

Characteristics of the submitted research/ artistic/other output

Name and surname Dr. habil. PaedDr. Ing. István Szőköl, PhD.
Document type: Characteristics of the submitted research/ artistic/other output
The name of the university Comenius University Bratislava
The seat of the university Šafárikovo námestie 6, 818 06 Bratislava

OCA1. - Surname awarded to the assessed person	Szőköl
OCA2. - Name awarded to the assessed person	István
OCA3. - Degrees awarded to the assessed person	Dr. habil. PaedDr. Ing., PhD.
OCA4. - Hyperlink to the entry of the person in the Register of university staff	https://www.portalvs.sk/regzam/detail/13906

1st evaluated output

OCA5.1 - Area of assessment

Pedagogy

OCA6.1 - Category of the research/ artistic/other output

scientific output

OCA7.1 - Year of publication of the research/artistic/other output

2024

OCA8.1 - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

1135313

OCA9.1 - Hyperlink to the record in CRPA or CRAA

<https://app.crepc.sk/?fn=detailBiblioForm&sid=A4B4C7A5993A9FA3241DE0580FC8>

Title of the publication to which the hyperlink points

(V3) Hrmo, R. - Szőköl, I. - Krištofiaková, L.: Opportunities for Improving the Quality of Education and Pedagogical Teacher Training, within an International Context. In: Acta Polytechnica Hungarica: An international peer-reviewed scientific journal of Óbuda University, Hungarian Academy of Engineering and IEEE Hungary Section : journal of applied sciences. – Budapest (Maďarsko) : Óbudai Egyetem. – ISSN 1785-8860. – ISSN (online) 2064-2687. – Roč. 21, č. 3 (2024), s. 109-124. WoS

Suggested output quality level

A+

OCA13.1 - Hyperlink to the webpage where the output is available (full text, other documentation, etc.)

<https://acta.uni-obuda.hu/Issue143.htm>

Title of the publication to which the hyperlink points

Opportunities for Improving the Quality of Education and Pedagogical Teacher Training, within an International Context.

Suggested output quality level

A+

OCA14.1 - Characteristics of the author's contribution

□
In this article, we examined the quality of the teaching process in an international context within the framework of Teacher Training.

OCA16.1 - Annotation of the output in English

In the research study, the existence and character of the relationships between the subjectively evaluated quality of school organizational climate and the level of teacher resilience are focused on. The main objective of the presented investigation was to confirm the existence of the hypothesized association between these two phenomena. In the research study carried out on the sample of 474 secondary school teachers in the Slovak Republic, two research instruments were used – The Organizational Climate Description for Secondary Schools to measure the subjectively perceived quality of school organizational climate by teachers and The Connor-Davidson Resilience Scale CD-RISC 25SLOVAK to examine teachers' resilience levels.

OCA17.1 - List of maximum 5 most significant citations corresponding to the output

2024 - 1 (SCOPUS:2-s2.0-85210830301) 1247091: Exploring ChatGPT's Potential and Concerns in Higher Education / Tick, Andrea [Autor] ; IEEE international symposium on intelligent systems and informatics, 22 [19.09.2024-21.09.2024, Pula, Chorvátsko]. – [recenzované]. – SCO.

In: SISY 2024 [elektronický dokument] : IEEE 22nd international symposium on intelligent systems and informatics : proceedings : Pula, Croatia. September 19-21, 2024 / Szakál, Anikó [Zostavovateľ, editor]. – 1. vyd. – Budapešť (Maďarsko) : IEEE Hungary Section, 2024. – ISBN 979-8-3503-8560-1. – ISBN (elektronické) 979-8-3503-8559-5, s. 447-454 2024-1, (SCOPUS:2-s2.0-85217619567) 1330112: Social Aspects of ESG in Higher Education: University Students' Attitudes Towards Robots / Péntek, Márta [Autor, 33.333%] ; Fehér, Botond [Autor, 33.334%] ; Gulácsi, László [Autor, 33.333%]. – DOI 10.1109/LINDI63813.2024.10820421. – SCO.

In: LINDI 2024 - 6th IEEE International Symposium on Logistics and Industrial Informatics, Proceedings / [bez zostavovateľa] [Zostavovateľ, editor]. – 1. vyd. – New York (USA) : Institute of Electrical and Electronics Engineers, 2024. – ISBN 9798331516192, s. 119-124 2024-1 (Web of Science Core Collection:WOS:001488743100043; SCOPUS:2-s2.0-85217559594) 1330113: Syllabus Design and Planning with Artificial Intelligence and the Potential of Generative AI / Kozhanov, Murat [Autor, 12.5%] ; Mosavi, Amir [Autor, 12.5%] ; Amirov, Azamat [Autor, 12.5%] ; Kaibassova, Dinara [Autor, 12.5%] ; Poser, Valeria [Autor, 12.5%] ; Shakhmatova, Aliya [Autor, 12.5%] ; Lira, La [Autor, 12.5%] ; Eigner, Gyorgy [Autor, 12.5%] ; IEEE International Symposium on Computational Intelligence and Informatics, 24 [19.11.2024-21.11.2024, Budapešť, Maďarsko]. – [recenzované]. – DOI 10.1109/CINTI63048.2024.10830766. – SCO ; WOS CC.

In: CINTI 2024 [elektronický dokument] : IEEE 24th International Symposium on Computational Intelligence and Informatics : Proceedings / Szakál, Anikó [Zostavovateľ, editor]. – 1. vyd. – Budapešť (Maďarsko) : Institute of Electrical and Electronics Engineers, 2024. – ISBN (elektronické) 979-8-3503-5343-3. – ISBN (elektronické) 979-8-3503-5342-6, s. 257-264

2025-1 (SCOPUS:2-s2.0-105011488133; Web of Science Core Collection:WOS:001539876700119) 1502181: Habits of using artificial intelligence in the lives of university students / Horvath, Szilard [Autor, 50%] ; Toth, Renata [Autor, 50%]. – DOI 10.1109/SACI66288.2025.11030201. – WOS CC ; SCO.

In: 19th International Symposium on Applied Computational Intelligence and Informatics [elektronický dokument] / Szakál, Anikó [Zostavovateľ, editor]. – [recenzované]. – 1. vyd. – Piscataway (USA) : Institute of Electrical and Electronics Engineers, 2025. – ISBN 979-8-3315-1546-1. – ISBN 979-8-3315-1548-5. – ISBN (elektronické) 979-8-3315-1547-8. – ISSN 2833-9010. – ISSN (online) 2765-818X, s. 699-703 [online]

2025-1 (SCOPUS:2-s2.0-105013055347) 1304762: The Development History of Technical Teacher Training from 1950 to the Change of Regime / Sanda, István Dániel [Autor] ; Viola, Attila [Autor] ; Holik, Ildikó [Autor]. – SCO.

In: 2025 IEEE 23rd World Symposium on Applied Machine Intelligence and Informatics [elektronický dokument] / [bez zostavovateľa] [Zostavovateľ, editor]. – [recenzované]. – 1. vyd. – Piscataway (USA) : Institute of Electrical and Electronics Engineers, 2025. – ISBN 979-8-3503-7937-2. – ISBN (elektronické) 979-8-3503-7936-5. – ISBN (elektronické) 979-8-3503-7935-8. – ISSN 2836-0834. – ISSN (online) 2767-9438, s. 53-58 [online]

2025-1 (Web of Science Core Collection:WOS:001524545300001; SCOPUS:2-s2.0-105010873317) 1391466: Teachers' motivation in developing quality learning in rural schools in Indonesia / Dahlan R, M. [Autor] ; Samsuri, Samsuri [Autor] ; Malihatun, Elih [Autor] ; Morisson, Buci [Autor] ; Abdurrohman, Asep [Autor] ; Basyit, Abdul [Autor] ; Madali, Madali [Autor]. – DOI 10.3389/feduc.2025.1597989. – SCO ; WOS CC.

In: *Frontiers in education* [elektronický dokument] . – Lausanne (Švajčiarsko) : Frontiers Media. – ISSN 2504-284X. – Roč. 10 (2025), art. no. 1597989, s. 1-9 [online]

2025-1 (SCOPUS:2-s2.0-105001282243; Web of Science Core Collection:WOS:001485246400042; Norwegian Register for Scientific Journals, Series and Publishers:Nordic List Level 1) 1328192: Health-Oriented Fitness Depending on the BMI Index of 10-Year-Old Boys and Girls from Elementary School / Rozim, Robert [Autor] ; Šagát, Peter [Autor] ; Bendíková, Elena [Autor] ; International Conference on Interactive Collaborative Learning, 27 [24.09.2024-27.09.2024, Tallin, Estónsko]. – [recenzované]. – DOI 10.1007/978-3-031-83520-9_42. – SCO ; WOS CC.

In: *Futureproofing Engineering Education for Global Responsibility* [textový dokument (print)] [elektronický dokument] : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL2024) / Auer, Michael [Zostavovateľ, editor] ; Rüttmann, Tiia [Zostavovateľ, editor]. – 1. vyd. – č. 4. – Cham (Švajčiarsko) : Springer Nature, 2025. – (Lecture notes in networks and systems, ISSN 2367-3370, ISSN 2367-3389 ; 1281). – ISBN 978-3-031-83519-3. – ISBN (elektronické) 978-3-031-83520-9. – ISSN 2367-3370. – ISSN (online) 2367-3389, s. 454-464 [tlačaná forma] [online]

Although educational management, educational leadership, and organizational climate are seemingly not associated with teacher resilience, the opposite is true. Teachers are among the determinants of the the quality of school organizational climate, and therefore, they have an important role to play in the context of educational management and educational leadership. Teacher resilience has a significant impact on the quality of their performance, since it helps teachers maintain normal functioning even if adversity is present. This way, teacher resilience affects the schools' outputs and also the organizational climate.

OCA19.1 - Characteristics of the output and related activities' impact on the educational process

The publication contributed to identifying possible causes of differences in the quality of the educational process in international contexts of teaching and Teacher Training.

2nd evaluated output

OCA5.2 - Area of assessment

Pedagogy

OCA6.2 - Category of the research/ artistic/other output

scientific output

OCA7.2 - Year of publication of the research/artistic/other output

2023

OCA8.2 - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

1058084

OCA9.2 - Hyperlink to the record in CRPA or CRAA

[https://app.crepc.sk/?](https://app.crepc.sk/?fn=detailBiblioFormChildWAL61&sid=497BFD8B534E5A6C0F89F97D1317&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok)

[fn=detailBiblioFormChildWAL61&sid=497BFD8B534E5A6C0F89F97D1317&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok](https://app.crepc.sk/?fn=detailBiblioFormChildWAL61&sid=497BFD8B534E5A6C0F89F97D1317&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok)

Title of the publication to which the hyperlink points

The Influence of Innovative Teaching Methods on Student Motivation

Suggested output quality level

A+

Suggested output quality level

A+

OCA11.2 - Characteristics of the output in the format of the CRPA or the CRAA bibliographic record, if the output is not available in a publicly accessible register or catalogue of outputs

(V3) Szőkö I. - Pšenáková, I. - Kováč, O. (2023). The Influence of Innovative Teaching Methods on Student Motivation. DOI 10.53349/resource.2023.is1.a1203. In: R&E-Source : research and education. – Baden (Rakúsko) : Pädagogische Hochschule Niederösterreich. – ISSN (online) 2313-1640. – suppl. Pedagogical diplomacy Roč. 10, č. 1 (2023), s. 196-203

OCA12.2 - Type of the output (if the output is not registered in CRPA or CRAA)

chapter

OCA13.2 - Hyperlink to the webpage where the output is available (full text, other documentation, etc.)

<https://journal.ph-noe.ac.at/index.php/resource/article/view/1203/1149>

Title of the publication to which the hyperlink points

The Influence of Innovative Teaching Methods on Student Motivation

Suggested output quality level

A+

OCA14.2 - Characteristics of the author's contribution

The paper's purpose is to find the options motivating students in secondary schools to try to achieve more interest in knowledge and know-how. The paper also deals with the impact of innovative teaching methods on students' motivational factors.

OCA16.2 - Annotation of the output in English

We know how important motivation is in the teaching process, how it can positively influence the student's view of the subject matter, how it can increase his interest in new knowledge and thereby increase his knowledge, skills and, in the future, the ability to achieve success on the labourmarket. On the other hand, we also know there is no need to exaggerate the motivation because it can lose its charm, and we easily fall into the pit of over-motivation. For each lesson, you must prepare a few activating spells that will work with the greatest certainty. They must be tested because not every student in every class perceives motivational impulses similarly. Each lesson, each topic and each group of students needs an individual approach when examining and choosing appropriate methods and means of motivation.

OCA17.2 - List of maximum 5 most significant citations corresponding to the output

- 2024 2 1148526: Dance of data in pedagogical research / Pšenák, Peter [Autor, 100%]. – [recenzované]. – DOI 10.53349/resource.2024.is1.a1256. In: *R&E-Source* [elektronický dokument] : research and education. – Baden (Rakúsko) : Pädagogische Hochschule Niederösterreich. – ISSN (online) 2313-1640. – suppl. Pedagogical Diplomacy II Roč. 11, č. 1 (2024), s. 207-214
- 2024 2 1200816: The influence of the integration of neuropedagogy, trend-watching, gamification, robotics, and immersive technologies on the development of pedagogical skills / Kuznietsov, Yevhen [Autor] ; Kostiukevych, Olha [Autor]. In: *Scientia et Societas* [textový dokument (print)] [elektronický dokument] . – Pereiaslav (Ukrajina) : Hryhorii Skovoroda University. – ISSN 2786-6319. – ISSN (online) 2786-6327. – Roč. 3, č. 1 (2024), s. 92-103
- 2024 2 1264862: Innovative models of vocational education: A symbiosis of artificial intelligence, neuropedagogy, and the competency-based approach / Kuznietsov, Yevhen [Autor] ; Kuznietsova, Tetiana [Autor]. In: *Professional Education* [textový dokument (print)] [elektronický dokument] : Methodology, Theory, and Technologies. – Pereiaslav (Ukrajina) : Hryhorii Skovoroda University in Pereiaslav. – ISSN 2415-3729. – ISSN 2415-3737. – Roč. 10, č. 1 (2024), s. 64-78
- 2024 2 1492687: The Effect of Motivation and Interaction Effects on Improving Mathematical Comprehension Skills through Problem and Inquiry-Based Learning / Supriatna, Irfan [Autor] ; Wahyudin [Autor] ; Turmudi, Turmudi [Autor] ; Yasing, Hakimee [Autor]. In: *Journal of Integrated Elementary Education* [textový dokument (print)] [elektronický dokument] . – Jakarta (Indonézia) : Universitas Islam Negeri. – ISSN 2828-223X. – ISSN 2776-1657. – Roč. 4, č. 1 (2024), s. 42-5
- 2024 2 190971: Didaktikai játékok a matematika oktatásában Ozobot robot felhasználásával = Didactic Games in the Teaching of Mathematics Using Ozobot Robot / Szabó, Tibor [Autor, 50%] ; Jakab, Zsófia [Autor, 50%]. – [recenzované]. – DOI 10.35406/MI.2024.1.87. In: *Mesterséges intelligencia* [elektronický dokument] : interdisziplinár e-folyóirat. – Debrecin (Maďarsko) : K+F Stúdió. – ISSN (online) 2676-9611. – Roč. 6, č. 1 (2024), s. 87-103

OCA18.2 - Characteristics of the output's impact on socio-economic practice

The reason for the need to study students' motivational factors is the fact that it is necessary to spark a concrete interest in "taking action," "solving tasks, problems, and situations," "improving oneself," and "acquiring knowledge and skills" in various situations. Without motivation, we lack the strength to move forward, improve, and tackle certain challenges in our daily lives. Therefore, we consider the exploration of this reality to be the primary social impact of this publication. Motivation is needed by teachers, students, school administrators, and other education professionals alike.

OCA19.2 - Characteristics of the output and related activities' impact on the educational process

The implications of this study for student motivation stem from the belief that motivation is influenced by a number of external and internal factors that teachers should take into account. Some of these factors can be mitigated or reinforced, while others cannot. Not every student perceives motivational stimuli in the same way—a point underscored by the research findings.

3rd evaluated output

OCA5.3 - Area of assessment

Pedagogy

OCA6.3 - Category of the research/ artistic/other output

scientific output

OCA7.3 - Year of publication of the research/artistic/other output

2024

OCA8.3 - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of

Artistic Activity (CRAA)

1148522

OCA9.3 - Hyperlink to the record in CRPA or CRAA

[https://app.crepc.sk/?](https://app.crepc.sk/?fn=detailBiblioFormChildWAR0Q&sid=C957D02FE2D4481C6ABFE9FDA2B6&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok)

[fn=detailBiblioFormChildWAR0Q&sid=C957D02FE2D4481C6ABFE9FDA2B6&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok](https://app.crepc.sk/?fn=detailBiblioFormChildWAR0Q&sid=C957D02FE2D4481C6ABFE9FDA2B6&seo=CREP%C4%8C-detail-%C4%8C%C3%A1nok)

Title of the publication to which the hyperlink points

Material Didactic Means in the Educational Process.

Suggested output quality level

A+

OCA10.3 - Hyperlink to the record in another publicly accessible register, catalogue of research/ artistic/other outputs

(V3) Szőköl, I., Osifčín, M. (2024). Material Didactic Means in the Educational Process. DOI 10.53349/resource.2024.is1.a1262. In: R&E-Source [elektronický dokument] : research and education. – Baden (Rakúsko) : Pädagogische Hochschule Niederösterreich. – ISSN (online) 2313-1640. – suppl. Pedagogical Diplomacy II Roč. 11, č. 1 (2024), s. 291-303

Title of the publication to which the hyperlink points

Material Didactic Means in the Educational Process.

Suggested output quality level

A+

OCA12.3 - Type of the output (if the output is not registered in CRPA or CRAA)

chapter

OCA13.3 - Hyperlink to the webpage where the output is available (full text, other documentation, etc.)

<https://journal.ph-noe.ac.at/index.php/resource/issue/view/55>

Title of the publication to which the hyperlink points

Material Didactic Means in the Educational Process.

Suggested output quality level

A+

OCA14.3 - Characteristics of the author's contribution

In our research, we focused on the content of the processed innovative professional text for the subject of engineering technology in dual technical education as an effective support for teachers.

OCA16.3 - Annotation of the output in English

From the point of view of didactics, there is a connection between theory and practice, but here there is a second big dimension and that is solving the question of where to go after finishing school, if the graduate is looking for his first job. The experimental part was solved using the statistical method, where we examined the readability of the professional text for pupils. Our labour market needs a lot of high-quality experts in technical fields, and the biggest problem is with craftsmen, who are massively disappearing from the market. SOŠ and OU began to adapt again to the labor market and the needs of society. Our common goal is to raise good experts and technicians, and for this we also need good teachers not only of theory but also of practice, and above all to get good experts and experienced technicians into education for the department, so that students receive knowledge, experience and skills in practice.

OCA17.3 - List of maximum 5 most significant citations corresponding to the output

2025-2 1385646: "Preparation Brings Results" The Impact of Didactic Materials on English Language Learning and the teacher's effort to develop them: A Qualitative Study at ITSUR [elektronický dokument] [iný] / Castro Franco, Jair Osmar [Autor]. – 1. vyd. – Guanajuato (Mexico) : Universidad de Guanajuato, 2025. – 34 s. – ISBN 2025 -2 1498408: Uso de materiales didácticos-tecnológicos y su incidencia en el listening en estudiantes de básica elemental / Mendoza, Luis Leonardo Delgado [Autor] ; Saltos, Rider Eloy Mendoza [Autor]. – DOI 10.56124/refcale.v13i3.009. In: Revista Electrónica Formación y Calidad Educativa [elektronický dokument] . – Manabí (Ekvádor) : Universidad Laica Eloy Alfaro de Manabí. – ISSN (online) 1390-9010. – Roč. 13, č. 1 (2025), s. 196-217 [online]

2025 - 1 SCOPUS:2-s2.0-105001282243; Web of Science Core Collection:WOS:001485246400042; Norwegian Register for Scientific Journals, Series and Publishers:Nordic List Level 1) 1328192: Health-Oriented Fitness Depending on the BMI Index of 10-Year-Old Boys and Girls from Elementary School / Rozim, Robert [Autor] ; Šagát, Peter [Autor] ; Bendíková, Elena [Autor] ; International Conference on Interactive Collaborative Learning, 27 [24.09.2024-27.09.2024, Tallin, Estónsko]. – [recenzované]. – DOI 10.1007/978-3-031-83520-9_42. – SCO ; WOS CC. In: Futureproofing Engineering Education for Global Responsibility [textový dokument (print)] [elektronický dokument] : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL2024) / Auer, Michael [Zostavovateľ, editor] ; Rüütmann, Tiia [Zostavovateľ, editor]. – 1. vyd. – č. 4. – Cham (Švajčiarsko) : Springer Nature, 2025. – (Lecture notes in networks and systems, ISSN 2367-3370, ISSN 2367-3389 ; 1281). – ISBN 978-3-031-83519-3. – ISBN (elektronické) 978-3-031-83520-9. – ISSN 2367-3370. – ISSN (online) 2367-3389, s. 454-464 [tlačená forma] [online]

OCA18.3 - Characteristics of the output's impact on socio-economic practice

Material didactic means are means of a material nature and are an important component of education. They serve as a means to achieve educational goals. They are part of didactic resources. Before we start thinking about creating and choosing a method of inclusion in the classroom, we need to know the content of the education for which it is intended. The main criteria for the selection of di-dactic means are the goal pursued, the content of the teaching, the nature of the phenomena demonstrated, the age, level, level of education of the students, the purpose of the teaching and the level of the teacher and his ability to use the in-tended didactic means.

OCA19.3 - Characteristics of the output and related activities' impact on the educational process

Didactic aids are of great importance in preparatory subjects for professional studies, which include mathematics, physics, technology, chemistry and etc. These subjects are preparatory subjects for professional subjects such as Parts of machines, Engi-neering technology, Science of materials and others.

4th evaluated output

OCA5.4 - Area of assessment

Pedagogy

OCA6.4 - Category of the research/ artistic/other output

scientific output

OCA7.4 - Year of publication of the research/artistic/other output

2024

OCA8.4 - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

1144173

OCA9.4 - Hyperlink to the record in CRPA or CRAA

[https://app.crepc.sk/?](https://app.crepc.sk/?fn=detailBiblioFormChildQB22U&sid=5B379D914C8D0FBF0BB9E952B8DA&seo=CREP%C4%8C-detail-kapitola/-pr%C3%Adspevok)

[fn=detailBiblioFormChildQB22U&sid=5B379D914C8D0FBF0BB9E952B8DA&seo=CREP%C4%8C-detail-kapitola/-pr%C3%Adspevok](https://app.crepc.sk/?fn=detailBiblioFormChildQB22U&sid=5B379D914C8D0FBF0BB9E952B8DA&seo=CREP%C4%8C-detail-kapitola/-pr%C3%Adspevok)

Title of the publication to which the hyperlink points

Flipped classroom in pedagogical practice.

Suggested output quality level

A+

Suggested output quality level

A+

OCA11.4 - Characteristics of the output in the format of the CRPA or the CRAA bibliographic record, if the output is not available in a publicly accessible register or catalogue of outputs

(V2)Pšenáková, I., Pšenák, P. Szőkö, I. (2024). Flipped classroom in pedagogical practice. International Conference on Interactive Collaborative Learning, Madrid, Španielsko]. – DOI 10.1007/978-3-031-53382-2_26. – SCO ; WOS CC. In: Towards a hybrid, flexible and socially engaged higher education [textový dokument (print)] [elektronický dokument] : Proceedings of the 26th international conference on interactive collaborative learning (ICL2023), volume 4 / Auer, Michael- Cukierman, Uriel R.- Vidal, Eduardo Vendrell -Caro, Edmundo Tovar – Cham (Švajčiarsko) : Springer Nature, 2024. – (Lecture notes in networks and systems, ISSN 2367-3370, ISSN 2367-3389 ; 911). – ISBN 978-3-031-53381-5. – ISBN (elektronické) 978-3-031-53382-2, s. 279-290

OCA12.4 - Type of the output (if the output is not registered in CRPA or CRAA)

chapter

OCA13.4 - Hyperlink to the webpage where the output is available (full text, other documentation, etc.)

<https://link.springer.com/book/10.1007/978-3-031-51979-6>

Title of the publication to which the hyperlink points

Flipped classroom in pedagogical practice.

Suggested output quality level

A+

OCA14.4 - Characteristics of the author's contribution

In this publication, we explored the idea that students' opinions can help us eliminate potential shortcomings and errors in teaching, improve the use of the flipped classroom method, and thus contribute to an overall increase in the level of knowledge acquired by students, regardless of the subject in which it is used.

OCA16.4 - Annotation of the output in English

The use of the flipped classroom in distance (or face-to-face) education can be very effective for students, as it allows for an individual pace of learning and interaction with classmates and the teacher, even if they are located in different parts of the world. However, when using this method, teachers must ensure that their materials are prepared in a clear, accessible and understandable way for all students, and that resources are available for students who may need help understanding the material. Overall, the flipped classroom should give students more flexibility in their learning and allow them to reach their goals faster. In fact, this teaching method is very adaptable to different teaching environments, including face-to-face and distance learning. Teachers should be open to new ways of teaching and be prepared to adapt their teaching to the needs and skills of their students.

OCA17.4 - List of maximum 5 most significant citations corresponding to the output

2024-1 (Web of Science Core Collection:WOS:001438533400016; SCOPUS:2-s2.0-85215659116) 1326561: Flipped Classroom in the Czech Republic / Jančaříková, Kateřina [Autor, 33.333%] ; Loukotová, Lucie [Autor, 33.334%] ; Jančařík, Antonín [Autor, 33.333%]. – SCO ; WOS CC.In: Proceedings of the European Conference on e-Learning, ECEL / [bez zostavovateľa] [Zostavovateľ, editor]. – 1. vyd. – Roč. 23. – Manchester (Veľká Británia) : Academic Conferences and Publishing International Limited, 2024. – ISSN 20488637. – ISSN (online) 20488645, s. 129-137

2025-1 (SCOPUS:2-s2.0-105016588171) 1408680: Moodle and MS Teams can eliminate the possibility of students cheating in online testing / Pokorný, Milan [Autor, 100%] ; MIPRO 2025, 48 [02.06.2025-06.06.2025, Opatija, Chorvátsko]. – SCO. In: MIPRO 2025 [elektronický dokument] [textový dokument (print)] : 48th ICT and Electronics Convention : June 2 – 6, 2025 Opatija, Croatia : proceedings / Skala, Karolj [Zostavovateľ, editor] ; Mornar, Vedran [Zostavovateľ, editor]. – [recenzované]. – 1. vyd. – Danvers (USA) : Institute of Electrical and Electronics Engineers ; Rijeka (Chorvátsko) : Croatian Society for Information, Communication and Electronic Technology, 2025. – ISBN 979-8-3315-3596-4. – ISBN (elektronické) 979-8-3315-3597-1. – ISSN 1847-3946. – ISSN (online) 2623-8764, s. [online] [tlačená forma]

2025-1 (SCOPUS:2-s2.0-105015370673) 1426846: On Importance of Video Lessons in E-Learning and Blended Learning / Pokorný, Milan [Autor, 100%] ; International Conference on Recent Innovations in Computing, 7 [28.11.2024-29.11.2024, Budapest, Maďarsko]. – DOI 10.1007/978-981-96-6034-6_5. – SCO.In: Proceedings of International Conference on Recent Innovations in Computing (Volume 3) [textový dokument (print)] [elektronický dokument] : ICRIC 2024 / Illés, Zoltán [Zostavovateľ, editor] ; Verma, Chaman [Zostavovateľ, editor] ; Gonçalves, Paulo J. Sequeira [Zostavovateľ, editor] ; Singh, Yashwant [Zostavovateľ, editor]. – [recenzované]. – 1. vyd. – Singapore (Singapur) : Springer Nature, 2025. – (Lecture Notes in Electrical Engineering, ISSN 1876-1100, ISSN 1876-1119 ; Volume 1421). – ISBN 978-981-96-6033-9. – ISBN 978-981-96-6036-0. – ISBN (elektronické) 978-981-96-6034-6, s. 71-81 [tlačená forma] [online]

2025-1 (SCOPUS:2-s2.0-105001282243; Web of Science Core Collection:WOS:001485246400042; Norwegian Register for Scientific Journals, Series and Publishers:Nordic List Level 1) 1328192: Health-Oriented Fitness Depending on the BMI Index of 10-Year-Old Boys and Girls from Elementary School / Rozim, Robert [Autor] ; Šagát, Peter [Autor] ; Bendíková, Elena [Autor] ; International Conference on Interactive Collaborative Learning, 27 [24.09.2024-27.09.2024, Tallin, Estónsko]. – [recenzované]. – DOI 10.1007/978-3-031-83520-9_42. – SCO ; WOS CC. In: Futureproofing Engineering Education for Global Responsibility [textový dokument (print)] [elektronický dokument] : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL2024) / Auer, Michael [Zostavovateľ, editor] ; Rüttemann, Tiia [Zostavovateľ, editor]. – 1. vyd. – č. 4. – Cham (Švajčiarsko) : Springer Nature, 2025. – (Lecture notes in networks and systems, ISSN 2367-3370, ISSN 2367-3389 ; 1281). – ISBN 978-3-031-83519-3. – ISBN (elektronické) 978-3-031-83520-9. – ISSN 2367-3370. – ISSN (online) 2367-3389, s. 454-464 [tlačená forma] [online]

OCA18.4 - Characteristics of the output's impact on socio-economic practice

The social impact of the publication can be seen in the fact that the survey results showed that students rated flipped classroom teaching (video recordings + online lessons) as interesting and suitable for distance learning. The responses of the respondents—students who participated in online education in the form of a flipped classroom—confirmed with 99% reliability that this form of teaching suited them completely or at least partially. These results are skewed by the relatively small sample size for a specific subject. Therefore, we want to develop this research in our proposed study. It is reasonable to assume that after evaluating the respondents' answers to the prepared questionnaire at both universities in our research, we could achieve the same or similar results.

OCA19.4 - Characteristics of the output and related activities' impact on the educational process

Flipped classroom is a teaching method that can be simply characterized as a way of education in which students watch teaching videos or materials mostly online before the lesson and then in class they focus mostly on content discussions, clarifying problematic parts of the curriculum and solving practical exercises under the guidance of teacher. We believe that the flipped classroom can be a very effective teaching method if used and implemented correctly.

5th evaluated output

OCA5.5 - Area of assessment

Pedagogy

OCA6.5 - Category of the research/ artistic/other output

scientific output

OCA7.5 - Year of publication of the research/artistic/other output

OCA8.5 - ID of the record in the Central Registry of Publication Activity (CRPA) or the Central Registry of Artistic Activity (CRAA)

461912

OCA9.5 - Hyperlink to the record in CRPA or CRAA[https://app.crepc.sk/?](https://app.crepc.sk/?fn=detailBiblioFormChildC9SAH&sid=D866EC94339E8540C0C9D311C6&seo=CREP%C4%8C-detail-kapitola/-pr%C3%Adspevok)[fn=detailBiblioFormChildC9SAH&sid=D866EC94339E8540C0C9D311C6&seo=CREP%C4%8C-detail-kapitola/-pr%C3%Adspevok](https://app.crepc.sk/?fn=detailBiblioFormChildC9SAH&sid=D866EC94339E8540C0C9D311C6&seo=CREP%C4%8C-detail-kapitola/-pr%C3%Adspevok)**Title of the publication to which the hyperlink points**

Learning Motivation and Quality of the Educational Process

Suggested output quality level

A+

Suggested output quality level

A+

OCA11.5 - Characteristics of the output in the format of the CRPA or the CRAA bibliographic record, if the output is not available in a publicly accessible register or catalogue of outputs

(V2) Szőköl, I.(2022). Learning Motivation and Quality of the Educational Process.. In: Mobility for smart cities and regional development - challenges for higher education (2) : Proceedings of the 24th International Conference on Interactive Collaborative Learning (ICL2021) / Auer, Michael; Hortsch, Hanno; Michler, Oliver; Köhler, Thomas, eds. Cham (Švajčiarsko) : Springer Nature. Springer, 2022. ISSN 2367-3370, ISSN 2367-3389 ; 390, CiteScore: 0,7 ; SJR: 0,151 ; SNIP: 0,19). – ISBN 978-3-030-93906-9. – ISBN (elektronické) 978-3-030-93907-6, s. 199-209. SCO ; WOS CC

OCA12.5 - Type of the output (if the output is not registered in CRPA or CRAA)

article

OCA13.5 - Hyperlink to the webpage where the output is available (full text, other documentation, etc.)<https://link.springer.com/book/10.1007/978-3-030-93907-6>**Title of the publication to which the hyperlink points**

Learning Motivation and Quality of the Educational Process

Suggested output quality level

A+

OCA14.5 - Characteristics of the author's contribution

The goal of the study is to point out why students are unmotivated and in which domain it is worth planning an intervention. The second aim of this work is to show the importance of the expansion of teacher's key competences, while also pointing out those other competences which are unavoidable in the pedagogical work and about the application of quality management in the teaching process, since it is one of the ways of increasing the quality of education and it is designing a system of quality management at vocational training schools.

OCA16.5 - Annotation of the output in English

This study focused on examining what factors affect learning motivation and how the efficacy of education can be enhanced, since students' motivation is the most important factor for learning success. There are several factors that affect and influence the individuals' learning attitudes; the degree of efforts they can and are willing to make, in order to learn the given subject. Furthermore, it is affected by cognitive abilities as much as by parental expectations. Thus, teachers do not have an easy job if they want to motivate all the students present in the classroom.

OCA17.5 - List of maximum 5 most significant citations corresponding to the output

2022 1 (**SCOPUS:2-s2.0-85146114954**) 529088: Development of a desktop application for a complex heterogeneous evaluation system / Jurinová, Jana [Autor, 60%] ; Miština, Juraj [Autor, 40%] ; International Conference on Emerging eLearning Technologies and Applications, 20 [20.10.2022-21.10.2022, Vysoké Tatry, Slovensko]. – [recenzované]. – SCO. In: *ICETA 2022* [elektronický dokument] : 20th Anniversary of IEEE International Conference on Emerging eLearning Technologies and Applications : proceedings / Jakab, František [Zostavovateľ, editor]. – 1. vyd. – Piscataway (USA) : Institute of Electrical and Electronics Engineers, 2022. – ISBN (elektronické) 979-8-3503-2032-9. – ISBN (elektronické) 979-8-3503-2033-6, s. 282-287 [online]

2023 1 (**Web of Science Core Collection:WOS:001027245000013**) 1065916: Personality As A Factor In The Learning Process Of Teaching – The Context Of The Big Five Theory / Czarkowski, Jakub Jerzy [Autor, 20%] ; Bursová, Janka [Autor, 20%] ; Dolinská, Eva [Autor, 20%] ; Šimek, Václav [Autor, 20%] ; Porubčanová, Dáša [Autor, 20%]. – [recenzované]. – WOS CC. In: *Ad alta* [textový dokument (print)] [elektronický dokument] : journal of interdisciplinary research. – Hradec Králové (Česko) : Magnanimitas akademické sdružení. – ISSN 1804-7890. – ISSN (online) 2464-6733. – Roč. 13, č. 1 (2023), s. 75-80

2023 1 (**SCOPUS:2-s2.0-85176944596; Web of Science Core Collection:WOS:001094758500005**) 1088760: Improving the Quality of Education in the Development of Algorithmic and Critical Thinking of Students of "Applied Informatics" - Case Study / Jurinová, Jana [Autor, 100%]. – [recenzované]. – DOI 10.3991/ijep.v13i7.37749. – WOS CC ; SCO. In: *International Journal of Engineering Pedagogy* [elektronický dokument] . – Viedeň (Rakúsko) : International Association of Online Engineering. – ISSN (online) 2192-4880. – Roč. 13, č. 7 (2023), s. 79-95

2024 1 (**Web of Science Core Collection:WOS:001263957400037; Conference Proceedings Citation Index - Science:WOS:001263957400037; Conference Proceedings Citation Index - Social Science & Humanities:WOS:001263957400037; SCOPUS:2-s2.0-85185722156**) 1131285: Elimination of pain by enhancing body posture in schoolgirls during physical and sports education lessons / Bendíková, Elena [Autor, 80%] ; Talaghir, Laurentiu-Gabriel [Autor, 10%] ; Rus, Cristian Mihail [Autor, 10%] ; International Conference on Interactive Collaborative Learning, 26 [26.09.2023-29.09.2023, Madrid, Španielsko]. – [recenzované]. – DOI 10.1007/978-3-031-52667-1_37. – SCO ; WOS CC ; CPCI-S ; CPCI-SSH. In: *Towards a hybrid, flexible and socially engaged higher education* (2) [textový dokument (print)] [elektronický dokument] : proceedings of the 26th International conference on Interactive Collaborative Learning / Auer, Michael [Zostavovateľ, editor] ; Cukierman, Uriel R. [Zostavovateľ, editor] ; Vidal, Eduardo Vendrell [Zostavovateľ, editor] ; Caro, Edmundo Tovar [Zostavovateľ, editor]. – 1. vyd. – Cham (Švajčiarsko) : Springer Nature, 2024. – (Lecture notes in networks and systems, ISSN 2367-3370, ISSN 2367-3389 ; 900). – ISBN 978-3-031-52666-4. – ISBN (elektronické) 978-3-031-52667-1, s. 387-397

2025 1 (**SCOPUS:2-s2.0-105001400683; Web of Science Core Collection:WOS:001485246400041; Norwegian Register for Scientific Journals, Series and Publishers:Nordic List Level 1**) 1328187: Health-Oriented Fitness in Terms of Pupils' Posture and General Physical Performance / Bendíková, Elena [Autor, 100%] ; International Conference on Interactive Collaborative Learning, 27 [24.09.2024-27.09.2024, Tallin, Estónsko]. – [recenzované]. – DOI 10.1007/978-3-031-83520-9_41. – SCO ; WOS CC. In: *Futureproofing Engineering Education for Global Responsibility* [textový dokument (print)] [elektronický dokument] : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL2024) / Auer, Michael [Zostavovateľ, editor] ; Rüütmann, Tiia [Zostavovateľ, editor]. – 1. vyd. – č. 4. – Cham (Švajčiarsko) : Springer Nature, 2025. – (Lecture notes in networks and systems, ISSN 2367-3370, ISSN 2367-3389 ; 1281). – ISBN 978-3-031-83519-3. – ISBN (elektronické) 978-3-031-83520-9. – ISSN 2367-3370. – ISSN (online) 2367-3389, s. 442-453 [tlačená forma] [online]

2025 1 (**SCOPUS:2-s2.0-105001282243; Web of Science Core Collection:WOS:001485246400042; Norwegian Register for Scientific Journals, Series and Publishers:Nordic List Level 1**) 1328192: Health-Oriented Fitness Depending on the BMI Index of 10-Year-Old Boys and Girls from Elementary School / Rozim, Robert [Autor] ; Šagát, Peter [Autor] ; Bendíková, Elena [Autor] ; International Conference on Interactive Collaborative Learning, 27 [24.09.2024-27.09.2024, Tallin, Estónsko]. – [recenzované]. – DOI 10.1007/978-3-031-83520-9_42. – SCO ; WOS CC. In: *Futureproofing Engineering Education for Global Responsibility* [textový dokument (print)] [elektronický dokument] : Proceedings of the 27th International Conference on Interactive Collaborative Learning (ICL2024) / Auer, Michael [Zostavovateľ, editor] ; Rüütmann, Tiia [Zostavovateľ, editor]. – 1. vyd. – č. 4. – Cham (Švajčiarsko) : Springer Nature, 2025. – (Lecture notes in networks and systems, ISSN 2367-3370, ISSN 2367-3389 ; 1281). – ISBN 978-3-031-83519-3. – ISBN (elektronické) 978-3-031-83520-9. – ISSN 2367-3370. – ISSN (online) 2367-3389, s. 454-464

One of the social impacts is the innovative approach to educational tasks, which has the potential to transform the learning process. It is necessary to shift away from traditional lecture-style teaching methods so that new methods can be implemented in classrooms. Children must learn how to study more effectively. It is the parents' role to foster positive self-confidence in their children, which will enable them later in life to achieve high goals. This study did not examine how self-regulated learning strategies vary in relation to extroversion in vocational schools. Further research may answer the question of whether extroverted individuals have lower test anxiety and higher self-efficacy than introverted individuals.

OCA19.5 - Characteristics of the output and related activities' impact on the educational process

This study focused on examining the factors that influence motivation to learn and on how to increase the effectiveness of education, since student motivation is the most important factor in learning success. There are several factors that influence individuals' attitudes toward learning; the level of effort they are able and willing to exert to learn a given subject.

Date of last update

23.03.2026
