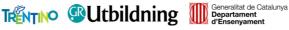


# **GUIDELINES FOR** SCHOOLLEADERS Encourage and Support the Uptake of Innovation in Schools







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### 1. Introduction

These guidelines for school leaders are the result of the final year of the work of the Future Classroom Lab Regional Network (FCL Regio). The FCL Regio project aims at exploring new ways of allowing a more active participation by decision makers in educational activities of European regions and aims to better support the integration of ICT in teaching and learning. To this end, micro-innovative activities, Future Classroom Scenarios and pedagogical videos developed to guide educators, school leaders and policy makers in the pedagogically effective use of technology along with innovative pedagogical techniques. Funded by the European Union Erasmus+ programme, the project started in September 2015 for a duration of 3 years.

The **Digital Education Action Plan**, adopted by the Commision in January 2018, highlights the need to support technology-use and digital competence development in education by prioritizing the better use of digital technology for teaching and learning, the development of digital competences and skills and the improvement of education through better data analysis and foresight. Schools have to meet the challenges and opportunities of education in the digital age and educators have to help students develop the knowledge and skills they will need in this highly changing digital age.

During the third year of the FCL Regio project, it has been considered of outmost importance to encourage the uptake and the retention of innovative teaching and learning practices with the use of ICT at the level of schools. Various elements of such an endeavour have been taken into account, from environmental factors to new pedagogies and collaborative techniques. To be more precise, the main challenges and enablers of adopting new pedagogies, integrating ICT for learning and designing innovative learning spaces were some of the main topics been investigated during the third year, all aiming at replying to the question of what does it take to allow innovation to thrive in schools. To this end, teachers from Italy, Spain and Sweden reflected about the importance of integrating digital technology in the learning process and developed pedagogical activities and scenarios which will inspire other educators to elevate their daily teaching practise.

From a policy perspective, the FCL Regio project drafted recommendations for policy makers who try to develop and promote innovative pedagogical approaches through the use of ICT in their regions (the recommendations can be consulted <u>online here</u>). Based on this document, a list of suggestions that school leaders can use as guidelines in their own context was developed by the project.



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#### 2. Define and embrace innovation

A general definition of innovation in education and on the key elements that are part of it was considered the stepping stone to start investigating practices and ways to mainstream and support innovation in schools. In fact, we considered paramount to reach a common understanding of the concept and to identify what are those corner stones that should be part of the school practice, but for some reasons are not yet so.

According to the consortium: "Innovation in education is a sustainable improvement process that positively affects the ecosystem, the content and the results of learning."

Technology-supported innovation is a key component of the FCL Regio's activities. According to Kozma (2003)<sup>1</sup>, ICT-supported innovation in education is defined as pedagogical solutions and means supporting a shift from traditional paradigms towards emerging pedagogical approaches based on our current understanding of learning, such as fostering learner-centred and constructivist processes, and the acquisition of lifelong learning skills.

Innovation is a process of positive improvement and change and not a single achievement. It is not reached with the adoption of a research breakthrough by an institute or an organisation, but when excellence is widely communicated, disseminated and implemented. Innovation in education must be inclusive, structural and long lasting; each and every student should benefit from it. Innovation in education is about challenging our methods and strategies to support the needs of all the learners and reach them in more effective and engaging ways. Innovation comes hand in hand with a risk taking attitude, with imagination and with an open and flexible mind.

The innovation process happens at different levels: national, regional, local, municipal, organisational, and even individual; and involves a variety of actors, which are not necessarily well connected among each other. Regions and Local Authorities can play an important role to guarantee innovation policies are actually translated into practice at the school level and to sustain innovation programs rather than mere spurts of innovation.

The main elements of school innovation have been inscribed within three core categories: new pedagogies, teaching and learning approaches; technology in the classroom as enabler; innovative schools and learning environments. Based on these elements been identified, practical suggestions that serve as guidelines for school leaders were suggested.

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1 Kozma, R. B. (2003), Technology, Innovation, and Educational Change. A global perspective: A report of the Second Information Technology in Education Study Module 2, ISTE publisher.



#### 3. Guidelines for school leaders

The guidelines summarised here are suggestions that try to answer the questions of what is needed for school leaders to encourage the initial uptake of innovation in schools and how they can best support innovative pedagogical approaches with the integration of ICT and the redesign of the learning space to meet the core challenges of our educational times.

- 1. School leaders as advocates of innovative educational approaches in schools. School leaders should encourage all teachers in their schools to embrace innovation and professional excellence, so that all students can have the best possible education that will allow them to become competent, active and responsible citizens.
- 2. Education based on key competences. School leaders should promote the shift from knowledge based learning to competencies based learning, that allow students to develop those skills and competencies crucial for their successful participation in today's society.
- 3. Learning communities and strategic partnerships for schools. School leaders should be part of learning communities and develop strategic partnerships for their schools, either with other schools and educational authorities or with businesses active in the education sector. They should also promote the engagement of teachers in collaborative activities that aim at sharing expertise, learning and co-creating.
- 4. Establishment and empowerment of an Innovation Team. School leaders should set a clear and shared vision before embarking on innovative practices and they should establish and empower an innovation team, a group of innovative teachers that work as change agent and aim at taking the school to the next level.
- 5. Responsible and effective integration of ICT in the learning process. School leaders should ensure the responsible and effective integration of ICT in the learning by developing a receptive education structure that is open to the evolving technological changes, keeping in mind that any technological solution been used serves as a supportive tool in the successful achievement of learning goals and that all the safety related measures have been considered.
- 6. Learning spaces that facilitate new teaching methodologies. School leaders should connect the physical changes required with learning and teaching developments to enable the introduction of innovative pedagogies using technology in the classroom and to help identify and determine pedagogical priorities with a single point of focus.



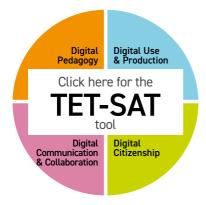
# 3.1. School leaders as advocates of innovative educational approaches in schools.

School leaders should encourage all teachers in their schools to embrace innovation and professional excellence, so that all students can have the best possible education that will allow them to become competent, active and responsible citizens.

## CONTINUOUS, EFFECTIVE AND UNIQUE PROFESSIONAL DEVELOPMENT EXPERIENCES FOR SCHOOL STAFF.

Teacher continuous, effective and tailored professional development is essential in securing students develop 21<sup>st</sup> century competences. Effective professional development means a structured and active training that results in changes to teachers practice and improvements in student learning outcomes. Adequate time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice should be provided and ongoing support should be given in a sustainable way during these experiences. High-quality professional development experiences create space for teachers to share ideas, collaborate and be able to assess their own progress.

The range of possible types of professional development opportunities for school staff is wide: onsite training, online courses, blended online and offline programs, formal or informal meetings and peer-to-peer exchanges sessions.



TET-SAT, the online seld assessment tool – MENTEP project

#### DEVELOPMENT OF IMPLEMENTATION MODEL.

School leaders should adopt standards for professional development of the school staff and should set a professional development pathway and model which is aligned with the needs of the school, of the teachers and the students within a culture of continuous school improvement. This pathway and implementation model may allow staff members options to select individualized, grade-level, subject-area, onsite or online opportunities.

Various implementations models can be discussed (observation, open classrooms,

lesson study, MOOCS etc.) but the self-assessment should be the starting point of every professional development initiative in order to identify learning needs, set goals, test ideas, monitor progress and define new goals. The technology enhanced teaching self-assessment tool (TET-SAT), developed by the MENTEP project, is a valuable tool to monitor teacher competence, built on teacher self-reflection and empowerment, its evolution and professional development needs over time.

#### 3.2. Education based on key competences

School leaders should promote the shift from knowledge based learning to competencies based learning, that allow students to develop those skills and competencies crucial for their successful participation in today's society.

#### STUDENT-CENTRED AND PERSONALIZED LEARNING.

In our fast changing reality, education does no longer focus only on the acquisition of notions, but more and more on the development of skills and competencies that are crucial for the success of the individual. These key competences include knowledge, skills and attitudes needed by all for personal fulfilment and development, employability, social inclusion and active citizenship. The Reference Framework<sup>2</sup> of European Commission, published in May 2018, sets out eight key competencies: literacy competence, multilingual competence, STEM (Science, Technology, Engineering, Mathematics) competence, digital competence, personal, social and learning to learn competence, citizenship competence, entrepreneurship competence, cultural awareness and expression competence

Student-centred approaches seem to go hand in hand with the competence-based education. Student-centred approaches and mainly personalised learning can develop flexibility, life-long learning skills, focus and persistence and changes the role of the teacher from the learning source to the learning facilitator. School leaders should build a bridge to support the educators in their transition to personalised learning models by developing a variety of implementation schemes, by providing support and training and by ensuring the availability of the relevant tools needed.



<sup>2</sup> Council Recommendation on Key Competences for Lifelong Learning (2018), European Commission



#### RAISE STUDENTS' ASPIRATIONS.

High aspirations both of teachers and students help to overstep the "what's the point attitude" and have an effect on results within schools. Empowering students by developing their skills in the educational context may raise students' aspirations, reduce the school dropout rate and enhance their learning experience. Education based on key competencies increase the ability of students to achieve their potential and prepare them to participate effectively in the society.

School leaders should prioritize aspirationraising and ensure that the learning style, the interests and the needs of all the learners are respected and considered when focusing on developing specific competencies of the students. This will result in developing a different mentality, a willingness to learn and innovate, and also in raising the engagement of each student.

#### 3.3. Learning communities and strategic partnerships for schools

School leaders should be part of learning communities and develop strategic partnerships for their schools, either with other schools and educational authorities or with businesses active in the education sector. They should also promote the engagement of teachers in collaborative activities that aim at sharing expertise, learning and co-creating.

#### NATIONAL NETWORKS

Developing networks, partnerships, peer consultancies and learning communities between schools and organizations results not only in school transformation but also in system transformation, considering that excellent practice is developed, shared, demonstrated and adopted across and between educational settings. Such collaborative and sharing initiatives make up a significant driver for school improvement and are considered as a notable mechanism for securing innovation.

At national level, teacher networks are formed by geographical parameters or by shared interest and facilitate the sharing of knowledge as well as have the potential

to create new knowledge that can be used for the benefit of the local community as a whole and/or its individual members. For this reason, teachers and school leaders should be supported to develop and join them as part of their professional development and growth throughout their career.

One relevant innovative practise coming from Trentino in Italy is the "*Caffé Digitale*" (*Digital Coffee*). This voluntary initiative provides an informal way for teachers to experience innovative practices, digital resources and techniques together with their peers and encourages the exchange of experiences among the participants.

#### INTERNATIONAL NETWORKS

ICT has facilitated the emergence and rapid growth of learning communities whose members interact from remote corners of the globe to form online learning communities that can be a powerful means of creating and sharing new knowledge and practice. Being a member of an international network or learning community is an eye-opening and valuable opportunity that widens the perspective of participating teachers and enables them to notice weaknesses in competencies and content knowledge, get support in a welcoming and friendly environment as well get inspired.

eTwinning platform is highly suggested as learning community for school in Europe. It promotes school collaboration in Europe through the use of *Information and Communication Technologies* (ICT) by providing support, tools and services for schools. Various opportunities for free and continuing online professional development for educators are also offered and many educators from many European countries are actively engaged.

#### 3.4. Establishment and empowerment of an Innovation Team

School leaders should set a clear and shared vision before embarking on innovative practices and they should establish and empower an innovation team, a group of innovative teachers that work as change agents and aim at taking the school to the next level.

#### RAISE SCHOOL'S PROFILE.

The establishment of an innovation team that meets on a regular basis, reflects and try to make real their "what if" ideas generated by their needs, signals that the school is ambitious, with bold expectations for students and staff but also for education in general. This innovation team may act as role models for the community of teachers, as these active and competent teachers will prove to their reluctant colleagues that

the change is feasible and beneficial for them. Motivation and encouragement are catalysts of this process.

The school, with the aim of this innovation team, is expected to implement new ways of teaching, develop innovative projects with the use of ICT and readapt the learning space, all of which parameters increase school's standing and influence at local, national and international level. School leaders should encourage the establishment of such a team at their learning environment and they should be open to hear, support and find ways to scale up innovative actions. The Future Classroom Toolkit can be a beacon of inspiration to this end, as it aims at bringing incremental but sustainable change in the education system and provides guidance and suggestions towards this direction via its five toolsets.



#### CREATE A CULTURE OF SHARED RESPONSIBILITY IN THE SCHOOL.

The creation of such an innovation team in a setting establishes a culture of shared responsibility and ownership towards the change and raise opportunities for the staff to innovate, take risks and experiment in a spirit of inquiry and open mindedness that aims at better learning. Within a culture of trust and professionalism, educators would see themselves as equal stakeholders who must collaboratively strive to influence the education and their daily teaching practice.

To this end, school leaders should shift away from the closed-door approach and boost greater communication and cooperation among the faculty members. Working closely with the innovation team, they should assess needs, identify challenges, illuminate the "non-discussibles" and mobilize the school around a clear mission and shared values. This may lead to creating a culture of continuous learning and shared decision-making that could benefit all the relevant actors and pave the way for more innovative teaching and learning.





#### 3.5. Responsible and effective integration of ICT in the learning process

School leaders should ensure the responsible and effective integration of ICT in the learning by developing a receptive education structure that is open to the evolving technological changes, keeping in mind that any technological solution been used serves as a supportive tool in the successful achievement of learning goals and that all the safety related measures have been considered.

#### STUDENTS AS CREATORS OF TECHNOLOGY

Making better use of digital technology for teaching and learning involves the shift of the students from digital content consumers to digital content producers. Digital technologies and social media provide unique opportunities to encourage students to become creators and publishers of content. Consuming is easy whereas creating provides a far more multidimensional, meaningful and enriching learning experience. School leaders should promote the ICT integration with the aim to amplify student voice, imagination and creativity in the classroom.

Coding, making, robotics, STEM learning, electronics and digital storytelling are some of the various educational trends that can be considered in the teaching and benefit the digital competences of the students, expand their possibilities and help them reach their highest potential. Technology creates potential for the students to take a more active role in their learning, to make their learning more authentic and inspire them to dive into the lifelong learning journey with meaningful ways.

## E-SAFETY AS A SUBSTANTIAL ELEMENT OF ANY INNOVATIVE PEDAGOGICAL APPROACH INVOLVING NEW TECHNOLOGIES.

The internet, and more broadly in general the digital technologies, offers new ways for educators to engage students and inspire them to communicate and learn. However, open and imprudent access to the internet can leave students vulnerable and at risk from online threats. School leaders should make e-safety education essential for all learners. They should raise awareness of related issues and risks, provide strategies for dealing with them and ensure that the internet is a place of opportunities for everyone to access knowledge, to communicate, to develop skills and to improve job perspectives and employability.





eSafety Label constitutes a Europe-wide accreditation and support service for teachers, school leaders and ICT administrators aiming to provide a secure and enriching environment, for safe access to online technology as part of the teaching and learning experience. At this portal, guidance is provided on evaluating the school's online safety, on taking action to improve and reinforce it and best practices are shared with peers.

#### 3.6. Learning spaces that facilitate new teaching methodologies

School leaders should connect the physical changes required with learning and teaching developments to enable the introduction of innovative pedagogies using technology in the classroom and to help identify and determine pedagogical priorities with a single point of focus.

#### CONSIDERING HOLISTICALLY THE LEARNING SPACE

When someone enters a space, the space communicates to him or her what kind of teaching and learning happens there. Physical design parameters of learning spaces can contribute to the active engagement of the students in the learning process, can engender the concentration essential for learning and enable students and teachers decide where and how they want to learn. School leaders should ensure that the new teaching methodologies that they try to implement are supported and facilitated by the classroom design and should provide training opportunities to both teachers and students on how to teach and learn in this new environment.

A holistic approach is needed to this end. Elements to be taken into account in this redesign process range from environmental factors (lightning, acoustics, colour, air quality) to furniture requirements (adaptability, flexibility, mobility) and technologies. The <u>Guidelines on Exploring and Adapting Learning Spaces in Schools</u> (2017), developed with input from Ministries of Education in the European Schoolnet Interactive Classroom Working Group (ICWG), aim at providing some practical advice and support when schools and school leaders start to consider different learning spaces.

#### INVOLVING ALL THE KEY ACTORS IN THE REDESIGN OF THE LEARNING SPACE

Adapting learning spaces should be a team activity involving all the key actors: from students to school leaders and the whole school community. School leaders should involve all the teaching staff and the students and invite them to reflect on and audit the use of the existing learning space. Making a wish list for the things that you would like to change fantasizing the dream school could help spotting similarities and differences. After that, an ongoing discussion, dialogue and planning for change with

teachers, students, parents and other stakeholders is needed, so that clear reasons for the change are determined and the potential benefits are understood.

School leaders should also open up their school by seeking advice from experts or local and regional educational authorities. They should spend time on visiting schools that have already adapted learning spaces and on visiting education development and technology exhibitions, considering that ideas and inspiration flow and are available everywhere, provided that we are open to them. In Castilla y Leon, for instance, 24 schools, called BITS schools (Bilingual, Inclusive, Technological and Safe Schools), have been selected. They are considered the role models for schools that are trying to adapt their learning spaces to the educational challenges of the 21<sup>st</sup> century.









PROVINCIA AUTONOMA DI TRENTO







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