

# Meta-model of the teaching and learning environment based on ICT integration in the e-learning systems

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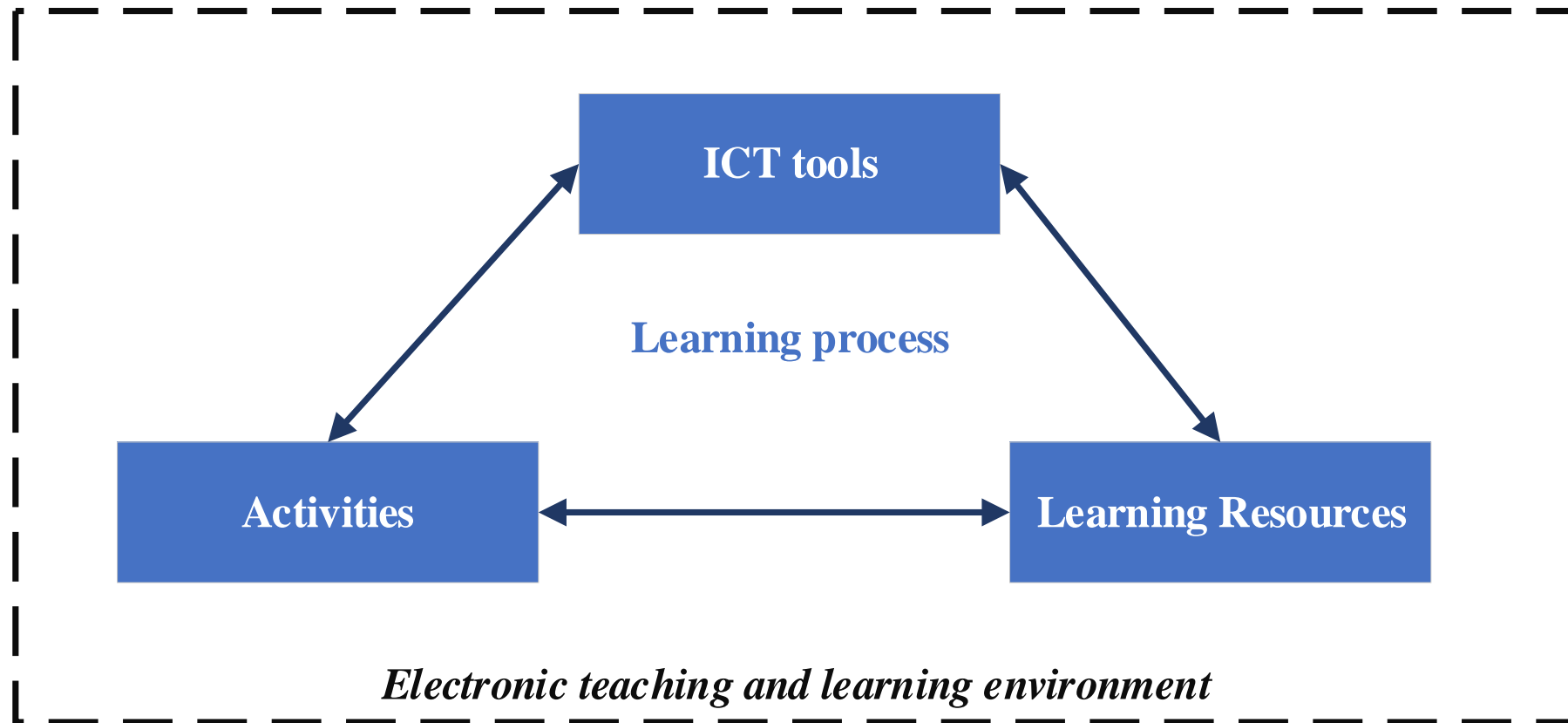
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# Paper Goals

- meta-model for the integration of ICT tools into the teaching and learning environment;
- methodology for evaluating the level of ICT knowledge and utilization and the impact of ICT on the learning process;
- results analysis.

# Meta-model of the teaching and learning environment after the integration of ICT tools (1/2)



# Meta-model of the teaching and learning environment after the integration of ICT tools (2/2)

## triple (LR, A, T)

- LR is *Learning Resource* meta-class for classes of learning resources;
- A is *Activity* meta-class – a binary relationship between LR and T;
- T is *ICT tool* meta-class - classes of tools.

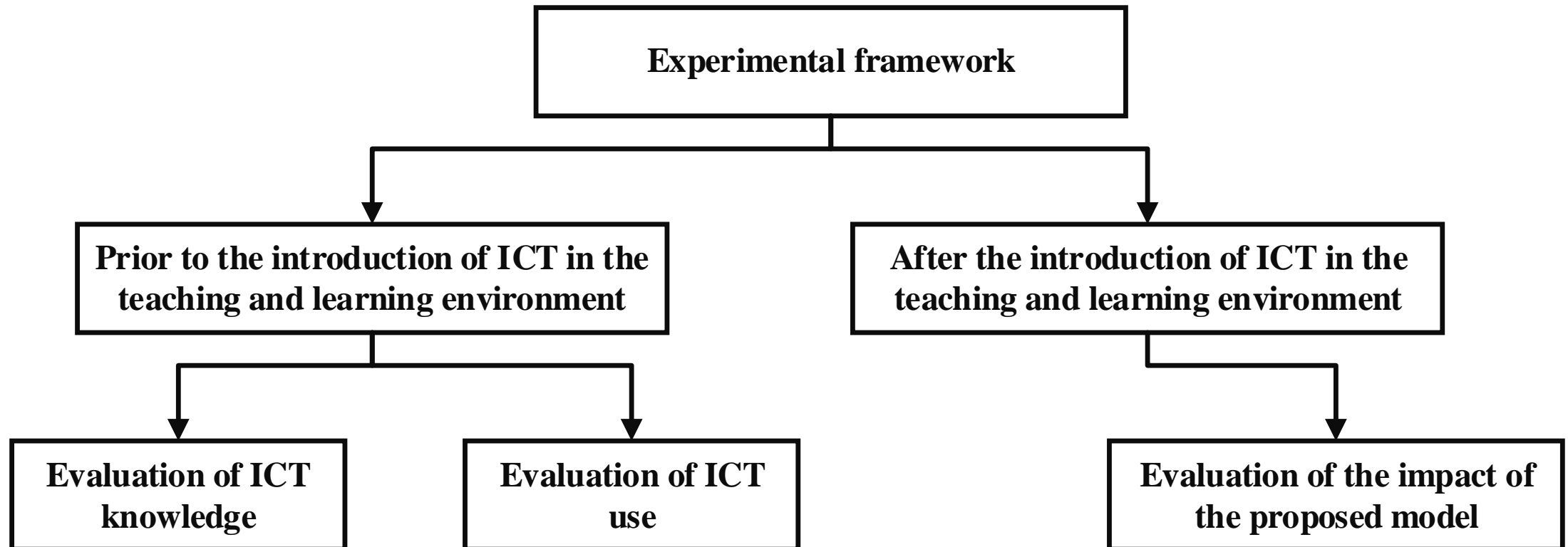
## ***Example:***

*<Student Project> <upload> <File sharing tool>*

# Research questions

- to determinate the degree of knowledge of ICT by the different participants in the learning process;
- to determinate the degree of use of ICT by the different participants in the learning process;
- to determinate the impact of ICT on the learning process after the implementation of the proposed meta-model.

# General experimental framework

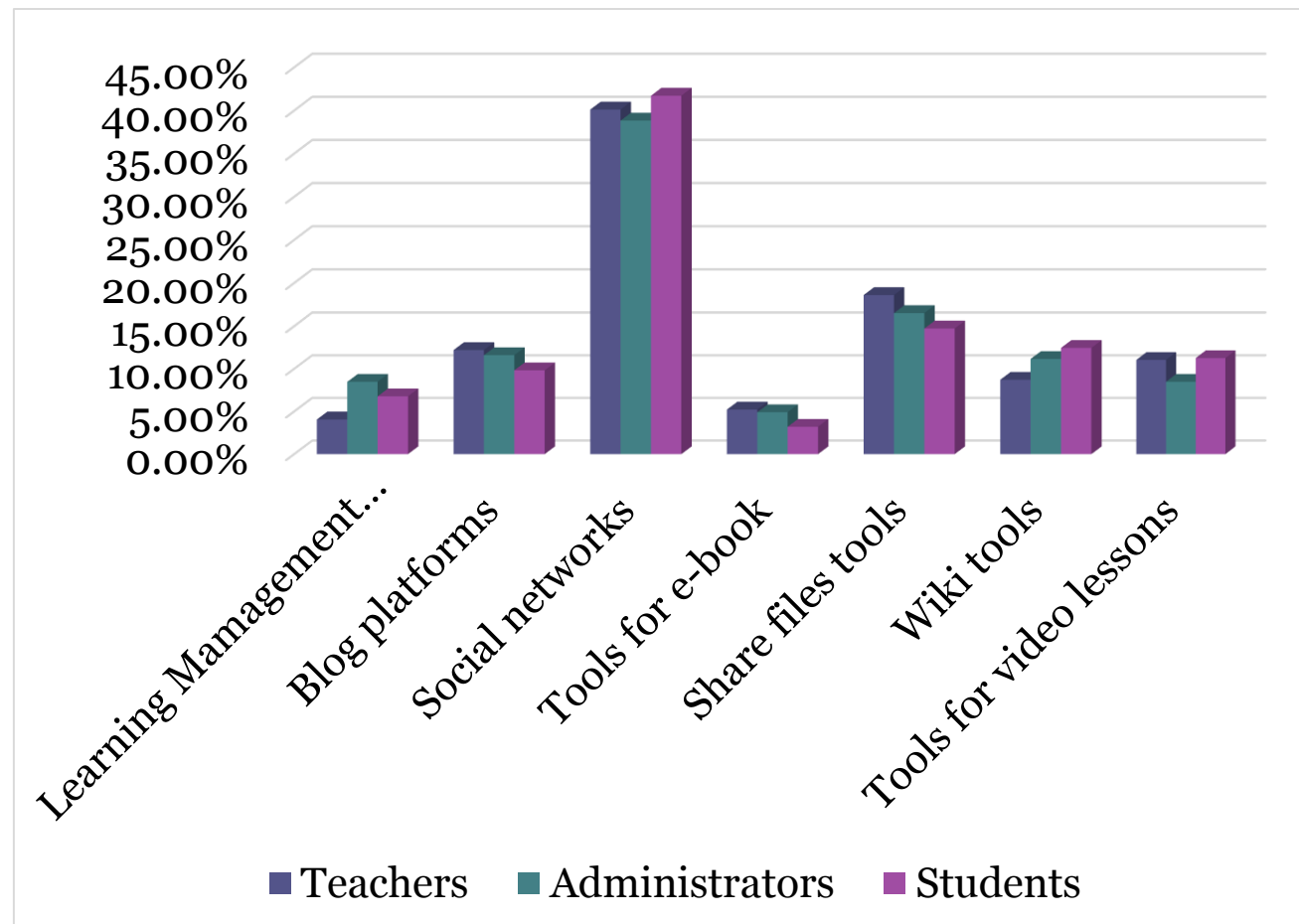


# Target Group

441 individuals participated:

- 22 - teachers;
- 26 – administrators;
- 393 - students.

# Most frequently used ICT tools





# Conclusion

- show that ICT tools are not wide know and used;
- the student success rate is improved - increased with about 30% to 50% after the ICT integration in the course of the learning process;
- the increased interest of the students participating in the study in both the content and the innovative teaching methods applied.

# ACKNOWLEDGMENTS

- Research presented in this paper was supported by the project “An innovative software platform for big data learning and gaming analytics for an user-centric adaptation of technology enhanced learning (APTITUDE)” - research projects on the societal challenges – 2018 by Bulgarian National Science Fund with contract N<sup>o</sup>: KP-06-OPR03/1 from 13.12.2018.

# Thank you!

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