

**Transformative Digital Learning in the Context of Higher
Education:
Comparison of Traditional and Transformative Concepts**

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Acknowledgment

This article has been developed within the scope of the "Implementation of Transformative Digital Learning in Doctoral Program of Pedagogical Science in Latvia" ((DocTDLL) Izp-2018/2-0180).



The aim of this article is to determine the necessity of learning process transformation in higher educational institutions analyzing proposals of experts from Latvian higher educational institutions and define the perspectives of Transformative Digital Learning (TDL) in the context of higher education.

Respondents of the Research

Ten experts (Dr. paed) from higher education institutions of Latvia have participated in the research and expressed their opinion concerning the implementation of TDL.

- University of Latvia;
- Rezekne Academy of Technologies;
- Daugavpils University,
- Liepaja University;
- Latvian Academy of Sport Education.

The continuous extension of the pedagogical object and subject leads to the gradual enlargement of the field of didactics as pedagogical discipline.

Didactics common concept covers teaching and learning, its related necessity, dependency and conventional relation between two or more persons in effective interaction (Žogla, 2001).

Today's didactic object studies cover real learning processes, provide knowledge of the natural relation between different parties and discover the essential features of the structural and material elements of learning process (Makarova, 2016).

Educational Innovations
(didactic and methodologic
strategies)



TRANSFORMATION

Resources

Learning
process

Role of
student

Role of
teacher/lecturer

Information and
Communication Technologies

(Bautista, Cipagauta, 2019)

Information and
Communication technologies

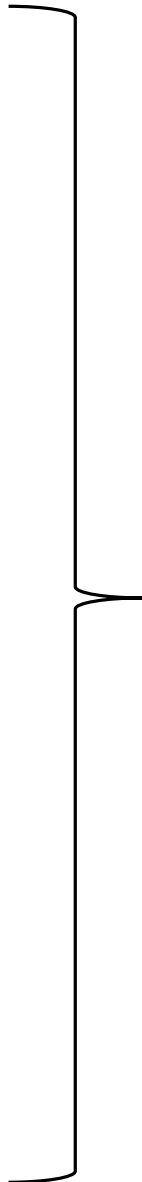
Usage of digital applications,
tools, resources

Interaction with
experts/professionals

Online co-operation

Simulation activities

Content creation



Important learning/teaching elements
(personalized experience, student-centered
approach, flexibility and choice for each student)

(The State Educational Technology Directors Association of the USA (SETDA), 2001)

Classic didactic questions / Traditional Approach	Updated didactic questions / Transformative Approach
<ul style="list-style-type: none"> • What to teach? (content) • How to teach? (methods, approaches, forms of process organization) • Why to teach? (goals) • Whom to teach? (requirements to the student – subject of teaching) 	<ul style="list-style-type: none"> • What are the strategies of education? • What are the educational outcomes? • How to measure or evaluate the outcomes of education? • What competences are developed? • How to organize the learning process to develop competences? • What is the structure of non-linear learning process? • Who's teaching? Who's learning? etc.

(Logvinov, 2003)

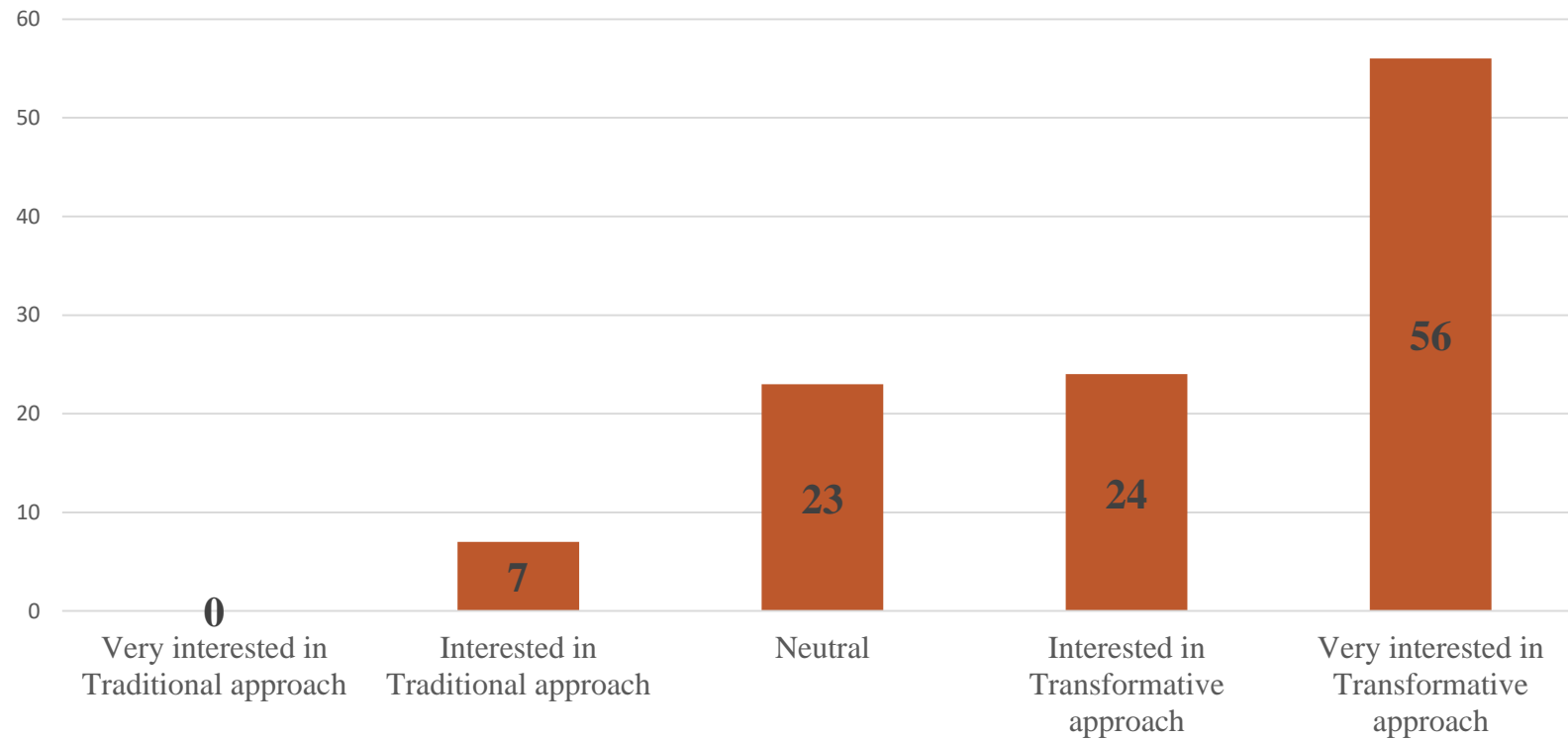
Questionnaire «Teaching/ Learning process in higher educational institutions»

Part 1 – Statements of Traditional and Transformative Approach (examples)

Statement A	More interested in Statement A				More interested in Statement B	Statement B
Systematic, passive process, geared towards development of memory	2	1	0	1	2	Creative, active process geared towards development of thinking
General learning	2	1	0	1	2	Deep, strategic, personalized learning

Questionnaire "Learning/teaching process in higher educational institutions"

Part 1 – Data analyses of Traditional and Transformative approaches



Questionnaire – Part 2 – Implementation of Transformative Digital Learning

Question Nr. 1

In your opinion, how does TDL help student in acquiring knowledge?

- Digitalization of learning environment;
- Individualization/personalization of learning process;

Question Nr. 2

Whether TDL, based on learning experience, rather than "transfer" of content, is effective?

- Transformation of knowledge;
- Individualization of learning process;
- Digitalization of learning resources;
- Transformation of experience;



Question Nr. 3

In your opinion, how the digital learning (teaching – learning) environment influences the interaction between students and lecturers?

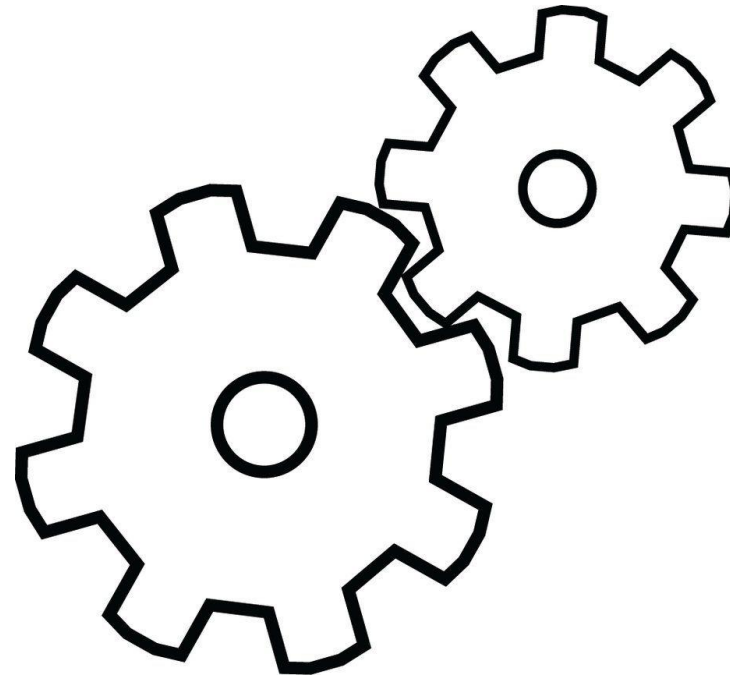
- Communicative competence;
- ICT competence;



Question Nr.4

In your opinion, what are the most complicated problems for the implementation of TDL?

- Technical supply/support;
- ICT competence;



Question Nr. 5

In your opinion, what are the main future perspectives of TDL?

- Digitalization of education;
- Digitalization of teaching – learning;



Question Nr. 6

In your opinion, does the content, methods, approaches and forms of the organization of learning process correspond to the requirements of digital economy? What changes should be made in higher education?

- Transformation of didactics;
- Digitalization of higher educational institutions;
- ICT competence;

Content
Methods
Approaches
Forms of
organization



PROBLEMS

As a result of the research, the following problems were identified for the implementation of TDL:

- the level of ICT competence, it is important to develop and improve it as for students as lecturers;
- technical support to avoid interruptions in both technical work and the Internet connection;
- lack of resources and didactic skills; critical evaluation of information and verbal communication with critical reasoning.

PERSPECTIVES

Digitalization processes are beginning to evolve, but the transformation is gradual and must be accelerated by changing content, methods, organizational forms, knowledge, skills and attitudes in the ICT field, attracting the necessary professionals and making links with employers and enterprises involved in the study process transformation by conducting defined, dedicated tasks and strategy.

CONCLUSIONS

- In general students and lecturers see the necessity of study process transformation.
- TDL is effective when the development of knowledge and skills is based on previous experience, as well as important theories are closely linked to practical work and are able to provide an individual approach to the learning process.
- The digital learning environment positively influences the interaction between students and lecturers, reinforces it, allows them to overcome distance, reduces time, stimulates an immediate exchange of opinions, but it is important to balance it with face-to-face communication.
- TDL will play an increasingly important role in the future and become an integral part of learning.



THANK YOU FOR YOUR ATTENTION!!!

Any questions???

