could become a digital citizen, construct their knowledge, apply technologies of different information, identify, solve and resolve problems, creating new, useful or theoretical solutions; acquire skills of algorithmic thinking, communication and presentation skills, become a cooperation partner.

The survey platform EDURIO has been used to find out data for the empirical part of the research in order to clarify opinions of all parties involved about the benefits of the distance learning process and

also not so positive characteristics, applying digital communication tools. All, i.e. 12 comprehensive educational establishments of Liepāja Municipality, were surveyed-their administration, teachers, pupils and their parents. The research base: 12 principals of educational establishments, 798 teachers, 5.385 pupils, and 6.177 parents.

Technologies are progressing; education is also developing, which is necessary for their efficient application. Purposeful application of IT tools and digital resources help all intervention elements to develop more efficiently. When education lags behind the technological progress, people are not qualified for the work that is being done, and most probably it is not productive enough or of such high quality as it could be. All the topicalities of the educational process mentioned above offer not only educators and pupils, but also other involved subjects a way how to make learning more modern, based on the real world, motivated and oriented towards action. It also provides the base for interdisciplinary thinking, as educators can apply them freely and coordinate them with different fields and competencies of the study content.

The authors, emphasising the significance of the thinking paradigm change in order to develop competencies of all participants involved in educational change processes, encourage discussion about changes in the culture and behaviour of management and educational institutions according to 5 pillars (Mercer & Gregersen, 2020):

- Leadership
- Pedagogy
- Capacity building
- Technologies
- Infrastructure.

To find out quality affecting factors of the distance education process in digitalization of the study process and pedagogical communication implemented during the school year 2019/2020, also to be able to identify potential resources to enhance efficiency of pedagogical interaction, the analysis of pupils and educators' survey data has been performed.

6. Findings

Currently in Latvia there are several processes monitoring the quality of education, including the accounting system for the national test results, accreditation of educational institutions, implementation of international comparative education research, record of education statistics in the State Education Information System which enables us to analyse the impact of digitalization processes on the individual's paradigm change. However, an updated unified system will provide a possibility to analyse correlations of the results of different processes, assess their impact, create an education policy based on evidences and implement the necessary support programmes, also in general, it will provide decision-making based on data and action on all levels of education. Within the framework of the monitoring system the quality of education is seen in a broader context, paying attention to such quality categories as studies, inclusive environment, good management and compliance with goals, where the overall integrity of the categories

is the characteristic of wellbeing which improves productivity of the municipality, educational establishments, educators and pupils: set and achieve goals, acquire the new skills in an unconstrained way, taking care of one's wellbeing, improve satisfaction. It is important to include all elements of interaction in the culture of the organization represented.

Despite the complicated situation in the education field caused by the pandemic, the analysis of the survey findings shows that several organizational and procedural aspects are highly appreciated. For instance, most of the surveyed (86%) teachers, pupils and parents acknowledged that their school provided **distance learning** rather well or very well, because distance learning has made a significant leap:

- in the study process digitalization, confirmed by most of the respondents involved in the research,
- 52% of pupils mention the level of motivation as higher, due to which progress in higher study success can be noticed;
- and no less important finding is that in some family's distance learning facilitated their living conditions, taking their children to and picking them up from the educational establishment in the cases when the place of residence is situated further away from school.

The data obtained in the research show that educators encountered several challenges in their pedagogical work, for instance 76% of the teachers spent a lot more of their time working remotely than face to face. The time factor and lack of sufficiently appropriate methodology created unjustified teacher overload and vulnerability in communication with parents and society's incomprehension, unjustified anxiety and stress. Some pedagogical risks were also created due to the factor that pupils had different experience of distance learning (learning load and forms differed, also daily, weekly, lesson plans and etc. were different). The current situation in the country makes us be more alert and tolerant towards the risk of social exclusion and stigmatization at the onset of symptoms of diseases of individuals involved in educational processes. Members of management and school administration had to pay lots of attention to socio-psychological aspects and adaptation of the physical environment (e.g. regular ventilation of the premises etc.) in order not to decrease wellbeing of the participants involved in the intervention.

As a result of the questionnaire data analysis, a new experience has been acquired which undeniably is a positive assessment of the evidence-based material in the improvement of further educational processes, implementing transformation of teachers, pupils and parents' interaction. Particular emphasis should be placed on such pedagogically relevant and important findings as:

- overall, the research data confirm that according to the new educational standard, which is being implemented within the framework of the project *Skola2030*, it is possible to provide differentiation and personalization of the study process for a better performance of student success;
- educators are both encouraged and motivated to apply the digital communication tools and platforms, which can serve as an efficient learning experience in the conditions when pupils or teachers have got into a situation when it is not possible to meet face to face. Creative and

dynamic methodological and professional development of teachers is necessary in new teaching and learning strategy development in compliance with the potential of the e-education platforms;

- the survey data show that parents' role during distance learning is a lot more important than onsite learning. This is an important confirmation that the issue of parents' resources is being raised in the process of children's education and teachers' collaboration with parents is an important impact factor.

7. Conclusion

Development or customization of new teaching materials, provision of remote feedback and work correcting took the most time for teachers in the distance learning process. Therefore, school administration should help teachers perform these activities in a more efficient way, organizing trainings, collating and analysing the best practices, obtaining extra tools or materials; it would facilitate the teachers' work essentially in case the distance learning happens again.

Clarity of communication and correct requirements from the school are an important indicator of the parents and pupils' general satisfaction with the learning process, even remotely, due to which the pupils, for whom school communication is clear, express a positive view of the distance learning experience. Clear school communication means a higher pupils and parents' satisfaction with the learning process and confidence in their children that they acquire the necessary subject matter. It is important how the pedagogical communication will be planned about the changes related to the introduction of the new education content and changes affected by COVID-19.

The experience of the pedagogical practice during the distance learning confirms that the learning process, in which pupils need their parents' support as little as possible, has to be developed purposefully, or the school has to provide extra help and support to those pupils whose parents' support is limited. Lots of activities performed by parents during the distance learning are very desirable also in the onsite learning process as a supplement – search for information resources or knowledge sharing (performed by 63% of parents), help the child to manage their time (46% of parents), encourage the child (33% of parents), speak to the child about the success at school (30% of parents).

The school's reliance almost exclusively on teachers' own initiative, without setting up centralized systems, created a bit of a chaotic environment, as the learners involved in the educational process sometimes had to follow up to 6 or even 7 different platforms, which must be acknowledged is cumbersome. The obtained practical experience confirms that several processes should be centralized, without relying on every teacher's individual competence.

Municipal Administration collaborating with Department of Education have to specify what technological provision is available and what is necessary for the child. The minimum technology support for pupils – the family has got at least one gadget (a computer, tablet or smart phone) with the Internet connection. The optimal technology support – pupils could take examinations remotely.

Psychologically it is important to find out how much the class teacher or any other adult (e.g. psychologist, social educator) were available in the distance learning process to find out, understand what

the pupils' feelings are, how the pupils handle the changes and anxiety, tasks, new situation, whether the pupils need some kind of support. Review the school's approach to communication with pupils. If there is a big proportion of teachers with negative feelings, one should find out what has caused these negative feelings, how to support the teachers to regain energy and positive feelings, how to improve the process so that it would not cause so many negative feelings.

Provision of socialization opportunities and development of skills, especially for younger children and children with special needs is the topical upbringing factor nowadays, therefore it is necessary to organize the "Zoom" lessons and group work more often to promote the pupils' mutual communication during the distance learning as well.

On the school level the agreement on the approach to learning is important- use a single planning system, platform for communication and send/receive assignments/feedback provision, agreement on what a qualitative learning means, including provision of feedback to pupils – how often and how much it would be provided. Consultative support to teachers and professional supervisions are urgent.

References

- Balsons, M. (2011). *Kā izprast klases uzvedību* [Understanding Classroom Behaviour]. Apgāds "Lielvārds".
- Bloom, B. S. (1982). *Developing Talent in Young People*. Ballenting Books.
- Boensch, M. (1991). *Variable Lernwege*. [Ein Lehrbuch der Unterrichtsmethoden]. [Variable learning path. A textbook of teaching methods]. Paderborn-München-Wien-Zürich.
- Dreikurs, R. (1964). *Children: the Challenge*. Duell, Sloan and Pearce.
- Edmondson, A. C. (2019). *The Fearless organization*. John Wiley&Sons, Inc.
- Erikson, E. H. (1968). *Identity: Youth and Crisis*. W.W. Norton & Company, Inc.
- Gullone, E., King, N. & Ollendick, T. H. (2000). The developmental and psychometric evolution of the fear experiences questionnaire: an attempt to disentangle the fear and anxiety constructs. *Clinical Psychology & Psychotherapy*, 7(1), 61–75.
- Kellmer-Pringel, M. (1979). *Was Kinder brauchen*. [What children need]. Klett-Cotta.
- Kokare, M. (2013). Organizational learning for reframing schooling: advancing innovative potential of a school. In Rubene, Z. & Drinck B. (Eds.), *The Perspectives of the Pedagogy: Innovative Solutions* (pp. 87–98.). University of Latvia.
- Maslo, I. (2019). *No zināšanām uz kompetentu darbību*. [From knowledge to competence-based action]. LU Akadēmiskai sagāds.
- Mercer, S., & Gregersen, T. (2020). *Teacher Wellbeing*. Oxford University Press.
- Ročāne, M. (2019). *The promotion of students' self-directed learning in the process of debating* [Doctoral dissertation]. Liepāja University, Institute of Education Science.
- Rubene, Z. (Ed.). (2015). *Democratisation of Education*. University of Latvia.
- Seligman, M. (2011). *Flourish*. Nicholas Brealey Publishing.
- Škuškovnika, D., Tiltiņa-Kapele, I., & Dudkina, A. (2014). *Trauksme un agresija. Korekcijas iespējas*. [Anxiety and aggressivity. Possibilities of Corrections]. Zinātne.