

2018 - 2022



FACULTY
OF EDUCATION
Charles University

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#### Title: WE Learn and COMmunicate Ensemble (WELCOME)

Type: Erasmus KA2

Project n°: 2016-1-CZ01-KA201-024036

**Period:** 2016 – 2019

**Project description:** The WE Learn and COMmunicate Ensemble (WELCOME) project will combine the efforts of eight relevant organisations from three European countries (the Czech Republic, Slovakia and Bulgaria) to create innovative products, which will contribute to increasing early childhood education and care (ECEC) teachers' competencies in addressing heterogeneous needs, level of achievement and individual abilities for learning among children in mainstream kindergartens. The project will also contribute to reducing disparities in learning outcomes affecting children with disadvantaged and/or from diverse backgrounds, in particular through an innovative comprehensive approach.

Coordinator: Nakladatelství Dr. Josef Raabe s.r.o., Czech Republic Partners: Výskumný ústav dětskej psychológie a patopsychológie (SK), Sdruzhenie "Institut za psihichno zdrave i razvitie" (BG), ZŠ M. Alše a MŠ Mirotice (CZ), Základná škola s materskou školou Zubrohlava (SK), ODZ 72 Prikazka bez krai (BG) Faculty contact person: PhDr. Barbora Loudová Stralczynská, Ph.D.

Web: https://www.e-welcome.eu/o-projektu

## Title: Citizenship Education in the Context of European Values - The Educational Aspect (CitEdEV)

Type: Erasmus Jean Monnet Network

Project no: 621298-EPP-1-2020-1-CZ-EPPJMO-NETWORK

**Period:** 2020 - 2023

**Project description:** A multidisciplinary network of experts incl. junior researchers from 28 universities across 19 European countries will be established based on the research and expertise of an already well established network. We wish to understand the experiences of all young people across Europe and formulate innovative and radical questions. The Network will thus be committed to educating and inspiring youth through the acquisition of civic knowledge, skills, and capacities to foster youth participation in democratic life and active civil society while finding out what they understand nowadays under the term (fundamental) European values and Citizenship. In accordance with the new EU Youth Strategy, the network will help prepare young people embrace and adopt engaged and empowered forms of active citizenship. The network will foster a dialogue on the principles and practice of citizenship education to promote European citizenship, identities, and fundamental values including the respect for human rights, freedom, democracy, equality, and the rule of law (defined by the Treaty of Lisbon). The Network's activities and outputs will operationalise the Paris Declaration of 2015 promoting citizenship and common values through education, which identifies the "urgent need to cooperate and coordinate, to exchange experiences, and to ensure that the best ideas and practices can be shared throughout the EU" (EC,2015). Through a series of seminars, conferences and workshops, an intercultural and transnational dialogue embedding fundamental European values and active civil society will be promoted. The network partners will engage in transnational learning, creating new forms of knowledge and expertise, identifying the best methodologies to embed European values, attitudes, and behaviours through citizenship education. A research database providing a range of national and Europe-wide case studies and reports to develop a citizenship education policy and practice will be created.

Coordinator: Faculty of Education CUNI, Czech Republic

Partners: Aristotle University of Thessaloniki (GR), Autonomous University of Madrid (ES), Charles University (CZ), Dublin City University (IE), Eötvös Loránd University (HU), Istanbul University (TR), Károli Gaspar University of the Reformed Church (HU), London Metropolitan University (UK), Lund University (SE), Malmö University (SE), Polytechnic Institute of Coimbra (PT), Rezekne Academy of Technologies (LV), Roma Tre University (IT), St. Cyril and Methodius University Skopje (MK), University of Augsburg (DE), National Academy of Educational Sciences of Ukraine (UA), University of Helsinki (FI), University of Latvia (LV), University of Patras (GR), University of Porto (PT), University of Tartu (EE), University of the Peloponnese (GR), University of the West of England (GB), University of the West of Scotland (GB), University of Applied Sciences (BE), University of Huddersfield (GB)

Faculty contact person: prof. PaedDr. Radka Wildová, CSc., mimořádný profesor Univerzity Karlovy

Web: https://citedev.eu/

### Title: ERAMUS+ Learning by Doing Attainment of Basic Competences in ECEC (ABC for kindergartens)

Type: Erasmus KA2

Project no: 2020 -1-CZ01-KA201-078464

**Period:** 2020 - 2023

**Project description:** As highlighted by the European Commission, it is of crucial importance to foster initiatives that support and reinforce the development of key competences for all individuals from early childhood. Many newly qualified or inexperienced teachers tend to base their lesson planning on the traditional PPP approach (Presentation, Practice, Production). The problem is that PPP serves the teacher's needs, but it is debatable whether or not it fulfils the needs of the learner. For this reason, more and more teachers in ECEC (Early Childhood Education and Care) turn to more learner-centred approaches where the needs of the children are central to the lesson content. Two such approaches are TBL (Task-Based Learning) and PBL (Project-Based Learning). Since the 1st of November 2020, the publishing house Nakladatelství Dr. Josef Raabe, s. r. o, has started to implement the transnational project "Learning by Doing - Attainment of Basic Competences in ECEC (ABC for kindergartens)". The project will combine the efforts of 8 relevant organisations from 3 European countries (the Czech Republic, Slovakia and Slovenia) and the aim of this project is to improve the quality of ECEC education through introducing innovative approaches and practices and to ensure comprehensive development of children's competences at ECEC level. This will be achieved by supporting kindergarten teachers to gain knowledge on how to efficiently apply project based learning (PBL) and task based learning (TBL) at ECEC level.

Coordinator: Nakladatelství Dr. Josef Raabe, Czech Republic

Partners: Faculty kindergarten with special care in Prague (Czech Republic), Kindergartens Kopřivnice (CZ), Catholic University in Ružomberok (SK), Kindergarten Riadok in Ružomberok (SK), P7 – University Of Maribor Faculty Of Education (SI), Kindergarten In Maribor Vrtec Studenci Maribor (SI),

Faculty contact person: PhDr. Barbora Loudová Stralczynská, Ph.D.,

Web: https://abc-kindergarten.eu/about-the-project/

### Title: University Practice Schools – sustaining collaboration across learning environments

Type: Erasmus KA2

Project no: 2020-1-UK01-KA201-079295

**Period:** 2020 - 2023

Project description: The UPSscale project aims to create an innovative, non-hierarchical space for sustainable, collaborative transnational working that responds to the needs and interests of educators and staff in early years settings, schools and universities. There is wide recognition that most EU countries face a shortage of teachers, prompted by an ageing teacher population, fewer students enrolling in initial teacher education courses and more teachers leaving the profession before they reach retirement age. A centrally important part of attracting and retaining teachers is early career support for novice teachers and continuing professional development for staff who are more experienced. A career that remains attractive through opportunities to learn and progress contributes to greater job satisfaction and wellbeing, and is likely to promote higher levels of staff retention.

Coordinator: University of Plymouth, Great Britain

Partners: VIA University College (DK), Fortunaskolen (DK), Universita Karlova (CZ), Vrije Basisschool Buitenschool Bergop (BE), Universidad De Santiago De Compostela (ES), Ermington Primary School (UK), UC Leuven (BE), Centro Público Integrado OCruce (ES), FMS Slunicko pod strechou pri PedFUK Praha 13 (CZ)

**Faculty contact person:** PhDr. Barbora Loudová Stralczynská, Ph.D., Philip Selbie, M.A.

Web: https://www.plymouth.ac.uk/research/education/university-practice-partnerships

#### Title: European Cultural Project

Type: Erasmus KA2

Project no: 2021-1-FR01-KA220-SCH-000032613

**Period:** 2021 - 2024

Project description: N/A

**Coordinator:** European Association for Education-France Paris (France)

Partners: University of Cordoba (ES), Universitaet Bremen (DE), Zemites pamatskola (LV), Associazione internazionale per la promozione della Scuola a Rete "DiCultHer" (IT), NGO (BG), EUROPTIMUS-Vereinigung für europapolitische Bildung- AEDE Österreich (AT), Ard Aoibhinn Community Initiativescompany Limited By Guarantee

(IE), Stichting AEDE Nederland (NL),

Faculty contact person: Philip Selbie, M.A.

Web: N/A

### Title: Environmental Socio-Scientific Issues in Initial Teacher Education (ENSITE)

Type: Erasmus KA2

Project no: 2019\_1-DE01-KA203-005046

**Period:** 2019 - 2022

Project description: Our world is facing tremendous global environmental challenges such as climate change, drinking water shortage and loss of biodiversity. To develop sustainable solutions of these challenges, our educational system has to fulfil the obligation to enable citizens to deal with complex problems. To do so, people need competencies - not only profound scientific know-how but also transversal skills (such as critical thinking, creativity, responsible citizenship competences and forward-looking skills). This is important as sustainable decisions cannot be taken only based merely on scientific facts, they are also influenced by ethical, cultural, ecologic and economic aspects. Dealing with environmental issues will also promote interdisciplinary cooperation in science, technology, engineering and maths. This is the starting situation which ENSITE picks up. Research proposes the engagement of socio-scientific issues (SSI) as one promising path to developing environmental citizenship competencies. ENSITE aims at improving higher education by including environmental SSI in science initial teacher education (ITE). To this end the project consortium will develop an innovative approach to supporting teachers in developing competences in dealing with environmental SSI as well as in acquiring teaching skills to supporting their future students at school in becoming responsible citizens themselves. In the longer term, ENSITE is expected to contribute to a widespread shared awareness of social and environmental responsibility.

Coordinator: Pädagogische Hochschule Freiburg, Germany

Partners: Austria, University of Innsbruck (AT), University of Klagenfurt (AT), Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences (BG), Cyprus, University of Nicosia (CY), Charles University (CZ), International STEM Centre (DE), University of Education Freiburg (DE), Leibniz Institute for Science and Mathematics Education (IPN) in Kiel (DE), National and Kapodistrian University of Athens (GR), Vilnius University (LT), University of Malta (MT), Utrecht University (NT), Norwegian University of Science and Technology (NO), Constantine the Philosopher University in Nitra (SK), University of Jaén (ES), Jönköping University (SE), Hacettepe University (TR)

Faculty contact person: prof. PhDr. Martin Bílek, Ph.D.

Web: https://icse.eu/ensite/

### Title: Developing an Out of School Learning Curriculum for Teacher Education Programs (DOSLECTEP)

Type: Erasmus KA2

Project n°: 2019-1-TR01-ka203-074692

**Period:** 2019 - 2022

**Project description:** In this project, it is aimed to develop an out-of-school curriculum for teacher education programs by following these steps: (i) finding out about different out of school learning environments, approaches and resources used in countries where out-of-school education has been successfully conducted over years, acquire and possess high-quality skills, (ii) acquire and possess high-quality skills, competences, knowledge and skills related to strategies, methods and techniques that can be used in out-of-school activities, iii) collaborate with partners to construct scaffolds which will help us to develop an out-of-school curriculum, iv) test and refine the curriculum first in Hacettepe University (the applicant university), (v) translate and apply the curriculum in participant countries. The curriculum will consist of following aspects: interdisciplinary connections, STEM education, using mobile applications, virtual museums, augmented reality, assessment. The goal of this curriculum is to combine the theoretical background with applied activities by creating on-site learning environments. The theoretical knowledge will be developed via intensive collaboration with the input emerged from national and international out of school practices and examples given by the teacher trainers and project experts. In order to support theory with practice, pre-service teachers will create learning environments by choosing one of the out-of-school learning environments (e.g. planetarium, museum, zoo, etc.)

Coordinator: Hacettepe University Binasi, Çankaya Ankara, Turkey Partners: Uşak University (TR), Atatürk University (TR), Recep Tayyip Erdoğan University (TR), Univerzita Mateja BelaV Banskej Bystrici (SK), Martin-Luther Universitaet Hallewittenberg (DE)

Faculty contact person: prof. PhDr. Martin Bílek, Ph.D. Web: https://doslectep.hacettepe.edu.tr/en/about-the-project/

#### Title: Pilot Project GEM Girls 4 STEM in Europe

Type: STEM

Project n°: LC-01380173(GIRLS4STEM-2019)

**Period:** 2020 - 2022

Project description: Closing the gender gap through digital and entrepreneurship education was one of the actions under the second priority of the Digital Education Action Plan: Developing relevant digital competences and skills for the digital transformation, and is vital if Europe is to fully embrace the benefits of the digital revolution. While both girls and boys have similar levels of interest and competence in digital technologies, fewer girls go on to develop this interest in their studies or for their career. Girls and young women require positive examples, role models and support to overcome stereotypes and realise that they too can embark on a fulfilling and successful career in ICT and STEM. The aim of the action Girls 4 STEM in Europe is therefore to promote Science, Engineering, Technology and Mathematics in engaging ways and to encourage girls to become leaders in tech. The project will set up a network of schools, universities, high education institutions and companies and no-cost summer camps for girls aged 13-18 years in order to reach the goals.

Coordinator: Pädagogische Hochschule Freiburg, Germany

Partners: Pädagogische Hochschule Freiburg (DE), Universiteit Utrecht (NL), Università ta' Malta (MT), Univerzita Konstantína Filozofa v Nitre (SK), Norges Teknisk-Naturvitenskapelige Universitet (NO), Universidad de Jaén (ES), Ethniko kai Kapodistriako Panepistimio (GR), Univerzita Karlova (CZ), Högskolan för Lärande och Kommunikation i Jönköping - Hlk School Of Education and Communication (SE), Edex - Educational Excellence Corporation Limited (CY), Vilniaus Universitetas (LT)

Faculty contact person: prof. PhDr. Martin Bílek, Ph.D.

Web: https://icse.eu/gem-empower-girls-to-embrace-their-digital-and-entrepreneurial-potential/

Title: Development and Evaluation of an Interactive Screen Experiment about Acid-Base Strength to improve uppersecondary Chemistry Instruction

**Type:** Aktion

Project n°: Aktion 94p2

**Period:** 2022

**Project description:** Recently, it has become apparent in chemistry education that, in addition to hands-on experiments, simulations and interactive screen experiments (ISEs) are an essential alternative to student experiments, which very often would be too dangerous or costly to be conducted. Whereas numerous simulations, particle models and instructions for experiments exist, there has been a minor focus on combining the two. Our project aims at constructing and evaluating such a combination by designing an ISE based on an acid-base experiment and integrating a 'magnifying glass' simulating the reactions occurring on the particle level. We intend to do so by designing mobile apps and a WebApp of the ISE and evaluating its functionality both with the use of questionnaires and eye tracking.

Coordinator: Faculty of Education CUNI, Czech Republic

Partners: University of Vienna (AT)

Faculty contact person: doc. PhDr. Martin Rusek, Ph.D.

Web: N/A

#### Title: Outstanding actions for LGBTI — OUT' ('action')

Type: REC Action Grant/Rights, Equality and Citizenship Programme-REC

Programme 2014-2020

Project n°: 881931 — OUT — REC-AG-2019 / REC-RDIS-DISC-AG-2019

**Period:** 2020 - 2022

**Project description:** The overall objective is to fight against discrimination based on sexual orientation and/or gender identity and to improve quality of life of LGBTI people through concrete and practical actions in the field of education, employment and public/community awareness that will serve as an incubator of successful practice to be replicated in other (Eastern) European countries. The project will bring new data about the causes of homophobic bullying at schools and based on the results we will formulate the List of Recommendation to prevent it. The detailed data research will be done also in the field of workplace equality with the focus on public sector. We expect to reach 2500 schools and at least 500 workers in the management. Project is targeting also the general public via the public awareness campaign combating stereotypes towards LGBTI people. The campaign will be based on using online tools, esp. social networks combined with traditional prints and supplements at the Czech biggest daily (we expect to reach approx. 2 million people – 20% of the Czech population). The last work-package of activities is focused on the LGBTI people – with the community campaign based on role models, direct dialogue and offer of support groups, we will reach more than 100 000 people. The activities focused on education, workplace and community building are using the peer-reviews and consultations with the LGBTI NGO workers from the CEE to share the experiences and know-how and learn together. The project will result in growing acceptance of LGBTI affection at public, growing number of schools and employers with the effective strategies to combat the homophobic and transphobic discrimination and bullying, growing number of the LGBTI people fully out in their lives and growing number of reported cases of discrimination. Outputs range from data collection analysis, educational tools, trainings and workshops to campaign outputs, such as videos, media outputs, websites and online ads.

**Coordinator:** Prague Pride, Czech Republic

Partners: -

Faculty contact person: doc. PhDr. Irena Smetáčková, Ph.D.

Web: https://www.developmentaid.org/organizations/awards/view/362273/outstanding-

actions-for-lgbti

# Title: Concepts for teaching units in mathematics for migrant or minority students

**Type:** Aktion

Project n°: Aktion 84p12

**Period:** 2019

Project description: Multiculturalism is one of the most significant challenges for schools in many European countries. Teacher are usually not sufficiently prepared to deal with the new classroom context with pupils having a migrant or minority background with different cultures and languages. Mathematics teachers feel the need for training and materials reflecting this situation. Little has been done as far as mathematics teaching in multicultural contexts is concerned. This project envisages the design of concepts for teaching units based on research studies, the development of examples using these concepts for creating full teaching units, the development of guidelines for mathematics teachers helping them to create their own teaching units suitable for their classrooms. These tools will allow teachers to create their own teaching units for multicultural classrooms.

Coordinator: University of Vienna, Austria

Partners:

Faculty contact person: prof. RNDr. Jarmila Novotná, CSc.

Web:https://www.dzs.cz/sites/default/files/2020-

10/Zpr%C3%A1va%20o%20%C4%8Dinnosti%202019.pdf

### Title: Developing mathematics teaching units for migrant students (Math4Migrants)

Type: Erasmus KA2

Project no: 2021-1-AT01-KA220-SCH-000023768

**Period:** 2021 - 2024

**Project description:** The multicultural nature of mathematics classrooms is a significant challenge in many European countries, especially at primary and middle school level. The teacher's job is all the more difficult because he/she is usually not sufficiently prepared to deal with a classroom context with pupil sharing a migrant background, coming from countries with different cultures and different languages. Teaching materials focusing on migrant students do exist, but mostly for languages, not for mathematics. Mathematics teachers feel the necessity for training and materials which reflect the needs of their classes in terms of linguistic and cultural differences. Their pupils with a migrant background encounter even more difficulties than their native classmates in acquiring fundamental maths skills.

Coordinator: University of Vienna, Austria

**Partners:** Panepistimio Thessalias (GR), Fondazione A.R.E.A. (IT), BORG Deutsch-Wagram (AU), Stredni skola, zakladni skola a materska skola da Vinci (CZ), Direzione Didattica Massa 2 (IT)

**Faculty contact person:** prof. RNDr. Jarmila Novotná, CSc. Web: https://mathematik.univie.ac.at/forschung/projekte/

#### Title: Artful Educational Robotics to promote Computational Thinking in a Blended Learning context (FERTILE)

Type: Erasmus KA2

Project n°: 2021-1-EL01-KA220-HED-000023361

**Period:** 2022 - 2025

Project description: The integration of Educational Robotics (ER) in the educational practice is associated with the development of digital skills and Computational Thinking (CT), positively affecting students' personal development. As ER has been deeply connected with classroom-based learning and face-to-face (f2f) interaction, the Covid-19 pandemic imposing online learning has abruptly discontinued robotics' implementation in all educational levels from elementary to secondary education and universities. Although several initiatives on developing ER simulators appeared, which have recently been also released as a cost-effective solution in case robotic technologies are not available, their exploitation remains sparse. Moreover, no methodologies exist to support educators in designing and implementing blended or online robotics learning designs. So, in the post-pandemic era, it seems to open up opportunities for a digital transformation, exploring the potential of integrating ER in a meaningful blended learning context.

**Coordinator:** University of West Attica, Greece

Partners: Universidad Rey Juan Carlos (ES), Universidad de Valladolid (ES),

Comenius University Bratislava (SK),

Faculty contact person: PhDr. Petra Vaňková, Ph.D.

Web: https://fertile-project.eu/

#### Title: Preventing post-COVID Social Exclusion Together

Type: Visegrad Fund Project n°: ID 22110213 Period: 2021 - 2023

**Project description:** Supporting social integration of young people and their families living in rural areas and small towns in less developed regions of Central and Eastern Europe in a period of an epidemic threats by developing recommendations for civil society on the creation of Local Support Groups — Rapid Response Teams in the local environment. The project is aimed at helping to reduce the scale of educational and social inequalities in peripheral areas where the introduction of remote education has caused much more negative effects than in urbanized areas and metropolises.

Coordinator: Pedagogical University of Krakow, Poland

Partners: University of Presov (SK), Institute of Educational Studies and Cultural

Management, University of Debrecen (HU)

Faculty contact person: PhDr. Vít Šťastný, Ph.D.

Web: https://pcset.up.krakow.pl/