## Projects

## 2021

Number	responsible solver	project duration	goals
005UJS-4/2021	prof. Dr. Krisztián Józsa, PhD	2021 -2023	The significance of the first eight years of childhood development has been scientifically proven. This is the period when children are most receptive to development, thus the effects of any intervention program may be most beneficial in this sensitive period. We also know that there are significant individual differences in children's development. Enhancing this development by respecting children's individual characteristics calls for differentiation. One of the prerequisites of differentiated instruction is diagnostic assessment. Testing is essential for teachers to explore the individual developmental paths of children, and set the aims of their targeted instruction accordingly. Therefore, instruments that make teachers' work as well as the transition from preschool to school more effective in this process are invaluable in preschool education. However, such standardized diagnostic instruments are currently not available in Slovakia for children. This project aims to adapt an international instrument for four- to eight-year-old children in Slovakia that teachers can use to assess the level of development of preschool and elementary school Hungarian speaking children, and which is also capable of tracking development and assessing school readiness. We are adapting the Hungarian test battery called DIFER (Diagnostic System for Assessing Development for four to eight-year-old children) for Hungarian for Slovakia. This standardized tool for assessing the child's development can also be used to monitor the individual education in compulsory preprimary education. Our research aims to involve approximately 1600 four- to eight-year-old Hungarian speaking children in Slovakia within the framework of a series of empirical studies. The engagement of our university's preschool teacher trainees in

SK01-KA201-078250 K201	Horváth Kinga dr. habil. PaedDr. PhD.	2020-2023	the data collection process ensures that they learn the practical implications of the instrument. Data analysis will involve checking the validity and reliability of the instrument. Test results of Hungarian-speaking children in Slovakia will be compared to that of Hungarian-speaking children in Hungary. Analysis will include exploring the factors that may explain any differences between the two groups. Based on the results of this large-scale study, we will set the DIFER test standards that apply to Hungarian-speaking children in Slovakia. These standards will be suitable for assessing school readiness by educational professionals. Furthermore, we aim to prepare teacher trainees as well as practicing teachers for the effective use of the instrument. Research results will be published in national and international journals. We plan to publish a book of studies to present the results in detail.  Realizing the crucial role of mentors in the process of teacher training and education the objectives set by project partners are as follows: - to support mentor teachers professionalism and equip them with relevant mentoring knowledge and skills, thus to make them more self-confident about their role, - to increase the level of their mentoring competences and, - understanding of their importance, - to develop an innovative modular mentor training programme for face-to-face and self-study implementation, - to design and develop mentor training materials in five languages (English, Slovak, Czech, Hungarian, Serbian) reflecting the modular programme, - to run teaching practice of will-be-teachers and induction phase of novices in professional environment and make them more trainee friendly, - to increase the quality of practical training of future teachers, - to increase motivation and ensure willingness of young teachers to stay in the teaching profession, - to strengthen the profile of the teaching profession.
NFP312010Z205	Horváth Kinga dr. habil. PaedDr. PhD.	2/2020 - 7/2022	The project focuses on improving the training of future pedagogical and professional staff and improving the link between higher education and the needs of practice. To achieve

			the scope of pedagogical practice of students, future pedagogical and professional staff of schools and school facilities, in training schools, as well as expanding the network of training schools. The project also introduces the implementation of student internships in schools and school facilities, which is another tool of preparing graduates for the needs of practice in a better way. Within the project, study materials are created for teachers, teacher trainers and students, which will be used in two newly created study programmes – for the education of university teachers and for teacher trainings, which are currently absent from the palette. The project involves 500 students and 80 training teachers, the network of training schools will be expanded by 5 new schools to a total of 22. The project is a direct response to the needs of students to prepare them for becoming teachers and professionals, but also to the requirements of schools, many of which have limited organization with a small number of classes in the less developed regions of Slovakia, with a significant number of their students being socially or otherwise disadvantaged students. In view of the above, we believe that the implementation of the project in the long term will significantly contribute to increasing the level of education in preschool facilities, as well as in primary and secondary schools in the least developed regions of Slovakia.
2020-1-HU01-KA203-	Mgr. Tóth-Bakos Anita,	2020-09-01 - 2022-08-	Flipped classroom (FC) is a pedagogical approach in which the conventional notion of classroom-based learning is inverted, so that students are introduced to the learning material before class, with classroom time then being used to deepen understanding through discussion with peers and problemsolving activities facilitated by teachers. Although using FC methods has multiple benefits and is growing popularity, researchers and practitioners indicate that among impediments of widespread usage of FC methods are the additional time and technological support in relation to development of flipped
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learning activities. The flipped approach often involves the investment of significant time and energy on the part of instructors (e.g., recording video lectures; designing additional inclass activities). It is therefore recommended for teachers flipping their courses in team. By working in team, teachers can share their experiences of implementing flipped classrooms as well as their teaching resources

The "Developing Flipped Methods for Teaching" project aims at developing all the necessary flipped learning pedagogical material (out-of-class tasks, pre-assessment tools, in-class activities) for teaching a discipline (psychology) covering a whole academic year course. The project aims at overcoming the difficulties of elaborating multiple materials for teaching with flipped classroom design. By collaboration of six education institutions an entire discipline will be covered with FC materials in seven languages (English, Romanian, Hungarian, Portuguese, Bulgarian, Slovak and Greek), tackling a gap between educational research and practice.

One of the project partners, The Mihai Eminescu National Pedagogical High School (Romania) is a secondary-level educational institute. Due to the particularities of the Romanian education system they offer teacher and kindergarten teacher training program, whereby graduates receive a teacher-kindergarten teacher degree. In Romania psychology is part of the secondary-level school curricula, so high schools can also benefit from educational materials translated to Romanian. Their main role in the project is to translate the developed educational methods by the higher education institutes (HEIs) from the partnership, to test and adapt it to the Romanian requirements. The partneship is composed from other six Higher Education Institutes with Teacher Training Faculties, who have important experience as partners or leaders Strategic Partnership projects and educational innovation.

The main intellectual output of the project are the pedagogical

101004653 —	Nagy Melinda dr. habil.	2020 - 2025	materials for teaching an entire course of psychology with flipped classroom (FC) methods (materials for 30 courses), available in seven languages. Each pedagogical material is composed of instructional video, out-of-class work plans (online activities) associated with Low-stakes, formative assignments as well as inclass activities and assessment tools.  A questionnaire for surveying data regarding using FC methods in teaching social sciences will also be developed. Survey results will reveal the FC methods and sources used by teachers and academic staff from six partner countries. Results can be used as sources for developing pedagogical materials. Moreover, by publishing the results a source of inspiration will be available for teachers and policymakers for introducing flipped methods in the teaching practice.  Teachers from higher and secondary education institutes will have all the necessary materials for teaching the subject of psychology with flipped classroom methodology. Project results are expected to facilitate the use of FC practices in teaching psychology. Studies indicate that when changing traditional methods to flipped classroom student's performance and satisfaction will improve. FC methods increase student's motivation and their self-confidence, their commitment to learn. Considering scientific evidence, we the project will contribute in general to improving the quality of education, and to the digital literacy and competences of teachers and students.  The aim of the proposed action is to strive against the logic of
Inclusion4Schools — H2020-SC6- TRANSFORMATIONS-	PaedDr. PhD.	2020 2023	exclusion in education and against the systemic (re)production of inequalities - insisting on a bottom-up strategy - in the context of segregated schools and communities.
2018-2019-2020			The specific objectives of the proposed action are: - to study and exploit efficient approaches in the field of
			educational research and development, in particular of projects
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			which focus on reversing educational inequalities;

			by evidence based research; - to enhance access and application of knowledge and data on territorial/regional and educational exclusion; - to coordinate and support interdisciplinary and cross-sectoral think-tank to develop ideas and suggestions in order to enlarge
			the efficiency of the EU policy concerning social inclusion; - to improve the network activity among the stakeholders of inequality discourses (municipal authorities, Roma organisations, civil right movements, centralized state actors and local authorities, welfare institutions, public health and social care systems, churches, academic associations, research institutes, community media etc.);
			<ul> <li>to support local communities (maintainers and clients of schools, local organisations, entrepreneurs etc.) to create a platform for discussing their local issues;</li> <li>to promote the dissemination and policy uptake of transformative practices in segregated contexts which contribute to cooperation and partnership between schools and communities.</li> </ul>
			<ul> <li>to develop tools to support network building and sharing the experiences of schools with community-centred pedagogical programmes on national and international level;</li> <li>to foster and facilitate the transformation of pedagogical practices and stimulate change in the communities' self-understanding in order to increase cohesion, collaboration and the development of competencies;</li> </ul>
			- to define and establish techniques and strategies for the sustainability of transformative practices and networking within and across the supported RIAs and communities in order to ensure the overall long-term impact of the project.
VEGA 1/0663/19	prof. Dr. Péter Tóth, PhD.	1/2019 - 12/2021	Analysis of science and mathematics education in secondary schools and innovation of teaching methodology Today's common economic and social problems are also related to the fact, that the underdeveloped scientific competencies of

	Németh, DSc.		teachers, teacher trainees, and students - within their complex
VEGA 1/0117/19	prof. Dr. András	1/2019 - 12/2021	The aim of the project is a research into the identity of actual
			of these subject.
			- To formulate recommendations for the methodological renew
			these subjects.
			- To investigate how ICT tools can contribute to the education of
			these subjects.
			- To explore the teachers' view on the learning difficulties of
			<ul> <li>In the framework of pedagogical research explore the teachin strategies used during the education of these subjects.</li> </ul>
			science and maths subjects.
			- To identify the factors influencing the students' relations to
			career path and learning styles.
			thinking and attitudes, socio-economic status of students, their
			- To examine the relationship among scientific and mathematic
			mathematical thinking, understanding and problem solving.
			- Discover the main attributes of natural scientific and
			mathematics in secondary schools, are the following:
			research in terms of education regarding science subjects and
			Taking into account the above, the main objectives of our
			mathematics is very important.
			conscious use of ICT tools in the education of science and
			professionally established knowledge. For this reason, the
			delusions, pseudoscientific knowledge and adverts by having
			school students. They will be able to navigate in the world of
			to develop the skills and needs of lifelong learning of secondar
			As knowledge is constantly changing in these areas, it is essent
			this field as well.
			basis of scientific competencies, therefore our research covers
			environment. Mathematical competencies forms an inseparab
			we can understand and consciously use the technical tools in o
			attitudes, so we can interpret natural phenomena, furthermore
			Scientific competencies means knowledge, skills, ability and
			students are a major handicap in economic development.

	social context, in relation with their socio-economical evironment, formation of steretotypes, as part of the network of social relations, and paralel identifiation of specific elements of national minority school/education process. The project is based on an original research. We intend to apply the method of micro-historical research as an innovative method, which we will carry out through methods of oral history and some other so called "projective methods", such as concept mapping and word association. We will also use the questionnaire method in order to identify and measure the detailes (items) of the professional, personal and national identity of the respondents. We have also included into our project a preparation and realization of a separate panel at an international scientific conference which would include an exhibition of school artefacts, related to our project.
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