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## RAINBOW

### Methodological framework

#### *Aims and objectives*

Our project aims at promoting social inclusion and positive values through the introduction of **non-formal education and methods into the school education**. RAINBOW focuses on fostering inclusive education and promoting EU social and common values. Its specific objective is to enhance the acquisition of **social and civic competences, foster knowledge, understanding and ownership of EU values and fundamental rights**. The choice was made taking into account the raising of populism and hate speech focusing on racial hatred towards minorities in partners' countries and the close relation between this phenomenon and social media description of migration. This situation shows the importance of **citizenship education** in this field and justify some interlaced activities for teachers and students on this topic.

#### *Project challenges*

Firstly, RAINBOW project aims to **reduce education gap by introducing innovative methods and tools** elaborated with **direct involvement of young, teacher and nonprofit organizations**. Investing in children education (formal and non-formal) is a progress towards breaking the cycle of disadvantages, reducing the risk of poverty, social exclusion and radicalism behavior in the future. Secondly, it wants to **improve competences and awareness on citizen education for secondary level teachers and students**. Thirdly, it aims to **promote and increase non-cognitive skills in education system** as intelligence structure (cognitive and non-cognitive skills) and lifestyle go hand by hand. Fourthly, it work for **enhancing knowledge on media and social media** role in the society by directly involve students, teachers and representative from media. Finally, it pushes to **generate and widespread peer education on social and civic** competencies by producing video, visual materials from youngster to youngster and from teachers to teachers.

#### *Methodology and Innovative aspects*



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RAIN.BOW approach is based on the conviction that people are really engaged in something only when they are actively participating in doing something. This is clear on the education field where researches demonstrate that “to do with” students is the best way to obtain good and durable results. Students like to interact and network, prefer to learn through video, pictures and sound, and just after that turn to the text. Learning makes sense for the nowadays’ students when it is relevant, instantly useful and fun, linked to the real life and related to authentic tasks. It is not surprising that even the most ambitious children often find school boring (“Understanding digital children Teaching & Learning in the New Digital Landscape” Ian Jukes and Anita Dosaj). So that, RAIN.BOW project aims to bring school closer to life, link it to the community and real life situations. This approach will be used to make both teachers and students well aware about media role in spreading fake news and in increasing racism and xenophobia.

Nowadays we can see a lot of emphasis on PBL and cooperative learning but teachers are not enough prepared and updated on it and they are teaching as usual. Inquiries of the school practices in different countries around Europe show that lessons and activities that employ such methods at school are not more than 3% of those applied (ref.: TTTNET, No 540029-LLP-1-2013-1-IT-COMENIUS-CNW).

One reason for this is that teachers are not trained enough to implement this method. Therefore, in order to get teachers “on board”, it is essential to involve them directly in order to change their mind and their way of teaching. They need to prove and improve new solutions. For that reason, RAIN.BOW project starts from concrete teachers’ involvement to improve their hard and soft skills through formal, non-formal and informal approach. These methods and approaches will be utilised for development of a set of **innovative educational resources** (lesson- / activity plans) aimed at developing media literacy and critical thinking skills of the young learners.

The RAIN.BOW educational resources will serve both students and teachers in their efforts for mastering civic education, common value and tolerance.

The RAIN.BOW project presents **four innovative aspects**:

1. **The combination of a top-down and bottom-up approach.** Teachers and students will be trained (top-down), and they will directly develop a European Values Campaign and new training activities (bottom-up). The partnership will develop a program both for Local teacher training and Local students workshop, where partners’ experts following the material prepared by partners will



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train the target group. On the other hand, teachers and students will produce visual materials, videos, blog etc. to spread information on tolerance, common value, active citizenship and peace. In this way, they will indirectly train web users and indirect beneficiaries. Peer education among teachers and students will be activated to widespread knowledge and to involve more and more people.

**2. Cooperative Intergenerational learning.** At the European values camp, teachers and students will work together; they will be at the same time trainers and trainees. They will develop mutual learning and mutual trust by showing the possibility of collaboration by different generations and roles. They will be engaged on the training evaluation and they will collaborate to mitigate problems and to improve training materials. Together they will develop the final European values campaign that will be widespread on the web through different tools. Thanks to the teacher training package, teachers will endeavour to build the right attitude, mind-set and perspective for dealing with **learner as an equal partner in the educational process**. Thanks to project's materials and the camp teachers will grow from providers of knowledge to coaches of learning who successfully keep their personal and professional function separate, enabling in that way the growth of students as independent thinkers and supporting students' active involvement, participation and production.

**3. Create a "European values" community.** Thanks to RAIN.BOW activities and to European values campaign, project will reach a wider community (target, stakeholder and audience) which will increase its knowledge on common values. People will be more and more engaged on teaching civil values. Everyone who has an educational responsibility will leave its isolation and will start build bridges to others by disseminating message of collaboration, tolerance and democracy. Target groups will be producers of subsidiary interventions. The RAIN.BOW project endeavours to launch several public campaigns aimed to serve as a quality test for the impact potential of the innovative educational resources and as an awareness raising campaign among wider societal communities. These campaigns will be profiled to address different project target groups. They will have a competitive character and will challenge the students and teachers to apply in a practical way the skills they will gain in the process of the project implementation and testing of the project outputs.

**4. Non-formal Education.** NGOs partners have gained extensive experience in training and educating teachers, students and other stakeholders about issues related to tolerance and diversity by using informal and non-formal methods. Partners' organizations are directly involved in training modules and implementation activities. The experience from the non-formal education and methods will be implemented on RAIN.BOW activities. A special focus on youth organizations



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methodologies and tools will be done to introduce new methods and approaches to the school education. Non-formal and informal methodology will help teachers to change their perspective to the youth culture, and further it will help them to approach the youngsters in a meaningful way.

### *Consistency*

Social exclusion and vulnerability go hand by hand. To mitigate and cut this cycle it is important to invest in education inclusion by wide spreading common value and active citizenship among students. RAINBOW project have chosen two target group, teachers and students, who could represent the society as whole: teachers as adults and educators and students as future users. Working with and on these groups, we enable society as a whole to fight against hate speeches, to increase civic competencies and to create an educational community. So that, **students** and **teachers** are the **target groups of the project**, as well as the main beneficiaries. Teachers are both trainers and educational example for younger and improve their knowledge means also give them tools to identify hate speeches tendencies in class and support a positive bottom-up mind change. **Teachers and educators** need to better understand how online media and social media work and their role in spreading fake news, racism and xenophobia. They will have to improve skills and competences towards online fake news and alternative-narrative, so that they will be able to help students to prevent risk of radicalization and to widespread positive values. Thanks to this, they will be more effective in their work of educators with students. In the majority of partners' country there is a lack investment on civic education that seem to be relegated to the good will of some teachers or adults. This context leaves students alone in front of hate messages, intolerance and extremist approach. It is urgently needed a direct involvement of students in learning activities linked to improve their civic competences in order to be able to internalize European common value and to become European active citizens. There is the necessity to promote a high participation of **students** in democratic and civic life, encouraging diversity, intercultural and inter-religious dialogue, and promoting the European value of freedom, tolerance and respect. Critical thinking and media literacy will avoid attempts at regimentation, which may jeopardize their development and future. They will be aware of the danger of fake news and hate speech, and they will be able to create European values campaign and European values movement. An important dimension than cannot be missed is the fact that reach arsenal of methods and good practices applied by the *informal education* can be transferred to the school context and can be employed for the sake of civic competences and critical thinking development. At the same time, the role of school is to equip young people with skills for the life, ability to actively engage with the society



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and to be successful in a constantly changing world of work (*"Key Competences for Lifelong Learning – A European Framework", Office for Official Publications of the European Communities, 2007*). Only the systematic approach within the context of education can bring sustainable results. So, issues such as development of civic competences, media literacy and critical thinking cannot (and should not) be left only into the domain of the informal and non-formal learning and civil society campaigns, and **should be addressed within the context of the school education**. Informal education however can provide variety of methods and teaching strategies, which are still rarely employed in the mainstream education but are more relevant to the expectations and learning styles of the nowadays students – born and raised in the context of a life, which is largely dominated by technologies.

### *Educational constructivism*

#### *Educational Technologies in RAINBOW project*

Doing research in educational studies on the verge of the Millennium, Punya Mishra and Matthew Koehler (2006, 2009) determined that the most significant change that happened in education for the past decades was the introduction of information technologies in the classroom.

Mishra and Koehler directed their work to building a conceptual framework for placing *educational technology* among the essential skills in the teaching profession. After five years of research on the practices of teachers from different grade levels their work resulted in creating the *Technological pedagogical content knowledge* conceptual framework (TPCK). Building on the pedagogical content knowledge (PCK) framework of Lee S. Shulman (1986), the TPCK model constitutes the *technological knowledge* as one of the essential professional competences of the educators, together with the *content knowledge* (specific knowledge about the subject they teach) and the *pedagogical knowledge* (knowing how to teach). Mishra and Koehler claim that *technological knowledge* in the context of the teaching profession nowadays is not something additional and



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optional. What is more – it cannot be added to the classroom without significant change of the *content* and the *pedagogy*.

Information and communication technologies are inevitable part of our life and education, and that is why we address their role in the Methodological framework of the RAINBOW project.[1]

About 50% of the students who took part in the RAINBOW inquiry acknowledged they use social media more than 3 hours a day and 31% answered that they spend on average 3 to 5 hours. Student respondents acknowledge that they use technologies to communicate, to entertain, to share content, to express themselves and 47% confirm they inform themselves through social media.

Few years after Mishra and Koehler published their work (2006), another researcher – Dr Ruben Puentedura created the SAMR model (2010). SAMR is a framework which reviews the *types of technology integration in the classroom* and is aimed to provide teachers with perspective and guidelines on how to utilise the technologies for achieving best results for the knowledge of their students.

The model considers four levels of integration of the technologies: *Substitution*, *Augmentation*, *Modification*, *Redefinition* and SAMR is an acronym created by the first letters of these 4 terms.

*Substitution* means that technologies come to replace a traditional process in education. At *substitution* level there is no change of the task and the nature of work by the introduction of the technologies. *Substitution* could be using an electronic or web-based version of a textbook or document, instead of a hard copy, or filling out a worksheet on a computer, instead of a paper version. *Substitution* might also include the use of PowerPoint, Prezi, Slides, or a similar program to present information to the class, instead of writing bullets and notes on the whiteboard.

*Augmentation* means that the substitute of traditional tools with technology would bring some enhancements to the students' learning experience. The task still does not change, but students benefit from some additional functionalities. For instance: the teacher might use a video to present some information; students can share their homework with their teacher (or any documents with their classmates) using email or cloud technologies, etc.

*Modification* means that thanks to the use of technology, the task would be significantly redesigned. Instead of replacement or enhancement, technologies will bring an actual change to



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the design of the lesson and its learning outcome. This could mean that a student might prepare a clip, instead of writing an essay on a topic, synthesising in the product video, text and sound. The teacher might use a learning management system (like Google Workspace or Microsoft Teams), which brings the logistics of the educational process at a whole new level – sharing information, posting assignments, tracking grades, messaging students and keeping in touch with parents would be much faster and much more efficient.

*Redefinition* means a fundamental change of the learning with the help of the technologies, enabling implementation of activities that were *previously impossible* in the classroom. This means that students could write their own wikis or blogs for public consumption and feedback; or could connect with a classroom in another part of the world and collaborate on a common project; or could communicate with a scientist who can help resolve a local ...ecological or another problem. This level of use of technologies *redefines entirely* the educational process and the classroom by **linking them to real life**. At the level of *redefinition*, thanks to the educational technologies students can engage in campaigns, projects and tasks which are authentic and significant. This puts them in an active position in the process of learning. They can communicate with the world outside the school in search of information and support from researchers, journalists, museums, business... Or to share their work and to receive instant feedback from the community or from specialists.

The *RAINBOW inquiry on social and civic competences and values awareness*, carried out in 2020 shows that both students and teachers consider that social and civic education at schools needs a more *practical approach*. Student respondents put a great emphasis on the need to feel engaged in authentic experiences which bring them knowledge about real life outside the school. Teenagers would like to engage in lessons that link social and civic education with their needs, interests and realities they face on a daily basis.

What is more – they would like to be engaged in meaningful tasks and projects, not on fictional ones, created by educators and written to be implemented in the classroom environment and intended to stay between the classroom walls. Student-respondents expressed interest to be engaged in awareness raising campaigns and activities that deal with controversial themes (such as discriminations, racism and violence). They also would like to be given the opportunity to create content (such as videos and photos, artistic content, dedicated social network pages, etc.).



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In addition to that, 89% of the teachers who took part in the RAINBOW inquiry consider that interventions of *stakeholders from outside the school* (such as journalists, scientists, witnesses or participants in various processes) would be beneficial for the improvement of the social and civic education.

With the mobilisation of the educational technologies, the changes and support demanded by students and teachers could be brought in the school classrooms. Likewise, a wider use of ed-tech would ease a more transversal approach to social and civic education. Part of the efforts of the RAINBOW partners during the process of the project implementations (WP4) will be dedicated to experimentation on that.

In the context of the RAINBOW project the focus would be particularly on the SAMR's *modification* and *redefinition* levels of integration of technologies in the classrooms as those are bringing most significant change in the learning process and are suitable to be implemented in the high-school level where students are more mature and independent. These forms of integration of educational technologies support a more active role of the students in the educational process, increase the relevance of the education to practical life and allow implementation of authentic experiences in the safe environment of the school in collaboration and under the supervision of the teachers.

***The RAINBOW model of instructional design (~ADDIE model)***

<https://www.instructionaldesign.org/models/addie/>

<https://elearninginfographics.com/the-addie-model-infographic/>

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[1] More information regarding the young people preferences and habits with information technologies and social media, can be found in the *RAINBOW EU report on Social and civic competences and values awareness* with the summary of the outcomes from the RAINBOW inquiry, carried out in the project countries in 2020.

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6. Lee S. Shulman's 1986 work [Those Who Understand: Knowledge Growth in Teaching](#)