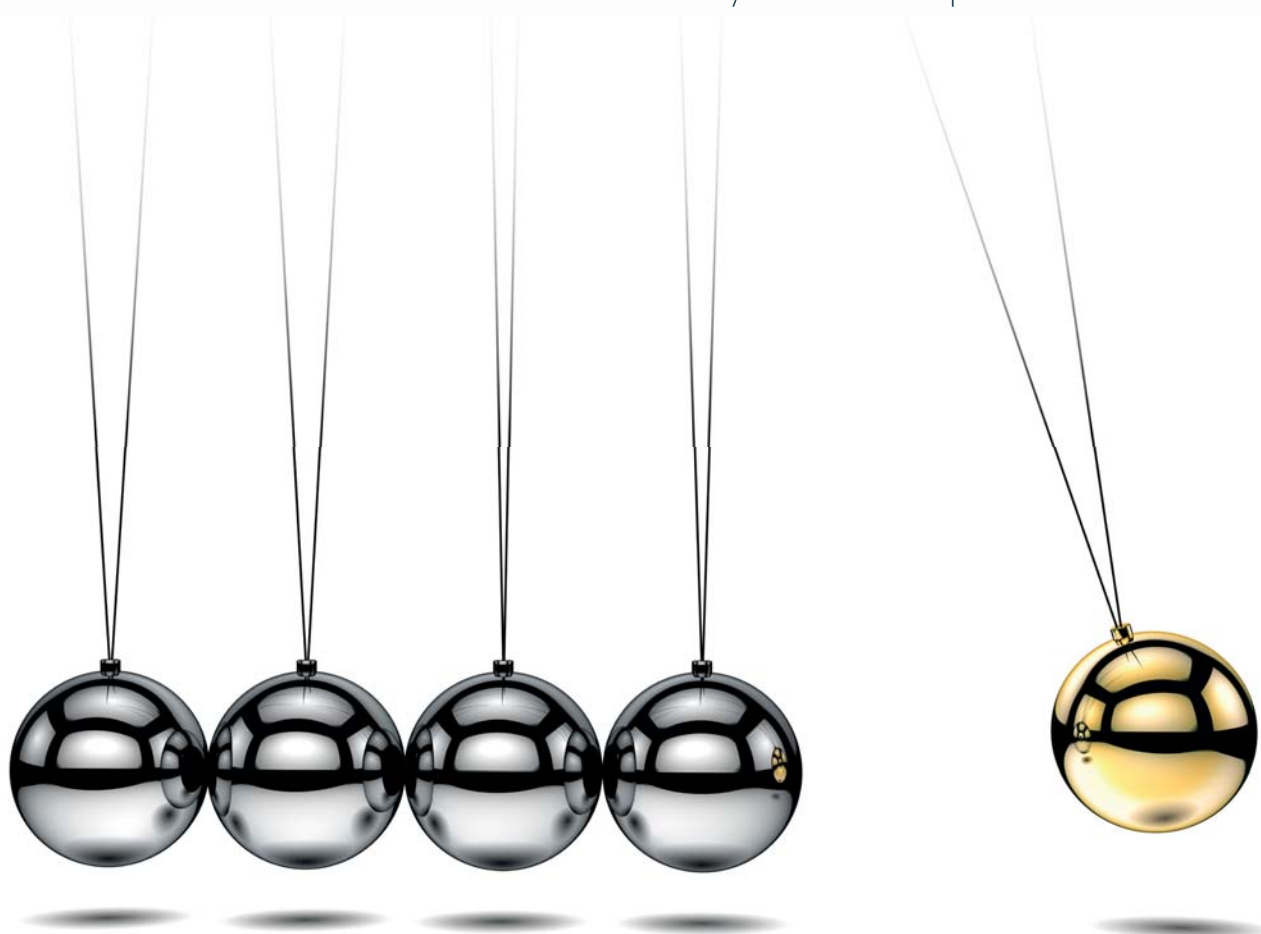


# Strategic partnerships for innovation in Erasmus+

A study on the impact

# 2



Erasmus+

# **Strategic partnerships for innovation in Erasmus+**

A study on the impact

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This publication has been edited by the INDIRE Erasmus+ National Agency and the Studies and Analysis Unit, which is entirely responsible.

Publication has been made possible thanks to contributions from the European Commission, the DG of Education and Culture and the Ministry of Education, University and Research.

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The publication is also available online on the website of the Italian Erasmus+ programme, in the "Further Information" section.

# Acknowledgements

Heartfelt thanks to all the Italian and foreign coordinators and partners involved in the study

Special thanks to all our colleagues in the INDIRE Erasmus+ Agency who have supported, assisted and advised us (Relevant units and names in alphabetical order):

**Management Unit for Adult and School Education Programmes:** Giuditta Giulianelli, Martina Iacopetti, Pietro Michelacci, Laura Nava (Head Unit), Silvia Rettori

**Management Unit for Higher Education Programmes:** Valeria Biggi, Claudia Peritore (Head Unit), Antonella Ratti

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**eTwinning Unit:** Elena Bettini

Many thanks go to Fausto Benedetti, INDIRE researcher, for his participation in the focus group.



*'The project begins when it ends'*



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# Introduction

Erasmus+, the European programme for education, training, youth, and sport (2014-2020), has introduced significant changes and innovations if compared to the previous generation of European education and training programmes. The structure of Erasmus+, which has brought together seven previously separate programmes under one single framework, “allows an overview of the available grant opportunities, facilitates access, and promotes synergies between different sectors by removing the barriers between the various types of project,” reads the Programme Guide. Erasmus+ has been designed with a structure that is in some ways revolutionary in the way it allows different sectors of education, training and learning to interact, and it has certainly drawn many reactions to its substantial changes, in particular when it comes to the objectives and priorities to be found within the five sectors of education (school, university, adult, vocational training and youth) but also in terms of its operational aspects and the management of individual projects.

The three key actions of the programme, Key Action 1 – Learning Mobility, Key Action 2 – Cooperation Projects, split into two types (Partnerships for Innovation and Partnerships for the Exchange of Good Practices) and Key Action 3 – Support for Policy Reform, abbreviated as KA1, KA2 and KA3, embrace and offer various possibilities for experimentation and research.

This second Erasmus+ publication is dedicated to the results of the educational cooperation, organised in partnerships that develop innovative learning methods in diverse European educational systems. The keyword of the survey is the exploitation of innovative practices in European contexts. The KA2 strategic partnerships offer two approaches to a project: a sectoral one, where the project focuses on the objectives, methods, and training needs of specific sectors and a cross-sectoral one, which aspires to promote collaboration and interaction between different institutions operating in areas that are related to the various fields of education and training. A great challenge for the Europe of education and learning then, which uses sharing to strengthen and renew the educational practices and policies that can and must improve access for all to knowledge and skills development to be invested in work and study.

For over twenty years, the INDIRE Erasmus+ Agency has been running the European programmes of the Italian education system in schools and higher education, and since 2000, also in the field of adult education. At a distance of four years from the beginning of the programme, this analytical work underlines the strategic importance to treasure and share, along with the reasons, the objectives, and the results achieved through the partnerships for innovation.

Innovation and experimentation connect different worlds in which we learn, train, and work, and in the educational sphere, their significance extends to all teaching practices as well as lifelong learning: novelties proliferate and develop better if the “laboratory of ideas” is open to all cultural influences without confines and prejudices, while contamination and curiosity are the new challenges for quality European project.

The cultural diversity we have found is the unit of measurement common to many different peoples who are taking action and embracing the idea of a Europe united in diversity, in respect of thoughts, and personal and collective stories.

*Sara Pagliai*

*Coordinator of the INDIRE Erasmus+ Agency*



# Foreword

The integrated Erasmus+ programme has represented a courageous challenge compared to previous education and training schemes. The 2014-2020 programme for education, training, youth, and sport introduced the world to the slogan ‘open your mind, change your life’, through mobility for study and teaching, partnerships between different sectors of learning, and the exchange of good practices.

The year 2017 was important for a series of Community appointments, insights, and celebrations: the Commission requested the first mid-term evaluation of the Erasmus+ programme, which stood within another occurrence of significance for the Europe of education and training, namely, the thirtieth anniversary of the Erasmus programme for higher education. An important opportunity to take stock of the participation and especially to identify success stories and to recount European experiences had during mobility and the cooperation between institutions. The work of teachers, students, trainers and other professionals has helped transform and breathe new life into educational systems, places of learning and the lives and professions of persons who have outlined a European identity. An identity which is the bearer of diverse cultures and stories, but precisely because of this, abounding in educational and cultural legacies that result in fusion and innovation.

After speaking of the results of the staff mobility in the first volume, in this second Erasmus+ Survey, dedicated to the impact of the strategic partnerships for innovation, i.e., those projects inspired by research into and experimentation with methods and teaching practices to be replicated in other contexts and environments, we intend to let the actors of European cooperation have their say and through a qualitative analysis of the results and processes, to emphasize those projects filled with novelty in the hope of encouraging the growth and development of new educational and cultural schemes.

This second Erasmus+ publication collects the first results of a qualitative survey on the impact of strategic partnerships for innovation: development of new policies and approaches to learning, digital tools to integrate learning for cultural growth, new curricula and platforms for skills assessment, educational strategies for social inclusion and reduction in early school leaving, and the strong tie between education and business.

To this end, at the end of 2016, the Agency began a series of activities to monitor the quality of the strategic partnerships. The survey served to study the changes at individual, institutional and systemic levels within INDIRE’s areas of competence, namely, school education, higher education, and adult education<sup>1</sup>. The task of studying and research was managed by the Studies and Analysis Unit which planned and implemented a series of activities from a qualitative perspective, to explore the many innovative aspects, the most significant transformations, tools, processes and ideas developed during the implementation of the KA2 research projects, and to investigate and exploit the results achieved.

The book is divided into four chapters: the first shows the reference framework, objectives, methodology and tools of the survey; the second and third are the results from the education and training sectors under INDIRE’s remit; finally, the fourth chapter collects the contributions produced by the project representatives, the Italian coordinator institutions involved in the study.

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1 - In this publication, for the sake of brevity, the acronym AE will be used to indicate ‘Adult Education’



## Chapter 1

### Context, objectives and tools used for the impact study

By the Studies and Analysis Unit, INDIRE Erasmus+ National Agency

#### 1.1 Context and participation in Key Action 2 “Strategic Partnerships for Innovation” in Erasmus+

Since 2014, the institutions belonging to the three sectors we deal with have undertaken to try out the opportunities offered by the programme.

Naturally, there has been no lack of difficulties and initial perplexity, as in all phases to trial new planning mechanisms, however, the commitment was undoubtedly enthusiastic. As was the participation, with peaks of significant involvement, although not without some disappointments in terms of “failures”, mostly due to insufficient grants. To understand the effectiveness and efficiency of the programme’s actions and objectives, the National Agency, already engaged in implementing and exploiting the results, also carried out surveys and studies on participation and the impact quality of the activities funded. The first survey was conducted in 2015: the **first Erasmus+ publication**<sup>2</sup> focused on the benefits and concrete effects produced by **staff mobility** in the KA1 projects and of the effectiveness of training abroad in terms of professional development and improvement, and the acquisition of language and teaching skills for teachers, trainers, educators and administrative staff.

In this further step, more than halfway through the Erasmus programme, we have focused on the results and objectives achieved through the first KA2 projects for innovation with regard to the three areas within the INDIRE Agency’s remit.

This meant new procedures and methods for planning international cooperation, with decentralised management (partnerships and mobility for learning are managed by the national Agencies). Among the novelties, the overall project grant is now managed by the coordinators of the partnerships who have assumed a key role in managing and implementing both the activities and the budget. Cooperation and sharing among all the partner institutions remains key.

#### 2014 CALL: TWO TYPES OF STRATEGIC PARTNERSHIPS

*The two types of Erasmus+ cooperation projects with different objectives and characteristics. Below is a brief description. This survey only looks at the second type, the strategic partnerships for innovation.*

##### STRATEGIC PARTNERSHIPS FOR THE EXCHANGE OF GOOD PRACTICES

These projects are dedicated to creating or consolidating networks, to comparing ideas, practices and methods and to producing final results that must be disseminated proportionately with respect to the objectives and dimension of the project. Unlike the partnerships for innovation, in this type of project there is no specific grant to realize the final products. The outputs must be fulfilled with the funds provided for the management and implementation of the project

##### STRATEGIC PARTNERSHIPS FOR INNOVATION

Innovative results must be achieved and/or existing products or innovative ideas disseminated and exploited. To this end, a specific grant has been provided for the realisation of intellectual outputs and related multiplier events. Organisations can set up partnerships with European schools and/or institutions to foster the growth of professional skills and promote innovation in educational practices and organisational management. Schools of all types and levels may apply, as can any organisation active in the contexts of education, training, youth work and the world of work interested in cooperating in the school education sector

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2 - The first Erasmus+ publication focused on Key Action 1 (KA1), for the school, university and adult education sectors. *Mobility in Erasmus+ 1*, July 2016, available in a digital version: [http://www.erasmusplus.it/pubblicazioni/quaderno1\\_mobilita\\_INDIRE/](http://www.erasmusplus.it/pubblicazioni/quaderno1_mobilita_INDIRE/)

## What we were like in 2014

### Finding our way around the reference codes of the first Erasmus+ Programme Call School Education Sector – KA201

In 2014, Key Action 2 was divided into strategic partnerships for innovation and the exchange of good practices (KA201): a single action that also included partnerships consisting only of schools. In the beginning, this choice created some degrees of complexity and confusion among the institutions. In particular, for the school sector certain interventions of simplification were needed, following indications from the national Agencies, which the Commission accepted, introducing into the subsequent 2015 Call a different type of school project, KA219, reserved for projects between schools alone.

Finally, in 2018, based on new inputs from the Agencies and following the medium-term report on the effectiveness of the cornerstone actions of the Erasmus+ Programme, namely, Key Action 1 and Key Action 2, the Commission eliminated KA219 and introduced KA229, partnerships for exchanges between schools, a type of project designed to help schools participating in Erasmus+ to promote mobility.

### Adult Education Sector – KA204

Strategic partnerships in this field were coded KA204, divided into partnerships for innovation and exchange of good practices.

### Higher Education Sector – KA203

Strategic partnerships were encoded KA203, and only one type was envisaged: partnerships for innovation.

In 2014, for the three sectors, there was a further type, KA200 partnerships, (an action eliminated in 2015), cross-sectoral, and directed to a prevailing context for a specific sector: School Education, Higher Education, or Adult Education. This type too was included in the survey sample.

Four years on from the start of the Erasmus+ Actions, we felt a pressing need to investigate and understand what had happened within the projects, along with the challenges and achievements, by means of a qualitative in-depth analysis of the cooperation activities between different actors operating in different contexts, but who coexist, interact and produce innovation, knowledge and culture through strategic partnerships for innovation, designed to have an impact at various levels: individual, institutional, and systemic.

In particular, we wished to investigate the **qualitative impact** produced by cooperation in innovative projects inspired by more ambitious objectives, focusing on innovation in methods, curricula and educational policies. In fact, the peculiarity of the KA2 projects is the production of **intellectual outputs**. In general, these *intellectual outputs* are designed and developed in products that are transferable and usable by third parties and are innovative and sustainable. In practice, this means intellectual, tangible and non-tangible products and creations, such as programmes, teaching and socio-educational materials, open educational resources (OER), platforms, evaluation methods, analyses, studies and peer-learning methods. With this in mind, the first objective of the study was to sift a selection of projects for innovation to analyse the process to implement activities, the approaches and tools used, drawing inspiration from some qualitative indicators included in the KA2 project assessment forms. The key points in **quality planning**, according to the indications shared and approved at a European level, are: the relevance of the project with respect to the strategic objectives of the action and the sector priorities; the quality of the proposal in terms of design and implementation; the quality of the working group and the cooperation arrangements; the impact, dissemination and sustainability of the proposal. This survey set out to retrace the most significant and strategic steps of the cooperation and the quality of the impact in the short to medium term.

Before illustrating the qualitative aspects of the analysis made, we believe it is useful to provide a summary of the quantitative data on participation within the KA2 strategic partnerships for innovation, funded by the INDIRE Agency over the last 5 years, by using some graphs and tables.

### Quantitative Data<sup>3</sup>

Figure 1 shows data on the participation of the **School Education Sector** in the KA2 partnerships for innovation, in an overview from 2014 to 2018.

Call	Projects received	Projects approved	Grant
2014	149	16 <sup>4</sup>	4,578,801
2015	199	24	6,964,835
2016	166	26	8,337,159
2017	130	38	11,395,542
2018	116	21	7,227,646
<b>TOTAL</b>	<b>760</b>	<b>109</b>	<b>38,503,983</b>

Fig. 1 Strategic partnerships for innovation in school education KA201 coordinated by Italian institutes, for the period 2014-2018

Figure 2 shows participation in the strategic partnerships for innovation for the **Higher Education Sector**, in an overview from 2014 to 2018.

Call	Projects received	Projects approved	Grant
2014	89	9 <sup>5</sup>	3,372,788
2015	95	8	3,152,890
2016	87	8	3,072,348
2017	73	12	4,251,376
2018	65	16	5,727,255
<b>TOTAL</b>	<b>409</b>	<b>53</b>	<b>19,576,657</b>

Fig. 2 Strategic partnerships for innovation in higher education KA203 coordinated by Italian institutes, for the period 2014-2018

Figure 3 shows participation in the strategic partnerships for innovation for the **Adult Education Sector**, in an overview from 2014 to 2018.

Call	Projects received	Projects funded	Grant
2014	164	15 <sup>6</sup>	3,939,599
2015	139	15	3,930,331
2016	114	10	3,021,393
2017	101	18	5,323,908
2018	98	21	6,130,703
<b>TOTAL</b>	<b>616</b>	<b>64</b>	<b>22,345,934</b>

Fig. 3 Strategic partnerships for innovation in adult education KA204 coordinated by Italian organisations, for the period 2014-2018

3 - Data processed by *Erasmus+ QlikView Dashboards*, a database set up by the European Commission, which works as a unified interface for three of the Programme's databanks (EPlusLink, Mobility Tool, EU Survey), allowing a virtually real-time analysis of the programme's performance including division of information by area of interest (for example: projects, subsidies, participants, mobility, themes, etc.) and for key actions, KA1, KA2 and KA3.

4 - In 2014, 7 cross-sectoral partnerships were funded (KA200) as well as 9 sectoral ones for School Education.

5 - In 2014, 9 projects were funded, of which 5 were cross-sectoral (KA200) and 4 were sectoral for Higher Education.

6 - In 2014, 5 cross-sectoral partnerships were funded (KA200) as well as 10 sectoral ones for Adult Education.



## 1.2 Areas of investigation, objectives and tools

Two lines of work were followed to reach the objectives we had set ourselves: 1) monitoring and investigating the quality of the results of the projects funded to determine and analyse their success and impact, 2) comparing and measuring the benefits occurring at various levels – individual, institutional and systemic – in three areas, with a view to developing and promoting innovation in learning and teaching. Our idea of performing quality monitoring to study the impact of KA2 projects was put into practice two years ago, in other words, on the expiry of the first international cooperation experiences within the framework of the strategic partnerships for innovation (Call 2014), lasting two or three years.

We planned three phases for our survey:

1. Sampling of strategic partnerships for the three reference sectors
2. Creation of a survey tool for qualitative analysis of impact: impact questionnaire and visits
3. Setting up of three specific focus groups for each sector surveyed.

The **selection** criteria adopted were mostly based on the **thematic approach**. For the school, the key themes were social inclusion, teaching methods for the learning of languages, and combating early school leaving through work-related learning schemes and development of learners' skills. As regards the field of adult education, we chose themes linked to formal and non-formal learning for specific groups, namely, migrants and prisoners, with social inclusion programmes and innovative methodologies for skills development.

As a tool for data collection and the study of aspects linked to the dissemination and impact of the results, a **questionnaire** was prepared, designed and built upon the fundamental concepts of our study: the impact recorded during and after the conclusion of the activities, and the dissemination and exploitation of the results based on their replicability and transferability to other institutions and in different contexts.

In addition to the tools used for this survey, we supplemented the reading of the questionnaires compiled with an **analysis of the final reports** of the projects examined.

To take a closer look at the quality of strategic partnerships selected for the survey sample in the worlds of school and formal and non-formal adult learning, we considered it useful and relevant to the analysis to set up meetings with the contact persons of the projects and their partners. The purpose of these meetings, denominated "**impact visits**" (in total we organized 11 impact visits), was to reflect on and rethink some basic concepts linked to the impact, the analytical verification of the objectives achieved, the dissemination and exploitation, and the sustainability of the results.

The reference universe of the institutions chosen for our survey consisted of the projects funded<sup>7</sup> in 2014. We picked out **11 coordinator institutions** (out of a total sample of 31 partnerships for innovation in the school and adult education sectors): **6 institutions for the school sector** and **5 institutions in the adult education sector**.

In the Higher Education sector, the **9 contracted partnerships in the first year of Erasmus+** were analysed. In view of the small number of projects, all the coordinators attended a focus group, which was the main research tool. The results of a questionnaire administered earlier to participants constituted a suitable starting point to introduce the topics to be discussed during the meeting.

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7 - In 2014, for the KA2 strategic partnerships for innovation, 16 projects were authorised for schools (KA201), 15 for the adult education sector (KA204), and 9 for higher education. For the AE sector in the survey sample we included a project funded in 2015 and concluded in 2017. This choice was influenced by the type of project (partnership for innovation) and the topic.

Below are the institutions involved in the study and presented on the dissemination platform, *Erasmus+ Project Results*.<sup>8</sup>



## School education

Project Code	
2014-1-IT02-KA200-003660	<b>R.O.S.E. Robotics opportunities (to foster) STEM education</b> School of Engineering, University of Florence
2014-1-IT02-KA201-003985	<b>School &amp; Work</b> CIPAT – Consortium of VET Institutes, Florence
2014-1-IT02-KA201-003456	<b>C.A.S.T.L.E. A chess curriculum to advance students' thinking and learning skills in primary education</b> "Alfiere Bianco" Chess association, Savigliano (CN)
2014-1-IT02-KA201-003609	<b>Too young to fail. 2young2fail</b> Compagnia di San Paolo School Foundation, Turin
2014-1-IT02-KA201-004069	<b>Innovative Learning</b> "E. Tosi" Technical Economic Institute, Busto Arsizio (VA)
2014-1-IT02-KA201-004204	<b>Print Stem Pedagogical resources in teaching science, technology, engineering, mathematics</b> IISS "A. Berenini", Fidenza (PR)

<sup>8</sup> - All the partnerships on the list will be published on the Erasmus+ Project Results platform which collects the contents, results and final products of the European projects: <http://ec.europa.eu/programmes/erasmus-plus/projects/>

## Adult education

Project Code	
2014-1-IT02-KA200-003510	<b>Tinkering: contemporary education for the innovators of tomorrow</b> Leonardo da Vinci' Science and Technology Museum, Milan
2015-1-IT02-KA204-015147	<b>Competence assessment and social entrepreneurship</b> "Il Girasole" Non-profit social cooperative, Florence
2014-1-IT02-KA204-003515	<b>Valorize high skilled migrants</b> "Casa di Carità Arti e Mestieri" Non-profit Foundation, Turin
2014-1-IT02-KA204-003517	<b>RiUscire. Rete universitaria socioculturale per l'istruzione e il recupero in carcere</b> University for Foreigners of Siena
2014-1-IT02-KA204-004132	<b>Social Start UpS. Unlocking the entrepreneurial talent of EPG's</b> Tamat Training and Research Centre, Perugia

## Higher education

Project Code	
2014-1-IT02-KA200-003689	<b>URBAN Green Education for ENTteRprising Agricultural Innovation</b> Alma Mater Studiorum University of Bologna
2014-1-IT02-KA200-004150	<b>PLAY4GUIDANCE: a European business game to train and guide students and unemployed on entrepreneurial, transversal and mathematical skills</b> The Polytechnic University of Milan Foundation
2014-1-IT02-KA200-002591	<b>eLene4work: Learning to learn for new digital soft skills for employability</b> The Polytechnic University of Milan Foundation
2014-1-IT02-KA200-003402	<b>CommonS</b> "La Sapienza" University of Rome
2014-1-IT02-KA200-004105	<b>LEADER - LEarning And Decision making Resources</b> University of Camerino
2014-1-IT02-KA203-003482	<b>Teaching biotechnology for human health: from the bench to the market</b> Alma Mater Studiorum University of Bologna
2014-1-IT02-KA203-003653	<b>Individual CAREer Development</b> University of Padua
2014-1-IT02-KA203-003486	<b>Welfare for Improved Social dimension of Education</b> Agency for the right to study at the Catholic University– EDUCatt
2014-1-IT02-KA203-003520	<b>House of Brains</b> Regional Union of Chambers of Commerce, Industry, Crafts & Agriculture of the Veneto Region

## Chapter 2

### Results of the survey in the school and adult education sectors

Paolo Cavicchi, Angela Miniati

#### 2.1 Results of the questionnaire on strategic partnerships in Schools (KA201) and Adult Education (KA204)

Our survey tool was a questionnaire designed and put together specifically for a qualitative impact survey which enabled us to retrace the entire project process, allowing us to explore the activities undertaken together with some project representatives. Our interlocutors, the project coordinators, retraced the stages, results and products of the partnership concluded over a year ago (the two-year partnerships of 2014 ended in 2016), while for some experiences the survey coincided with the tail end of the project (three-year projects 2014-2017). In this way, we were able to take a closer look at many aspects relating to the impact, the benefits, and the possibility of transferring and replicating the most significant results at different moments and in different phases. The survey questions<sup>9</sup>, which primarily focused on impact, were mainly structured around closed-choices while others required a comment. Our aim was to bring out the improvements and skills acquired during and at the end of the partnership experience, to get to know the methodologies and innovations produced by the educational and training research and experimentation.

The most significant results that emerged from the questionnaires, in the run-up to the visits, partially confirmed certain aspects that had already been highlighted in other investigations<sup>10</sup>. The consultation proved to be especially useful to delve more deeply into certain aspects of the project: the link between the idea and the initial rationale and the realisation of the intellectual outputs, the impact quality inside and outside the partnership, and last but not least, the strategies to disseminate and exploit the results. The relevance of the *outputs* in an open resource format, whether tangible or otherwise, are the key to understanding the potential and actual impact that characterizes our survey. In other words, we wanted to investigate, discover and determine what activities actually produced the expected results and achieved the objectives set.

#### 2.2 Overview of the projects involved in the study

As regards the school education sector, the project called **R.O.S.E., Robotics Opportunities (to foster) STEM Education** (School of Engineering of the University of Florence), which aims to promote the study of STEM disciplines<sup>11</sup>, particularly among women, offers the chance to get to know and appreciate mathematics, physics and other scientific subjects using robotics. The main target groups and interested parties were students, teachers and administrative staff of the schools taking part in the project. Synergistic actions were conducted by the University of Florence in collaboration with other higher education institutes in Tuscany: the Universities of Pisa and Siena, the TECIP Institute of the Sant'Anna secondary school in Pisa. Many schools also collaborated with the Regional School Office for Tuscany in formalizing a vertical curriculum for teaching robotics to learn STEM disciplines.

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9 - The questionnaire is available as an appendix to this publication.

10 - In 2016, the Erasmus+ Agency conducted a series of surveys involving stakeholders in the school, university and AE sectors. For the survey conducted in 2015-2016, focusing on the impact of mobility at an individual, institutional and systemic level, the Agency turned to an Italian research body, the Istituto Piepoli. A summary of the results is available on: [http://www.erasmusplus.it/wp-content/uploads/2018/02/Piepoli\\_executive\\_report.pdf](http://www.erasmusplus.it/wp-content/uploads/2018/02/Piepoli_executive_report.pdf). Again in 2016, we dealt with the AE sector, and involved the beneficiaries of the preceding programmes dedicated to adult learning through an online questionnaire (Grundtvig Programme). For the results of this study, see the reports available on: <http://www.erasmusplus.it/wp-content/uploads/2017/10/Indagine-sullimplementazione-e-sullimpatto-di-Erasmus.pdf>.

11 - STEM is an acronym for Science, Technology, Engineering, and Mathematics.

The same theme, with different instrumental approaches, was developed in the project **Print Stem, Pedagogical Resource in Teaching Science, Technology, Engineering, Mathematics** (IISS “Bererini”). The use of a 3D printer to teach STEM disciplines was an educational approach which resulted in others around Europe and otherwise (PON, MIUR/INDIRE projects, etc.). This European experience triggered participation in three other projects involving some of the teachers of *Print Stem* and extended to others. “After the conclusion of the project, the sense of achievement, i.e. the satisfaction of being able to fully realize what had been designed and the fact of having produced an interesting educational impact, triggered other European projects with some of the previous partners and also with other new ones,” we can read in the questionnaire drawn up by the coordinating institute.

The **Innovative Learning** project (ITE “E. Tosi”) trialled a methodology based on SLE (Situated Learning Episode) micro-lessons and proposed 20 innovative learning pathways created by some of the teachers, tested by others, and which continue to be utilised by the various disciplinary groups. The underlying pathways and methodology were discussed in the disciplinary departments and used to carry out CLIL modules. Documentation of the various marketing campaigns carried out has shown an operational model that has proved useful at an educational level. The Institute is involved in the activities of INDIRE’s Avanguardie Educative, innovation movement which systematizes the most significant experiences of schools’ organisational and educational models.

The partnership **Too young to fail - 2young2fail** (Compagnia di San Paolo School Foundation) was inspired by one of the objectives of the Europe 2020 strategy, namely, to employ preventive actions among the 10-15-year age group to reduce the phenomenon of early school leaving. Early school leaving is a burning issue whether we are talking about inclusion, guidance, students’ sense of entrepreneurship, or new technologies for teaching. The “2young2fail” project led to many collaborations in European Intent-based Networking (“Second Chance School”, “Digital Skills and Job Coalition”, “Eustory”) and a more active involvement in dissemination and information provision activities (presentations, webinars). In addition, new European-level partnerships were set up, for example, with the Municipality of Turin’s innovation/European projects sector; with the Institute for Educational Technologies of the CNR; the Asvapp Association for development of the assessment and analysis of public policies. Great interest was found among stakeholders in the partner countries, particularly in Portugal, where a “2young2fail” good practice was transformed into a trial by the Ministry of Education.

In the **School&Work** partnership, the CIPAT consortium investigated the importance and development of skills in the field of work-related learning schemes, the proposal of tools for teachers to increase students’ motivation and develop their abilities and self-assessment capabilities. The transfer of the project methodologies involved a significant number of teachers with the project expanding in terms of knowledge. The staff concerned expressed a very positive evaluation of the educational approach and the involvement of the students in producing the toolkits. There was also extensive participation by the partnership’s actors: 37 schools; over 100 teachers; around 4,000 students; 41 different institutions including universities, education associations and centres; public authorities and institutions.

Another innovative teaching scheme was the **C.A.S.T.L.E.** project (of the “Alfiere Bianco” chess club association), which created a training course for primary school teachers to give them the necessary technical skills to offer chess lessons and include these in the school timetable, as well as training their colleagues. Forty-five teachers with their respective classes took part in the three countries involved in the project (with the same number for the control group) with the creation of a programme to teach chess for the five levels of primary school: motor skill games on a giant chess board, the use of chess in class “on the desk” as well as online chess activities (a platform called “Victor’s Chess House”). Measurements of the outcomes were an integral part of the objectives of the project which received the recognition of “Success Story” from the European Commission in September 2018, a qualification which on the *Erasmus+ Project Results* platform is reserved for certain particularly significant and important projects picked out from among all the European good practices.

Brief overview of the five partnerships in the **adult** education sector selected for the survey.

Two projects which address the question of migrants' competence are **Competence Assessment and Social Entrepreneurship** ("Il Girasole" cooperative society) and **Valorize High-Skilled Migrants** (Non-profit Foundation "Casa di Carità Arti e Mestieri"). The former, through the evaluation of formal and non-formal skills among migrants with low qualifications, women in particular, proposes employment opportunities through social entrepreneurship. Together with their partners, the organisations have developed a basic training business plan for start-ups. Research which, starting from the skills learned by migrant women in non-formal and informal situations, capitalizes on that knowledge to begin training which will enable them to organize themselves in associations, in particular to work as carers, as well as offering useful tools for new job prospects and skills development for social enterprises.

The experience of the second partnership, **Valorize**, focused on *high-skilled migrants*, a different outlook, therefore, with different aims, however, the ultimate goal is still *inclusion*, which arrives through work, professionalism, and the acquisition of new skills. Many migrants enter the world of work in low-skilled positions which never change, the alternative being unemployment or a forced resort to family care. The primary objectives were, on the one hand, the possibility of improving and acquiring new skills, exploiting soft skills, creating social enterprises, and on the other, the strengthening of skill capital.

Another example of a good practice related to the theme of inclusion and integration through work was **Social Start-ups**, an experience of business and training for migrants, above all women, developed by the Tamat, Training and Research Centre. In this case, there was great commitment in conjunction with an intense programme that was extremely productive in terms of both results and impact. Six transnational meetings were held, as well as eight *multiplier events* and three transnational training activities, two of them for staff and one for participants, and eight intellectual outputs were produced. The first results in terms of impact demonstrate that the project staff increased their level of competence and expertise through the use and exchange of new methodologies and new approaches. The partners took into account the factor of the complementarity between organisations operating in different contexts and with different responsibilities, taking advantage of the heterogeneity of the partnerships.

With the project **RiUscire** – *Sociocultural University Network for Education and Rehabilitation in Prison*, the University for Foreigners of Siena, together with other European universities, proposes educational syllabuses and training courses for prisoners, teachers, and prison staff. At the centre of their study, a survey and refereeing of good international practices, along with educational practices for the social integration of migrants, both outside and inside prison. "The survey and the analysis of good practices, realized on the net with forms compiled by the prisons and a request to notify experts was carried out on ten quality criteria," writes Professor Benucci in the questionnaire.

"The quanti-qualitative analyses related to both sociolinguistic research and analysis of good practices were processed by each partner and combined in the writing of the volume *Buone pratiche e repertori linguistici in carcere* (*Good Practices and Linguistic Repertoires in Prison* – Benucci, Grosso) which contains contributions by various representatives from the partner countries. The ensuing activities developed language skills and professional qualifications for various beneficiaries selected during the interchanges and experiences in various territorial contexts around Europe."

Education and training are the lines of research and experimentation of the **Tinkering** partnership, coordinated by the National Museum of Science and Technology of Milan. In this experience, the *Tinkering* methodology<sup>12</sup>, developed by the Exploratorium in San Francisco and brought to Italy for the first time, represents a new approach to be adopted in lifelong learning practices for adults, to learn the STEM disciplines in a non-formal

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12 - The *Tinkering Method* is a way of "thinking with our hands", a practice of building and creativity, and is proposed as a very effective way to involve people with different levels of experience and interest in exploring concepts and activities to do with science.

educational environment. There was a significant impact on the staff involved, with an enrichment of their professional skills.

Through direct experience and training at other institutions (*joint-staff training*) which continues the training of educators of adults in *Tinkering* also on other occasions. The project was a “laboratory of thoughts created with the hands”, which resulted in a series of internal training sessions to reflect on the use of this educational technique in the museum and also become an activity of inspiration for other situations of education in STEM. There was enthusiastic participation by learners in all the workshop and learning phases.

These were the experiences which we probed and compared to deepen the qualitative value of the impact, both inside and outside partnerships, to look for strategies and effective measures based on the transferability and replicability of the innovative results. A more extensive discussion of the partnerships has been collected in Chapter 4 of this publication, with a gallery of contributions prepared by the project representatives, direct protagonists of the processes of disseminating and exploiting the outcomes.

### 2.3 Impact visit reports, from project ideas to shared results

We then began to meet the beneficiaries: the two *modus operandi* questionnaires and the impact visits met with significant success among all those involved, who repeatedly stressed the importance of the initiative proposed by the Agency for a more informal dialogue and a qualitative investigation of the partnerships that ended in 2016-2017.

The impact visits (to schools, universities, associations, foundations, etc.), where the people work and share activities, were the real novelty and added value for our work. All the meetings were held not only with the institute coordinator but also with the other Italian partner institutes involved. The debate was consistently wide-ranging and keenly subscribed. In a word, an initial result shared with our interlocutors is the idea that the *impact* is an essential part of the implementation process, and it is necessary to evaluate results and generate new skills and abilities for future improvements.

Were we to summarize the impact on staff and what skills have been strengthened in the professional field, we could say that the use of digital tools has had a significant input on individual experience; of equal importance is the use of language to communicate in different contexts, and what follows is a greater awareness in the acquisition of new professional, organisational and managerial abilities in the work and among the resources. This latter aspect is crucial for the educational institutions involved because it is through experience and contacts with foreign colleagues that they can enjoy the opportunity to share and observe other managerial and organisational models of school life.

The most experimental phase of our survey was unquestionably the impact visits, a moment for sharing and discussion with the beneficiaries and their local partners; all the participants welcomed us with great interest and openness. The most important result was a mutual willingness to retrace the fundamental stages, the difficulties and the successes of the project work, with a view to eventual exploitation.

Talking together with the representatives we gained greater awareness of some of the concepts and aspects of the processes used to disseminate and exploit the results. The former described how the intellectual outputs were produced, talked about the field research, and the methodologies adopted and renewed in a European key. In our discussions, the representatives had the opportunity to present experiences, meetings and activities that surfaced during the project, sometimes not envisaged in the work plan but which ended up representing added value.

For the Agency this was an opportunity to observe the projects in the concluding phases of the activity, at a certain distance from the end of the work, a time when it made more sense to speak of the impact assessment and verification of the short- and medium-term results. For the institutions, the meetings were an opportunity to evaluate

the work from another view point, in particular, the Italian partners, together with the coordinators, were able to recount their experiences, and examine the skills available in depth, as well as their role within the partnership.

At the meetings, ample space was given to the qualitative aspects, regarding the exploitation and sustainability of the intellectual outputs produced by the projects, while an examination was made of the role played by associate partners, stakeholders, local authorities and the worlds of culture and work, in keeping with the specific themes of the various projects.

The observation point during the visits gave us a way to change perspective to better investigate the type of involvement of the staff, the professional relations of the European team, the impact on each partner institution in the contexts of reference. Other things that emerged were the peculiarities and differences within each project: in some partnerships the role of the coordinator proved to be too specific, in other cases, the partner institutions were less involved or less collaborative. However, at every meeting, we found representatives able to find solutions and strategies to solve and improve the end results.

To schematise and summarise the main points that emerged during the visits, in relation to impact, we are presenting a brief description of the key aspects.

Our first impact visit (in September 2017), was useful for two main reasons: testing the tool designed for the visits, namely, the questionnaire, and understanding whether the practice of a meeting could represent a *modus operandi* to monitor and check the quality of the activities and results, investigating the actual impact at various levels in a direct exchange with participants.

In total, we carried out **11 impact visits** in regard to the two reference sectors of this chapter (school and adult education), and we would like to affirm some observations from the history of our **trips to discover quality**, following the timeline.



#### The Leonardo da Vinci Museum of Science and Technology, Milan

In a setting where space and time intermingle with the past and the present, European cooperation is a prerogative of the museum's life. Which led us to wonder, in the end, what did this specific project represent? What was absolutely key was the *sharing*: the intellectual outputs were widely shared with partners and the workshops saw a very high turnout of adults (visitors). We knew the partner institutions already from other collaborations. There was a significant impact for the staff and other local institutions, with demands for training and advice. The methodological practice, **Tinkering**, proposed in the project, not very well known in Italy, developed theoretical but especially unfamiliar pathways with workshops and the construction of *Tinkering Zones* inside the museum. On this occasion the validity of the questionnaire was verified as was its potential role in identifying impact on the basis of sustainability.



#### "Il Girasole" non-profit social cooperative, Florence

**CA@SE, Competence Assessment and Social Entrepreneurship**. Numerous project aspects were discussed during the visit, which saw the participation of the leading representative as well as the representative of the partner institution which has proved to have had a key role within the work team. Great professionalism abounded along with a readiness to describe and document the salient phases of the project. The Europe-wide cooperation has resulted in various social services of use to foreign women (carers in particular) who offer assistance to the elderly or people with disabilities: and above all the career counselling service for migrants and people with low skills in addition to training and skills upgrading for staff. The counselling service was advertised by the Consorzio Messtieri at job centres around Florence. Also new collaborations arose with the project partners, with



stakeholders identified over the two years and with some migrant facilities that were involved both during the pilot course and the career counselling service. During the meeting we were shown materials and publications and had the opportunity to meet members of staff involved in the training. Many activities had been organized at a territorial level with the involvement of local authorities.



#### Non-profit “Casa di Carità Arti e Mestieri” Foundation, Turin

A partnership with strategic new objectives, new perspective to handle involvement, with training matching the demand from companies. Great teamwork in the partnership, strong links with the territory. The target is new, namely, high-skilled migrants, since the technical or vocational training of migrants is usually low to medium level. There was also keen participation in the multiplier events (over 300 people), with maximum adaptability and portability of the Intellectual Output (I.O) *Skills Assessment Model*. The indirect beneficiaries are companies, but also schools and training centres specializing in labour services. From the debate and the work with companies, 12 Top Soft Skills emerged. There was a direct impact for learners: 60 migrants were involved. Overall, there was a strong impact on the sector organisations and the stakeholders. With **Valorize** the desire was to prevent the dispersion of human capital, and the innovative part was the system and the involvement of public bodies. The work began from the need to recognize qualifications, this was the educational-training choice made. There were three fundamental phases of the project activities: highlighting, identifying competence and soft skills in order to exploit them, and lastly how to promote them and make them portable in the market and for businesses. To build such a vital partnership the work with partners proved essential: two were already known while others were tracked down using databanks. The partners worked in tandem on each intellectual output: tandem work method that allows continuous exchange with minimal waste of time and resources. The assessment of the migratory experience becomes an integral part of the evaluation as a whole, made with different tools, for example, self-assessment: a self-assessment chart was produced featuring 5 levels in order to assess an individual’s ability to manage a complex situation (problem-solving).



#### School of Engineering, University of Florence

During the visit, it was possible to investigate the impact of the methods and the test approaches used by the whole partnership to teach robotics in class. The **R.O.S.E.** planning experience proposes a comparative analysis of two samples of students, ‘contaminated’ and ‘non-contaminated’ to measure how the teaching of robotics, especially for girls, generated improvements in school performance in STEM subjects (Science, Technology, Engineering and Mathematics) with a transverse effect. From experimentation and application came a vertical curriculum to introduce the teaching of robotics in class, developed with the assistance of teachers from a network of schools and the Regional School Office for Tuscany in close collaboration with our European partners (foreign universities, colleges, and schools). The measurement of the impact on the selected target groups (students from various schools) meant a great deal of work for teachers and educators engaged in extensive checks owing to the changes and improvements. The crucial point of the impact analysis was born from the idea of proposing an educational model, a curriculum, can facilitate and improve the learning of STEM in class through the use of robotics in application-oriented education.



#### CIPAT Florence

The platform developed by **School & Work** offers the opportunity for the education sector to communicate with the production sector: training needs on the one hand, and demand for competence and innovative skills on the other. Understanding the difference between school and companies

(who have requested real orders) allowed us to explore ideas that could fill this hiatus, aiming at improving students' motivation to learn scientific disciplines and develop digital competence. During the visit, the Italian partner institutions stressed the importance of teamwork within the European context, with a view to creating a bridge between classroom experience and skills of use to the world of work. A success story that takes a close look at the world of work, establishing a guidance scheme for students with the aim of producing materials and experiences that can connect school and work. Locations were created for self-assessment which encourages awareness of soft skills, in an attempt to curb the early school leaving phenomenon.



Chess Club Association – Savigliano (CN)

**C.A.S.T.L.E.. A Chess curriculum to Advance Students' Thinking and Learning Skills in Primary Education** is a success story where the factors that determine quality and importance have emerged from shared planning enlarged to a local and international working group. Consistency and implementation activities are at the basis of the educational innovation proposed. Namely, the creation of an educational pathway through the use of chess in education to transfer the necessary technical expertise to primary school teachers so that they can carry out chess lessons and schedule them during school hours in a peer-to-peer approach. The group we met was large and enthusiastic. It was an excellent teamwork in a European context and all partners was involved to disseminate the results. There have been many contributions and requests for training, with a structured course being developed for Italian and foreign teachers and school leaders, which is now available on various databases. Of interest is the interaction between *Alfiere Bianco* and the school foundation: the teaching of chess was carried out with a group of teachers linked to the school foundation.



University for Foreigners of Siena

The project called **RiUscire**, a partnership consisting of European universities and the Directorate General of Training for the Ministry of Justice, engendered intense activity to train staff, teachers, educators and prison guards, as well as Italian and foreigner prisoners. The effects and the benefits on staff and learners is concretely embodied in the generic skills development and linguistic-cultural knowledge fundamental for the social integration of foreign prisoners. The language and culture theme proved useful to communicate with the prisoners, and the central nucleus of the project activities, after the research step, was the creation of courses for more than 80 prison workers, while the educational and training activities determined a strong qualitative impact. During the visit we had the opportunity to take part in a conference call with the Portuguese university and to deal directly with the Italian partners at the discussion who spoke of experiences characterized by quality teamwork, shared and planned by all the institutions involved.

“From this planning experience,” we were told by the participants, “actions and initiatives developed in a chain, the most significant of them seeing an increase in the number of students on the degree course for linguistic mediators, while degree theses on prison education are currently being written. Sustainability is the arrival point of the work, where teachers, operators and prisoners communicate with one another in a different way.”



Compagnia di San Paolo School Foundation, Turin

The impact visit was important and profitable for a number of reasons, and this was unquestionably an occasion for the representatives to reconsider the results and impact of the European experience together with us. Even if, at the time of the visit, the project had ended over a year

earlier, the impact and exploitation of the work provided input for other activities on the theme of “dropping out” which the Foundation is continuing. Here there is good practice in terms of exploitation and replicability of the results to be developed in other European projects. The opportunities plus the relationship with the territory and other local situations represent the strong point of this experience, shared with and spread to other schools. The representatives told us that the Foundation is a partner in a project called Interreg Central Europe, InAirQ, which implements measures to improve the quality of the air inside classrooms. In addition, thanks to **Too young to fail, 2young2fail** there was an increase in those taking part in the European Intent-based Networking (“Second Chance School”, “Digital Skills and Job Coalition”, “Eustory”) along with a more active involvement in dissemination and information provision activities (presentations, webinars). The interesting experience of a recent graduate resulted in a thesis on the project “2young2fail”, designed and inspired by another project on early school leaving: “Try it again, SAM!” In terms of impact at the partnership level, it underlined the experience of the Portuguese partner where the project “2young2fail” was transformed into a trial by the Portuguese Ministry of Education.



#### Tamat Training and Research Centre, Perugia

A well-structured working group that was able to realize the project idea they had developed together with the University of East Anglia. Many activities and multiplier events took place, including ‘All of Social!’ The final event of *Social Start Ups* project. (10-11 March 2017) featured a vast programme consisting of different types of initiatives to disseminate the project results and promote follow-up. The meeting produced widespread dissemination of the activities relating not only to the Erasmus+ partnership but also to other projects developed by Tamat. There had been strong collaboration with the territory and other organisations, universities, stakeholders, producers, and companies. **Social Start Ups** certainly helped to reinforce the level of cooperation between organisations of different origins and with different backgrounds: 2 universities (Plymouth and East Anglia), 2 civil society organisations (Tamat and Amsed), a technical agency (Technology Park 3A), and a public authority (the Municipality of Verteneglio). In addition to the impact at local, national and European levels, the partnership had positive effects on the institutions that joined the “Social Start Ups” project. There was also significant input from an external assessor who monitored and evaluated all the activities.



#### I.I.S.S. “A. Berenini”, Fidenza (PR)

**Print Stem** presented a challenge for both teachers and students, who were engaged in an important new relationship with local businesses. The school received orders and a 3D printer became an educational tool. The students surpassed the conception of learning STEM as pure abstraction and improved their school results. For teachers, the project work produced a gradual acquisition of skills in the experimental teaching of scientific disciplines. Although the teaching using the 3D printer was not integrated into the institute’s curricular activities, it did represent an experience which offered fresh opportunities for students and could be applied and used for various disciplines. At the teaching level, the impact produced greater attention to the students’ educational success and increased competence among students who were low achievers. The project was invited as a Best Practice to the European conference in Bonn and the impact produced by the cooperative activities provided input for other local initiatives (for example a conference with local businesses).



#### ITE “E. Tosi” – Busto Arsizio (VA)

This strategic partnership involved students with varying levels of potential, different interests, and students with disabilities. The impact on several levels determined a curricular practice tried out over time and as a concrete impact the school saw a significant increase in enrolment after the European experience. Alongside 20 teaching methods, applicable to CLIL activities, **Innovative Learning** produced other learning approaches (such as marketing campaigns designed by the students) which were eventually proposed to specific local stakeholders. The school and companies were able to interact to put the skills acquired by the students into practice. The project resulted in a powerful interaction between teaching practices, research, experimentation and the world of work.

#### “I exploit, therefore I am”

At the end of the impact visits, we can affirm that the partnerships for innovation had produced a multiplicity of strategies and intellectual outputs which, as multifunctional open resources, are easily usable and transferable to other learning contexts, and that the replicability of the results is also ensured by the production of materials and final products in various languages, a guarantee for the dissemination and sustainability of the results.

There can be no doubt that the involvement of the territory plus other stakeholders is essential for good dissemination and a sustainable outcome. The domino effect of the dissemination, initiated by multiplier events, as has happened for other dissemination channels, is all the more effective if local, regional and national authorities are involved from the outset.

Sustainability in strategic partnerships is a crucial aspect for institutions working in formal and non-formal contexts. Making the training of teachers, operators, and volunteers consistent at a national and international level is the strong point of almost all the projects covered by the study. There was a broad involvement at the individual level, among institutions, and a continuous and profitable attempt to introduce innovation at the system level. In our conversations at the institutions, the importance of systemic training based on the proposed models was mentioned several times.

We shall try to formulate some of our **final considerations**. Discussing the benefits of project in teaching and methodological practices was our main objective and visits to the institutions selected for this study offered an opportunity to understand and analyse whether the results obtained have generated a real impact, through a series of actions right from the design phase.

During our visits we examined many concepts related to exploitation and impact, discussing how and when a particular beneficial effect produced transformations and changes for people, practices and institutions, and ultimately, the systems themselves. Another aspect discussed was sustainability. In this case too shared reflection led to the emergence of a common consideration, namely, the opportunity to continue using the project results beyond the end of the period covered by the grant. Occasionally, final products may be used and exploited in the long term, also through marketing, accreditation or integration.

Not all the parts of the project nor all the results can be sustainable, and it is important to consider dissemination and exploitation as a progression that goes beyond the duration of the activities in order to involve and inform the policy and other stakeholders. The impact of the KA2 projects has not merely been evaluated in terms of the quality of the project results, but also the extent to which these results are known and used outside the partnership. Reaching as many potential users as possible through effective dissemination helps to create other projects as well as increasing awareness regarding the opportunities offered by the programme. This can positively contribute to the perception of the general public and encourage wider participation in Erasmus+.

## 2.4 The focus group as an experience of exchange between peers and networking activities

Normally, the round tables during our visits were attended by at least 5-6 people, and as a result the exchanges were wide-reaching and rewarding for all concerned. From the stories of individuals we were able to more deeply understand the work of mediation in European cooperation, the role of each individual in the monitoring, dissemination and exploitation phases. In this respect, it was the involvement of the public authorities and in some cases the RSO which determined the success, while not only were the original objectives achieved, at times the impact was reflected in totally unanticipated activities and initiatives.

The two round tables represented the final stage of a long road of analysis and study of aspects relating to impact, plus the importance of exploiting the European-wide experience.

The debate took place in an informal setting, with an interest in the exchanging of opinions and the experiences to be shared.

With the focus group the desire was to take an in-depth look at the concepts of the survey, giving everyone the chance to discuss and share some future prospects starting from the results of the KA2 partnerships. We resumed from where we had left off after the impact visits, and this time some highly significant facets emerged on the awareness of the changes, on what had worked better, and on ways to continue and strengthen the objectives achieved. The two focus groups were structured in two parts, with one session in the morning and another in the afternoon, and divided into three parts devoted to impact, dissemination, and exploitation, and finally to the sustainability of the results. In the second part of the day, the round table was opened to all of the Agency's participants from other offices (management, finance, communication), so that they could actively participate in the debate.

The agenda of the two focus groups included an informative presentation by staff from the Italian unit of the Eurydice network on activities that had been carried out for years, producing publications in a comparative European key with insights and descriptive analyses to do with educational issues of relevance to the national and international debate. It's a useful channel for all those who wish to learn about and perform research on education systems and policies in Europe; a response to realize quality and innovative strategic partnerships.

The participants in the focus groups were:

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**28 May 2018 - Moderator: Angela Miniati**

**Representatives of the KA204 Adult Education partnerships:**

Antonella Benucci (UNISTRASI); Claudia Ducange (Non-profit "Casa di Carità Arti e Mestieri" Foundation); Zsofia Jobbagy ("Il Girasole" non-profit social cooperative); Domenico Lizzi (TAMAT); Maria Xanthoudaki (Leonardo da Vinci Museum of Science and Technology Foundation).

INDIRE Erasmus+ Agency: Erika Bartolini, Paolo Cavicchi, Daniela Ermini, Martina Iacopetti, Pietro Michelacci, Laura Nava, Valeria Orsini, Valentina Riboldi, and Lorenza Venturi.

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**18 June 2018 - Moderator: Angela Miniati**

**KA201 partnership representatives - School Education**

Benedict Allotta (University of Florence); Nadia Cattaneo, Maria Giovanna Colombo, Rita Montesissa (ITE Tosi); Cecilia Fava (IISS Berenini); Giuseppe Italiano, Marussia Pastacaldi (CIPAT).

INDIRE Erasmus+ Agency: Simona Baggiani, Stefano Bindi, Paolo Cavicchi, Giuditta Giulianelli, Laura Nava, Silvia Rettori, Valentina Riboldi, Luisella Silvestri, and Lorenza Venturi.

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## Results of the two focus groups: the impact

The debate yielded a series of new questions of importance for the subjects being dealt with. The first part of the debate focused on the dynamics produced by the impact on the staff and the institutions, generating a radical change and a significant effect on students, teachers, trainers, educators, and administrative staff. The personal and professional growth of staff is a given that was shared and established among all the participants: the acquisition of new skills (linguistic, digital and transverse), the development of soft skills (team-working, problem-solving); training activities and new challenges that contributed to the growth of their respective expertise.

In general, the representatives confirmed that the positive effects are still tangible if we are talking of impact in the short and medium term. However, the long-term perspective of the impact and the sustainability of the educational methodologies implemented is another story. On this matter, the suggestions and tips were numerous and also varied. One representative proposed involving the relevant national authorities to implement educational pathways resulting from the strategic partnerships (to be submitted for the attention of the MIUR), suggesting the possibility of greater involvement on the part of national institutes responsible for research, innovation and educational policies such as INDIRE and INVALSI.

Another aspect that everyone agreed on was that for teaching to be innovative new tools are needed, and that open resources and intellectual outputs can respond to specific educational needs and have changed the way of working and the finding of teaching tools.

**One very interesting reflection placed resources** (time, support and professionalism) at the centre of education, alongside **communication** (dissemination strategies, communication skills), which are not always shared and shareable among institutes. A project can facilitate certain processes and becomes fundamental to the synergy between schools and the territory, a lengthy but important process, summed up in an expressive statement: *"The project begins when it ends"*

## Results of the focus group: exploitation and sustainability

In general, the participants agreed that the *Erasmus+ Project Results* platform is indispensable for the dissemination of the products, even if it is not very visible nor fully effective for their exploitation. In the sense that it presents itself as an archive or a repository, used only by those already familiar with the programme. One good suggestion was to include some indications in the Erasmus+ social channels on the activities and contents that the platform offers. Another aspect agreed on during the focus group was the crucial role played by local, regional and national authorities, given that they can boost the effects of disseminating and exploiting the results throughout the territory.

The participants in the focus group were lavish with suggestions to increase the sustainability of the projects. The working group highlighted the recurring drawbacks and problems encountered: the prevailing opinion is that a lack of financial support hinders the creation of methods and initiatives to ensure and engender lasting effects/benefits (impacts). The project has a specific contractual duration and often the projects do not have funds available to ensure the continuity of the results, with the sites becoming obsolete and out of date. Precisely for this reason, the Erasmus+ Platform is fundamental in documenting and collecting all the project work from around Europe.

**Sustainability** belongs to a later stage when the project has ended, and often the grants are insufficient to continue disseminating the results. On this point, the debate highlighted the proposal to include a **specific Call** for deserving projects (*Best Practices, Success Stories*), to obtain funds to dedicate to sustainability and the systematisation of the most innovative practices and teaching strategies that are replicable in other contexts (to be proposed to the European Commission). This assumption could be administratively complicated but would unquestionably be fundamental for the dissemination of results, while providing incentives for good practices. Another suggestion was to involve INDIRE in the phase to valorize the results. The participants commented

that the initiative to organize the focus group could be structured as an activity of exploitation and exchange between peers on other occasions, including round tables for discussion.

Yet another consideration regarding potential strategies and initiatives of use for sustainability and the exploitation of results, underlined the need to involve **stakeholders** in the implementation phase of the project and not only in the dissemination phase. Pivotal for replicability and interest on the part of other sectors are investments in the territory, at local and regional levels, to actively engage both public and private stakeholders, who could encourage the sustainability of the projects. Another aspect that emerged during the debate is the question of *policy*, and the choice of the proper context in which to disseminate and transfer the outcomes.

With regard to the concepts of dissemination and exploitation, many proposals and strategies were mooted to enhance and optimize sustainability. A generally shared opinion is the need to have the products and intellectual outputs translated into several languages (or at least make them available in the partners' languages), however, the costs of these translations are significant and are typically made only in English. There was much debate on the tools used by the Commission to collect and publish the results on the Erasmus+ Platform: all agreed that the tool is valid, perhaps a little dispersive, not particularly user-friendly, but very effective and useful for those approaching European projects for the first time (e.g. the platform can be used for Partner Searching) and it is without a doubt an important archive to perform thematic research and discover what has already been achieved. There was a discussion of several initiatives to improve navigation within the platform: for example, it was proposed to make it more interactive with the social channels through posts on Facebook when there are new projects on the platform. In this sense, a model to copy is the SALTO-YOUTH portal, which is multifunctional and more interactive.

During the focus groups there were two sessions to look at and present the EPAL platforms dedicated to adult learning, and eTwinning, twinning initiatives between schools, since these represent useful tools for the dissemination and distribution of good practices. These are two resources that can catalyse the debate on educational policies, on the systems and related innovative methodologies for cultural insights **in connection with the learning and development of new skills**.

## 2.5 Conclusions

This study chiefly allowed us to express some thoughts and reflections on the quality of the projects and the effectiveness and relevance of KA2 strategic partnerships in the fields of innovation and lifelong learning. Team playing in cooperation is an added value, and to implement and realize outcomes takes a commitment from everybody involved in the partnerships. The exploitation and sustainability of the results achieved must be a part of the project from the initial idea, in the joint planning. The survey was characterized by pathways designed and constructed to contribute to the development over time of the benefits and qualitative effects on institutions, people, and the territory.

To better focus the Agency's role in this crucial phase of the projects and to understand how and to what extent the partnerships for innovation have truly changed and given an added value to the educational research in the various fields of learning, along with the institutions' coordinators, we questioned the quality of the European projects' impact and which dynamics influence an international team's success when it comes to performing research and creating innovation in shared themes and aims. Something significant occurred during this experience: our observatory moved inside the partnerships to share strategies and new forms of collaboration with those directly concerned. The continuity and portability of good ideas and success stories represent an opportunity for development and shared growth.

At the end of the analyses, we really were more aware and positively encouraged to continue this process of reflection and qualitative analyses of impact. The two fronts of our inquiry, the school and adult education sectors, albeit with due distinction at the level of motivation, areas of interest and educational needs, do have many points in common. In schools, the managers, teachers and administrative staff told us of the increasingly useful

link with the territory – with other schools, of course – but also with other areas of learning, and expressed the need to carry out networking both inside and outside the institute. An important impact at institutional level has resulted in application and knowledge at the administrative and management levels.

The third sector (consortia, associations, cooperatives, foundations) has skilfully explored areas and new frontiers to encourage interaction between different actors of society, focusing on themes related to social inclusion, e.g. multilingualism as a result of migratory flows, and methodologies imported from the world at large. For the non-formal and informal adult learning sector, the impact on the institutions was crucial and decisive for the growth and development of new educational and training methods and approaches at both local and regional levels. The more companies, and local and national authorities are involved in the design process, the more a project has a good chance of strengthening its potential for portability to other contexts until it becomes systematized. The confines of the coordinating and partner institutions have extended and turned outwards, endorsing their experiences and good practices. The more the cooperation within a partnership is important and functional, productive and shared, the more functional and important the impact outside the partnership and in each country involved. The perspective of the *cooperation space* changes, as does *the horizontal line of the cooperation time* (the duration of the project). That is to say, the coordinators all speak of **a before** and **an after** with respect to the European Erasmus+ experience. It means that something really has changed. What interests us is that *something*, unavoidably linked as it is to the experiences, shared choices, and intellectual outputs created jointly, i.e., products (tangible or otherwise) and innovative tools, distinguished by their portability and adaptability. Some key examples: robotics as a motivational practice for students (with a specific target group to increase the presence of women in the mathematical and technological-STEM disciplines) to improve their performance in the scientific field by rendering the mathematical and physical principles indispensable to robotics fascinating; in this case applied to teaching (a vertical curriculum has been created). Many schools took part, as did educational authorities (RSO) and sector stakeholders. The next stage is the application at the system level of educational practice and interdisciplinary methodologies. Another experience (but all the project experiences are lumped together by innovative approaches which trial and produce effects and benefits at multiple levels), is the one relating to the teaching of chess in primary schools. In this project every teacher becomes a fit bearer of strategies and methodologies to be transferred to colleagues who can try them out in class. Another good practice is the cooperation between European universities, prisons and the Ministry of Justice to put together a course that is a formative and methodological approach to prison education; a strategic plan to make the training of teachers, operators and prisoners (in particular migrants) consistent at a national (systemic) level.

So what has happened in terms of impact on the educational and training system?

Much work remains to be done on this aspect, many communication channels are missing between the national authorities and the group of innovators and experts in European cooperation conducting the experiments, starting from knowledge already assimilated, new additions and more convincing responses transferable to a wider audience of students, teachers, and institutions. Some unhurried but reassuring reaction is happening at a systemic level, which can and must bring much hope regarding possible adjustments and the use of teaching and learning practices that have emerged and developed in the strategic partnerships.

This investigative activity aims to be a first step to reinforce and optimize the impact of new and shared intellectual outputs, fundamental to the modernisation of educational systems and policies. In the proposal for the new Regulation<sup>13</sup>, the legal basis of the new Erasmus+ Programme for 2021-2027, the line of programmatic and substantial continuity is to be found in the goals: “to increase the qualitative impact of the current programme, the future Erasmus+ should reach out more and better to people of different ages and from diverse socio-economic backgrounds. For

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13 - Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing ‘Erasmus+’: the Union programme for education, training, youth and sport and repealing Regulation (EU) No 1288/2013, <https://eur-lex.europa.eu/legal-content/EN/TXT/?URL=COM%3A2018%3A367%3AFIN>



school students, Erasmus+ experiences have been an exception so far. As regards higher education, students, trainees, apprentices.” Accordingly, “further efforts are needed to make the Programme more inclusive and further increase its efficiency, building on the excellent results achieved over the past 30 years by EU programmes in this field.”<sup>14</sup>

In relation to the future European programme there is much debate on the new opportunities that international cooperation represents to recognize and develop skills that are portable in various environments, “*cooperation between organisations and institutions is a catalyst for innovative ways to support learners in their personal, educational and professional development. It brings concrete positive effects for individuals, for example by empowering people with more key competences, reducing early school leaving, recognizing competences acquired through volunteering and non-formal learning, increasing higher education attainment or implementing the Bologna reforms. It also facilitates the circulation of ideas and the transmission of best practices and expertise, thus contributing to a high quality education.*”<sup>15</sup>

This experience of investigation and analysis, deeply interesting and challenging for the Erasmus+ Agency, will continue in the coming years, to bring a value and an increasingly important meaning to project experiences of quality, an example and a guide for everyone who want to know better the programme



Photo 1: Coordinators of the AE partnerships and INDIRE Erasmus+ staff



Photo 2: Coordinators of school partnerships and INDIRE Erasmus+ staff

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14 - Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing ‘Erasmus+’: the Union programme for education, training, youth and sport and repealing Regulation (EU) No 1288/2013, p.3

15 - Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing ‘Erasmus+’, p. 4

## Chapter 3

### Results of the survey in the higher education sector

Luisella Silvestri

#### 3.1 Introduction

Key Action 2 - Strategic Partnerships for Innovation, introduced with Erasmus+ in 2014, gathers the experiences gained during the previous EU programmes, integrating these to generate maximum interest among potential stakeholders. The aim of this programme action is to realize and implement initiatives that can provide answers to those phenomena contingent on political objectives, such as: employment, economic growth, the discrepancy between the skills required in the labour market and those acquired in academic curricula, improving the quality and relevance of the educational offering through the introduction of innovative and digital tools. The projects approved in Italy in the higher education sector almost doubled between 2014 and 2018, despite the limit imposed by the budget available for this action, passing from 9 to 16, compared however to a request that is four times greater than the number of applicant that actually received a grant; they were selected for the relevance of the idea proposed, the implementation of which should have a potentially significant impact on several levels and ensure innovative results. Some National Agencies organized meetings to reflect on the results of the strategic partnerships and what the preconditions should be for a project to achieve its goals, to be sustainable in the long term and be transferable to other contexts, also through appropriate dissemination and exploitation of the results.

The aim of this work is to investigate what the impact and effect of a strategic partnership project are, both at the level of the individual involved directly or from a systemic point of view, shifting the focus to the local, national and European community. On 8 June 2018, the INDIRE Erasmus+ National Agency organised a focus group with the coordinators of the nine Strategic Partnerships that had received a grant within the 2014 Call framework, which have now ended, in order to investigate aspects such as impact, sustainability, and the dissemination of the projects. The participants were also invited to comment on these topics through a questionnaire<sup>16</sup> which was administered prior to the meeting. An analysis showed a positive scenario in which the characteristics that were the object of the research played an important role in all the project phases. However, to optimize the results achieved, a further stimulus is necessary which, although related to the economic sphere, also brings into play other organisations that are likely to facilitate the impact and transferability of the products.

#### 3.2 Results of the questionnaire on impact and sustainability: an overview

The meeting of 8 June between the INDIRE Erasmus+ National Agency and the beneficiaries began with a presentation of the results of the survey, which collected seven replies relating to 6 out of the 9 projects that began in 2014, the first in Erasmus+, two of which ended in 2016 and the other seven the following year. The overall picture that emerged from the analysis is on the whole positive, even if some critical aspects were reported in certain circumstances.

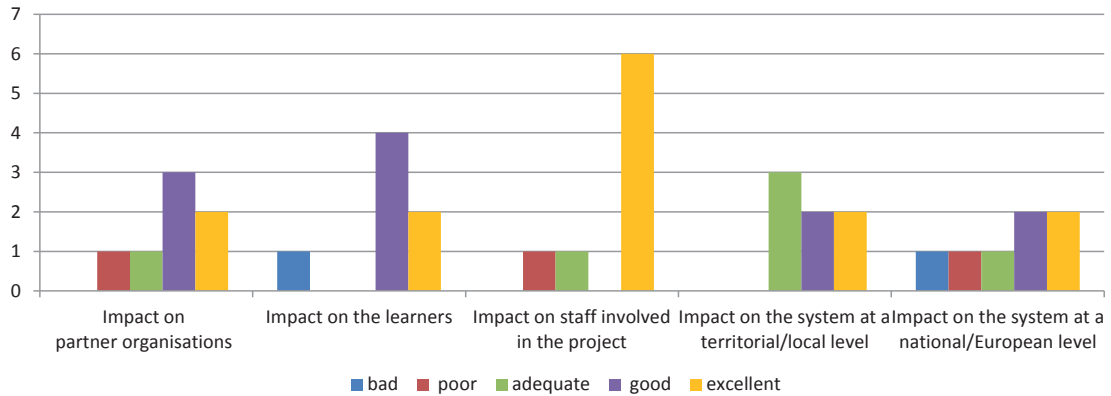
Strongly linked to the type of partnership and the level of synergy between the partners, the impact was felt more at individual and organisational levels; in fact, the one aspect agreed on, with a very positive opinion, was the impact on the personnel involved in the project, who, as can be seen from some of the comments provided by the participants in the survey, had the chance to develop new skills and share good practices through the collaborations developed with the partnership. For one coordinator, the project was the starting point for the creation of a team, within their institution, specializing in international planning which “as it gradually grew, expanded individual capabilities.”

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16 - The survey questions are listed at the end of this chapter.

The question on any outcomes on the learners highlighted some problems that arose during the implementation of the project, linked mainly to discrepancies among the partners; however the judgement delivered was above average in general. From the comments it emerged that this type of Erasmus+ project leads to tangible results on the system at a territorial level, by encouraging a dialogue with local situations, while the impact on a larger scale is more limited, speaking of both national and European levels (Fig. 1).

Fig. 1: Survey on strategic partnerships 2014, impact assessment (Questions 1-5, absolute value)



If the results varied from one project to another from the point of view of impact, when it came to medium- to long-term sustainability the responses were more similar, indicating a very positive evaluation. Particular attention was paid to this aspect throughout the life cycle of the partnership, right from the initial phase; this effort allowed further developments of the original project idea which, in certain cases, led to further candidacies.

Even if, in one case, there was a blatant lack of commitment on the part of the individual partners, in general, the organisations involved worked in the wake of common interests, considering sustainability an essential prerogative in all phases of the project. The answers concur in considering the intellectual outputs produced as innovative, relevant, and usable over time (Figs. 2 and 3).

Fig. 2 Survey on strategic partnerships 2014, assessment of sustainability (Questions 7-9, absolute value)

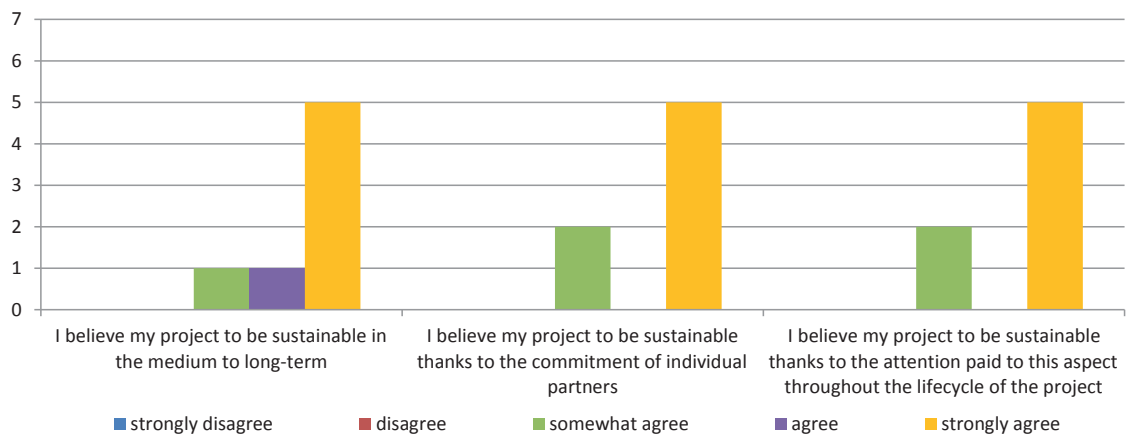
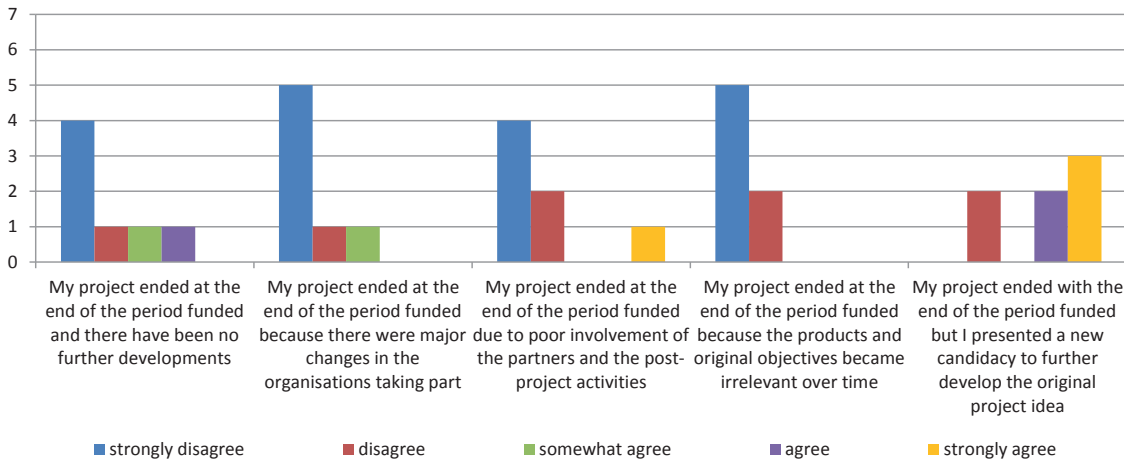


Fig.3: Survey on strategic partnerships 2014, assessment of sustainability (Questions 11-15, absolute value)



In conclusion, the strategic partnerships examined had positive effects on an individual level, especially on the staff engaged in the project. They fostered partnerships with local stakeholders, while the impact on the national and European systems was less evident. The products proved to be sustainable and adaptable to new contexts. However, the need emerged for a strong partnership, constituted by well-matched organisations that follow a shared and well-structured *modus operandi*.

### 3.3 Outcomes of the focus group

Participants in the focus groups were:

8 June 2018 Moderator: *Luisella Silvestri*

#### KA203 Partnership Representatives - Higher Education

Francesco Girotti (University of Bologna), Geyleen Gonzalez (Eurosportello of the Veneto Region), Stefano Lariccia ("La Sapienza" University of Rome), Pietro Rossi (Agency for the Right to Study at the Catholic University), Magda Mantegazza (Agency for the Right to Study at the Catholic University), Andrea Marconi (University of Camerino), Sara Ramadori (University of Camerino), Sara Raponi (University of Padua), Paul Vercesi (Polytechnic University of Milan Foundation).

On behalf of the Erasmus+ National Agency: Fausto Benedetti, Valeria Biggi, Paolo Cavicchi, Angela Miniat, Claudia Peritore, Antonella Ratti, Alessia Ricci and Lorenza Venturi.

**Question 1:** *What strategy was adopted during the project cycle in order to have the maximum impact at an individual level, an organisational level, and a systemic level, and where were the best results achieved? Is it realistic to envisage a large-scale impact?*

With regard to the impact, many contributions mentioned dissemination and to what extent this makes it possible to communicate the project outputs to a wide range of stakeholders if they are planned and integrated throughout the project cycle. In one case, it would have been useful to add a new member during the work, someone to really promote the dissemination phase. Where little impact was reported, the reason was strongly linked to the characteristics of the partnership and the nature of the coordinator who proved unable to assess the students' results because of being on a different mission from that required by the partnership.

And since companies that sell by vocation do not like the look of open-resource projects, some have suggested an intervention by the Education, Audio-visual and Culture Executive Agency (EACEA), which, with its neutral approach, could promote the dissemination of the results. Another keyword that emerged from the discussion is the *connection* with the territory, which is fundamental in order to obtain maximum impact from the projects: the stronger the territorial link, the stronger the connection with local stakeholders, and the more positive the responses will be as will the possibility of enlarging the pool of beneficiaries. Once a model has been validated it would be opportune to translate it on a broader scale to yield a national impact and bring subsequent projects to life.

**Question 2:** *What are the key factors to ensure that a project is sustainable and does not finish with the end of the grant?*

With regard to sustainability, the main difficulty declared was to combine the results at a national level and systematize the products created. It is necessary to build bridges of contact and introduce new actors to act as facilitators. A matrix structure can be built from the academic outputs of the various projects to fuel a new culture of partnership and collaboration, through the products and results of the different projects, that could lead to the achievement of a genuine “Erasmus Community” which could eventually influence a new programme which, at that point, would find a project humus and a completely different, readier expertise in the vast EU panorama.

Working using good practices could be a good road to follow, trying also to overcome the fact that we are not talking about projects that are exclusively Italian but only those that are coordinated by Italians. The process could be facilitated by the National Agency itself, whose support would facilitate the existing bottom-up drive, from which both impact and sustainability must also begin. If the priority is to capitalize on the results, one solution could be to involve those projects considered leaders in knowledge transfer partnerships through a subsequent restricted Call. Another aspect that emerged from the debate was that the strategic partnerships, although international, are smaller than those of other kinds, which tend to be designed on a large scale. However, as small as they are, they are many, and they are to be found in more than a few countries, and so why not channel them into round tables? The idea of sharing information at a European level found wide consensus among the focus group participants and there were those who suggested doing so during the implementation of the projects themselves, in order to create greater incisiveness. Precisely to avoid acting in watertight compartments and to try and interact with other situations, it would be useful to know the dates and agendas of the multiplier events organised as apart of other strategic partnerships. For some, the sharing of the products is not such a simple process but really needs a coordinator *super partes* given that these are intellectual outputs. Following a different approach, “branding” the product created could ensure its sustainability, in the sense that it could be marketed, and its continuity ensured over time as an EU project.

**Question 3:** *How did you design the dissemination plan? Did it yield the expected results?*

The priority was to identify the target and to be able to involve the stakeholders. The difficulties reported in disseminating the results among teachers and students could be overcome through initial planning which takes this into account; for example, providing credits or issuing open badges for students attending the meetings to promote the projects could be one possible solution. There is a general consensus that dissemination works if the whole partnership is involved and not only the coordinator; it is therefore essential to convey the idea of what advantage lies in a good promotion of the final results. The very architecture of the project restricts large-scale dissemination, since it is not possible to organise multiplier events in other countries outside the partnership. It was emphasized by many that it would be useful to review the financial aspect, since an applicable grant is not envisaged, even though it takes many hours of work per day/person to exploit the projects well. Even if this is not the only solution, the future introduction of an economic instrument would facilitate the dissemination, which would acquire even more importance if it were supported by a form of grant: in the current state of affairs it almost seems like an ancillary activity for some.

In light of the various observations made, participants demonstrated great interest in the hypothesis of assigning a one- or two-year grant to support the dissemination of projects deemed particularly valid through an incentive mechanism.

**Question 4:** *What do you think of the European platform to disseminate Erasmus+ projects? Is it a valid tool in your opinion?*

In general, from the views expressed, what emerges is that the platform is used more as a repository than as a means for networking. What is interesting is the motivation behind this approach, according to which rather than following lines already mapped out it is more effective to pursue ideas born outside the box, such as a bottom-up initiative.

### 3.4 Innovation and impact of the strategic partnerships: the European point of view

*Valeria Biggi, Antonella Ratti*

The impact and sustainability of strategic partnerships for innovation have been the subject of extensive reflection at a European level. In fact, the National Agencies and the beneficiary organisations have been encouraged from the very start of the Erasmus+ Programme to question the importance of this aspect as well as the capacity of projects funded under Key Action 2 “Cooperation for innovation and the exchange of good practices” to contribute to the development of lasting results that are transferable to higher education systems throughout Europe.

The closure of the first projects presented in the 2014 Call was an opportunity to encourage debate on this point and to understand the scope of what has been achieved in keeping with the programme’s objectives. Sessions with the project coordinators and dedicated working groups have seen the National Agencies questioning the concept of innovation above all else. This concept immediately seemed to be linked to several aspects, all equally and distinctly fundamental: from the choice of the themes tackled to the composition of the consortium, the disciplinary area impacted, and the tools and methods used to attain the project objectives. So that the innovation at issue can translate into a shared approach at a European level, also in terms of impact and sustainability, certain conditions must be met, whatever the prevailing innovative element of the partnership. Thus, if for a partnership consisting of organisations that are new to the Programme, the impact of the progress achieved at the project level is expected to be visible, particularly on the organisations themselves and on the individuals who have been the driving force behind the project, those partnerships that represent bodies with greater availability – whether management or financial – must be able to more widely reflect institutional internationalisation strategies, in order to guarantee project results that remain stable well beyond the end of the EU grant. Hence it follows that a strategic partnership project which meets these characteristics, far from being a “one-man show”, must be the reflection of a broader vision and therefore anchored to objectives that are essentially institutional.

What emerges from the international Erasmus+ meetings on the results of Key Action 2 Strategic Partnerships<sup>17</sup> is that the most coveted rewarding benefit is the impact on the organisations involved and on individual participants; the achievement of this result being closely related to the increase and improvement in international policy of each beneficiary.

One point of view shared by all is that the involvement of stakeholders from the beginning of the planning activities, after a thorough analysis of needs, is unquestionably extremely useful to obtain maximum impact from the results; this is no easy operation, since it is linked to the agendas of the potentially interested parties (ministries, government departments, and the world of work).

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<sup>17</sup> - Transnational Cooperation Activity: Dissemination, Sustainability and Impact in Erasmus+ Strategic Partnerships (KA2), 16-17 May 2018 in Bonn; Annual Meeting of the National Agencies. In addition, the Commission set up a working group which included the INDIRE Erasmus+ National Agency for Higher Education

There is a general consensus that the impact of the project stops at the local level, which at times is also essential for the implementation of the project. Also in this case it is the topic dealt with that makes the difference while the results achieved can have wider-reaching effects if it coincides with national priorities, to take an example. Transferability of the results is essential if the aim is to increase the international dimension of the participating organisations.

As for sustainability, i.e. the ability of project results to continue after the end of the EU grant, some key factors emerged: the internationalisation strategy of the partner organisations is fundamental, so that the stronger the push is in this direction the more the projects have a long-term impact. It is also necessary to have the support of the executive levels of the institutions taking part to help projects develop potential synergies with other projects managed by the organisation and to integrate the results in the institutional/academic offering.

For the success of the project and its lasting continuity, it is important that organisations make participation in international projects attractive for their staff: the staff must feel motivated and involved in the project's mission. The process of planning for projects' sustainability must begin well in advance; to this end, the project coordinators should be aware that it is necessary to continuously review the results and to use them as tools for dissemination to be shared with interested parties; moreover, they must not underestimate the potential of the involvement and participation of target groups and stakeholders in the development and sustainability of their projects, since feedback from the latter helps preserve projects from any deviation from the initial goals and keeps them focused on current needs. Another crucial factor for sustainability lies in the project idea itself, i.e., a project idea should be taken as a matter of priority in considering impact and sustainability; the promotion of results can help to improve projects' capacity to reach a wider audience and obtain further support.

### 3.5 Conclusions

It is clear from the debates that the impact, sustainability, dissemination and exploitation of projects are interconnected and that we cannot separate one aspect from another. These all play an important role when evaluating an application for a strategic partnership project, just as they do in the final evaluation of the finished project. It is appropriate, therefore, to question the results of an Erasmus+ Strategic Partnership in consideration of these characteristics, in order to obtain maximum efficiency from European grants, while still adopting a realistic approach.

The meeting of 8 June proved particularly fruitful, with extremely relevant observations that led to concrete proposals. The idea of organising international round tables was met with favour, also during the implementation of the project activities in order to promote "mutual fertilisation" between projects focusing on similar topics to encourage new synergies. With a view to capitalizing on the results and hence to optimizing European grants, it is necessary to follow the rationale of good practices by introducing subsequent restricted Calls, intended only for the top projects, to combine the good ideas in Knowledge Transfer Partnerships. Networking, getting to know the territory, and having strong links with the local stakeholders, are all fundamental aspects for the outcomes to have the greatest impact on beneficiaries, in particular indirect ones. It is necessary to build bridges of contact that can facilitate the dissemination of the results with the support of individuals acting as facilitators. One form of sustainability proposal is that of "branding" the final product, then marketing it to ensure lasting continuity. Moreover, investing in the flexibility of the outcomes and creating models that can be transferred to other situations is the key to making them sustainable in the medium to long term.

One opinion shared by all is that the promotion of projects should be supported financially by allocating a specific grant for dissemination activities, to manage them once the contract period has ended. It would therefore be desirable, at least for projects that have distinguished themselves, to provide a grant to support the promotional initiatives.

From international meetings on the same issues, it also emerged that the success of a project is linked to the internationalisation strategy of the partner organisations and the level of involvement of the executive levels of the institutions since their support is vital to ensure that the project results will be absorbed in the academic offer and that channels of communication will be created between the projects managed by the same organisation.

Starting precisely from the academic outputs of projects, organized in a matrix, it is definitely desirable to build an *Erasmus Community* through a new approach based on partnership and collaboration.

The focus group concluded with the hope of a follow-up to this debate, with the organising of international focus group meetings promoted by the INDIRE Erasmus+ National Agency.

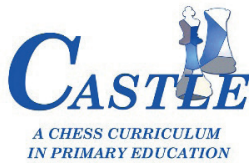






## Chapter 4

### Point of view of the partnership coordinators who worked on the survey



#### C.A.S.T.L.E. A chessboard to learn at school

Alessandro Domenici, “Alfiere Bianco” Amateur chess club, Savigliano (Cuneo)

The C.A.S.T.L.E. Project, A chess curriculum to advance students’ thinking and learning skills in primary education was born from the idea of using the game of chess as a pedagogical tool in primary schools. The project, which ran from 2014 to 2017, was actively addressed to teachers, under the initial thrust of three partners with wide experience in the fields of chess and schooling: Alfiere Bianco in Italy, Deutsche Schulschachstiftung in Germany, and Club Ajedrez 64 Villalba in Spain. The partner schools were: I. C. “Muzzone” of Racconigi (Cuneo), the CEIP San Miguel Arcangel of Villalba (Madrid) and Grundschule Gärtnerplatz of Munich. The mutual starting point came out of the conviction that chess at school can nurture the growth of individuals, by engaging and improving some of humans’ unique skills: logical-mathematical, metacognitive, psychomotor and also those involving a social and relational point of view.

Nowadays, in Europe, the most widespread way of launching “Chess at School” projects relies on chess instructors invited into schools as external experts, at a considerable cost for the school administration. The C.A.S.T.L.E. project can offer a valid alternative to asserting the pedagogical use of chess in schools: the 45 teachers of the project were able to bring the various activities envisaged into their classes in a wholly independent manner and within school hours, understanding by the end of the project that they too could become educators of their colleagues in the future. The intellectual outputs produced to support classroom teaching proved highly effective and were created by various working groups based on an interaction between the experiences of the teachers and the chess instructors. Two manuals on motor skill games

on a giant chess board were produced, along with a manual on “chess on the desk” and a web platform (“Victor’s Chess House”) to integrate the classroom activities in the three languages used for the project. In addition, as Intellectual Output No. 5, a report was produced analysing the impact of the activities on both the students and the teachers.

The partners involved in assessing the impact of the chess activities on the areas mentioned above were the University of Turin (Prof. Trincherro) and two partners from Ministries of Education: the Regional School Office for Piedmont (Dr. Damiani) and the Dirección General de Innovación, Becas y ayudas a la Educación (Dr. Heras Lazaro) of the Madrid region.

The results of the experiments were extremely positive: in the motor skill games on the giant chess board the children in the experimental group improved their psychomotor skills to a greater extent than those in the control group in all the items measured by an external observer, while in the logical-mathematical metacognitive sphere there were undoubtedly positive results even if, compared to the motor skill games, these were less constant. Instead, the teachers who answered the questionnaires about the impact of the project on their professionalisation expressed total satisfaction with the C.A.S.T.L.E. Project activities. What came to light (in 88% of cases) was the competence of the teachers in transferring the skills acquired to their colleagues and, above all, the perception of an “advantage” for the students in the following dimensions: classroom atmosphere; peer collaboration; participation and involvement of all the students, even those with difficulties; generic skills development.

Participation in a project of the FIDE (World Chess Federation) as stakeholders from the outset, greatly increased the interest in C.A.S.T.L.E. at an international level, and for the first time the FIDE officially entered the motor skill games on the giant chess board in its worldwide programme to train teachers (Early Years Skills programme, [eys.fide.com](http://eys.fide.com)).

The European Chess Union (ECU) included the C.A.S.T.L.E. project in a conference held at the European Parliament in Brussels on 24 February 2016, officially approving the addition of the C.A.S.T.L.E. programme for teachers to their own School Chess Teacher Certificate. In Italy, the Italian Chess Federation has entered the entire C.A.S.T.L.E. curriculum on its website, recommending its use to train teachers.

In general, for Alfiere Bianco and the other project partners, having educational models that were innovative but at the same time already tried and tested by appropriate measurements, certainly helped in the training of teachers and in the use of chess in class as an educational tool. Training and refresher projects are an integral part of all the project partners' activities, while the use of motor skill games on a giant chess board, as well as the chess match and web platform "Victor's Chess House", have positively stimulated the project design. Both the partner schools and the stakeholders have drawn inspiration from the C.A.S.T.L.E. experience, to design new activities independently, creating innovative pathways linked to the pedagogical use of chess, in some cases with an aim geared more towards social inclusion and integration (in Italy, for example, through the National Operational Programmes – PON). There are already many FSI/CONI training courses for chess instructors in Italy (in Piedmont, the Marches, Calabria, Sicily and Friuli-Venezia Giulia), and similar types are being realised in Spain, Germany, Switzerland, Sweden and the Netherlands (with requests from as far away as Bolivia, Trinidad & Tobago), on the teaching method represented by C.A.S.T.L.E..

The national chess federations, involved in the aforementioned international dissemination, have already understood the value of the results and it seems that the project has contributed in an innovative way

to "routine" training, both in the school world and among chess federations. To give the C.A.S.T.L.E. project substance, being essentially a project to train teachers, there is a need to increase its dissemination at both national and international levels.

Translation has begun of the intellectual outputs into English, a language not originally envisaged by the project, and the next step will be to redevelop the site [www.castleproject.eu](http://www.castleproject.eu), so that the new communications platform can contain all the data and access to materials in a cohesive fashion of more use to the school world. The two important Erasmus+/European Commission awards obtained by the project, namely, "Good Practices" and "Success Story", will widen its visibility and will be fundamental in reaching a higher number of teachers, thanks to the interest which – we hope – will come from the educational sectors of the EU Member States and the MIUR.

In order to ensure the project's continuity it will be vital in the near future to be able to involve a good number of teachers in the C.A.S.T.L.E. training programme so that they can try out the model activities, successfully bring them into their classrooms, and ultimately pass on the pedagogical use of chess to their colleagues.

As regards Italy, we have already informed Italian schools of the possibility to use the manuals and videos produced by C.A.S.T.L.E. free of charge, suggesting at the same time the prospect of producing teacher training courses recognized by the MIUR through the SOFIA platform, since each state school has the chance to organise this type of course using the "Carta del Docente" [teacher's bonus] to cover the costs. We will also have a way to communicate with many teachers through the eTwinning platform, thanks to the webinar<sup>18</sup> to be held by the INDIRE Erasmus+ Agency this coming October.

At an international level, Alfiere Bianco will be participating in the forthcoming Chess Olympiad (September/October 2018, Batumi, Georgia), at the two General Assemblies of FIDE and ECU to better disseminate the C.A.S.T.L.E. model among the 155 chess federations from all over the world that will be attending, in the hope that they will use it and also inform their respective ministries of education of its existence.

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18 - A recording of the webinar is available on the eTwinning platform: <http://etwinning.INDIRE.it/supporto-e-formazione/training-online/webinar/>

Ultimately, C.A.S.T.L.E. wishes to be an aid to change the Member States' educational policies, completely in line with the European Parliament Declaration of 15/03/2012, which called for the introduction of "chess at school" in the EU Member States' educational systems, suggesting an easy-to-use model, designed and tested with precision (more than 8,000 measuring tools compiled and analysed in three years), without the costs associated with external experts and that could be disseminated independently by schools, in-house, but also to other associated schools.





## School & Work - Connecting the skills acquired at school and in the world of work

Giuseppe Italiano, CIPAT – Consortium of VET Institutes for Tuscany, Florence

The theme of the “School & Work” project is of prime importance and timeliness for Italian Schools, beyond any contingencies and controversies. Connecting the skills acquired at school with the world of work, both as an output tool and a moment for guidance and individual potentiality, represents a challenge, first and foremost for the teachers and their cultural growth. The project dealing with these issues created general guidance tools (guidelines, online training courses) but also products that are portable at an educational level (interviews, testimonies, research into professional profiles, aptitude and skill tests) in a non-stop synergy and exchange between the project partners.

The schools involved in the project, which reported to the CIPAT consortium, had the opportunity to participate in the product development (in particular two professional institutes: “L. Bianciardi” of Grosseto and “F. Datini” of Prato) whose classes and teachers were directly involved in the development, with subsequent testing on an experimental basis in those classes involved in work-related learning schemes (fourth year).

Other institutes and figures linked to schools (e.g. courses for dropouts, or vocational guidance counsellors) had the opportunity to use the various sections of the web portal through available online resources. Here, the aptitude and skill tests section represented the most important and most widespread tool used in practice.

For teachers, again involved through dissemination initiatives promoted by CIPAT, the resources of the training course, available also in Italian, were particularly appreciated. This section, once again the fruit of synergies between the various partners, allowed the launch of a reflection on the know-how that teachers should acquire or strengthen in the tricky phase of constructing a personal project for their students. Meanwhile, the students greatly appreciated the video section, aimed at presenting success stories in the various areas of work, from the point of view of

its connection with education, with transverse skills, with the ability to accept a challenge even after failures and difficulties. In addition to the more institutional videos, films made by their peers were shown to the students, ending with some time for discussion and reflection. From an educational point of view, this was the section that was appreciated most, with the possibility of using it in class and giving birth to opportunities for profitable, lively debates.

As a consortium whose members number more than 40 institutes from around Tuscany, CIPAT has always been a promoter of initiatives to exploit the results of these and other strategic partnerships in which the themes are never sectoral and specific but embrace the entire range of the education sector for students from 14 to 19 years of age. In fact, inside these products is an evident connection with the strategies to counter dropouts and early school leaving, through teaching methods and the cultural development of the operators involved in schools:

[\(https://schoolandwork.pixel-online.org/\)](https://schoolandwork.pixel-online.org/)



Underlying the project was an analysis of the difficulties encountered by European students in mathematics and science subjects, which are often the cause of early school leaving.

Indeed, as demonstrated by recent studies, in Europe in 2009 alone the number of students with insufficient skills in science subjects, according to the PISA standard (Program for International Student Assessment) was around 17%. In Italy, the percentage was higher, at around 20%. The numbers for mathematics were the worst. In 2009, the number of students who failed to reach a sufficient mark in mathematics in Europe as a whole was 21%, while in Italy it stood at 25%.

Mathematics in particular, but also many scientific disciplines, are too often perceived by students as something abstract and unconnected to their daily experiences, resulting in a lack of interest in these disciplines and their progressive abandonment, in spite of their fundamental role in economic development, research, and the labour market in general.

For this reason, it becomes fundamental for schools to develop educational methods that encourage interest and motivation when it comes to mathematics and other scientific disciplines.

Innovation in educational technology and the introduction of ICT can represent effective ways to counter these difficulties, by favouring the direct application of theoretical concepts to the realisation of a project, or the practical resolution of a problem directly applied to real life, allowing an understanding of the usefulness of the notions learned, while fueling creativity, the desire to know, and independence.

To this end, experiments carried out in 2013 by 21 schools in the United Kingdom solutions using 3D printers applied to the teaching of STEM disciplines (Science, Technology, Engineering, Mathematics) were developed, tested and modelled.

The work followed two distinct complementary approaches:

a) project work

b) disciplinary experimentation, including the printing of three-dimensional objects to support reflective observation and the abstract conceptualisation of the theories of mathematics, physics and other scientific disciplines.

The project involved five schools and 600 students between 14 and 15 years of age.

In addition to our main institute, other partners included schools (five), businesses and training centres and services from seven European countries: Italy, the United Kingdom, Spain, Poland, Turkey, Greece, and the Czech Republic.

The activities were of different kinds:

Experiments guided by students as project work, in which the students themselves proposed a series of objects that they would print, in line with the learning objectives applied to STEM disciplines and their school curriculum, while the teachers offered support with selection and feasibility studies. The objects picked in the various countries ranged from scales (IIS Berenini), to mobile phone covers, key-chains, and self-heating cups...

Experiments guided by teachers for skills development in mathematical literacy. The proposal came from the teacher in order to develop something connected with the programming of the subject in question. For example: a geometric interpretation of Pythagoras' formula (EPAL Chanion, Greece), a small working rocket that was launched (Kirby Stephen Grammar School, United Kingdom), the historical sites of the city of Adana (Sabancı Mesleki ve Teknik Anadolu Lisesi, Turkey), a series of progressively halved geometric solids (IISS Gadda, Italy) and solids on an inclined plane (the mechanical paradox of the double cone) (IISS Berenini, Italy).

Experiments guided by teachers for skills development in scientific literacy. A section of a two-storey building (EPAL Chanion, Greece), a 3D LED (Kirby Stephen Grammar School, United Kingdom), the periodic table (Sabancı Mesleki ve Teknik Anadolu Lise-



si, Turkey), an animal cell (IISS Berenini, Italy), atomic orbitals (IISS Gadda, Italy).

The works were uploaded onto an open-source portal ([Thingiverse](#)) with all the instructions to replicate them. In addition, all the material is present in both English and Italian on the site <http://www.printstem-project.eu/>.

A multiplier event was also organized, with an invitation sent to all the schools in the region and with the presence of school authorities from the Municipality, the Province, and the Region. The 70 participants were shown the project results, followed by laboratory demonstrations in the afternoon.

In addition to being available online, the works were disseminated by sending materials to teachers who requested them, and demonstrations/courses were organized at junior and senior secondary schools that requested them, including some outside the province. The local press gave great prominence to the project and the related events, and the presentation of the project became a key feature in career guidance activities. Last of all, to conclude the project and introduce it into a broader context of collaboration and communication between schools and the world of work, a final conference was held at the headquarters of the Industrial Union of Parma with the presence of such VIPs as the CEO of Dallara Automobili, Andrea Pontremoli.

During the project, despite or perhaps precisely because of the initial difficulties, new synergies developed between teachers of the various disciplines and the two sectors of the school (technical and gymnasium). New ways of working were introduced in terms of structure and the fact that intellectual outputs were expected. In addition, collaborations with Italian and foreigner partners and the responsibility of being a leader and having to govern the whole process undoubtedly increased the level of awareness and “maturity” of the project on the part of the whole school (given that everyone, even those not directly involved, was always kept up to date on the evolution of this important project).

After the conclusion of the project, the sense of achievement, i.e. the satisfaction of being able to fully realize what had been designed and of having had an interesting educational impact, acted as the flywheel

to trigger other European projects with some of the previous partners and also with other new ones.

New collaborations began and procedures for planning, organisation, realisation, dissemination, and reporting were also put into practice, which increased the know-how of the school’s management and administration.

As for the students, they were aware that their own class’s experiment formed part of a context in which other students like themselves were tackling the same educational challenge in other European countries, and they also knew that the results of all their work would end up being shared. All of this increased their motivation and sense of responsibility along with a constructive desire to produce quality work. The experience also led to an improvement in their language skills and relational capacity, along with an increase in the use of digital tools.

At local, regional and national levels, through the school’s site and newsletter, the stakeholders were kept up to speed on the development of the project as well as its highly favourable results, and the fact that it was picked as an example of good European practice for the Bonn Conference held last spring. The partnership felt extremely gratified and this encouraged everyone to continue European projects in similar areas, but not only.

The theme itself, the use of a 3D printer in the teaching of STEM disciplines, certainly urged others to start their own experiments starting from our results.

Within the institute, the 3D printer is a tool available to those who wish to use it as an educational tool in a similar way to its usage during the project and yet another Erasmus+ KA2 Project on the use of the drones in teaching is already up and running (including some of the previous partners). Moreover, what has been gained is already the starting base for teaching work and for other projects, European and otherwise. That first European project resulted in participation in other European and national projects,

involving some of the Print Stem teachers, but also others who had benefited from our colleagues’ experience in the previous Erasmus+ project.

In other institutes, we are exporting – on request – the expertise gained through the Print Stem project.

What we can say is that the outcome of the experiment was a greater opening up to Europe, a better ability to work in a team, the growth and development of professional relationships between colleagues, and, accordingly, the development of a capacity for exchange and sharing.

The transferability of the intellectual outputs produced, thanks to the fact that they are fully available on the Thingiverse portal and the dedicated website with detailed descriptions of the materials and procedures to be used, will make it possible for anyone who is interested to access and reproduce the project, so as to enable experimentation on a wider scale and more significant data collection from the point of view of quantity with respect to the original assumptions.





## Innovative Learning - Lessons on Learning

Angela Nadia Cattaneo, Francesca Benedetti, Maria Giovanna

Colombo, Elena Petruzio, Rita Reina. ITE "E. Tosi" – Busto Arsizio (VA)

"Rethinking Education" is the demanding title of this European Commission report, which underlines the need to rethink educational models and revitalize techniques and methodologies in order to fill both the "digitized" generational gap between teachers and students and the disparity between the objectives pursued at school and society's actual needs. This necessarily leads to an analysis of the potential of new technologies in teaching and the trialling of new techniques. Rethinking education nowadays cannot be confined to the strategic use of new technologies or educational resources available online, to experiments like the "flipped classroom" or other innovations aimed at flexible learning. Above all, educational systems are being called to contribute to the building of key skills, both basic and transverse. A fine challenge for economic institutes this, which primarily translates into a promotion of entrepreneurship and the development of language skills.

Bearing this reference framework in mind the project identified as key objectives:

- giving encouragement and support to the changes that are taking place in teaching
- providing materials organized to fit the educational situation in Italian schools
- providing innovative materials characterized by the possibility of adapting them to the class and changing the lessons over time
- offering teachers innovative materials in English to carry out CLIL activities
- developing the digital skills of both teachers and students
- providing students with a new opportunity for self-learning, effective because it is sustained by their own motivation

To this end, 20 Learning Pathways were designed, put together using Blendspace and organized in learning units usable for different courses, editable over time

and adaptable to different educational situations.

The learning pathways, SLE micro-lessons on a Tes model: [www.tes.com](http://www.tes.com), are available in English and lend themselves to CLIL teaching. They are available on the [project website](#) with an active link from the partner schools' sites, and have been created by some teachers, partially in collaboration with the students, tested by others, and continue to be accessed and enjoyed by various disciplinary groups.

Disciplines such as Economics, Science, and Social Studies using innovative methodologies through case studies to analyse socio-economic situations, encourage entrepreneurial skills and bridge the gap between education and real life. Given that the participating schools focus on economic and technological challenges, the case study developed was the design of a marketing campaign for an important sector that schools operate in.

The five marketing campaigns carried out represent an operational model that has proved useful on an educational level and some have even seen the product they wished to promote put into production.

Specifically, the students of the coordinator school produced a mug with the skyline of the most representative buildings of the city's industrial and social history, instead, the English students produced a series of promotional items: scarves, greetings cards and envelopes with designs reflecting the project partners' cultural and artistic traditions. These products were useful for promotion at local and international levels and represent a positive advertisement/witness of local history and traditions.

The impact was undoubtedly significant and can be ascribed to great openness on the part of the teachers in using materials available online for daily teaching, accompanied by an increased interest in educational innovation and experimentation and a willingness to design other pathways to use with their students or to be shared with others.

The use of SLE materials in various subjects and in different languages constituted a wealth of useful elements for the CLIL activities and a wide range of examples on the basis of which to produce micro-lessons for a Flipped Classroom. Each learning pathway is related to a programming card containing details on the user, the educational and linguistic prerequisites, the various phases of the activities (preparatory, operative, reconstructive) and the assessment procedures. This facilitated the use of the lessons and the replicability of the teaching model by other teachers not involved in the implementation in the hope of encouraging them to create new ones.

There were some online projects with schools from the Province of Varese (REMO CLIL and “The Ideal City”) which returned to the innovative learning model. The proposal to arrange educational pathways that used both open-source and original material attracted other schools. In order to make the materials accessible, exercises in the guise of games were also prepared with the plus point of persuading students to tackle themes for study or deeper investigation.

During the event to disseminate the project, students presented the results obtained at the end of the learning pathways and the innovative learning procedures, highlighting the strengths of a teaching of this kind. They welcomed an approach that led to independent study and was repeatable until the acquisition of the contents. Some of the students of the schools involved particularly appreciated working in an international group, an experience they had never experienced in a normal study context.

The impact at local and regional levels was a significant result of the workshop activities, the multiplier events, and the meetings to promote the Erasmus+ programme at which the Institute’s teachers were often asked to speak.

Instead, the impact at a national level was mainly entrusted to the National Agency; the institutes involved, despite being structured and organised to disseminate the results and promote the innovations introduced by the project, were unable to achieve such a large-scale response.

Particular attention was paid to the selection of the various stakeholders: students of different geographical origin and type of school, professors of various

disciplines, representatives of school institutions, the Regional School Office, the Territorial School Office, and representatives of the world of work.

The testing phase involved all the partner schools, while the pathways were tested by several teachers along with their students, and on the occasion of assignments, a testing phase was always included.

The underlying pathways and methodology were discussed in the disciplinary departments and used by teachers and students from local schools to carry out the CLIL modules. Multiplier events were accompanied by a testing phase on the part of the teachers and students of the schools invited. The learning pathways and marketing campaigns were rendered accessible through the project website where the assessment questionnaires used in this step are available.

In order to develop the materials produced and to support the proposed methodologies with a view to continuity, the dissemination of the materials themselves is underway, flanked by a phase of guiding teachers who did not contribute to their implementation to help them understand the way to use them. There are also targeted updates and occasions for exchange on the potential of OERs and the new teaching methods.

The learning pathways produced continue to be enjoyed by the various disciplinary groups and as a result several teachers, who were not originally involved in the project, are using this material in their classes and also have the opportunity to adapt the materials to their own students’ needs.

All materials are available on the project website, whose link is active on the sites of the partner schools and are therefore available to all those who see a use for them.

The learning pathways improve familiarity with the web and with the digital resources used, create greater attention to the quality of sources and an openness to the use of other digital tools that are comparable but with different characteristics.

The realisation of the “Innovative Learning” project was therefore a fruitful experience to ‘rethink education’ in the building of knowledge shared with students and verified and evaluated through them, in the activation of a process of cooperative learning that

also included the teachers, in experimentation with innovative teaching methods stimulated by the use of digital technology, also in TEAL mode, in the organisation of times and spaces for learning geared to the idea of a flexible school open to developing different and varied learning experiences and capable of transforming knowledge into know-how and know-how into knowing how to be.

In particular, the results are geared to sustainability and the sharing of the proposed methodologies:

the Share@Tosi Institute platform to share materials produced by teachers and students

- the birth of “Digital Cafés” to exchange good teaching practices that make use of new technologies
- the production of material in a vertical curriculum for the dissemination of a culture of safety, The IN-DIRE “MemorySafe school” Call
- the birth of an action-research community involving several schools of the territory
- the experimental approach of schools open to using Raspberry to design/study/experiment with the way of educating students/teachers used in the Debate
- the experimental assignment of a timetable for disciplinary coordination to produce CLIL material.



The objective of the CA@SE Competence assessment and social entrepreneurship project was to develop the employment potential of the less well-qualified working in the health and care work sector via social entrepreneurship courses.

The idea of the project was born from the necessity of the partners – public and private bodies – to train staff (educators, professionals, work coaches, assistants and other third-sector operators) so that they can:

- 1) assess the formal and informal skills of those less qualified who work in the health and care work sector, especially migrants;
- 2) offer career guidance services to support the start-up of social enterprises.

The partnership developed the following works over the two years of the project:

- The CA@SE Assessment Manual which contains national legislation on the creation of social enterprises, a section on the various professional figures in the health and care work sector with an indication of their EQF level, and methods to assess people's competence.
- The CA@SE Training Manual is a tool intended for trainers to update and qualify educators, vocational guidance counsellors, public employees and third-sector operators, and to train them in the assessment of non-formal and informal skills of people with low qualifications (with specific reference to migrants) in the health and care work sector. This manual contains a module to improve operators' skills in offering guidance and support for people with low qualifications on the start-up of social enterprises, beginning by writing a business plan. The CA@SE Training Manual has been tested in all partner countries using a "blended learning" methodology (which included a combination of lectures and e-learning) lasting a total of 32 hours.
- The CA@SE social business plan model: this is a business plan template that was used by profession-

als at the CA@SE Career Counselling Service set up in each partner country from March to October 2017. The professionals involved in the service were trained beforehand thanks to a pilot scheme and a joint staff training event for all the partner organisations held in Glasgow in March 2017, which offered an important occasion for European professionals to swap opinions. In addition to the business plan template, a CA@SE Protocol was also developed, which provides guidelines to organise and promote the CA@SE Career Counselling Service; then there is the CA@SE database which is a collection of all the local public and private institutions that offer services to businesses and stakeholders to support the creation of social enterprise or paths of self-employment.

Thanks to the intellectual outputs and in compliance with the objectives of the Europe ET 2020 strategy, the CA@SE project seeks to provide a response to the high rates of unemployment (10% of the active population, which is equivalent to 23 million people in Europe and 12.8% in Italy), which mainly means people with low qualifications, in addition to tackling the problem of the ageing of the population with the consequent need for care work.

The impact of the project was mainly on the partner institutions involved and on their staff, who benefited from a training course designed to improve their professional expertise in the assessment of skills, career guidance, and the development of business plans. At a European level, a total of 154 professionals were involved from educators to social workers, tutors, and civil servants.

The impact in Italy has been significant, given that the Girasole cooperative – the project coordinator – began offering a guidance service for migrants and the low-skilled that will remain active (on appointment) until at least the end of 2018. Brand new collaborations with the project partners also arose, with stakeholders being identified over the two years and with some migrant facilities that were involved both



during the pilot course and the career counselling service. In addition, the counselling service was advertised by the Consorzio Mestieri at job centres in Florence. Lastly, the Italian partners intend to present the CA@SE training course to be covered by inter-professional grants (FONCOOP) in order to continue to offer training to their employees, volunteers, and other professionals also after the project has ended (at least once a year).

The project has had a significant impact on its beneficiaries: in total, 205 migrants and people with low qualifications used the career counselling service in the partner countries while 55 business plans were developed at a European level.

One of the main objectives of the partnership was to make the CA@SE project products available to the public. To this end, all the products and intellectual outputs are downloadable free of charge from the project website (linked to the partners' websites) and remain active for at least 2 years after the project has ended.

The intellectual outputs relate to general topics that are easily adapted to all contexts: how to approach the target group of migrants, how to facilitate their integration, how to help them in an active search for work, how to assess their skills, how to improve their skills in the contexts of communication, motivation and orientation, and how to write a business plan. The only section that differs for each country is that concerning administrative issues with regard to a start-up company, within the CA@SE social business plan model (O3).

The project has been presented to almost 400 stakeholders, including public bodies, training agencies, adult education centres, private companies, universities, chambers of commerce, NGOs, social services, organisations and associations that operate in the field of disability and migration, and job centres. Thanks to the Facebook page, the project website, and the various e-newsletters sent by partners, 52,000 people have been reached throughout Europe.

The Facebook page has become one of the most important communication channels to keep stakeholders, beneficiaries, and the general public up to speed on the project activities. From a qualitative point of

view, the main impact of the project is the acquisition of methodologies to assess professional skills and entrepreneurship in the social and healthcare sectors. In 2015, after the approval of CA@SE, the partnership created and signed a European Development Plan, to ensure that the project results will continue to have an impact until 2020 at least.

The results already achieved are:

2016: the approval of an AMIF project (Asylum, Migration and Integration Fund); "EU-Roadmap: Refugees and Vocational guidance, Assessment Desk, Methodologies, Activities and Participation", which two partners are involved in (FormAzione Co&So Network – FCN, and the Bridges Programmes) within the scope of which a vocational guidance service was opened up, similar to that of CA@SE in Italy, in Scotland, Germany, Austria and Greece, to offer support when employing migrants and refugees in terms of skills assessment; 2017: approval of two KA2 Erasmus+ projects involving FCN in the partnership: JOB TO STAY and FROM YOUTH TO WORK. JOB TO STAY promotes the working inclusion of refugee women through the development of a skills-assessment model, where the CA@SE Assessment Manual was a good basis to start from. Meanwhile, the "FROM YOUTH TO WORK" project aims to provide a vocational guidance service to disadvantaged young people (including migrants).

2018: the approval of two AMIF projects, "EUVOICE: European Volunteering and Integration through Cultural Experience", and "EMME: Enterprises Meet Migrants for Employment". These projects involved Co&So (the consortium of social cooperatives which both Il Girasole and FCN belong to) and, in part, were based on the results and networks of organisations developed in CA@SE. The Girasole cooperative is also working on a new initiative: to create an association of family assistants (a Carers Association). A significant impact was on the Bridges Programmes which strengthened the links with companies resulting in a visit from the Scottish Government's Fair Work Directorate to the Bridges Programmes to become acquainted with the CA@SE tools and share the results with organisations that deal with Syrian refugees in Scotland. The Bridges Programmes are currently collaborating with the Aberdeenshire Local Authority, a public body in the north of Scotland, to apply the CA@SE methodologies in working with migrants. Fi-

nally, the Scottish Government has approved a new development project which Bridges will be involved in to help set up a validation service for qualifications obtained overseas. The CA@SE tools, in particular the Assessment Manual, will be presented as a good practice and adopted. The CA@SE project represents an important innovation for the organisations involved and also to support the employment of the low-skilled, besides having launched new services for citizens with fewer opportunities and offered concrete answers in the health and care work sector. (<http://www.case-project.eu/>)



This project geared its efforts to a precise target: migrants with medium-high skills but who are struggling to enter the world of work or are only able to access working positions below their potential. These are people who, although high-skilled, are considered by the world of work as low-skilled.

The objectives achieved were:

1) promoting entry to the world of work for migrants with working positions below their real competence level (or, in many cases, who had been excluded from any type of employment), by promoting and enhancing the soft skills they possessed as a key to success in accessing the labour market;

2) developing approaches and services in organisations for assessment, training and work placements, in particular regarding the inclusion of high-skilled individuals who are considered low-skilled from the point of view of employment:

3) developing approaches and models for assessment, empowerment and the promotion of soft skills for migrants with medium-high profiles.

IO - Intellectual Output:

IO1: Framework of Soft Skills required by Companies for High-Skilled Migrants

Development of research aimed at identifying the Soft Skills most often requested by companies for high-skilled migrants (with particular attention to people with skills ranging from levels 4 to 6 of the EQF). This research, which identified 12 Top Soft Skills, offers a good basis for all human resources, and is therefore transferable to other targets, and identifies elements to define and redesign training programmes and personnel selection activities.

IO2: Model of Soft Skills Assessment (MOSSA)

Included in a wide-ranging, integrated system, MOSSA is the first step whose focus is the evaluation and exploitation of the 12 Top Soft Skills with the purpose of identifying those that need strengthening and pro-

moting in line with the project to boost the employability and career development of individual medium-high skilled migrants. Ample room is devoted to activities which, through the use of story-telling and self-assessment within simulated business situations, promote the emergence of personal and life experiences that can translate into recognized competence and soft skills.

IO3: Model of Soft Skills Empowerment (MOSSE)

Instead, MOSSE is a module geared to strengthening the 12 Top Soft Skills with the aim of boosting the employability and career development of individual medium-high skilled migrants. It includes training sessions to be chosen from a catalogue of 25 reinforcement measures aimed at the 12 Soft Skills. The tools and activities have been designed in a way that allows participants to use them independently.

IO4: Model of Promotion and Self Promotion (MOSP)

MOSP is the third module of the integrated system. It lays down a pathway for the promotion and self-promotion of the 12 Top Soft Skills identified, assessed and strengthened to boost employability and career development of individual medium-high skilled migrants. The tools identified are a portfolio, a video curriculum and professional social media, chosen for their high dissemination and communication potential. The project has helped to bring about significant changes both internally, and among the network of individuals spread across the territory. In particular, with respect to the internal changes, key elements of impact were:

- skills development and approaches to the two focuses of the project: soft skills and the target of medium-high skilled migrants
- acquisition of innovative practices (those developed through the IOs), experimenting with integrated schemes of assessment, training and promotion to boost the employability of medium-high profiles

- identification of areas for reproduction and dissemination of the results, also by promoting new spheres of application
- growth in the procedures and approaches to company relations, to provide services related to the assessment and certification of non-formal and informal skills, not only professional, and in particular for migrants

Instead, with respect to the impact on the network and the territory, thanks to the project results we have seen:

- strengthening of partnerships with other actors working in the spheres of training, vocational guidance and the placement of foreigners and adults
- closer collaboration with the business world (see above) as benchmark stakeholders when it comes to employability and competitiveness
- integration with existing initiatives and projects or those initiated subsequently
- dissemination of materials required by different stakeholders of the territory who have expressed a growing interest in soft skills and the target of foreigners with medium-high skills, and which has allowed the promotion of integrated actions and the participation of different actors.
- Already in the implementation phase of the IO, the elements of sustainability that would favour their maintenance even when the European grant ended were being considered.
- In general, the sustainability of a project can be divided into:
  - subsequent designs and services dedicated to training and assistance for organisations interested in acquiring the materials and results produced;
  - the presence of trained operators and centres capable of using the materials and methods developed and of promoting their dissemination and exploitation
  - active involvement of the project target group, also through the world of associations, in order to increase awareness of the results achieved by the project as a value useful to the integration project
  - the involvement of public authorities, plus the ed-

ucation and private social sectors in promoting the use of the project results.

The strategies introduced to supplement and implement the exploitation of the models and results concentrated primarily on defining the areas of potential integration with models and approaches already adopted for the employment, guidance and training services that our organisation creates. To this end, staff training sessions were set up to promote awareness of the results and their wide reach in the context of the consolidated activities managed by the institution.

Alongside internal refresher courses, meetings were organized to swap opinions and disseminate results which saw the involvement of public institutions that deal with training and work placement, in particular for migrants. Flanking the training and work placement, particular attention was also given to the issue of reception for asylum seekers and refugees, as a scenario to exploit and disseminate the VHSM results. This theme is particularly present in the locations where the Casa di Carità Arti e Mestieri Foundation works and makes it possible to offer innovative interventions intended to promote a process of proactive integration. Finally, it should be emphasized that the territory has shown a growing interest in the material produced since it delves deeper into the issues related to soft skills cited in the learning standards which are the basis of the work to revise the pathways of vocational education and training.

From our point of view, the Erasmus+ projects represent a major opportunity but also an important challenge for an organisation like ours. In particular, the Valorize High Skilled Migrants project was an inspiring experience that allowed us to develop new themes and experiment with different methods and innovative approaches for our interventions geared to foreigners.

The European comparison between partners of different cultures and different approaches on the issue of the integration of foreigners, never so current as now, made it possible to work on common results where each individual could recognize him/herself. To date, the value of what has been done can be measured in the increased expertise of the staff, in the services and methods promoted for foreigners,

and overall in the wide-reaching projects that our institution has built on the themes of exploitation, strengthening and promotion of soft skills as a key to enter the labour market for foreigners, but not only. Confirmation of the value of what has been achieved has also come from the DG for Education, Youth, Sport and Culture of the European Commission which selected our project as a “Success Story”. This recognition is awarded to projects that have distinguished themselves by their impact, their contribution to policies and creative results which can be an inspiration for others. This recognition has strengthened our awareness of having fully responded to the challenge we set ourselves initially and that, with the contribution of an active partnership, this has allowed us to take innovation, development and change to the territories where we are present. Moreover, on the occasion of the first European Summit on Education, held in Brussels on 25 January 2018, we were invited to talk about our project and promote it together with others, helping to create on this occasion new links and new networks between actors who work on similar themes. The strength of the project is growing, therefore, and its inspiring energy continues (<http://valorize.odl.org/>).





## Tinkering - Thinking with the hands

Maria Xanthoudaki, Leonardo da Vinci Museum of Science and Technology, Milan

The project called “Tinkering: Contemporary Education for the Innovators of Tomorrow” was coordinated by the Leonardo da Vinci National Museum of Science and Technology and was carried out between 2014 and 2017 in collaboration with the following partners:

Deutsches Museum, DE Mobilis Science Centre, HU Jedlik Ányos Gépipari És Informatikai Középiskola És Kollégium, HU, NEMO Science Museum, NL, University of Cambridge, UK, and the International Centre For Life, UK.

The project advisor was the Exploratorium in San Francisco, USA.

The project emerged from a need to have people who can respond to the global challenges of the contemporary world, who are competent in science and technology, confident and critical thinkers, socially committed, and with an attitude of innovation and entrepreneurship. The project work responded to these needs through a learner-centred approach aimed at education in STEM subjects (Science, Technology, Engineering, and Mathematics) and the development of 21<sup>st</sup>-century skills. This particular approach, known as Tinkering, was translated into a series of activities and tools built by the project and disseminated at a European level through cooperation between partners.

Tinkering is the term used to define an innovative teaching method that reflects current trends in the field of education and that of the “makers” and was perfected for the first time by the Exploratorium in San Francisco. It promotes an individual’s active involvement in activities of a scientific nature as ways to relate to the surrounding world and understand it more deeply. It also promotes capacities and skills that can be used in a variety of contexts to become useful for life in general.

The objectives of the project were:

- to enrich the capacities linked to STEM subjects and the skills of the 21st century: creativity, innovation and entrepreneurship

- to promote a pedagogical approach focused on the learner through Tinkering and implement this in scholastic and extra-scholastic contexts throughout Europe
- to improve adults and students’ relationship with science and technology
- to encourage cooperation and the exchange of expertise and practices between formal and informal educational institutions.

The work of the consortium produced various activities and resources, first and foremost, five intellectual outputs. All the material produced is available on the project website:

[www.museoscienza.org/tinkering-eu/](http://www.museoscienza.org/tinkering-eu/).

The intellectual outputs focused on the development of new Tinkering activities for adults and schools, while pedagogical materials were created to accompany these in order to provide all the information necessary for the implementation of the activities in educational contexts outside those of the partners. All this is based on a methodological document which, using the literature and reflections resulting from the trialling of the activities and the training sessions, defines the scope of action and its particular characteristics.

In addition to the intellectual outputs, the project carried out a series of training activities (which involved around 450 educators) and multiplier events for the project target, attended by 27,213 people.

The project has had the following general impact:

The partner institutions have introduced new activities into their daily practice, not only during the periods envisaged by the project but also in a permanent manner, thus enriching their educational offering.

The possibility to work on common plans and goals gave partners the opportunity to acquire new skills in view of the implementation of Tinkering in their practice, but even more, an enrichment of their facilitation and communication skills.



The opportunities for exchange and the trialling of the activities in partner institutions other than their own was an initiative that kindled the staff's motivation and changed their way of thinking when working with visitors.

Moreover, the project's structure encouraged the creation of networks between institutions and individuals at a local level who benefited from the various activities and resources. The latter took part in the events and programmes organised, however, their involvement extended well beyond the specific participation. They had the opportunity to understand the potential of Tinkering in different contexts, and what we noticed was a growing interest in finding out more about how Tinkering can become a genuine tool of learning and growth.

At a European level, the most significant impact has been the specific interest demonstrated by several scientific museums to be trained in the Tinkering method, in order to adopt the approach and the activities in their practice. At an international level, the collaboration between the consortium and the Exploratorium of San Francisco has helped spread the word, while all the project resources are now available to a wider community.

The project had two priorities:

a) A reduction in the number of low-skilled adults: the most important contribution made by the project was the active engagement of adult learners to develop their skills. Too often, active/experimental learning, or even museums themselves, are considered only for children, with the risk that adults lose an important opportunity to engage in learning and to develop their skills and knowledge.

b) An improvement in the relationship between young people and the sciences: the project worked in particular with experts in young people's disaffection with science, especially in their school years. Having seen the positive impact created by the involvement of students in the activities, we wanted to explore the potential of Tinkering in improving young people's relationship with science. One of the questions that surfaced during the project is whether it has the potential to help solve disaffection in school, especially when it comes to science education. The process of designing, testing and implementation of the ac-

tivities in school groups offered an opportunity to observe and reflect on the nature of the experience and on the situations of active participation that were created during the Tinkering activities and how these could be used with students at risk of disaffection.

With regard to disaffection, the resources and methodologies usually taken into consideration as innovative support are those from the field of art that contribute to the development of integration, motivation, and self-confidence, while science seemingly has no role or does not fall within the objective. It appears that it is unusual to work for science or to use science in underprivileged environments. We believe that Tinkering can change this, not only because of the methodology it promotes but also because of the very nature of its activities which lie midway between scientific technology and the arts. In both cases, multiplier events have helped to reach a large number of both target groups, and thus extend the impact of the project on a larger scale.

In addition to the target groups and individuals the project activities targeted, the following stakeholders were reached:

Methodological framework: adult educators and experts in pedagogy and/or STEM education, teachers, trainers, academics, and museum specialists.

Tinkering activities for adults: adult learners in family groups, adult educators and trainers.

Tinkering activities for schools: students, educators in formal and informal learning contexts, teachers, and trainers.

Pedagogical materials: adult educators, teachers, experts in pedagogy and/or STEM education, museum specialists, teachers, and trainers.

Each partner institution leveraged its experience and contacts in local channels and on the social media to publicize the project and Tinkering itself as a practice among the general public. **The involvement of the internal staff of the organisations taking part** was made possible through training sessions for them plus regular internal communications, such as bulletins to inform professionals whose practice could be enriched by the results and involvement in the project, or other personnel who might benefit from the knowledge of what was going on within their organi-

sation. In addition, **visitors to the science centre or participants in events**. Groups of adults and families were contacted through marketing devices such as flyers, mailing lists, and social media channels. Each partner institution used their own channels in a way that was most suitable to reach the selected local and regional audience, explaining Tinkering and inviting people to multiplier events.

**Local teachers and professionals in informal education** were contacted by each of the partner institutions through emails and newsletters, training sessions, lectures, and events. They constitute a key audience given that they can use the Tinkering methodology to bring their work up to date in schools and other learning contexts, and thus reach a much larger group of young people with respect to the partner institutions on their own.

**Educators and professionals in informal education at national and international levels** were contacted through sessions and discussions at national and international conferences and through social media such as the Twitter account, @TinkeringEU. The impact was that of providing activities which professionals could try out for themselves and adapt to their own audiences, and to discuss the methodology and techniques to facilitate Tinkering.

The resources that the project offers are created in such a way as to be easily disseminated and used outside the consortium, well beyond the institutional or national context. They are permanently available on the project web page. In addition, the activities are a permanent part of the partner institutions' educational offering. They can give a thrust to further fresh training opportunities among educators. Their implementation and maintenance can be included among the ordinary costs and budgets for each institution.

The pedagogical materials will remain a solid basis for further training courses, in such a way that the methodology proposed by Tinkering can become deeply ingrained in the institutions' learning approach, while helping other approaches too, for example, inquiry-based learning.

Multiplier events, tested during the project, can be easily reproduced in a lasting manner. Moreover, the project was the starting point of continuous activities and reflections on the Tinkering methodology. This

inspired the creation of a second Erasmus+ Project, Tinkering EU: Building Science Capital for ALL, which began in 2017 and will continue until 2020, bringing Tinkering into schools and focusing specifically on teachers and students working in disadvantaged communities. In the context of STEM education and 21<sup>st</sup>-century skills, we believe that Tinkering has immense potential which we intend to use long term and that the project therefore represents an important innovation opportunity in the field of education. The first innovative aspect of the project is its own teaching method, namely, Tinkering, which lies at the fringes of pedagogy and constitutes an innovative approach to STEM education. When the proposal was submitted, the partners already knew its potential, but after three years of work they were even more convinced of the contribution that Tinkering can make to skills development in the 21<sup>st</sup> century (innovation, entrepreneurship, social structure, initiative and intentionality, and so forth...) in addition to a lasting relationship with science. We can therefore state that the project is innovative because it has promoted a new way of interesting people in science and technology. It has done so by creating a structured action that touches all aspects of this work: the partners have worked to consolidate the methodological bases for designing new activities, to develop them with their students, to train educators, and to disseminate the bases on a large scale. During this experience, the partners were able to reflect and understand why Tinkering really is an innovative approach and have incorporated this conviction in all their outputs.

At the same time, Tinkering has different facets in common with inquiry-based learning or STEM education. In this sense, it helps to round off knowledge in the teaching and learning of science and technology and to enrich the activities and tools used by formal and informal educators.





## Social Start Ups - Social enterprise and critical consumption

Colomba Damiani, Domenico Lizzi, Tamat NGO, Perugia

“Social Start Ups” is a project funded by the KA2 Erasmus+ Programme, begun in **2014** and concluded in **2017**. Together with the project leader Tamat, an NGO active in Perugia since **1995**, whose role was overall coordination, the project involved other partners such as Amsed, an NGO of Strasbourg founded in **1998**, which deals with **intercultural dialogue, integration and development** through international projects; the Municipality of Brtonigla in Croatia; the Faculty of Economics of the University of Plymouth, which was the partner in charge of developing the methodology and training and assisting the project mentors; Technology Park 3A (Agriculture, Food and the Environment), which is dedicated to research and experimentation with innovative techniques used in the agro-industrial sector and looked after developing outputs and training courses to do with hygiene and food quality and safety.

“Social Start Ups” is based on a ‘learning-by-doing’ approach which envisages direct involvement of the participants in the start-up activities and the management of fair trade buying groups designed as “workshops” for the acquisition of skills and personal empowerment. The project is aimed at adults with the objective of developing and testing an innovative learning methodology that encourages active participation and entrepreneurship through the creation of Community-Supported Agriculture (CSA).

The project included an initial phase during which it carried out an in-depth analysis of the reference contexts through focus groups that involved local stakeholders, members of CSA groups, and political representatives, with the objective of understanding the needs and characteristics of the various contexts, the various management procedures and the impact of CSA on the territories. Subsequently, practical experimentation with the methodology began, involving 30 participants in each country, which included the planning and launching of CSA, during which the intellectual outputs of the project (methodological

tools) were tested. In particular, in this second phase, the role of the project partners, Technology Park 3A and University of Plymouth, was strategically important since they helped define the learning model and provided technical support for the experiments conducted by Tamat, Amsed, and the Municipality of Brtonigla in Italy, France and Croatia, respectively. Then the last step included a revision and validation of the tools.

The CSA system used by the project is an organisational model at whose core was a group of people who decided to create an association in order to agree on joint action to deal with small local producers and buy their products directly, thereby avoiding the steps that the mass retail industry entails. The objective of a fair trade buying group is to have a critical approach to consumption by applying principles of sustainability, solidarity and fairness to their purchases. The financial sustainability resulting from the fact that a CSA needs no economic investment to begin with, makes this model easily replicable even after the project has ended. To this end, a Handbook was compiled which describes the initiatives and methodologies tried out in “Social Start Ups”, with the aim of having a reference manual that makes the processes developed by the project replicable in different contexts. This Handbook includes a Guide for Mentors, a useful tool to direct a group of participants during the learning process (which includes planning of a CSA/Social Enterprise group), a Self-Assessment Tool or Business Diary, designed for participants to check their progress during the training programme and Pre and Post Tests, to measure learning and the impact on the participants. The testing phase of the project in Italy, France and Croatia, which saw the participants directly involved in all stages of the design, start-up and management of a CSA, stimulated and developed their spirit of entrepreneurial initiative.

The particularly innovative challenge of the project was to manage the planning of the CSA by trying to

match a business model that looked to the social enterprise as a reference. Monitoring and data collection revealed that 95% of the people directly involved in the testing phase increased their level of key skills. More specifically, in Croatia, the members of the Brtonigla CSA tried to develop a more sustainable and inclusive model aimed at raising awareness among the community on the subject of short production chains and small-scale local production. The project thus allowed knowledge of the CSA model, little known before the project began, to become more widespread in Croatia.

In France, the path taken by the Amsed mentors saw the participation of members of various local CSA groups who had given life to many enterprise projects. Amsed's experiments had a decisive impact and provided extremely important feedback on the methodology bolstering the thesis that from a CSA it is possible to develop innovative business ideas which differ from one another. The projects designed included a restaurant that uses CSA products, a micro-brewery that hosts a CSA, production of seeds and animal feed, a cooperative market, a café, and a textile and handicrafts CSA.

Also in Italy the testing phase enabled us to achieve good results. In Perugia Old Town, participants launched the "Fuori di Zucca" CSA, which purchases and distributes products. In November 2017, this CSA became a formally registered association. The activities of "Fuori di Zucca" have been integrated with the initiatives of the cultural association "Fiorivano le Viole", an association based in Perugia Old Town, and founded with the aim of regenerating the central neighbourhood that lies between Via Cartolari and Via della Viola.

"Fuori di Zucca" now involves 9 producers and over 70 members who regularly purchase vegetables, cheese, yoghurt, bread, flour, cereals, eggs, wine, honey, and beer. The CSA system has proved effective and sustainable and members of the group intend to carry on this idea without excessively expanding the structure but exploiting the value and potential of the fair trade buying group as a valid model in a neighbourhood situation. The objectives that "Fuori di Zucca" has set itself are clear:

to buy good healthy food, to support the activities of local producers who use sustainable production techniques, and to maintain direct contact with them.

The Group has also promoted local events and initiatives, with the aim of raising awareness on the issues of "organic farming", "0km" and the short distribution chain.

"The Association was born from a specific need to communicate: we are fighting against the negative aspects of intensive monoculture and the mass retail industry, promoting and trying to achieve clarity on the concepts of "organic farming" and "km0", around which much confusion has been generated." This is what is stated on the association's site.

"Fuori di Zucca" answered an invitation to take part in the "UmbriaMiCo Festival del Mondo in Comune", a project coordinated by Tamat and co-funded by the Italian Development Cooperation Agency with the initiative "FuoriDisPensa", born with the aim of setting up a neighbourhood foodbank to help families in need, doing their weekly shopping for them, and including them in the management of the CSA. The project is carried out thanks to the collaboration and participation of "Fuori di Zucca", "Fiorivano le Viole", and "Tamat", producers who collaborate with the CSA and local shops. The intention is to carry on the process which has already begun in order to redevelop and restore the neighbourhood itself.

The dissemination and exploitation of the progress and the project results have been key elements during the period of "Social Start Ups". The dissemination plan which was drawn up established dissemination channels and tools to provide information on project activities, share the results, and create the right conditions to promote transfer of the methodologies developed. The target that the dissemination aims at are fair trade buying groups, associations, adults with low-level skills, the unemployed, universities, public bodies, and social-sector institutions. Through the project, eight multiplier events were organized which attracted 299 participants. "Social Start Ups" has also been at the centre of other initiatives and enjoyed good visibility thanks to its participation in "EXPO 2015" at the Italian pavilion, "Do the Right Thing – Umbria" and in 2016, the "Plymouth Social Enterprise Week" which took place from 16 to 22 November 2015 and the Economic and Social Research Council's "Festival of Social Science" held from 7 to 14 November with over 200 events organized throughout the United Kingdom.

The presence of foreign convicts in prison facilities is growing in most European countries: it currently stands at 40% of the total prison population. This “over-representation” of foreigners inside prison settings, certainly also attributable to the roads of marginalisation trod by migrants as a group at risk of social exclusion, begs its own analysis alongside interventions to improve communications inside prisons. Instead, previous research by the advocates (MPS projects 1 and 2, winners of the European Language Label Award 2008; Benucci 2015 and Benucci, Grosso 2015; Sciuti Russi, Carmignani 2015; the LIPS and DEPORT projects) and some other partners demonstrates that it is possible to exploit and develop precisely what RiUscire aimed at, namely, the interlinguistic and intercultural dimension of prison settings, transforming the latter into places of resources, emancipation and rehabilitation, through integrated training schemes aimed at foreign convicts, prison staff, and teachers working in prisons, as indicated in the Council of Europe Recommendation No. R(89)12 on Education in Prison. The project therefore helped to transform European prison settings from places of exclusion and deprivation into somewhere to acquire skills (which could also be specialised) and prepare for social reintegration, as advocated in the 2010 EC conference in Budapest on the promotion of good practices in prisons, “Pathways to Inclusion”, and by Recommendation (2012)5 of the Committee of Ministers to Member States on the European Code of Ethics for prison staff. Indeed, this project won the European Language Label Award in 2016. It is also intended to exploit the work done over the last twenty years in prisons by the University for Foreigners of Siena, ensuring sustainability for projects already carried out and, ultimately, provide tools and build up highly specialized skills useful to assimilate the university into the Prison University Centre of Tuscany.

Most of the research and training activities were concentrated in the implementation phase.

Given that the specific characteristics of the project’s audience still need to be fully explored, the first out-

puts were dedicated to the realisation of a fact-finding action indispensable for all subsequent activities for the project’s beneficiaries.

Below is a list of the outputs produced.

**Methodology for a survey and analysis of linguistic and sociocultural** aspects with the compilation of three types of questionnaire addressed to prisoners, prison operators, and teachers (Output 3). This material was based on previous works developed as part of the DEPORT Project, of which RiUscire was a natural successor. Indeed, it was the experience already gained and the data from the previous survey that allowed a more precise calibration of the items and an interrelation between the three different questionnaires, a feature which allowed data correlation, not only those of RiUscire but also previous ones.

**Survey and analysis of sociolinguistic and sociocultural aspects.** In this case, a detailed report was produced on the linguistic profiles of foreign convicts, the cultures and contact languages in prisons, the ethnic groups present, the communication modes most frequently used in daily interactions and for work (Output 4). Also here, a comparison with data from previous surveys made it possible to identify the evolutionary lines and stable characteristics to achieve an analysis that was also longitudinal.

**Survey of good practices** concerning the models and pathways of: linguistic and/or cultural education for prisoners in the countries involved; training to improve the intercultural skills of the operators involved; updates/specialisation/training for teachers working inside prisons (Output 5). This was the first comparison made at a European level of actions often unknown even in the individual territories where they have been carried out and that brought out a different sensitivity among countries regarding the problem of integrating/rehabilitating non-native convicts.

**Syllabuses and programmes for training, methodology and educational material for convicts (Out-**

**put 6)**: a plan was made to develop new methodological tools and up-to-date customized approaches to manage communication processes and training and educational procedures using the CLIL approach.

This activity became a link between the results of the research and the training. The development of the educational materials for the linguistic-professional training necessarily had to be preceded by the conception of an adequate approach marked as cognitive and cooperative. The resulting methodological models satisfy needs, identities, places, procedures, timeframes and practices in providing courses for disadvantaged adults that are geared towards rehabilitation and reintegration.

**Syllabuses and programmes for training, methodology and educational material for teachers working in prisons (Output 7)** included the development of new qualitatively important methodological tools and up-to-date customized approaches to cognitively and cooperatively manage the communication and training processes and the teaching procedures. Everything culminated in a training day whose beneficiaries were teachers who work with multilingual and multicultural classes in the context of exclusion; students, researchers and other staff interested in the teaching of second languages.

**Syllabus for prison operators to deliver contents of “Inclusive communication in the prison system” (Output 8).**

This programme developed coordinates for the training of prison administration staff in knowledge of and insights into cultural aspects of the various ethnic groups present in the prisons of project partner countries and to identify operational solutions suitable to meet the needs expressed in daily life in prison, as well as guidelines to develop methods of intercultural communication in the prison environment and to identify suitable characteristics and strategies for them. The beneficiaries were prison operators and the observation and treatment team (Benucci, Grosso 2018a).

**The linguistic-professional portfolio for convicts (Output 9)** constitutes the final objective of the project’s activities for prisoners, more easily achieved if concrete aims are provided for the commitment they must take on, such as opportunities for professional training accompanied by an attestation usable at the

end of the prison term, with the acquisition of pragmatic intercultural skills to help integration and, in some cases, replace purely linguistic expertise (Benucci, Grosso 2018 b).

**Educational Methodology Courses for Teachers (Output 10)**

The implementation of O7 meant the realisation of courses for teachers in Italy, Spain and Germany. These courses aimed at acquiring techniques to motivate convict students, thereby ensuring proactive attendance of the courses; at knowledge and the proper use of the methods developed in previous projects; at managing intercultural and interlinguistic aspects; at exploiting the diversity present; at managing the personality of groups of adults with problems of exclusion.

The first impact envisaged was the definition of a reference framework in which the universities and prisons involved implemented the training activities, after identifying good practices. The prison staff were involved in training programmes and are now able to appoint trainers capable of disseminating the skills acquired thanks to the project among their colleagues, in so doing also replicating the results. This result is already significant in itself since it allows a cascade replication of the vocational skills acquired even when activities closely linked to the project have ended. The teachers involved benefited from refresher courses on intercultural communication and the teaching of L2, acquiring professional skills for training that they will in turn pass on to the convicts. Other unexpected beneficiaries were students of the University for Foreigners and the Autonomous University of Barcelona who were given the opportunity to take part as auditors or to carry out formative and/or curricular internships during some of the phases of RiUs-cire. The expected impact for these first categories of beneficiaries concerned their vocational retraining. The foreign convicts realised progress in conflictual situations caused by misunderstandings of language and culture as well as gaining communication and vocational skills of use both during their prison term and at the end of their sentence (Benucci, Grosso 2016).

The prison administrations were the direct connection with the beneficiaries of the activities, providing coordination and facilitating communication with local decision-makers, playing a key role in speeding up the networking and maintaining the links between

the various prisons taking part. But above all they saw their internal modes of communication changed while benefiting from a less conflictual climate that was more cooperative and genuinely committed to rehabilitation. Another of the impacts generated by the project was the input of the University for Foreigners in the Prison University Centre of Tuscany, in association with other Italian centres and the CRUI.

In the respective prison administrations the project results improved the training of operators at a national level, with the result that systemic training activities are now being planned based on the models proposed by RiUscire (see, regarding prison operatives: Bormioli, 2017).

As for the dissemination of the project, particular attention has been devoted to developing the website ([www.riuscire.org](http://www.riuscire.org)), which contains all the products and events realized within the framework of the project. In addition to several international conferences and seminars for optimal dissemination of the results, an international conference was organized on the prison system. This was attended by scholars from various areas (criminology, sociology, pedagogy, linguistics) both Italian and European, including M. Aebi (editor of the SPACE and SPACE II reports), F. Dunkel and M. Cavalli who offered an interdisciplinary perspective to analyse the phenomena and the project results. An entire section was dedicated to contributions from the Call for Papers to welcome the voice of those who deal daily with the reality of prisons and with those who inhabit them.

The survey and analysis of good practices, realized online with forms compiled by the prisons and the request to notify experts was carried out on ten quality criteria and assessed by referees from outside the project selected from among experts in research on the methodology of language teaching, interlinguistic and intercultural contact, and aspects of the social integration of migrants (Benucci 2017, Benucci, Birello 2017). The quanti-qualitative analyses-relating to both sociolinguistic research and analysis of good practices were processed by each partner and combined in the drafting of the volume *Buone pratiche e repertori linguistici in carcere* ("Good Practices and Linguistic Repertoires in Prison" – Benucci, Grosso) which contains contributions from representatives of the partner countries. Subsequent activities developed language

and vocational skills for various beneficiaries selected in the context of interchanges and experiences in various territorial contexts around Europe.

In particular, three vocational language courses were planned and organized for foreign citizens, two of them inside a prison and one in a location outside the prison to monitor the extensiveness of the proposal: courses intended for foreign convicts were realized in Italy at Padua Prison (for agricultural workers/green maintenance operatives) and in Catalonia at Barcelona's Centre Penitenciar de Joves. The vocational language course for foreign citizens outside the prison walls was carried out to verify the transferability of the experimental methods to a broader context thus exploiting the project activities further. A "Course for Assistant Cooks" was therefore realized in collaboration with the non-profit Migranti San Francesco association, CESCOT Siena and Confesercenti, for refugee citizens, who followed the Education Portfolio (on this topic, see Benucci 2016). The follow-up highlighted the soundness of the educational offering, given that 17 of them found a job in the catering sector.

The whole partnership, consisting mainly of universities, undertook to fulfil the third mission and was open to dealing with the prison institution, generating benefits for both, in terms of "opening up towards the socio-economic context by the exploitation and transfer of knowledge."

We propose to standardize teacher training at national and international levels, as well as that for operators in contact with migrants and the migrants themselves through content developed within the project by entering the programming of these training measures within the national training schemes for these figures.

## Bibliography

- Benucci A. (2016), Italiano L2: linee per la definizione di un portfolio linguistico-professionale, in *RILA 2/3* 2016.
- Benucci A. (2017), Répertoires linguistiques des détenus étrangers en Italie et en Europe: premiers résultats des projets RiUscire et DEPORT, in J.-C. Béacco, D. Little, H.-J. Krümm, and Ph. Thalgot (eds.), *The Linguistic Integration of Adult Migrants: Some Les-*



*sons from Research*, Berlin: De Gruyter Mouton in cooperation with the Council of Europe.

Benucci A., Birello M. (2017), Immigrants and prisons: good practices in Europe, in J.-C. Béacco, D. Little, H.-J. Krumm, and Ph. Thalgott (eds.), *The Linguistic Integration of Adult Migrants: Some Lessons from Research*, Berlin: De Gruyter Mouton in cooperation with the Council of Europe.

Benucci A. (2016), Corsi d'Italiano per interazioni professionali, in P. Mazzotta, R. Abbaticchio (eds.), *Est/Ovest Nord/Sud. Frontiere Passaggi Incontri culturali*, Atti del XXI congresso dell'Associazione internazionale dei Professori di Italiano, Volume 8 L'insegnamento dell'italiano dentro e fuori Italia, Florence, Cesati editore (Collana "Civiltà italiana" Terza serie), p. 27-36.

Benucci A., Grosso G. (2016), Produzioni scritte e orali nel contesto plurilinguistico penitenziario italiano, in Balboni P.E., *I 'territori' dei Centri Linguistici Universitari: le azioni di oggi, i progetti per il futuro*, Ninth National AICLU Convention, Venice 4 – 6 June 2015, Turin, Utet Università, p. 369-383.

Benucci A., Grosso G. (pending publication, 2018a), Approccio plurilinguistico e pluriculturale alla formazione professionale di insegnanti e operatori penitenziari, in RILA 2018/1.

Benucci A., G.I. Grosso (2018b), Strategie di "sopravvivenza linguistica" in carcere e didattica inclusiva, *Studi Italiani di Linguistica Teorica e Applicata (SILTA)*, XLVII, 1, 2018, pp. 187-204

Benucci A., G. I. Grosso (2017), Buone pratiche e repertori linguistici in carcere, Rome, Aracne Editrice.

Bormioli A. (2017), Sistema penitenziario e detenuti stranieri. Lingue, culture e comunicazione in carcere, Rome, Aracne Editrice.

Sciuti Russi G., Carmignani S. (2015), (eds.), La formazione in contesto penitenziario. Percorsi di lingua e insegnamento a detenuti stranieri adulti, Pisa, Pacini.

Benucci A., Grosso G. (2015), Plurilinguismo, contatto e superdiversità nel contesto penitenziario italiano, Pisa, Pacini, pp. 1-197.

Benucci A. (2015), Intercultural and Interlinguistic Models in disadvantaged migration contexts, in C. Argondizzo (ed.), *European Projects in University Language Centres*, Bern, Peter Lang, pp. 81-104.



## **LEADER - Learning and decision making resources: vocational guidance as a pathway to building a formative and professional career**

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Within the scope of educational and vocational study choices, Career Management Skills (CMS) represent the educational goal of modern vocational guidance systems. This concept underlay the EU Guidelines for Lifelong Guidance Policies and Systems (2004 and 2008) as an essential requirement to support the growth and wellbeing of European citizens throughout life in a society that is becoming increasingly complex and dynamic.

Choosing one's course of studies and managing one's career are complex tasks that take skills which are far from banal, both to analyse a growing and increasingly changeable range of professional opportunities, and above all to explore, evaluate, and become aware of one's own aspirations and potential and to link these to coherent paths of study and work.

A methodological framework that describes CMS is essential to design and then monitor and evaluate training measures and orientation courses in schools of all types and levels, at universities, among vocational guidance and employment services. A framework on CMS describes the skills useful to orient oneself and to manage one's educational and vocational career, by outlining for each skill what the individual is able to do.

There is currently no European framework which describes Career Management Skills in detail, however, some countries have developed national models and guidelines, precisely as a part of regulating national vocational guidance systems. In many other countries, a CMS reference framework is still lacking.

In Italy, this European approach to CMS had already been included in an Agreement between the Regions and local authorities signed in 2014: "Defining Guidelines for the National System on Lifelong Guidance", even if it does lack an operational description of CMS.

The *LE.A.D.E.R. project Learning and decision making resources* set out to identify a shared framework and to collect resources and useful models to design

activities and vocational guidance services that can promote the development of individual skills. This framework may become the essential tool to centre interventions geared to every person's CMS needs, to coordinate interventions therefore, and to ensure the quality standards of the lifelong guidance system.

Within this context, three main objectives were identified:

- Identifying and developing approaches, methods and guidance resources that can effectively support the development of CMS as key transverse skills;
- Developing methods and assessment practices that will improve the quality of learning in orientation skills at every age;
- Testing and using digital resources within the CMS framework of reference.

The international project, through a typical joint research approach, not only developed materials and models to design vocational guidance interventions and courses based on the CMS framework, but also developed proposals for training vocational guidance operators and experts.

The principal outputs were:

- An international survey on emerging needs and available resources in the context of CMS;
- A proposal for a skills framework necessary for career management;
- A training model for vocational guidance operators;
- An open-source platform for guidance operators;
- A web platform for working students to learn and grow through CMS;
- A proposal and experience to create pilot activities and a database of materials and practices;
- A manual on the CMS framework (recommendations and guidelines).

Participating organisations were asked to assess the impact on their organisations and on the staff who participated in the project. This took in increased capacity, skills and knowledge as well as relationships with both local authorities and transnational partners.

In total, at a national level, 20 pilot activities were organized by the project partners, while approximately 80 professionals from various schools, universities, training centres and guidance services were involved in the CMS framework trial. A total of over 1,400 students were involved in our experiments in Greece, Romania, Spain, the United Kingdom, Italy, and Turkey.

The creation of 6 focus groups involved 120 participants (Greece 33, Italy 17, Romania 15, Spain 5, Turkey 35, United Kingdom 15). The partners presented the project results at 30 local and national events, gathering ideas and proposals to disseminate and exploit them.

The quality, usefulness and effectiveness of the project results were evaluated by the partners and by participants at the multiplier events which were used to disseminate the results. The project website ([www.leaderproject.eu](http://www.leaderproject.eu)) has received more than 5,500 visits and has seen over 300 downloads of its products.

Exploitation and dissemination activities have reached more than 120 institutions nationally and locally in different countries, and about 100 institutions throughout Europe. Last but not least, hundreds of teachers and professionals have been able to learn, visit and download the contents of the online platform thanks to our newsletter and targeted emails.

Participants in training activities were asked to evaluate the programme and its impact on them as learners. The impact of the pilot activities on each geographical area was evaluated using feedback from partners, operators, and institutions at the origin of the formats. At a local level, partners were able to offer a series of resources carefully designed

to improve the practical application of CMS in vocational guidance services and practices.

At a national level, all the partners involved were members of regional and territorial networks and were working to introduce the CMS framework and its applications in various regional and national sys-

tems. In most cases, round tables were set up with the regional authorities.

In addition, all the partners were members of national networks in their areas of specialisation and were in a “privileged” position to disseminate the results. In Italy, the Ministry of Education expressed its appreciation for the results. The Universities of Camerino and Siena presented the project during events and conferences at the main vocational guidance fairs, encouraging knowledge of the model.

At a European and international level, 6 universities and research centres took the role of international organisations and shared the results and materials at international conventions and conferences. All the other project partners helped to disseminate the project results among schools, public and private job centres, and vocational training and guidance centres through networks developed during previous projects or networks they had joined. All these connections were used to ensure the project’s visibility at all levels, both in terms of dissemination activities to boost commitment and experimentation with the tools created.

The CMS Manual has been published and printed in English and Italian (both volumes with their own ISBN) to promote knowledge of the model and provide tools to help launch new experiments and redesign vocational guidance interventions.

In addition, the extensive use of software and open source applications contributed to the dissemination of products among the community of professionals in Europe, even after the end of the project. The open access to the platform has ensured its sustainability and just a few weeks after its launch it had already obtained significant recognition in terms of accesses and recordings as well as downloads of the materials it contains.

The dissemination of the project results increased awareness of the importance of the CMS framework within the partner countries. In addition, the project fostered a strategic structured approach, useful for designing interventions capable of helping people manage their professional careers and make more informed choices.

At a local level, some schools where the project had been tried out integrated the planned activities with

various curricula and guiding interventions based on the pilot module developed for the project. This beginning helped to promote the activities carried out during the pilot activities, with the possibility of transferring the model and tools to other contexts, thanks especially to vocational guidance operators directly involved in the pilot activity and training. Indeed, they are now implementing the best practices and skills acquired in other schools too, different from those which participated in the project's pilot activities. Also the partner universities involved in the pilot activities have refined and updated their vocational guidance services by developing new tools and activities and offering them to their students and graduates.

The strategy of exploiting the project results passes through a process of cooperation and communication which highlights the future challenge of vocational training systems in Europe and the ability to respond to people's needs.

The strong points of the project are closely related to the methodological choice of a "joint research approach" and involving a group of partners who could share the ambitious objective of changing the reference model, with strong motivation and specific skills. The idea of working together for a new framework required all members of staff to question their way of working and to initiate pilot activities that could test the innovative practices.

The methodology at the base of the project work plan is structured on several levels:

- a main streaming process: the innovations proposed in the project and tested by the partners were transferred at a system level during a process of peer learning by the organisations (higher education institutions, schools and other territorial bodies) which joined the experimentation and materially contributed to the development and dissemination of the model at a national level.
- the process of creating a learning community: the experimentation, implementation and results become the property/heritage of the final beneficiaries of the guidance interventions through the production and dissemination of information material and support tools before and after the experimental phase.
- Europe-wide dissemination: involvement of the national and international guidance community both

in terms of scientific research groups and at technical and institutional levels.

All the project partners contributed to the dissemination activities to ensure the widest possible reach for the results and project activities.

The main target groups for the dissemination among partners were:

- at an organisational level: staff members, members of the board of directors, teachers, trainers, researchers, guidance operators, and volunteers
- at a local/regional level: local guidance services, secondary schools, higher education institutes and institutions, universities, local employers, employment services (public and private), and associations
- at a national level: national employment agencies (Anpal), national education and guidance networks (Euroguidance, EURES, etc.).

Each partner prepared a detailed report of its activities for the dissemination and contacts, with a total of over 800 contacts. Information on the project results reached the entire community of the lifelong guidance network (Euroguidance).

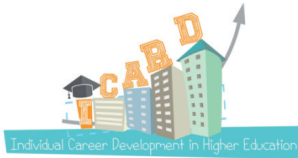
The project learning platform (based on the Moodle e-learning system) was opened to all users, teachers, experts in vocational guidance, consultants, tutors and researchers in the field of guidance. The test phase involved around 20 different institutions (schools, universities, and guidance centres) and around 80 professionals and teachers engaged in guidance activities.

This dissemination phase was superimposed on the assessment one since the partners asked users to assess the content and resources of the pilot activities in order to adapt and optimize the online structure of the platform and its OER. The dissemination of the research project "Understanding Career Management Skills" was directed at institutions and organisations that work with young people and adults by providing vocational guidance services and also learning pathways for generic skills development.

During the final part of the project, the results and communication activities were also addressed to guidance policy makers, those in charge of education, and stakeholders in partner countries. At regional and

local levels, guidance policy-makers became involved and were invited to take part in local events. The dissemination plan mainly focused on the organisation of national events in order to evaluate the opportunity to continue improving the framework through national projects. The project partners are important actors operating in various national guidance systems with over twenty years' experience and were therefore able to effectively exploit the project results at different national and international events through a process of loyalty building among several national actors, and also launched some national platforms using the project products.

The sharing of the international Career Management Skills model and the use of digital technologies in the context of vocational guidance require new skills on the part of advisors, teachers, and tutors. Through the LE.A.DE.R project it has proved possible to analyse this emerging need for guidance skills, both through the initial survey and focus group, and within the international working groups and training activities that were organized face-to-face (in Barcelona and Athens) and online through the creation and implementation of an e-learning platform, plus the realisation of web seminars and video tutorials. Again thanks to the LE.A.DE.R project a platform for online learning was created and employed within the framework of educational pathways, structured on the basis of skills identified by the work team. These resources are available and accessible on the project website: <http://www.leaderproject.eu>. This experience, the theoretical proposal, and the tools and learning environments created, represent a useful resource for universities and training institutions that wish to offer training and refresher courses and resources for vocational guidance counsellors and teachers (Handbook on the CMS framework, 2017 ISBN 978-1-910755-24-2).



## Individual CAREer Development (ICARD)

Sara Raponi, University of Padua

The aim of the ICARD project is to provide an online programme to facilitate career development and promote the self-awareness and personal development of higher education students, in order to provide them with the tools essential to deal with the transition from education to the world of work. Among the generic skills necessary for learners and “2020 workers”, are a sense of initiative and entrepreneurship, seen as the ability to transform ideas into actions, evaluate oneself and the skills possessed and at the same time the professional context in which one is immersed in order to seize the opportunities that arise.

To this end, both guidance at school in the choice of studies and vocational guidance in the choice of professions and the labour market, can contribute significantly to facilitating young people’s entry into the world of work, helping them to realize their full potential.

The period of transition between universities and the labour market would be more effective if the students arrived at the point of leaving the world of education with a greater awareness of their real skills, expectations, and future plans.

Currently, guidance at university is provided mainly on entering and leaving, and the number of students

who can directly access it (through individual/group support, workshops, etc.), is fairly limited compared to the number actually attending university. It is therefore necessary to create additional tools to reach a greater number of beneficiaries. The European Career Development Programme (ECDP) is seeking to achieve this aim through the use of virtual spaces.

The ECDP is modular in structure and comprises three separate programmes that correspond to the three main phases of students’ academic experience: Transition In, Ongoing, and Transition Out (Fig 1). In view of the similarities and differences identified among the universities involved in the partnership, the ECDP has a common structure however the information provided in the modules has been adapted to suit institutional and national circumstances. In some of the modules, some information has been specially designed for individual universities (see, for example, the module “Tackling University”), while other modules have shared information and applications, but the context has been adapted to individual institutions and nations (e.g. “Self-understanding”, “Choosing a Course of Studies”). Flexibility and adaptability to national and local needs are two key characteristics of ECDP (fig.1).

Entrance to University TRANSITION IN	During University ONGOING	Leaving University TRANSITION OUT
Self-understanding 1	Self-understanding 2	Self-understanding 3
Tackling University	CV & Letter of Presentation	Active Search for Work
Choosing a course of studies	Interview & Selection Tests	Succeeding in the workplace
Organisation and Planning	Searching for an internship	Personal branding
Managing money	Teamwork	Entrepreneurship
	Deciding on a professional path	Problem-solving and Negotiation Techniques
	Effective Communication	Coping with pressure
		Organisational Culture & Ethics at Work

Fig. 1

To implement and refine the European Career Development Programme (ECDP) it became necessary to realise the following outputs:

- A survey of the status quo: gathering & analysis of practices and examples and publication of an online database. Eighty-eight practices from 22 European countries and one extra-European one (Australia) were gathered, analysed, and described. The complete database is available on the project website;
- The design of the programme structure: a draft of the structure of the modules, gathering and analysis of feedback, final architecture of the modules;
- Development of the modules: development and translation of the modules into the four project languages (Italian, English, Spanish, and Romanian);
- Piloting: experimentation in four different partner countries with a group of students;
- Guidelines: online publication of guidelines in order to facilitate the adoption of the ECDP.

Every university project partner was able to involve its own human resources to carry out the project (teachers, career and vocational guidance experts, administrative personnel) favouring the interests of students and graduates during the piloting phase, which took place in the four partner countries involved in the project: Italy, Romania, Spain and the Netherlands.

Workshops were organised in all the countries to present the project and the ECDP, involving around 1,500 students. In addition, other means of communication were also used such as posts on Facebook, podcasts, dissemination of information through professors, etc., in due course attracting the involvement of 245 students and graduates who were included in the piloting and who completed at least one programme out of three.

The imbalance that can be seen in the number of participants in the piloting phase for each country (Spain: 184; Italy: 20; Romania: 21; The Netherlands: 20) may have to do with the type of tools used to promote the piloting itself. The Spanish university involved a larger number of students in face-to-face promotion compared to the other universities which relied to varying degrees on online communication tools.

Instead, when it comes to the preference demon-

strated in the exploitation of the 3 programmes available, the majority of the participants in the piloting phase opted for Programme 3, Transition Out (173 questionnaires collected). This result is actually not that surprising since the university partners of the project, represented by Career Services, customarily interface with students from the last year of university courses or with recent graduates. On the other hand, however, it does highlight the need for operational tools for dialogue and to enter into contact with the world of work.

The universities that joined the consortium added the ECDP to their educational offering, in line with each institution's characteristics. Wherever possible, each university carried out some technical work to transfer and integrate the content of the ECDP onto their Moodle platforms, with the result that they are available both on the project platform [www.career-modules.eu](http://www.career-modules.eu) and in the virtual learning spaces of each university.

This choice was made to enable the introduction of further changes, updates, and the addition of optional modules even after the period funded, using the resources and staff inside each university. For example:

- at the University of Padua, the ECDP modules were adapted and integrated with the Career Service Moodle platform, which, together with the other tools and resources made available will constitute a real virtual learning environment. Until now, around 480 students have benefited from at least one module;
- AICU, the Romanian University of Iași integrated ICARD modules both within its offering and within an institutional project for NEETs realized in conjunction with the Romanian Ministry of Education that saw the participation of numerous students and companies. In particular, 219 students only used the ECDP within the framework of this project;
- meanwhile, at the Spanish university of Salamanca, the ECDP was integrated with and adapted to the local context as well as being fully integrated with their online activities and resources. To date, 868 Spanish students have benefited from the ECDP;
- The University of Maastricht not only promoted the ECDP by updating and supplementing 12 modules within its offering, it also included it in some activi-

ties carried out to boost employability, for example during sessions on the drafting of a CV.

- Therefore, the partners have adopted the strategy to continue to use the project results, also by modifying them to their own needs in order to integrate them into their activities.
- In addition, the partnership encourages contacts and exchanges with other EU projects and university networks, and these contacts keep partners involved and engaged in further dissemination and promotion activities well beyond the period funded.





The Urban Green Train project, presented as cross-sectoral, or rather, addressed to the higher education and adult education sectors in the first Erasmus+ Strategic Partnerships invitation in 2014, created an innovative training course on entrepreneurship in Urban Agriculture (UA) based on interaction and cooperation between universities, businesses and the territory.

The general objective of the project was to strengthen the knowledge triangle between education, research institutes and companies, in the field of urban agriculture through:

- awareness-raising among potential employers and entrepreneurs in the environment and green economy sector;
- entrepreneurship education for young students and graduates
- innovation of curricula and learning methods in higher education, and expanding existing forms of University-Society-Business Cooperation (USBC)
- building the awareness of decision-makers and young people on the role of the new green enterprises in the creation of more sustainable cities

The intellectual outputs produced included:

1. A collection of entrepreneurial experiences within the urban agriculture sphere and methodological guidelines for the development of training modules to develop new entrepreneurial initiatives;
2. Five training modules on entrepreneurship in Urban Agriculture, developed and delivered in a pilot form (blended learning) for students and entrepreneurs of SMEs and NGOs;
3. A methodological guide to replicate the UGT formative experience, develop the modules and realize them with the support of the urban community.

### Internal institutional impact

The project partners consistently adopted the train-

ing modules developed by integrating them within the curricula of study courses offered by their institutions. Moreover, the “governance” of the institutes involved recognized the significance of the project and set a point of departure for the development of new educational and third mission initiatives in cooperation with the territory, encouraging interdisciplinary cooperation between various research groups.

### Impact on the beneficiaries

*Students and graduates:* participants in the Urban Green Train pilot course and future courses benefited from an educational pathway that was innovative in content and methodology and had, and will have, the opportunity to develop new business ideas related to sustainable Urban Agriculture.

*Owners of SMEs and members of NGOs, employers and workers:* both the project partners and those who participated in the pilot course acquired new skills and knowledge to breathe new life into their activities in a sustainable manner.

*Policy makers and local authorities* who were motivated to support new businesses and green initiatives, from production to the market.

And more in general the *citizens* inhabiting an urban context, benefiting from a city and services that are greener thanks to the dissemination and growth of urban agriculture innovations and initiatives that are economically viable.

All these target groups were reached through a wide-ranging dissemination and communication campaign aimed at spreading the methodology adopted within the UGT project and the model curriculum put together and tested.

This dissemination and exploitation campaign reached the various target groups through specific communication channels and was carried out both virtually on the web (through the project website, newsletters, social networking, promotional videos)

and through direct contact with stakeholders (by organising and participating in public events). The exploitation strategy and the project sustainability sprang from the richness of the partnership. The 10 partners in the project included not only organisations that differ greatly from one another (Universities, NGOs, companies), but also consortia able to reach out to hundreds of stakeholders and actively involve them during and after the project. In addition to the wealth of the initial partnership, right from the start of the project the consortium sought to involve local stakeholders in implementing both the needs analysis and the project itself.

In particular, strategies of interaction with the territory and local authorities allowed the Urban Green Train Project to provide its beneficiaries with an urban space to develop their own business projects or revitalize existing ones. The collaboration with local actors then led to the realisation of new research and application initiatives related to urban agriculture aimed at recovering disused urban spaces (e.g. brownfields). Consequently, the sustainability of the project did not stop with the integration of educational resources developed within the partner institutions' curricula, but continued, in particular by creating new projects with the support of local communities and the European Union. With regard to the European panorama it should be pointed out that the consortium obtained two grants to repeat the Urban Green Train experience in the preschool education sector (Erasmus+ Project "Gardens-to-Grow") and to export it outside the European Union (to Myanmar, Erasmus+ Chinlone, and to the Western Balkans, Erasmus+ BUGI).

Another result generated by the dissemination and exploitation strategy was the creation of the Urban Agricultural Cluster, a network which today boasts more than 80 associates not only from Europe but also from Latin America, the United States and Australia.

We can therefore confirm that the project results have been fully integrated within the partners' educational offering and that the educational experiences can be replicated.

In addition, we can also state that the Urban Green Train project was only the beginning of a much wider

range of initiatives for research and training in sustainable urban agriculture launched by the UGT consortium.

The Green Train Urban Project has allowed us to develop significant innovations in the entrepreneurship education sector to do with urban agriculture. On the basis of the training modules designed in response to the training needs of the sector, model curricula have been developed to support new forms of entrepreneurship. The project has launched a series of additional activities which include the implementation of new experiences of urban agriculture, the development of innovative teaching tools and the establishment of international interdisciplinary networks of sector operators.



The Polytechnic University of Milan Foundation coordinated two KA2 Erasmus+ projects for Strategic Partnerships in Higher Education, funded through a Call in 2014 and ending in August 2017.

“Play4Guidance” and “eLene4work” are projects that differ in their approach and the expected results, but that do have certain elements in common, including the ultimate objective of the work: achieving skills, particularly “soft skills”.

Although coordinated by the same institution, the two projects offered different results in terms of impact, exploitation, and sustainability. This document seeks to draw a parallel between the two experiences, highlighting the similarities and differences. The opportunities and difficulties are brought out, recommending in conclusion a greater presence of agencies to support the exploitation of results.

**Keywords:** *generic skills, digital competence, entrepreneurial skills, games, connections.*

Two different projects, but with certain points in common. **Play4guidance** was designed as a business game that allowed players (high school students, university students, but also the unemployed) to acquire skills related to entrepreneurship. The format is that of a classic business game: a simulation in which players step into the shoes of an entrepreneur who must grow a company over a period of one year to reach the highest economic value possible. It can be played against other players or, in an online version accessible on the website [www.Play4guidance.eu](http://www.Play4guidance.eu), against the simulator itself, which changes its behaviour in accordance with the player’s choices. Players can win or lose, and something is always learnt about the value chain, but not only: based on the games and the answers to the questions scattered throughout the game, players also receive feedback as to how certain skills help to build entrepreneurship.

Instead, **eLene4work** investigated what new digital

skills are required by the market from the target of young people leaving university. To this end, tools have been created to support the mapping of players’ strengths and weaknesses along with the creation of educational paths personalised on the basis of these, mainly using the Massive Open Online Courses (MOOCs) currently found on the main national and international platforms. On the portal at <http://eLene4work.eu/> it is possible to investigate further and obtain these tools.

Therefore, both games aimed at an understanding and exploitation of skills, particularly generic ones, but tackled the theme from two very different points of view.

In terms of the **dissemination of the results**, the two projects yielded respectable figures, far beyond expectations. Apart from “casual” or sporadic visitors to the respective project platforms, the most interesting figures are undoubtedly those relating to the involvement of people through multiplier events and “**pilot activities**”: testing and verification sessions with target groups which were incorporated as an activity within the outputs, linked to the modelling of the experience.

The subject of the **impact** is more complex and, from what we have been able to see, the projects yielded quite different results, despite starting off from a common strategy.

Of the two, the “Play4Guidance” project was the one that responded to the challenge on impact in a more traditional manner. A quick survey conducted among the partners in the spring of 2018, nearly a year after the conclusion of the project, showed, for example, that the game was in use in various schools, universities, and job centres which had the opportunity to discover the simulator through pilot activities that they had taken part in. The real limit is that this is not a tool which has been formally included among stand-

ard curricular activities: it therefore remains tied to the interests of individual teachers and trainers.

The intellectual outputs provided by “eLene4work”, with particular attention to the more operational kinds, have shown themselves to be well produced from a scientific point of view, but a little “heavy” to use. For example, to complete the self-assessment on skills takes several hours and not everyone is willing to dedicate this much time to filling in a form. Nonetheless, these tools are showing significant pliancy in terms of impact given that they touch on a fundamental theme (the new digital skills requested by the world of work) with the result that they turn into an occasion for exchange and investigation with varied interlocutors even after the end of the project.

As regards **exploitation**, the two projects feature different scenarios. “Play4guidance” was conceived to be easily transferred to multiple contexts (upper secondary schools, universities, among the unemployed). During the pilot activities we also tested the game with students from junior secondary schools to the satisfaction of the teacher and the students. Perhaps what is lacking today – and this was not foreseen by the project – is to be able to offer an example of official visible use over a long period.

Instead, “eLene4work” is arguably aimed at a more specific target, while leaving the door open to university students from any faculty: in fact, the pilot activities were carried out in both humanistic and scientific faculties.

Exploitation in terms of portability at an international level has always been a point of emphasis in both projects. The most significant outputs were translated into the different languages of the partnerships while in the design phases, there was a constant effort to work on the common elements of the partners’ various national identities.

In my personal opinion, **sustainability** should be an objective for this type of project. In most cases this was a result that was difficult to achieve. It is an issue we are sensitive to and that the partnerships we coordinate tackled immediately given that sustainability cannot be built during the last 3 months of the project. However, the opportunities to achieve effective, long-term sustainability are essentially linked to the introduction of a specific resource in an official man-

ner, for example at a curricular or routine level. Too often we are working along the razor’s edge between innovation and experimentation: it is difficult to tie the result to long-term planning. It is obviously much easier when the planning is linked to the transfer of existing good practices, but this is not the case for “eLene4work” nor “Play4guidance”.

We undertook to ensure as a minimum the usability of the outputs realized for at least 5 years from the conclusion of the projects, reasoning without delay on support and maintenance costs. Consideration was made of hosting, compatibility with the evolution of software, etc. The partners responsible for these aspects were therefore able to program their own costs considering longer timeframes than those of the project.

And at this point we then sought alliances with other projects that had points in common, so as to convey the information via other well-targeted channels and to declare mutual validity by some means. We continue to do this even after the formal conclusion of projects, in a precise attempt to let potential new users know and use the resources that have been created.

The first valuable element of an international project as a strategic Erasmus+ partnership is bound up with the challenge – implicit or explicit, depending on the awareness of the partnership – of the sharing and sometimes of the creation of a common language on a given theme. This is a result which is not easily exportable if we think of individual projects, but after 15 years spent in the world of European planning I can safely say that the experiential network supported by these programmes is also actively creating shared and delocalized codes which make it possible to work ever more effectively on innovation. In my opinion, the quality of the outputs, which has definitely improved over the years, bears witness to this trend.

Commitment is an essential element to be able to work on the sustainability and impact of these projects, in the sense of a commitment by the bodies and institutions as well as the individuals involved. People often make a difference in the quality of work and therefore of the outputs, but they are not enough when we need to think “beyond the project”. Having one or more bodies in the partnership with a genuine and concrete interest in the usage of the project re-

sults is unquestionably an element of value. However, from the writing during the presentation phase to the end of these projects 3-4 years have elapsed. These are many, and in several cases I have noticed that they are quite sufficient to see clear-cut changes in strategy on the part of those partners most heavily committed. This is quite normal; all it takes is to change director. And the times we are living in are those of a society that is ever faster, also when it comes to changes.

For this reason, I believe that the agencies which govern these programmes should take a more central proactive role in supporting the impact and as a result the sustainability of the projects funded. The portal with the results is a first move in this direction, however it is possible to densify the weft of interactions between the bodies and support the intellectual products produced by exploiting them at a central level.



# APPENDIX

## Questionnaire on KA2 Strategic Partnerships in Higher Education

Name and Surname

Institute

Project No.

### Impact assessment

1) Impact on partner organisations

Outstanding

Good

Fair

Poor

None

1.1) Indicate some aspect (e.g.: at the level of governance, in terms of the procedures, at the level of the courses offered, at the level of the products or services adopted by the partner organisations thanks to the project)

2) Impact on learners

Outstanding

Good

Fair

Poor

None

2.1) Indicate some aspect (e.g.: skills acquired, awards/certifications...)

3) Impact on the staff involved in the project

Outstanding

Good

Fair

Poor

None

3.1) Indicate some aspect (e.g.: experience, acquisition of new skills, potential new contacts for collaboration, any recognitions at a career level...)

4) Impact on the system at territorial/local level

Outstanding

Good

Fair

Poor

None



4.1) Indicate some aspect (e.g.: possible involvement of various stakeholders at a local level)

5) Impact on the system at national/European level

- Outstanding
- Good
- Fair
- Poor
- None

5.1) Indicate some aspect (e.g.: possible involvement of national/European authorities)

6) Any other comments

### **Sustainability Assessment**

7) I believe my project is sustainable in the medium-long term

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree

7.1) Please give reasons for your answer

8) I believe my project is sustainable thanks to the commitment of individual partners

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree

8.1) Please give reasons for your answer

9) I believe my project is sustainable thanks to the attention paid to this aspect ever since the drafting of the proposal and throughout the entire life cycle of the project

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree 9.1)

9.1) Please give reasons for your answer

10) Any other comments

11) My project ended with the end of the period funded and there have been no further developments

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree

11.1) Please give reasons for your answer

12) My project ended with the end of the period funded because there were significant changes within the participating organisations

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree

12.1) Please give reasons for your answer

13) My project ended with the end of the period funded due to a lack of involvement from the partners in the post-project activities

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree

13.1) Please give reasons for your answer

14) My project ended with the end of the period funded because the products and the initial objectives became obsolete over time

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree

14.1) Please give reasons for your answer

15) My project ended with the end of the period funded however I submitted a fresh application to further develop the original project idea

- Strongly Agree
- Agree
- Somewhat agree
- Disagree
- Strongly disagree

15.1) Please give reasons for your answer

16) Any other comments

## Questionnaire on KA2 Strategic Partnerships in School Education/Adult Education

### **PART I PROJECT DATA AND ACTIVITIES**

#### **Data of the Institute**

Name of the Institute

Type of Institute

City

Contact person

Position of contact person Legal Representative

#### **Partnership data**

Partnership ID code

Name of the partnership

Countries involved

#### **Motivation**

What reasons prompted you to submit the project?

#### **Intellectual outputs**

YES  NO

Did you encounter any difficulties in implementing the works envisaged in the original work plan?

YES  NO

If so, of what kind?

Organisational

Methodological

Instrumental

Other

Do you think that the works carried out can easily be transferred to other situations?

YES  NO

And how? If not, why?

#### **Multiplier events:**

YES  NO

What was the theme of this event?  
How did you structure the event?  
How long did the organisational part take? Were the objectives you set met?  
How were the participants selected?  
What activities did you do to disseminate the intellectual outputs?  
Other activities?

## **PART II IMPACT**

### **Institution**

What were the most significant changes that you found during and after the conclusion of the project within the institution(s)?

Were new services/new activities/new collaborations developed (towards the inside and the outside) or management and administrative procedures? If so, which?

Have the teaching/learning methodologies and strategies within the institution changed or improved?

Very Little - Little - Somewhat - A Great Deal

① ② ③ ④

What improvements did you encounter in the institution as a result of the European project experiences?

- Greater openness to Europe
- Greater ability to work in a team
- Growth and expansion of professional relations between colleagues
- None
- Other

What proposals/procedures do you plan to introduce in order to facilitate the professional growth of staff and to systematize the teaching/training methods acquired during the project?

In your opinion, to what extent will the project have benefits for the sectoral/professional networks and/or local schools and/or associations, stakeholders, and authorities?

Very Little - Little - Somewhat - A Great Deal

① ② ③ ④

## Staff

How will the project activities impact (or have they impacted) staff? In terms of the people involved, the skills and abilities made available

As regards the professional growth of the staff, have you found that new skills were acquired? Which?

- Acquisition of new methodologies for teaching/training of learners
- New skills at an organisational, managerial and executive level
- Possibility to initiate new international partnerships
- Improvement in language skills
- Improvement in the use of digital tools
- Improvement in knowledge of their workplace
- Adult learners/Students

In which phase of the project did you involve students/ learners?

- Design
- Implementation
- Monitoring
- Verification of the results and/or any teaching tools
- Dissemination and exploitation
- In all phases of the project

Has the experience at a European level impacted the personal growth of the students/students participating in the project?

- YES  NO

What new capacities or skills have been developed?

- Improvement in language skills
- Improvement in the use of digital tools
- Greater knowledge of grants available at a European level for the development of international projects
- Improvement of relational skills

Have they changed their expectations, their views and aspirations during and since the conclusion of the project?

Very Little - Little - Somewhat - A Great Deal

- ① ② ③ ④

Impact on the territory and within the partnership

What was the impact at local, regional and national levels? And the impact within the partnership?

## The 'construction' of the impact

Project objectives

Were the project objectives adequately defined? Were these objectives clear, explicit and measurable?

## Monitoring

At what point in the project (implementation, dissemination, exploitation) was a monitoring phase included and with what tools? (face-to-face interviews, questionnaires, assessment forms, other)

Who did you involve in the monitoring and assessment process?

- Teachers/Trainers (administration)
- External experts
- Legal Representative
- Staff involved in adult education/School staff
- Learners/Students
- Associated partners
- Other

What results emerged from your monitoring/assessment?

Potential issues or problems arising from the monitoring in the achievement of objectives

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- Lack of time
  - Lack of Resources
  - Problems at the partnership level
  - Problems at the coordination level
  - Problems at the financial level
  - Problems at the administrative level
  - Other
- 

Did you arrange for a report on the monitoring and assessment results?

The dissemination and exploitation of the results are essential elements in promoting a project.

## Dissemination of results

What tools were used for the dissemination activities?

- Website
- Newspapers
- Public Presentation
- Cultural event/Seminar
- Brochure
- Performance
- Other

Have you taken part/will you take part in events to present the activities/experiences and/or the project results?

Are you using any of the platforms available from Erasmus+, *Project Results*; *EPALE*, *eTwinning*, *School Education gateway*?

YES  NO

If not, please explain why:

**Exploitation of results**

What tools or activities were used to exploit the results? e.g. OER - Workshop - Seminars - EPALÉ events, Erasmus+ Agency events?

Do you think the results can be adopted by and adapted to other contexts/institutions? How?

**Sustainability of the project**

After the end of the project, which activities were planned for the sustainability of the results and experiences?

Platforms – Events inside and outside the partnership and the Institute

Are you willing to write articles, contribute to publications, and participate as a 'good practice' in other events and workshops organised by the Erasmus+ Agency?  YES  NO

## Questions for the two focus groups: school education and adult education

### **Impact**

Were the effects of the project obtained with the resources available?

What tools were used to measure the impact? What tools were the most useful and reliable?

Were there any results and impacts not provided for in the implementation plan?

### **Dissemination and exploitation**

WHAT to disseminate

WHO are the beneficiaries of the dissemination:

HOW to disseminate WHEN to disseminate

What types of dissemination activities are more appropriate for greater visibility and dissemination of the results?

Has the scope of the dissemination and exploitation activities increased the dimension and strategic importance of the project?

Can exploitation and dissemination maximize the effects (impacts) of the results? In what way? Does the transferability of the results imply greater margins for their sustainability?

Maximizing the potential of Erasmus+ projects to have an impact on policies and systems: how to do it and who to involve?

### **Replicability of the results and sustainability**

What sustainability strategies were implemented in your project?



**Ediguida S.r.l.**

Printed in the month of January 2019



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