Key Competence Development in Europe

Catalogue of initiatives

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CATALOGUE OF INITIATIVES

http://keyconet.eun.org
KeyCoNet (2012 – 2014) is a European policy network focused on identifying and analyzing initiatives on the implementation of key competences in primary and secondary school education.

On the basis of the evidence collected through literature reviews, case studies, peer learning visits, country overviews, videos and exchanges between network members, the project’s final objective is to produce recommendations for policy and practice regarding the enablers and obstacles to a holistic implementation of key competence development.

Among KeyCoNet’s current 18 partners in 10 countries (Austria, Belgium, Estonia, Finland, France, Ireland, Norway, Portugal, Spain and Sweden), are Ministries of Education/related agencies, universities/research institutes, European organizations, and practice related partners. KeyCoNet also has a growing number of associate members from other countries and stakeholder groups, steadily increasing our network’s scope and influence.
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WHAT DO WE LEARN FROM THIS CATALOGUE OF INITIATIVES?

This catalogue includes a European overview of 50 initiatives concerned with key competence development in school education. It also provides preliminary information about European initiatives as well as those collected in fourteen European countries (Austria, Belgium, Estonia, Finland, France, Ireland, Malta, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden and the United Kingdom). Full descriptions of these initiatives can be found in the case notes on the KeyCoNet website (http://keyconet.eun.org/project-results).

The initiatives related to key competence development described in this catalogue differ in many ways, according to the nature of the key competences addressed, the implementation process used, the number of students and teachers directly concerned, the type of actors involved, and the duration and stage of development.

Key points emerging from the analysis of initiatives:

- Policy efforts to implement key competence development in schools are mainly concentrated at secondary school level;
- The majority of the initiatives identified are at national level, and are in the first or second stages of implementation, while regional projects, pilot initiatives involving a network of schools and school level experiments have also been identified;
- One third of initiatives identified claimed that they were implemented in both formal and non-formal learning contexts, testifying to education systems’ growing awareness of the importance of building bridges between formal and non-formal learning to harness students’ motivation and maximize learning outcomes;
- In Spain, Poland and Austria, the initiatives identified directly complement these countries’ overarching national strategies on key competence development, in which recent curricular reform has played an important role;
- While all initiatives to some degree target the curriculum and the transformation of pedagogical practice so as to be more innovative, collaborative, cross-curricular, project-based, ICT-enhanced, motivational and student-centred; the majority of initiatives also involve investment in in-service teacher training, but rarely address initial teacher education also;
- The assessment of key competences remains a difficult and under-developed area, and changes to the curriculum have not always been accompanied by changes to assessment practices; where assessment has been changed in line with curriculum reform it focuses on assessment for learning strategies, comprises both summative and formative purposes, and a variety of methods including portfolio assessment, digital competence-based assessment tools, peer and self-assessment;
- Transforming the physical learning environment into flexible spaces enabling diversified, ICT-enhanced learning, as well as modifying the timetable, structure and organization of lessons can facilitate a key competence based approach in schools;
- Holistic, multi-competence and multi-dimensioned initiatives (covering an array of key competences and targeting three or more of the following dimensions: curriculum, assessment, teacher training, pedagogy, school organization, and learning resources) also exist in countries lacking a national dedicated strategy in this area (e.g. Belgium, Finland, Ireland, Malta, Sweden and Slovakia);
- Around half of all countries (Austria, Estonia, Poland, Portugal, Norway and Finland) analyzed have at least one initiative mainly focused on the development of students’ digital competence, often including training teachers to use ICT more effectively for teaching and learning; other initiatives focus on the use of ICT as a means through which to teach and learn other competences;
- Competences in foreign languages, cultural awareness and expression and social and civic competences are rarely addressed in the initiatives identified, reflecting the fact that less than half of all EU countries have national strategies in these areas;
- Entrepreneurship education is increasingly more present in schools and is beginning to be offered as a separate subject at secondary school level in Spain, Ireland and Estonia (and already exists as such in Poland); national initiatives dedicated to this competence exist in Sweden and Norway, where it has been prioritized in recent education reforms;
- Key competence development supports an inclusive approach to education, as the pedagogical approach favoured is well suited to targeting low achievers and young people at risk of dropping out of the education system;
- A participative approach involving all stakeholders (students, teachers, parents, community and business leaders) throughout the process is central to the development of key a competence approach in school education.
**EUROPEAN OVERVIEW OF INITIATIVES CONCERNED WITH KEY COMPETENCE DEVELOPMENT**

**INTRODUCTION**

The Lisbon agenda, launched by the European Council in 2000, underlined national education systems’ key role in fostering a dynamic and innovative European knowledge-based economy. To assist national education systems’ contribution to this objective, the 2006 Recommendation of the European Parliament and of the Council on Key Competences for Lifelong Learning was formulated. Since then, Europe’s focus on the digital agenda and the need to face the challenges posed by the current financial crisis have given renewed relevance to the importance of developing a key competence approach in education systems across Europe.

Most EU countries, including those represented within KeyCoNet, have introduced the concept of key competences and learning outcomes into their national curricula or official steering documents for compulsory education during the last decade (see Figure 1). In countries, including Finland and Sweden, where a competence-based approach has in fact been in place since the mid-1990s, recent or current education reform is re-emphasizing the centrality of key competences in the new curricula to be introduced in the near future. It is this series of recent curriculum reforms across EU countries which have often given rise to the initiatives described in the case notes collected by KeyCoNet partners in 2012 and 2013, focused on developing and strengthening the key competence development (KCD) approach adopted by each country.

One example of a very recent curricular reform which has had a consequence on how the French education system conceives and implements key competence learning, is the Law of orientation and programming for rebuilding the school of the Republic (*Loi d’orientation et de programmation pour la refondation de l’école de la République*). This new law has introduced ‘culture’ into the core curriculum (*le socle commun*) established in 2005, which up until now officially comprised ‘knowledge’ and ‘competences’. A new official body, the “conseil supérieur des programmes” was launched in October 2013 and is responsible for translating the law into principles for the curriculum and into a detailed syllabus for each level of school education. Recent reforms impacting on key competence development at national level have also taken place in Belgium, Finland, Sweden, Portugal and Malta. For a full list of the national education reforms see table 1 below, and for further information, please consult the respective country overviews available at [http://keyconet.eun.org/project-results](http://keyconet.eun.org/project-results).

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**Figure 1: Recent curricular reforms integrating KCD**

<table>
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<th>Date</th>
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<td>2006</td>
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<td>Ireland</td>
<td>Key Skills Framework</td>
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<td>Slovakıa</td>
<td>State educational programmes</td>
<td>2008</td>
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<tr>
<td>Poland</td>
<td>New core curriculum</td>
<td>2008</td>
</tr>
<tr>
<td>Austria</td>
<td><em>Bildungsstandard</em></td>
<td>2008/2009</td>
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<td>Belgium (NL)</td>
<td><em>Vakoverschrijdende eindtermen@2010</em></td>
<td>2010</td>
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<tr>
<td>Finland</td>
<td>New national core curricula</td>
<td>2010-2016</td>
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<tr>
<td>Sweden</td>
<td>New Education Act - for knowledge, choice and security</td>
<td>2011</td>
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<tr>
<td>Portugal</td>
<td>Revised curriculum framework, curricular goals and basic education programmes</td>
<td>2011-2013</td>
</tr>
<tr>
<td>France</td>
<td><em>Loi d’orientation et de programmation pour la refondation de l’école de la République</em></td>
<td>2013</td>
</tr>
<tr>
<td>Spain</td>
<td><em>Ley Orgánica para la Mejora de la Calidad Educativa (LOMCE)</em></td>
<td>2013</td>
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<tr>
<td>Malta</td>
<td>Core Curriculum Programme</td>
<td>2013</td>
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2 Please note that the above table only makes reference to the latest curricular reform in each country. For further details on the nature of each reform and its relation to KCD please refer to the annually updated KeyCoNet Country Overviews accessible here: [http://keyconet.eun.org/country-overviews](http://keyconet.eun.org/country-overviews).
1. THE NATURE OF THE KCD INITIATIVES DESCRIBED IN KEYCONET’S CASE NOTES

As part of its remit, the KeyCoNet network has identified and analyzed emerging key competence initiatives implemented in its partner and associate countries across Europe in 2012 and 2013. The description and basic analyses of these initiatives have been collected in a series of ‘case notes’. KeyCoNet’s partners and associates were responsible for identifying and contacting coordinators of KCD initiatives of interest at national level, and requesting those directly involved in the initiative to draft a case note or provide relevant information. The network has produced a total of 50 case notes since January 2012 until December 2013, on the basis of KCD initiatives identified in 14 countries. Additionally, six European initiatives have been identified involving countries also not currently represented within the network. The initiatives collected by partners and described in this catalogue are not exhaustive and therefore do not fully represent all KCD developments in each country. The catalogue provides a brief overview of the KCD initiatives in place across KeyCoNet partner and associate member countries, and offers some insights on emerging trends and priorities.

The initiatives described in this catalogue differ in many ways, according to the nature of the key competences addressed, the implementation process used, the number of students and teachers directly concerned, the type of actors involved, and the duration and stage of development. It should be noted therefore that this overview is modest in the comparisons and trends it refers to due to the diverse nature and scope of the initiatives identified, as well as the varying degree of information available. Although already rich in information, the case notes are intended to provide an initial overview of the initiative concerned. A more detailed and critical analysis of initiatives selected by the network have been developed into fuller case studies, based on a sound research methodology. They identify obstacles and enablers perceived during the initiative’s implementation, with the objective to fuel recommendations at school, local, regional and national levels to support key competence development.

1.1 POLICY EFFORTS IN KCD ARE CLEARLY CONCENTRATED AT SECONDARY SCHOOL LEVEL

Half of all the initiatives identified target secondary school students only, some specifying a focus on lower or upper secondary level. This need to target secondary education in particular is in line with literature findings in this area (European Commission, 2009; Riviou, K. and Sofoklis, S. 2013) which state that primary school pedagogy is often more participatory, learner-centred and multidisciplinary than methods used at secondary level. Teachers at secondary level, for the most part, have less expertise in these areas and opportunities to implement them in the secondary school context, due to a lack of preparation during their teacher training which is mostly centred around subject-specific knowledge and competences. This could explain in part various countries’ decision to implement training and other key competence related initiatives at secondary level, where the change is most needed. The remaining half of initiatives concentrate on the whole of compulsory education, covering both primary and secondary levels, except for one Finnish initiative (see case note FI2) which specifically targets primary level only. Other initiatives identified covering levels going beyond KeyCoNet’s scope of compulsory school education, include two Spanish initiatives which also cover nursery education (see case notes ES3 and ES4), and one European initiative (see case note EU3) which specifically targets adult education (see Figure 2). The European project, VINTAGE, which is currently developing an online tool for the self-evaluation of adults’ key competences, was nevertheless considered an interesting case to analyse as part of the network’s remit to contribute to a coherent lifelong learning strategy for the development of key competences.

1.2 MAJORITY OF INITIATIVES IDENTIFIED AT NATIONAL LEVEL

![Figure 2: Level of education covered by the KCD initiatives identified](http://keyconet.eun.org/project-results/case-studies)
The majority of the initiatives identified are at national level, and are in the first or second stages of implementation. A proportion of these initiatives have evaluation built into their programmes, and while the process has been launched, results are still not available (see for example cases notes BE1, BE2, EE2, EE3, and ES1). Other national initiatives which have been in place for longer, such as the Cultural Rucksack programme (see case note NO4) and work carried out by the Norwegian Centre for ICT (see case note NO2) already have well established monitoring and assessment tools in place (e.g. the Norwegian Centre for ICT’s longitudinal Monitor study on ICT infrastructure and the use of ICT for learning, carried out at national level every two years since 2003). The Irish initiative Project Maths (see section 2.4 and case note IE5) is another example of an advanced initiative which has been in place for over 5 years, and has invested in an external evaluation of the impact of the project on student achievement, motivation and learning.

1.3 REGIONAL INITIATIVES

Key competence based initiatives have also been identified at regional level in France, Austria and Spain. In France, the Regional Education Authority of Bordeaux has been developing a software application since 2012 for monitoring competence-based learning (see case note FR6). The software will include a range of resources which can be adapted to the competence level of each pupil. This new tool will help identify students’ individual learning difficulties and allow teachers to customize intervention strategies. Pilot schools in the Bordeaux region will test the software in the 2014-2015 school year, and if it is successful the software will be offered to all lower secondary schools in the region, and in a further step possibly beyond. The Austrian initiative ACHTplus (see case note AT2) aims to enable students, parents and teachers to determine students’ competence levels in a collaborative approach at the crucial transition period, when they are aged between 14 and 15 years, to inform their career decisions. The project helps students develop their self-evaluation skills and their ability to identify their strengths and weaknesses, and opportunities for development. The project began as a pilot in 2011 with 11 initial schools, and currently includes the participation of 36 schools, including middle, secondary, technical and vocational schools. The aim is for all schools in the region of Vorarlberg to be involved in the project by the 2016/2017 school year.

The Spanish initiative, is also focused at the regional level, but is different to the French and Austrian cases, as rather than involving a pilot which is gradually being scaled up across the region, it in fact represents one of various regional implementations of the national initiative, the COMBAS/PIC project (see section 2.1). The PICBAS programme6 (Programme for the integration of key competences in Andalusia - Programa de Integración de las Competencias Básicas en Andalucía), which ran initially from March 2011 until June 2012 and entered a new phase in 2013, is the largest regional sub-project of Spain’s national COMBAS/PIC project. The PICBAS programme (see case note ES1) aimed to develop pilot training actions for teachers to assist them in the integration of key competences into the curriculum, and involved 82 public Andalusian primary and secondary schools. The PICBAS programme was the focus of a peer learning visit6 KeyCoNet members participated to in Seville in October 2012, and will also be the focus of a case study in 2014. Spain has various key competence initiatives running at regional and local level. For example, the Alzira Teacher Training Centre in Valencia (see case note ES2) has recently developed lesson plans for primary and secondary education, in cooperation with teachers from 30 schools in the region, to integrate competence based learning into the curriculum. Moreover, all teachers at compulsory education level as well as nursery level on the island of El Hierro have received training on the inclusion of key competences in curriculum practices (see case note ES3).

1.4 PILOT INITIATIVES INVOLVING SMALL NETWORKS OF SCHOOLS

In addition to initiatives which have already been mainstreamed, a group of six pilot initiatives were also identified. Three of these pilot initiatives involve a small network of 3 to 4 primary (see case note SK1) or secondary (see case notes SE2 and IE2) schools where all students and staff are involved in a whole school approach aimed at experimenting how best to embed competence-based learning within daily school practice. In the cases of Sweden and Ireland the choice to experiment using school pilots may be partially attributed to their decentralized approach to various dimensions of the education system. The Slovak 4-year pilot has come to an end, and has been the subject of a thorough evaluation conducted by the National Institute for Education, and was overall deemed successful. As a result the plan is to scale up the initiative to national level to ensure that all primary schools use the innovative methods developed by the project. A catalogue containing the proven innovative teaching methods and opportunities for accredited training will provide all Slovak teachers with free access to information and methodological documents intended to enhance a further systematic implementation of the programme.

1.5 SCHOOL LEVEL INITIATIVES

A group of eight initiatives were identified at school level, only involving one school (see case notes FI1, FI3, FR1, FR2, FR3, FR4, FR5, and PT2). Their scope and nature vary significantly however. In the Finnish school experiments for example university researchers have carried out detailed formative evaluations with scalability in mind, with the intention of creating a nation-wide school network as the result of the LEAP21 initiative for example. In France, where five school level initiatives were identified scaling up is envisaged to a much less ambitious extent, by expanding the initiative only to other year groups within the school where the project has taken place.

1.6 NON-FORMAL LEARNING COMPLEMENTS SOME OF THE FORMAL EDUCATION INITIATIVES

The remit of KeyCoNet’s work is to analyze the development of key competences in formal education, and therefore the majority of initiatives identified clearly operate within the formal school framework only. Interestingly however, a significant one third of initiatives identified claimed that they were implemented in both formal and non-formal learning contexts (see Figure 3). This is evidence of the fact that education systems across Europe are becoming increasingly aware of the importance of building bridges between formal and non-formal learning to harness students’ motivation and maximize learning outcomes. In Finland for example, the new core curricula currently under development will specifically encourage links to be made between formal and non-formal learning.

6 http://www.mecd.gob.es/cnie/investigacion-innovacion/competencias-basicas/projecto-combas.html
7 http://competenciasbasicasandu.com/andalucia-desarrollara-un-programma-combas/
8 Seville Peer Learning Report: http://keyconet.eun.org/peer-learning-visit-report

9 International researchers working on innovative teaching and learning have developed the professional development programme LEAP21 with the aim of embedding the principles of 21st century learning into schools’ daily practice (http://www.itlresearch.com/itl-leap21).
2. KCD INITIATIVES COMPLEMENTING OVERARCHING NATIONAL STRATEGIES TARGETING ALL OR MOST OF THE KEY COMPETENCES

Spain, Poland, and Austria are the only partner or associate KeyCoNet member countries which have national strategies focusing on all or most of the key competences to be developed in school education. The key competence development (KCD) initiatives identified in these countries, described in the network’s case notes, reflect this wide ranging approach. The information below regarding these countries’ national strategies derives from the network’s country overviews as well as the report Eurydice (2012) Developing Key Competences at School in Europe: Challenges and Opportunities for Policy, and is used to contextualize the initiatives identified by network partners in these countries.

2.1 SPAIN’S NATIONAL STRATEGY

Spain’s Organic Act on Education 2/2006 (Ley Orgánica de Educación - LOE) specifically mentions ‘basic competences’, together with objectives, contents, pedagogic methods and assessment criteria as the building blocks of the curriculum. Spain’s education policy fully supports the key competence approach through the 2006 Education Act which establishes a common core national curriculum for compulsory education including eight ‘basic competences’, describing how each area or subject should contribute to their development. Likewise, following the shift in national curricula from subject knowledge to a competence-based approach, Spain’s assessment system has adopted an explicit emphasis on competences. The last national standardised tests took place in 2008-2009 for primary, and 2009-2010 for lower secondary compulsory education, and assessed linguistic communication, mathematical competence, knowledge and interaction with the physical world, and social and civic competences. Spain has also put in place specific strategies for students’ development of mother tongue (reading), foreign languages, science, digital competence and a sense of initiative and entrepreneurship. As of 2013, the LOE law has been replaced by the new Organic Law for Improving Education Quality (Ley Orgánica para la Mejora de la Calidad Educativa - LOMCE), and has been widely contested at the political level, as well as by associations of education professionals, families and students. However, despite the controversial changes it proposes, the integration of competences is still to be fostered in the revised curriculum, and the dedicated curriculum development programme, COMBAS, will continue to be supported by the new government (see paragraph below). It is nevertheless possible that under this new law the eight competence model and accompanying indicators for the improvement of learning could be replaced by a new model. KeyCoNet will monitor the situation closely and report on any developments in the 2014 version of the Spanish Country Overview.

This all-encompassing, concerted approach to KCD in Spain is furthermore reflected in the ongoing COMBAS project\(^\text{10}\) (Programme for consolidating Basic Competences as the essential element of the curriculum - Programa para la consolidación de las Competencias Básicas como elemento esencial del currículo) which has recently been renamed in its second phase, the PIC project (The Curricular Integration Project - Proyecto de Integración Curricular), established by the Spanish Ministry of Education, Culture and Sport, in collaboration

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with 15 Autonomous Communities in 2010. 12 of Spain’s 17 regional governments continue to participate in the PIC project. The project targets all members of the education community at all stages of compulsory education (students, teachers, management teams, families, etc.) and its holistic approach includes: supporting competence-based curriculum development so as to increase students’ level of competences, develop their creativity, and prevent and reduce school failure by promoting lifelong learning; improving and updating initial teacher training in primary and secondary education to include the teaching and learning of key competences; financially supporting the development of projects seeking to consolidate a key competence approach in the curriculum; and evaluating the implementation of the programme and its impact. In addition to this national key competence development framework, it should be noted that Atlántida and other innovation groups have also been active in the area (see case notes ES2, ES3, and ES4).

### 2.2 Poland’s National Strategy

Poland’s Strategy for the Development of Education (2007-2013) envisages curriculum changes including more emphasis on the development of key competences to help the employability of graduates. As a result, the new core curriculum introduced in 2008 fully reflects this approach and is organised around key competences such as learning to learn, communication, mathematical thinking, etc. Moreover another recent Polish strategy, namely the Strategy for the Development of Social Capital (2011-2020), is currently subject to public consultation. The strategy refers directly to the provision of key competences, to basic and complex skills as well as to the development of students’ creativity within the framework of education. It also aims to render the educational system comprehensible to the development of civic activity and social participation in public life. The strategy addresses all competences and particularly aims to support the development of digital competences, ensuring the wide use of ICT for learning purposes. The document entitled Lifelong Learning Perspective, annexed to the above-mentioned strategy, includes a direct reference to the development of key competences as essential for tailoring education and training to the needs of the economy and to changes in the labour market.

A large scale ongoing initiative, ‘Students’ Academy’ (2009-2014), coordinated by the Centre for Citizenship Education (see case note PL1), was designed to support the implementation of the new national core curriculum by developing and testing achievement standards for mathematical, scientific and digital competences in 300 secondary schools. In the classroom as well as during extra-curricular activities known as School Science Clubs, lower secondary school students perform experiments and carry out projects in mathematics and natural sciences. Although the initiative focuses mainly on improving teaching and learning in MST subjects, it also above all develops students’ learning to learn competence. It is one of only two initiatives identified by the network which focuses on this rather elusive competence, which is rarely treated explicitly. Through a specific module within the Academy programme on peer teaching, students are required to identify and analyze their own learning styles (often normally unnoticed by themselves or by their teachers) and to use this reflective exercise to inform their teaching to peers. More than 300 secondary schools from 5 Polish provinces have participated in the project, and 3,000 teachers have been provided with practical training (face-to-face, online and blended modes) on how to use the achievement standards during lessons and extra-curricular activities. Since the project’s launch more than 1,000 teachers have implemented over 3,000 of the Academy programme’s modules benefitting circa 23,000 students aged between 13 and 16 years old. The multi-faceted project targets the effective implementation of the new competence-based curriculum, renewing the approach to MST pedagogical methods, and providing teachers with support through in-service training and dedicated resources. Teachers who join the programme can benefit from e-learning courses that cover experiment preparation and implementation, project-based learning management, methods to increase student motivation and the role of feedback in the learning process.

### 2.3 Austria’s National Strategy

Although Austria’s approach to KCD development is holistic and integrated in a similar way to Spain and Poland’s strategies, unlike these countries, it focuses mainly on a core group of competences, as opposed to all of them12. With the amendment of the national School Education Act (Schulunterrichtsgesetz – SchUG), a legal basis for the implementation of educational standards (Bildungsstandard) in relation to the development of core competences in Austrian schools was established in 2008/09. This Act primarily determines the framework for quality standards in three main subjects (mother tongue, second foreign language and mathematics) for students in years 4 and 8. Regular evaluation of the standards allows for them to be adapted in order to ensure the quality of education, and teachers receive feedback on students’ learning results. An integrated programme for teacher training and professional development has also been developed accordingly, and has already been partly implemented. The aim is to improve education by moving towards more competence-based teaching, through an implementation strategy that includes an analysis of key competence-based practices and quality assurance. Assessment has been designed around the principle of assessment for learning, as opposed to assessment of learning, and includes the learners’ own feedback and self-evaluation.

The Federal Institute for Educational Research, Innovation and Development of the Austrian School System (Bundesinstitut für Bildungsforschung, Innovation und Entwicklung des österreichischen Schulwesens – BIFIE) is responsible for the development of these standards as well as for the education and training of teachers, in close cooperation with the teacher training colleges (pädagogische Hochschulen - PH). PH are the bodies through which all educational and training measures in this area are carried out, and they also serve as the guidance and advisory board for teachers needing support in the implementation of key competences in their teaching. National standardised assessment of students’ learning and feedback to the teachers is an essential part of the quality assurance system set up by the Austrian implementation strategy. The first assessment was implemented by BMUKK and BIFIE in the key competences of maths (2013) and mother tongue (2014) in year 4, and in maths (2012), second foreign language (2013) and mother tongue (2014) in year 8. An essential step forward towards the full implementation of the key competences approach in the Austrian educational system is the new secondary school leaving exam, also forming a part of the amended Education Act. By the 2013/14 school year the new exam will be partially standardised and competence-based, in order to correspond with the competence development of the educational standards for school years 4 and 8.

Austria, like Spain, has a national KCD programme, but rather than targeting all competences, focuses on those taught as specific subject areas within the curriculum; namely, MST competences, digital competence and communication in the mother tongue. The national programme IMST (Innovations Bring Schools to the Top) aimed at improving teaching in mathematics, science, information technology, German language and related subjects was

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11 The CoPE (Certificate of Personal Effectiveness) developed by ASDAN is a qualification which assesses students generic ‘cross-curricular ‘personal effectiveness skills’ including the learning to learn competence. The development of these skills is based on a methodology involving experiential learning by way of personal challenges which permit the incremental development and recognition of skills through formative assessment and on “learning to learn” through a process summarised as “PLAN-DO-REVIEW”. For more information see case note UK1: Building a culture of achievement through the ASDAN Certificate of Personal Effectiveness.

12 At regional level however, there is one Austrian initiative which focuses on all 8 key competences (see section 1.3 and case note AT2: ACHTplus).
launched in 1998 and in 2013 was extended for a further three years. The programme is run by the Institute of Instructional and School Development (IUS) of the Klagenfurt University with support from the Austrian Educational Competence Centres (AECC) and the Pädagogische Hochschulen (university colleges of teacher education). The programme helps teachers to implement innovative pedagogical projects and to receive support in terms of content, organisation and funding. It involves around 7,000 teachers who participate in projects, attend conferences or cooperate in regional and thematic networks. Evaluation and research has been integrated at all levels of the IMST programme to ensure its impact is measured. Gender sensitivity and gender mainstreaming are important principles of the programme, and their implementation is supported by the Gender Network.

During 2011 and 2012 regional networks were supported under IMST’s network programme. By way of regional educational planning these networks can set their own priorities and support district networks, regional specialist didactics centres, specialist groups in schools and/or inter-school networks. This programme also permits the setting of contextual priorities by promoting small-scale projects, for example. As of 2010, IMST has started supporting five to ten theme programmes for classroom and school projects with a view to boosting specific priorities, including competences in mathematics and science. The network and theme programmes are monitored by programme teams, composed of academics at universities and colleges of teacher education as well as school staff, which work on approximately 20 classroom and school projects per theme and school year. Thanks to IMST’s support system, the way has been paved for further anchoring of specialist didactic knowledge so that educational policy projects can resort to reliable structures. The Austrian Educational Competence Centres for example, have turned out to be key agents in the introduction of educational standards and of a centralized secondary school leaving exam.

2.4 TARGETED INITIATIVES ON SPECIFIC COMPETENCES IN AUSTRIA, SPAIN, POLAND AND IRELAND

In addition to their overarching national strategies on KCD, Spain, Austria and Poland also have targeted initiatives on specific competences. To improve students’ literacy all three countries have invested in reading initiatives: In Spain, the national ‘Plan for Promoting Reading’ (Plan de fomento de la lectura) of 2007 aim to foster reading and further develop school libraries; In Austria the ongoing reading initiative Literacy Competence (see case note A2: Reading Initiative) focusing on improving reading and text comprehension was set up in 2004 to compensate for the shortcomings in reading skills revealed by PISA results; In Poland, the National Programme for the Development of Reading (2011-2020) is currently being prepared by the Ministry of Culture and National Heritage.

Austria has a range of national programmes, actions and centres, each dedicated to developing a specific competence or group of competences. For example, its national digital competence programme has recently completed a pilot phase which uses the EDUCOOL platform to integrate ICT into the curriculum for the teaching and learning of various subjects (see case note A1: Digital Competences, Basic Education in ICT). Austria also has a specific national centre (ÖZEPS, www.ozeeps.at) for students’ personal development, encouraging the development of social and learning to learn competences, and another centre dedicated to citizenship education, which recently produced a publication including practical lessons and diagnostic exercises (Diagnoseaufgaben) to help teachers assess students’ ability to find solutions to problems independently, as well as assess their decision-making and conceptual thinking skills. Moreover, the Ministry of Education has set up the EESI centre (Entrepreneurship Education for School Innovation - http://www.eesi-impulszentrum.at/) which is responsible for all teaching materials, teacher training, competitions and workshops related to the development of entrepreneurial skills. Lastly, the Austrian government has also supported a number of arts projects with the explicit aim of fostering students’ creativity, innovation, cultural awareness and artistic expression. Since 2007 more than 20,000 new projects have been launched by schools, artists and cultural institutions, with the support of government funding.

Spain also has national programmes or strategies dedicated to specific competences. For example, the Comprehensive Programme for Learning Foreign Languages (2010-2020) implemented by the Spanish Ministry of Education, Culture and Sport in collaboration with the Autonomous Communities, focuses on the promotion of language learning from an early age; and the National Strategy for Science and Technology (2007-2015) underlines the need for the education system to promote interest in science and technology and particularly to develop students’ problem-solving and critical thinking skills.

Poland is currently further developing the Teaching Tools Database (see case note PL2) set up in the autumn of 2011, which supports the implementation of the new core curriculum introduced in schools in 2009. The database provides teachers with tasks that can be used for the learning and assessment of higher order thinking skills, such as critical thinking and problem solving, which the new curriculum focuses on. This is a much needed tool, as there are currently few resources available for teachers to help develop these specific competences in their students.

Ireland has recently implemented a national initiative devoted to improving students’ mathematical competence - Project Maths (see case note IE5). Following a review of post-prima- ry mathematics education in 2007, the National Council for Curriculum and Assessment (NCCA) prepared for the phased implementation of syllabus change in mathematics over a four-year period from September 2008. This change involved the review of mathematics syllabuses at both junior cycle and senior cycle and a complete change in the approach to the teaching and assessment of mathematics, which is now focused on the contextualisation of content in concrete, real-life situations. The five key skills (communicating, working with others, critical and creative thinking and information processing and being personally effective) have been embedded into the new mathematics syllabuses. Teachers have been at the heart of this curriculum development process, and their feedback has informed refinements and revisions to the curriculum which was mainstreamed in all Irish schools in 2010.

http://www.bmukk.gv.at/kultur/kulturvermittlung/kunstmachtschule.xml
3. HOW THE CURRICULUM, ASSESSMENT, PEDAGOGY, TEACHER TRAINING AND SCHOOL ORGANIZATION ARE ADDRESSED IN THE INITIATIVES IDENTIFIED

3.1 AN EMPHASIS ON KEY COMPETENCES IS MORE VISIBLE IN IN-SERVICE TEACHER TRAINING AS OPPOSED TO INITIAL TEACHER EDUCATION

All initiatives identified target the curriculum and pedagogy to some degree. Throughout the initiatives analyzed the teaching methods considered favourable to competence development are characterized as innovative, collaborative, cross-curricular, project-based and motivational, often supported by ICT, with a focus on student-centred, personalized learning. The majority of initiatives also involve some degree of teacher training which typically accompanies a pilot project in its first implementation phase. However, this teacher training is nearly always dedicated to serving teachers, with less than a third of initiatives also targeting initial teacher education. This reflects the CASE Report’s (2009) finding that an emphasis on key competences is more visible in in-service teacher training as opposed to initial teacher education. Even the three holistic curriculum reforms identified (Ireland’s Key Skills Framework, Spain’s Curricular Integration project COMBAS/PIC, and Malta’s Core Curriculum Programme; see case notes IE1, IE5, ES1, and MT1) have made provisions for continuous professional development opportunities to assist teachers with the new approach, but have not yet considered accompanying measures for initial teacher education. The only initiative identified which specifically targets initial teacher education is the introduction of a module focusing on the embedding of key skills in teaching and learning, as part of a third level undergraduate BSc Science and Maths Education Degree, at the National University of Ireland Maynooth (see case note IE4). Initiatives which are starting to look at teacher training holistically include Belgium’s cross-curricular final objectives initiative (see case notes BE1 and BE2) which emphasizes the need for more attention to be given to competence-based learning and assessment in both initial and in-service teacher education, in accordance with the curricular reform.

An example of a European initiative which is developing a teacher training framework for key competence based teaching, is the TRANSIT project (see case note EU6). TRANSIT’s ultimate aim is to have a positive impact on the development of students’ key competences through building teachers’ capacity in competence oriented education. To achieve this, a pilot teacher training methodology is currently being developed with the aim of improving teachers’ awareness of key competences and equipping them with the professional skills needed for the didactics and e-assessment of transversal competences. The training framework will propose collaboration between teachers in cross-curricular subjects to promote a shared approach which will encourage them to engage in team planning and collaborative design of lessons and materials. Moreover, teachers will be given guidance concerning how to assess students’ transversal competences; a complex area which needs further investigation (see section 3.2 below).

3.2 ASSESSING KEY COMPETENCES REMAINS A DIFFICULT AN UNDER-DEVELOPED AREA

Assessment greatly influences teaching and learning and therefore is an integral part of any curriculum development. However, the academic literature (see KeyCoNet literature reviews14) as well as the evidence presented by the initiatives analysed in this overview illustrate that changes to the curriculum have not always been accompanied by changes to assessment practices. Assessment is mentioned by various initiatives, but rarely focused on or elaborated in detail. Several coordinators involved in these initiatives mention the difficulty in developing appropriate assessment tools for this new way of teaching and learning (especially regarding transversal competences), and pilot projects in their first implementation phase that do consider assessment as part of a holistic approach to key competences, count on dedicating attention to this in their project’s next phase of development.

However, the large scale curriculum reforms identified in Ireland, Spain and Malta have developed assessment practices in line with the changes to teaching and learning required by the new key competence based approach. Reflecting the evidence in this area, they have similar principles: key competences are specified in terms of learning outcomes, which consist of knowledge, skills and attitudes, and are not over-specified so as to allow teachers to adapt them to context; the emphasis is on assessment for learning as opposed to of learning, and serves both summative and formative purposes; and a variety of assessment methods (not just standardized and performance based tests, but also portfolio, peer and self-assessment etc.) are used to adequately capture the acquisition of learners’ key competences. Some examples of alternative assessment methods mentioned in the initiatives identified include: the use of paper and digital portfolios (see case notes UK1; FR3; MT1 and AT3) allowing different types of evidence of learners’ competence acquisition, both inside and outside of school, to be collected over time; self-assessment practices (increasingly being used as a way of making the learner an active agent, responsible for his/her own learning (e.g. see case notes MT1; AT3; and UK1), and digital competence-based assessment tools facilitating the monitoring of learning and the customization of teaching strategies (see case notes FR5 and FR6).

3.3 ADOPTING A KCD APPROACH CAN IMPACT THE SCHOOL’S PHYSICAL LEARNING ENVIRONMENT, TIMETABLE AND ORGANIZATION OF LESSONS

Some initiatives interestingly tackle the issue of how a key competence approach might impact on school organization in terms of learning spaces or timetables; a very practical and real concern for the implementation of any education reform. The Finnish initiative (see case note FI3: Co-designing learning environments) is based on the principle that physical learning environments need to be updated in order to better support the teaching and learning of key competences necessary for the 21st century. It is a cross-curricular project (visual arts, physics, chemistry, mathematics, ICT, mother tongue and literature, English and Spanish) but is conducted mainly as part of the visual arts course. The main objective is to transform school areas into spaces enabling diversified learning, through a user-centred co-design development process involving all members of the school community. Similarly, the Austrian initiative, Mobile Learning Tutors (see case note AT4) is also concerned by the need to change the physical teaching and learning environment. In accordance with Austria’s national ICT strategy, eFit21, the initiative promotes the use of mobile learning devices such as notebooks, netbooks, tablets or smartphones as ‘mobile learning tutors’ in schools in order to increase students’ digital skills and improve teachers’ digital literacy. The introduction of mobile education learning devices at the heart of the teaching and learning process means that lessons need to be prepared in a different way from those using standard textbooks, and learning platforms and virtual learning environments need to be accessible from each mobile device. A different pedagogical approach is required for the use of mobile learning devices, including the need for project-based work in groups. Moreover, the learning environment itself must be flexible to allow for movement in the classroom as well as outside, to accommodate outdoor learning.

14 http://keyconet.eun.org/literature-review
activities with the mobile devices.

The French lower secondary Collège André Bauchant has implemented a new type of internal organisation which is innovative in both structural and pedagogical terms (see case note FR4: New pedagogical organization). The curriculum is partially taught through interdisciplinary workshops which has modified the timetables of some subjects and therefore required an exemption from local education authorities, due to its affect on compulsory education. This particular school’s initiative has achieved a key competence approach through the reorganisation of lessons, divided between subject lessons, team-taught interdisciplinary lessons, modular competence groups and personalised support.

3.4 MULTI-COMPETENCE AND MULTI-DIMENSIONED INITIATIVES

Despite the absence of a national strategy dedicated to key competences, some countries (e.g. BE, NL, IE, MT, SE, and SK) have initiatives which cover all or most of the key competences and target various dimensions of the education system to ensure their successful implementation. A particularly comprehensive example is the curriculum development work on the Key Skills Framework in Ireland. Key competences have been embedded into learning outcomes for the assessment of the formal curriculum at primary and the lower and upper levels of post-primary education (see case notes IE1: Key skills for junior cycle and IE2: Key skills for senior cycle). The development of the Key Skills Framework in the senior cycle was tested in four secondary schools, in a whole school approach experiment. In order to successfully embed the key skills into teaching and learning several actions were taken: a network was established and schools participating in this network received support, training and resources to integrate the key skills approach into every day teaching and learning across subjects. Similarly, Rektorsakademiern in Sweden also recently embarked on a pilot project involving three schools with the aim of integrating ‘future competences’ into the traditional syllabi and curriculum (see case note SE2: Future competences). The programme offers training, a handbook on how to implement and integrate the work on competences into the curriculum and process support in change management. Schools were asked to form an Advisory Committee including representatives from businesses as well as teachers and students, to ensure a link is made with the demands of working life. The role of the Advisory Committee is to support and advise the school management team in their work on future competences. Following the successful pilot the programme was launched at national level in January 2013 for all interested secondary schools willing to pay the participation fee.

Key competence development in Belgium has centred around the implementation of the cross-curricular final objectives (see case note BE1: Cross-curricular objectives @2010) which were first introduced by the Ministry of Education and Training in 2001, shifting the emphasis from a subject-oriented logic to a more competence-based education. These objectives were reviewed and updated in 2010, and are structured under 7 learning contexts, namely: physical health and safety, mental health/wellbeing, socio-relational development, the environment for sustainable development, political-juridical society, socio-economic society, socio-cultural society, learning to learn and ICT. Since 1 September 2010, every Flemish secondary school is required to implement them. The final objectives describe a basic package of competences related to specific themes that each school is accountable for implementing over the six years of secondary education. Schools are free to determine how to implement the cross-curricular themes within different subjects, projects, and activities, and while schools are not under obligation to achieve the final objectives, they are obliged to make clear efforts in this regard and to show evidence on inspection. One of the biggest changes in the updated cross-curricular final objectives is the inclusion of the topic Sustainable Development. The Flemish Government therefore provided specific training for teachers on how to teach sustainable development education as part of their in-service training initiative for the 2011-2012 school year. The content is covered in an integrated way, including social, economic and environmental aspects, and is intended to promote cooperation between teachers from different disciplines. Although the Belgian case represents a multi-competence and multi-faceted initiative, the case study concludes that more needs to be done in the area of in-service training. School teachers and coordinators interviewed for the Belgian case study suggested that because cross-curricular learning through projects is a new challenge for them, it would be useful to introduce teacher professional development refresher courses, concentrating particularly on the integration of the cross-curricular objectives into project based learning.

The Slovak ITI initiative (see case note SK2: Integrated Thematic Instruction – ITI) is another good example of an initiative which targets all key competences through a holistic programme. The initiative was implemented as a pilot project over a period of 9 years, and was subject to pedagogical research which concluded that the pilot had been very successful. As a result the programme is ongoing and is now officially recognized. The programme develops innovative teaching methods to ensure students’ effective learning of the key competences.

The programme is accompanied by teaching materials and accredited training is provided by the Slovak National Institute for Education, the Methodology and Pedagogy Centre, ASK: Education for the 21st Century in Slovakia and the Children of Slovakia Foundation. Formative assessment is also an element of the ITI programme and while this is recognized as very important for the proper integration of the key competence approach, it is challenging and needs further development. There are also examples of initiatives focusing on one or a group of specific competences, where the approach used is holistic, targeting the various necessary dimensions, as in the cases described above (see for example case notes NO1, NO2, PL1, UK1 & UK2).

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15 http://action.ncca.ie/key-skills-introduction.aspx
16 http://keyconet.eun.org/project-results/case-studies
4. KCD INITIATIVES TARGETING SPECIFIC COMPETENCES

Around half of all KeyCoNet partner and associate country members surveyed have at least one initiative mainly focused on the development of students’ digital competence. In Estonia, Finland and Norway, where more than one initiative focused fully or in part on developing students’ digital skills was identified, recent curricular reforms have placed emphasis on the development of digital literacy as a cross-curricular competence. In Estonia, ICT is considered a compulsory cross-curricular theme and is a focus of the General Education System Development Plan for 2007-2013, together with Maths, Science and Technology (MST) competences more generally. This focus is reflected in the large pilot project coordinated by the Tiger Leap Foundation (see case note EE1: ICT management and assessment model for schools) which aims to train teaching and administrative staff in the effective use of ICT for teaching and learning in all curriculum areas, as well as for management purposes.

In Norway digital competence is similarly considered as a 'basic skill' which is to be integrated in all subject teaching. The Norwegian Centre for ICT in Education (see case note NO2: Norwegian Centre for ICT in Education) set up in 2010 has been instrumental in ensuring ICT is embedded in all teaching and learning processes, as required by the Knowledge Promotion Reform of the national curriculum in 2006. The centre contributes to this goal through policy initiatives, research and development projects, collaboration with schools and professional development courses for teachers. The centre has also developed several tools for monitoring, supporting and assessing schools, teachers and students in their engagement with digital technologies for learning. In Portugal, the ongoing EduScratch initiative (see case note PT3: EduScratch) is directly linked to the curriculum reforms introduced in August 2012, which stipulated the need for ICT to be taught as a separate subject in grades 7 and 8 (students aged 12 and 13 years old). The initiative, which promotes the educational use of the programming tool Scratch, including dedicated in-service teacher training, is intended to support the implementation of the new curriculum target devoted to the exploration of computational environments.

4.1 INITIATIVES FOCUSING ON TRAINING TEACHERS TO USE ICT MORE EFFECTIVELY FOR TEACHING AND LEARNING

Various other KCD initiatives collected, if not specifically targeting digital competence, nevertheless addressed this competence in one way or another, especially those focused on MST competences (see case notes FR1, NO3, PL1, SE3, and SK1). The prominence of digital competence in the KCD initiatives identified across Europe is partially due to the fact that digital competence is often seen not only as a subject-related competence (i.e. associated to ICT and technology related disciplines), but also as a means through which to teach and learn the other competences. An example can be seen in the Finnish case note describing a primary school’s involvement in the LEAP21 project, on fostering 21st century skills (see case note FI1: LEAP21: Towards 21st century learning – innovative teaching and learning in Rau-mankari comprehensive school). The project is based on the principle that the effective use of ICT in education can support the development of innovative teaching practices at schools in relation to any of the key competences. Another example is the French case note (see case note FR3: Competences and self-esteem) describing a lower secondary school’s project in which the school’s pedagogical team developed an IT tool to assess subject-related and cross-curricular competences, permitting the follow-up of students’ progress.

4.2 INITIATIVES USING ICT AS A MEANS THROUGH WHICH TO TEACH AND LEARN OTHER COMPETENCES
4.3 COMPETENCES IN FOREIGN LANGUAGES, CULTURAL AWARENESS AND EXPRESSION AND SOCIAL AND CIVIC COMPETENCES ARE RARELY ADDRESSED IN THE INITIATIVES IDENTIFIED

Only one initiative amongst the case notes collected specifically targets foreign language learning (see case note PT1: Portuguese as a second language), and only two mainly focus on, in each case, cultural awareness and expression (see case notes NO4: The cultural rucksack and PT2: European Club), and social and civic competences (see case notes FI2: Children’s site and UK2: National curriculum citizenship). This is not surprising considering that less than half of all EU countries currently have national strategies in these areas (Eurydice 2012a, pp. 16-17). It is interesting to note however, that the new curriculum framework in Portugal states that citizenship education is a cross-curricular area which will now be taught in all subjects.

4.4 ENTREPRENEURSHIP INITIATIVES FEATURE IN COUNTRIES WHERE THIS COMPETENCE HAS BEEN PRIORITIZED IN RECENT EDUCATION REFORMS

Strategies to develop a sense of initiative and entrepreneurship are slightly more common across Europe (Eurydice 2012a, pp. 17). Interestingly, the only two KeyCoNet countries where initiatives specifically dedicated to the development of entrepreneurial skills in the curriculum were identified are Norway and Sweden, whose recent education reforms have explicitly brought entrepreneurship education to the forefront. In Norway, the Action Plan Entrepreneurship in Education and Training – from compulsory school to higher education (2009-2014) was launched in September 2009. The main objective of the action plan is to strengthen the quality and the scope of entrepreneurship education and training at all levels and in all areas of the education system. A key aim is to bring students close contact with the world of work and business life, and to connect learning with real life working situations. To contribute to this objective JA-YE Norway (see case note NO1: Junior Achievement Young Enterprise Norway) runs more than twenty different programmes from the earliest stage of primary education through until higher education, focused on cultivating a culture of entrepreneurship in schools in partnership with industry, rooted in the Government’s 2006 Knowledge Promotion curriculum reform.

Sweden has also recently prioritized entrepreneurship as one of the key areas for students’ competence development. This is reflected in the ongoing entrepreneurship initiative (see case note SE1: Entrepreneurial approach) run by Skolverket (National Agency for Education), which aims to encourage entrepreneurship in schools by providing in-service training for teachers, counsellors and head teachers to equip them with the basic attitudes and skills necessary to work on entrepreneurial activities in schools. The initiative also promotes schools’ cooperation with employers, facilitates the exchange of experience between schools and allocates development funds.

Another initiative concerned with providing professional development for teachers in the area of entrepreneurship education is The Entrepreneurial School (TES) project (see case note EU4: Company Programme Self-Assessment Tool) involving all the current KeyCoNet partner and associate member countries, in addition to other European countries, with the goal of equipping students with entrepreneurial skills.

Compared to the other transversal competences, teaching entrepreneurship as a separate subject is less common in Europe (Eurydice, 2012a, pp. 24), particularly at primary level, where it is in fact only taught as such in Slovakia (Eurydice, 2012a, pp. 22). However, a new trend in this direction can be identified amongst some of the KeyCoNet partner and associate member countries. Poland is one of the few countries where entrepreneurship is already taught as a compulsory separate subject at secondary school level. In Spain since 2011/12 education authorities in the Autonomous Communities have been free to implement a separate subject, but as of 2014/15 it will be obligatory for schools to offer a new elective subject on ‘professional guidance and entrepreneurial initiative’ in the 4th grade of lower secondary schools. In Ireland, NCCA has developed a senior cycle short course on enterprise which is currently being discussed with education stakeholders before implementation, and in Estonia, from September 2013 ‘Economic and business studies’ will be offered as an optional separate subject in all secondary schools.

Another example of the increasing importance given to entrepreneurship in education in Europe is ASDAN’s recognition of entrepreneurial skills as one of the cross-curricular “effectiveness skills” it assesses in students working towards the CoPE (Certificate of Personal Effectiveness; see case note UK1).
Participative approaches

5. FRAMING KCD IN INCLUSIVE AND PARTICIPATIVE APPROACHES

5.1. TARGETING LOW ACHIEVERS AND DROP-OUTS

Two initiatives in Malta and Sweden have interestingly used a key competence approach for the specific purpose of fostering social inclusion in education. As these initiatives demonstrate, the type of teaching and learning associated to key competence based education is particularly suited to addressing young learners who are low achievers and/or at risk of dropping out of the education system. The Maltese Core Curriculum Programme (see case note MT1) targets the educational development of low achievers through a key competence curriculum reform which includes the training of teachers and mentors, as well as the provision of accompanying learning resources and guidance. The curriculum programme targets low ability learners at risk of failure, during the last three years of secondary education, between the ages of 13 and 16. The programme which targets the needs of lower-level learners is characterised by a constructivist approach which favours inquiry-based learning and assessment for learning strategies. Learners following the Core Curriculum Programme will be given a core entitlement covering subject specific key competences as well as carry out cross-curricular projects that enhance their ‘soft skills’. Evidence through different methods of assessment will be collected in a portfolio, which will be used to instil learning to learn skills. The key competence approach inherent to the pedagogical and assessment principles within the programme is especially conducive to the holistic development of each learner, allowing for his/her unique potential to be fulfilled. This Maltese initiative will be the subject of a more in-depth case study in 2014.

The Swedish Oneeighty ongoing initiative (see case note SE4) which started in 2007 is an online educational option for young people who do not, for various reasons, participate in the official school system. Every year, 1200 young people leave secondary school in Sweden without any qualifications and many more have a number of significant problems with their schooling. For these students there is often a lack of contact with the school and in many cases this is the beginning of a long-term social exclusion which causes a huge expense to society, while for those concerned, the human and emotional costs are immeasurable. The purpose of Oneeighty is to reduce the risk of young peoples’ long-term exclusion, and to strengthen their self-esteem and their confidence in their own ability to continue lifelong learning. The programme is not intended to be a permanent solution, but rather aims to be a temporary stepping stone with the ultimate goal of helping young people get back into the formal education system and become more integrated into society. While the programme follows the national curriculum, it focuses particularly on a key competence approach to effectively engage learners. As Oneeighty is a web-based platform where young people, teachers and families come together, the development of digital competences is particularly central to the project. As priority is given to methods and topics which resonate well with these otherwise disengaged youth, digital interests in playing online games or watching films for example are used as windows through which to develop learners’ competences in all other areas also. The key competence pedagogy at the heart of the Oneeighty initiative, which embraces the development of knowledge, skills and attitudes on the basis of authentic, meaningful social contexts and recognizes informal as well as formal learning, has proved to be particularly successful. Since the programme began, 50% of the young people involved have returned to school and play a more active role in society.

5.2. INVOLVING FAMILIES AND THE WIDER COMMUNITY

An issue arising as key in some of the initiatives identified is the need for a participative approach, associating the main stakeholders (teachers, students, parents, community and business leaders) from the beginning and throughout the whole process. Such stakeholders can be involved at various stages of the process; e.g. in an initial consultation concerning the definition of key competences and related attainment targets, or later on when feedback on materials or processes is needed. The Spanish project Competences for life: school, family and community (see case note ES3) targets such stakeholder involvement head-on, in the development of a key competence approach in schools in El Hierro. All schools on the island were involved in the development of a global curriculum encompassing all key competences needed in life, with the active participation of the family sector (represented by parents associations) and the community sector (represented by political officials). Family groups were also central to another Spanish initiative (see case note ES4: Families and Schools: Educating together based on key competences), where regular meetings with them ensured consensus was built around the key competence model used to build a common educational vision in a network of 22 diverse schools. The Austrian initiative ACHTplus (see case note AT3) also involves the active participation of parents. Students’ competence levels are determined in collaborative ‘status discussions’, in which students have the opportunity to discuss with their parents, teachers and career councillors about their learning achievements, strengths and weaknesses and needs for improvement. Parents are also an integral part of the programme’s evaluation and are requested to complete feedback questionnaires concerning the status discussions. Moreover, the initiative sought to involve families and get them on board from the outset by ensuring that all schools implementing ACHTPlus received targeted information for parents.
REFERENCES


- KeyCoNet 2013 Country Overviews. Accessible here: [http://keyconet.eun.org/project-results](http://keyconet.eun.org/project-results)


- KeyCoNet 2013 Case Studies. Accessible here: [http://keyconet.eun.org/project-results/case-studies](http://keyconet.eun.org/project-results/case-studies)


AUSTRIA [1]
DIGITAL COMPETENCES, BASIC EDUCATION IN ICT

A. BASIC INFORMATION

**Country:** Austria

**Title of initiative:**
[DE] Digitale Kompetenzen, Informatische Grundbildung
[EN] Digital Competences, basic education in ICT

**Coordinator/ Organization:** FI, Mag. Günther Schwarz (Inspector for ICT)

**Key competences addressed:**
[DE] Informatische Grundbildung
[EN] Basic education in ICT

**Type of initiative and channels used for implementation** (e.g. curriculum reform introduced through legislation etc.)
In order to improve key competences in ICT and raise interest in STEM (science, technology, engineering, and mathematics) the Federal Ministry of Education, Arts and Culture has set up a pilot project for lower secondary schools in cooperation with the ICT inspector of Upper Austria.

**Partners:** BMUKK (Bundesministeriums für Unterricht, Kunst und Kultur - Federal Ministry of Education, Arts and Culture), teacher-training institutions, regional education authorities etc.

**Scope:** (student/teacher/school level; local/regional/national)
To increase interest and resources for the subject of ICT, but also to develop cross-curricula education on a national level.

**Learning context:** (formal or non-formal)
Formal, within the curriculum

**School education level/s:** (primary, lower secondary, upper secondary)
Lower secondary

**Target groups:** Teachers and students

**Time frame:** (start and end date)
March 2012-May 2012 (pilot phase)

B. SUMMARY

This pilot project, run by the BMUKK (Bundesministeriums für Unterricht, Kunst und Kultur - Federal Ministry of Education, Arts and Culture) aims to improve key competences in ICT and to raise student motivation in STEM (science, technology, engineering, and mathematics).

The project uses the EDUMOODLE platform and aims to integrate ICT into the curriculum for various subjects. There is a specific focus on increasing the use of technology in schools, and particularly on developing teachers’ ability to motivate students in to use technology for their school work.

The test project has been very successful in improving the technological impact on society by using technology in lower secondary education to motivate students and parents as well as to encourage teachers to improve their teaching methods. It is hoped that the pilot project will be the basis of further political decisions enabling the development of ICT competences at a political level.

Since 2013 the target and aim of the the project were - in some extend - implemented in CPD and initial teacher training (online-campus-virtuelle-ph). So Called “matrices of competences” for primary schools and lower secondary schools have been developed and recommendations for teacher initial training have been published.

**HTTP://KEYCONET.EUN.ORG/CASE-NOTES/AUSTRIA1**

Relevant links:
- EDUMOODLE site: http://www.edumoodle.at/moodle/
- eFit21 strategy: www.efit21.at
- http://www.edugroup.at/praxis/portale/digitale-kompetenzen.html
**Austria [2]**  
**Reading Initiative – Reading Fit**

### A. Basic Information

<table>
<thead>
<tr>
<th>Country</th>
<th>Austria</th>
</tr>
</thead>
</table>
| Title of initiative      | [DE] LESEFIT  
[EN] Reading initiative - Reading fit |
| Coordinator/Organization | BMUKK (Bundesministeriums für Unterricht, Kunst und Kultur - Federal Ministry for Education, the Arts and Culture)  
MR Mag. Karl Hafner |
| Key competences addressed|  
· Literacy  
· Communication in the mother tongue  
· Digital competences  
· Cultural awareness and expression  
· Social and civic competences |
| Type of initiative and channels used for implementation | This reading programme was initiated under the name LESEFIT in 2004 and renamed “Literacy Competence” in 2008. In 2011 various activities were established in all regions on the request of the current Minister for Education, the Arts and Culture, Dr. Claudia Schmied. |
| Partners                 | BMUKK, teacher-training institutions, regional education authorities, etc. |
| Scope                    | School level  
National |
| Learning context         | Formal, within the curriculum |
| School education levels  | Primary and lower secondary (but in principle could be applied to all levels) |
| Target groups            | Teachers and students, school librarians |
| Time frame               | 2004 – on-going |

### B. Summary

The LESEFIT (Reading-Fit) initiative, later to become the “Literary Competence” initiative, is an on-going project to improve students’ literacy skills, focusing on improving reading and text comprehension. The initiative was established in 2004 to compensate for shortcomings in reading skills revealed by PISA results.

The target and aims of the project have been transferred step by step since 2012 into “allgemeine Leseförderung” (the common reading skills initiative of the ministry) and is supported by the relevant department within the ministry. A part of the initiative is the website “http://www.literacy.at” which offers relevant material especially in competence based education and “Bildungsstandards” (educational standards) for German as first language.

**Relevant links:**
- BMUKK: http://www.bmukk.gv.at/schulen/pwi/pa_archiv/lesefit.xml
- Literacy: http://www.literacy.at

**HTTP://KEYCONET.EUN.ORG/CASE-NOTES/AUSTRIA2**
### AUSTRIA [3]

#### ACHTPLUS

<table>
<thead>
<tr>
<th>A. BASIC INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country:</strong></td>
</tr>
<tr>
<td><strong>Title of initiative:</strong></td>
</tr>
<tr>
<td><strong>Coordinator/ Organization:</strong></td>
</tr>
</tbody>
</table>
| **Key competences addressed:** | European key competences  
  - Competence in the national language and mother tongue (German)  
  - Foreign language competence (English)  
  - Competence in math and basic STEM  
  - IT competence  
  - Social competence and citizenship  
  - Initiative and entrepreneurship  
  - Cultural awareness and expression  
  - Interests  
  - On-the-job competences  
  - Personal achievements |
| **Type of initiative and channels used for implementation:** | ACHTplus started as a pilot project in 11 pilot schools (on a voluntary basis):  
  - Introduction to the goals and implementation strategies during teacher conferences  
  - Expansion of pilot schools (on a voluntary basis)  
  - Specific ACHTplus instruments tested in selected classes  
  - Starting in 2016/17, ACHTplus will be implemented in every middle and technical school in Vorarlberg. |
| **Partners:** | BIFO – Institute for Education and Career Guidance |
| **Scope:** | All students and teachers mainly in grades 7 to 9, with preparation beginning in grade 5; this is a regional initiative and ACHTplus is only offered in Vorarlberg |
| **Learning context:** | Formal |

| **School education levels:** | Lower and upper secondary mainly from grade 7 to 9 (middle schools, technical schools, secondary academic schools, vocational schools) |
| **Target groups:** | Students aged 12 to 16 |
| **Time frame:** (start and end date) | September 2011 to present |
| **Relevant links:** |  
http://www.achtplus.info  
http://www.individualisierung.org  
http://www.bifo.at  |

---

#### B. SUMMARY

**OBJECTIVES**

The purpose of the project is to enable students, parents and teachers to determine the students’ competence levels at the transition from grade 8 to 9 and to provide pupils with career guidance and additional information related to their future professional and educational career. Young people aged 14-15 should be well prepared for their future professional career, being aware of the options that are available to them and what they want to do.

With the help of the ACHTplus assessment tool, the documentation of their development and progress in their portfolio, and individual career advice sessions, young people are offered support in recognising their competences, potential and abilities and in presenting them in a manner that is helpful and useful for themselves, parents, teachers and the economy.

**CORE ELEMENTS**

- Competence determination beginning in grade 7 and continuing through grades 8 and 9 for all pupils of various types of secondary schools through various assessment methods.
- Assessment results, certificates, competence verification etc. are collated in students’ portfolios.
- A specially trained teacher prepares a report based on this documentation.
- During a careers advice session, the current learning and development status of the student is discussed from the perspective of all participants (students, parents and teachers). Based on this session, an individual learning focus and agreed objectives are defined.
- If necessary, further assessments are carried out at the beginning of grade 9. The results of these assessments are used together with the ACHTplus documentation as the basis for a careers advice session. The joint meeting is conducted by the form teacher or a careers advisor.
- ACHTplus is a comprehensive standards tool. Additional educational and careers advice with an analysis of potential will still be required for specific issues and in-depth considerations for some pupils.

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**HTTP://KEYCONET.EUN.ORG/CASE-NOTES/AUSTRIA3**
## Austria (4)
### Mobile Learning Tutors

#### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country</th>
<th>Austria</th>
</tr>
</thead>
</table>
| Title of initiative: | **[DE]** Mobile Lernbegleiter  
**[EN]** Mobile Learning Tutors |
| Coordinator/Organization: | Organisation: Bundesministerium für Unterricht, Kunst und Kultur (BMUKK – Federal Ministry for Education, the Arts and Culture)  
Coordinator: Mag. Christian Schrack |
| Key competences addressed: | **[DE]** Digitale Kompetenzen, Nutzung von mobilen Geräten (Notebook, Netbook, Tablets, etc.)  
**[EN]** Digital competences, use of mobile devices (notebooks, netbooks, tablets etc.)  
As the project addresses all key competences in all relevant subjects other competences are also addressed. |
| Type of initiative and channels used for implementation: | Initiative by the BMUKK to promote the use of mobile computers/smartphones in the teaching process. Use of electronic education content, internet etc. |
| Partners: | • eLSA  
• ENIS Austria  
• eLearning Cluster Austria |
| Scope: | Cooperation in a new teaching and learning process between teachers and learners. |
| Learning context: | Formal |
| School education levels: | All educational levels are participating in these tests. |
| Target groups: | Students (who will learn not only subject knowledge but also digital skills). |

#### B. SUMMARY

This eFit 21 initiative by the Federal Ministry for Education, the Arts and Culture (BMUKK) has proven to be an extremely important initiative targeting eSkills for students, covering not only the standard curriculum but also digital skills, safer internet, how to use social media, distinguishing between fact and opinion, searching the internet, etc.

Due to the different operating systems and different display sizes, schools need to have online learning platforms and content as the teacher cannot be familiar with the full range of ‘student-owned devices’. The teacher must be able to concentrate on teaching, rather than on technical or software problems. A different pedagogical and didactic approach is required for the use of mobile devices in the teaching process. Students need to be appropriately grouped for different projects, the classroom environment must be ‘moveable’ and outdoor activities have to be coordinated. eBuddies or coaches must be available to tutor the lesson.


| Time frame: | Began as a one-year project in 2010; has been renewed on a yearly basis until 2013 |
- mobile Lernbegleiter project website : http://www.eeducation.at/netbook.php |
## A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Belgium – Flemish education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of initiative:</td>
<td>[NL] VOET@2010 (vakoverschrijdende eindtermen@2010) [EN] Cross-curricular final objectives@2010</td>
</tr>
<tr>
<td>Coordinator/Organization:</td>
<td>Flemish Ministry of Education and Training</td>
</tr>
<tr>
<td>Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):</td>
<td>Curriculum reform introduced through legislation</td>
</tr>
<tr>
<td>Partners:</td>
<td>No information provided</td>
</tr>
<tr>
<td>Scope: (student/teacher/school level; local/regional/national)</td>
<td>The objectives are developed on community level (education in Belgium is governed by the communities: the Flemish, French and German speaking communities each have their own education system, which is implemented in each school).</td>
</tr>
</tbody>
</table>

## B. SUMMARY

The ‘first generation’ of cross-curricular final objectives was introduced by the Ministry of Education and Training in 2001, shifting the emphasis from a subject-oriented logic to a more integrated education. These objectives were reviewed and updated in 2010, a process which led to the creation of VOET@2010 (Cross-curricular final objectives@2010).

The cross-curricular final objectives concern physical health and safety, mental health/wellbeing, socio-relational development, the environment for sustainable development, political-juridical society, socio-economic society, socio-cultural society, learning to learn and ICT. The objectives address all key competences at some level and, since 1 September 2010, every Flemish secondary school is required to implement them.

The final objectives describe a basic package of themes that the school is accountable for implementing over the six years of secondary education. Schools are free to determine their own way of implementing the cross-curricular themes within different subjects, projects, activities, etc. and while schools are not under obligation to achieve the final objectives, they are obliged to make the highest possible effort to achieve them as far as possible.

A. BASIC INFORMATION

Country: Belgium – Flanders

Title of initiative:

[EN] Format for competence-based formulation of final objectives

Coordinator/Organization:

Flemish Ministry of Education and Training

Key competences addressed:

[EN] Communication in the mother tongue (minimal);

[EN] Communication in foreign languages (minimal);

[EN] Mathematical competence and basic competences in science and technology (only technology competences);

[EN] Digital competences;

[EN] Learning to learn;

[EN] Social and civic competences;

[EN] Ontwikkeling van initiatief en ondernemerszin

[EN] Sense of initiative and entrepreneurship;

[EN] Cultural awareness and expression;

Type of initiative and channels used for implementation:

The format will be used to update existing final objectives and to develop new final objectives.

B. SUMMARY

In Flanders, the Flemish government determines the final objectives to be achieved according to subject. Educational suppliers can concretise the final objectives in their curriculum, provided the final objectives are included in a recognisable way.

The evolution towards competence-based education, changes in the Flemish Qualification Structure and the need for more coherent and systematic final objectives led to the development of the "format for competence-based formulation of final objectives", which can be used for formulating final objectives in preschool education, primary and secondary education (general as well as special education), adult education (including Dutch for immigrants and foreign languages) and part-time education in the arts.

In June 2013 the Flemish Government approved a ‘master plan’ about the reform of secondary education. This master plan contains an analysis of strengths/weaknesses, goals for the reform and actions to take. It mentions that all educational objectives are to be assigned to competences. A competence is defined as the ability to use knowledge, skills, and attitudes in an integrated way for civic activities. Knowledge will be mentioned explicitly and set apart from skills and attitudes. As a result the ‘format for competence-based curriculum’ will be compared to the master plan’s goals and, if necessary, be adapted.

Relevant links:

- Flemish Educational Council (VLOR):http://www.vlor.be/
- Agency for Quality Assurance in Education and Training (AKOV): www.akov.be
ESTONIA [1]
ICT MANAGEMENT AND ASSESSMENT MODEL FOR SCHOOLS

A. BASIC INFORMATION

Country: Estonia

Title of initiative: [EE] IT juhtimise pakett koolidele
[EN] ICT management and assessment model for schools

Coordinator/Organization: Tiigrihüppe Sihtasutus (Tiger Leap Foundation - TLF)

Key competences addressed:
[EE] digitaalsed kompetentsid [EN] Digital competence;
[EE] algatusvõime [EN] Sense of initiative;
[EE] probleemi lahendusoskus [EN] Problem solving;
[EE] riskianalüüs [EN] Risk assessment;
[EE] otsuste langetamine [EN] Decision taking;
[EE] kooli juhtimine [EN] School management;

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):
Curriculum reform – ICT should be used as a teaching and learning tool in all main subjects.
Informative seminars in regional centres, TLF website.

Partners: Schools (administration and ICT departments)

Scope: Teachers, school level and local (student/teacher/school level; local/regional/national)

Learning context: Formal and non-formal

School education levels: All education levels: primary, lower secondary, upper secondary

Target groups: School administrations, ICT department (or person responsible for ICT in schools)

B. SUMMARY

The ICT Management and Assessment Model for Schools project was developed by Tiigrihüppe Sihtasutus (the Tiger Leap Foundation) with the aim of encouraging and improving the use of ICT resources in the teaching and learning process. The project also enables the sharing of best ICT management practices between schools with the help of external ICT management consultants.

The main competence developed through the project is digital competence, with school administrations establishing and working towards the achievement of new ICT goals for their schools in order to support learning; the project also helps to develop a sense of initiative, and problem solving, risk assessment, decision taking and school management skills.

Every school that takes part in the project completes an online self-assessment regarding its ICT management, following which members of the school administration and ICT department are offered ICT management training and all participants receive a best practices in ICT management handbook. Following this training schools undergo a deeper process of self-assessment regarding their ICT management and are provided with an external ICT management consultant who provides feedback and advice according to the results of the self-assessment. External consultants help to identify the gaps between schools' self-assessment and external assessment. All ICT personnel who have participated in the initial training will then have the chance to become an external consultant for another school, giving them an opportunity to discover best practices in ICT management from other schools and to gain a better insight into ICT management in general.

In 2012, the ICT management model and programme successfully passed the piloting phase, in which 12 schools across Estonia participated.

On 1 May 2013 the Tiger Leap Foundation, which originally managed and ran the piloting of the ICT management programme, was merged with two other organizations which, all together, now form the Information Technology Foundation for Education. The ICT management model was given over to another organization and is now being developed by the Estonian Association for Quality (Eesti Kvaliteediühing). Due to these changes, training programmes and external evaluations are not taking place according to the announced timetable for 2013.

Relevant links:
Self-assessment link: http://www.itjuhtimine.ee/et/pakett-koolidele
HITSA: http://www.innovatsioonikeskus.ee/
# ESTONIA [2]
## SMARTLY ON THE WEB

### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Estonia</th>
</tr>
</thead>
</table>
| **Title of initiative:** | [EE] Targalt Internetis  
[EN] Smartly on the Web |
| **Coordinator/Organization:** | Tiigrihüppe Sihtasutus (Tiger Leap Foundation - TLF); Estonian Union for Child Welfare; InSafe, European Schoolnet - EUN |
| **Key competences addressed:** | [EE] digitaalsed kompetentsid [EN] Digital competence;  
[EE] öppima öppimine [EN] Learning to learn;  
[EE] sotsiaalsed ja ühiskondlikud kompetentsid [EN] Social and civic competences;  
[EE] kriitiline mõtlemine [EN] Critical thinking;  
[EE] probleemi lahendusoskus [EN] Problem solving;  
[EE] riskianalüüs [EN] Risk assessment;  
[EE] otsuste langetamine [EN] Decision taking;  
[EE] Konstruktiivne tunnete juhtimine [EN] Constructive management of feelings; |
| **Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)** | Started as an initiative of the European Commission; integrated into the curriculum. Training for children, teachers and parents; media campaigns; events (seminars etc.) |
| **Partners:** | Estonian Union for Child Welfare; MTÜ Lasteabi (Helpline); Police Board and Border Guard Administration; Advisory board (23 different ICT companies); Youth Panel |
| **Scope:** | Student, teacher, school level and parents; Local, regional and national |
| **Learning context:** | Formal and non-formal |
| **School education levels:** | Primary and lower secondary |
| **Target groups:** | Children aged 6-16, teachers, parents |
| **Time frame:** | Started September 2009  
1st project period ended May 2012  
2nd project period: August 2012-September 2014 |
| **Relevant links:** | [www.targaltinternetis.ee](http://www.targaltinternetis.ee) - [http://insafe-survey.eun.org/](http://insafe-survey.eun.org/) |

### B. SUMMARY

The Targalt Internetis (Smartly on the Web) project began in 2009 as a European Commission initiative and is run by Information Technology Foundation for Education (HITSA), formerly by Tiigrihüppe Sihtasutus (Tiger Leap Foundation - TLF) in partnership with the Estonian Union for Child Welfare and MTÜ Abikeskused, InSafe (EUN). The main aim of the project is to enable children and young people to use the internet safely through developing awareness raising materials, organising campaigns and interactive learning sessions for children and young people, parents, carers, social workers and teachers.

The main competences which are being developed through this project are digital competence (closely related to critical thinking; risk assessment; decision taking; problem solving), learning to learn and the constructive management of feelings.

In order to achieve these aims the project focuses on providing various training activities to children, teachers, parent and social workers training for trainers; organising awareness campaigns in the national media (in Estonian and Russian); developing competitions and study materials; establishing the “Smartly on the Web” network for youngsters; adopting an e-Safety label concept and encouraging schools to apply; creating and disseminating Bunny-Johnny cartoons for children aged 5 to 9 and video clips for teenagers.

The project entered its second project period in June 2012; 15 new trainers joined in the “train the trainer” programme, 11 new training programmes have been developed and carried out in 152 schools. The basic problems lie in teachers’ scepticism towards ICT, parents’ lack of knowledge about internet safety and children’s need to have a parent nearby when using the internet. These issues are being dealt with through the organisation of more training events, which are mainly conducted on the basis of “learning by doing”.

From results so far we can see that awareness in society has grown regarding the need to use the internet safely, with clear results from the growth in the number of reports made to the web-based hotline regarding the distribution of materials that violate the rights, dignity and physical inviolability of children on the internet. We have also organised many “extra” training programmes carried out by volunteers who see the importance of raising awareness of safe internet use.
A. BASIC INFORMATION

Country: Finland


Coordinator/Organization: University of Jyväskylä, Agora Center

Key competences addressed: [FI] 2000-luvun taidot (avainkompetenssit)  
[EN] 21st century skills (Key Competences)

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): Professional development program for teachers, school development through research-based professional development

Partners:  
- Raumankari Comprehensive School  
- SRI International, USA: International research co-ordinator of the ITL Research  
- Microsoft Partners in Learning Programme

Scope: (student/teacher/school level; local/regional/national)  
- Teacher level  
- School level  
- National

Learning context: (formal or non-formal)  
- Formal

School education levels: (primary, lower secondary, upper secondary)  
- Primary, lower-secondary

Target groups: Teachers

Country: Finland

Time frame: (start and end date) 2011 – on-going

Relevant links:  
- ITL Research: www.itlresearch.com/  
- Raumankarin Comprehensive School: http://peda.net/veraja/kalajoki/raumankarinkoulu/school

B. SUMMARY

There is a focus on the development of 21st century skills (Key Competences) in the Finnish national core curriculum, where collaboration, problem solving and ICT are frequently mentioned as part of the required skill areas and cross-curricular themes. However, results from ITL Research show that opportunities to learn 21st century skills remain limited, and that innovative teaching practices within schools tends to take place at the level of individual teachers.

International ITL researchers have developed the professional development program, LEAP21 with the aim of embedding the principles of 21st learning (Key Competences) into the daily practices of schools. The aim is to support the development of innovative teaching practices at schools.

Teachers at Raumankari Comprehensive School participated in the LEAP21 workshop in spring 2012 and were later visited by the ITL research team, who interviewed and observed some of the teachers. The aims of these visits are to support schools in their plans to implement the LEAP21 programme into their school culture and to collect data regarding the impact of the workshops.

Results of the programme will show changes in teaching practice in Raumankari Comprehensive School. The LEAP21 model has engaged teachers and principals who are focused on school development.

It was also recognised that the workshop is not sufficient as the only form of support for building teachers’ ability to teach 21st century skills. Further support is needed to build a collaborative school culture. Building networks between schools to share experiences and material is also extremely important.

The knowledge acquired during and after the case study can be used to improve the professional development offered to teachers. The aim is to build a Finnish LEAP21 professional development program. This program will include elements from another international study, namely Assessment and teaching of 21st century skills, which aims at developing learning and assessment tasks related to 21st century skills (key competences).

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/FINLAND1
**FINLAND [2]**

**CHILDREN’S SITE**

### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th><strong>Country:</strong></th>
<th>Finland</th>
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</thead>
<tbody>
<tr>
<td><strong>Title of initiative:</strong></td>
<td>[FI] Lasten sivut (Lasten asiaila -projekti) [EN] Children’s Site</td>
</tr>
<tr>
<td><strong>Coordinator/Organization:</strong></td>
<td>University of Jyväskylä, Agora Center</td>
</tr>
<tr>
<td><strong>Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)</strong></td>
<td>The United Nations Convention on the Rights of the Child (UNCRC) introduced to children through a website, maintenance and development of the website. The website is related to the work of the ombudsman for Children in Finland.</td>
</tr>
<tr>
<td><strong>Partners:</strong></td>
<td>Ombudsman for Children in Finland</td>
</tr>
<tr>
<td><strong>Scope:</strong></td>
<td>(student/teacher/school level; local/regional/national) Elementary school students National</td>
</tr>
<tr>
<td><strong>Learning context:</strong></td>
<td>(formal or non-formal) The website can be utilized both in the formal and non-formal contexts. There are for example several classes who actively participate in the activities related to the website.</td>
</tr>
<tr>
<td><strong>School education levels:</strong></td>
<td>(primary, lower secondary, upper secondary) Primary, also early childhood education to some degree.</td>
</tr>
<tr>
<td><strong>Target groups:</strong></td>
<td>Primary school aged children, their teachers and parents.</td>
</tr>
<tr>
<td><strong>Time frame:</strong></td>
<td>(start and end date) 2006 – on-going</td>
</tr>
</tbody>
</table>

### B. SUMMARY

The Children’s Site is a website aimed at primary school students. The project is implemented at the Agora Center of the University of Jyväskylä, in partnership with the Ombudsman for Children in Finland in order to provide a forum for children to express themselves on issues affecting their daily life and to encourage their active participation. It serves as a communication tool for informing children about the United Nations Convention on the Rights of the Child (UNCRC) in a child-friendly way, with the aim of promoting children’s rights and supporting their participation.

The website acts as a platform for making a difference and as a forum for children and the youth by including them in decision-making processes that affect them, via the Ombudsman for Children in Finland. The website offers information on the everyday lives of children in contemporary Finland, illustrating the lives and everyday realities of children and the youth by linking the situation of Finnish children to the application of the UN Convention on the Rights of the Child.

**Relevant links:**
- Ombudsman for children in Finland: www.lapsiasia.fi/en/frontpage
- Children’s Site: www.lastensivut.fi/

**HTTP://KEYCONET.EUN.ORG/CASE-NOTES/FINLAND2**
### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Finland</th>
</tr>
</thead>
</table>
| Title of initiative: | [FI] Käyttäjälähtöinen oppimistilasuunnitelma  
[EN] Co-designing Learning Environments |
| Coordinator/Organization: | University of Jyväskylä, Agora Centre |
| Key competences addressed: | [FI] Kommunikointi äidinkielellä  
[EN] Communication in the mother tongue  
[FI] Kommunikointi vierailla kielillä  
[EN] Communication in foreign languages  
[FI] Matemaattinen, tieteellinen ja teknologinen kompetenssi  
[EN] Mathematical competence and basic competences in science and technology  
[FI] Digiitaalinen kompetenssi  
[EN] Digital competence  
[FI] Oppimaan oppiminen  
[EN] Learning to learn  
[FI] Sosiaalisuuteen ja kansalaisuuteen liittyvät taidot  
[EN] Social and civic competence  
[FI] Aloitteellisuus ja yrittäjyys  
[EN] Sense of initiative and entrepreneurship  
[FI] Tietoisuus kulttuurista ja kulttuurin ilmaisumuodot  
[EN] Cultural awareness and expression. |
| Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): | Theoretical and practical model of the 21st century learning environment |
| Partners: |  
- Jyväskylä Teacher Training School  
- University Properties of Finland Ltd. |
| Scope: (student/teacher/school level; local/regional/national) | School level  
Local |
| Learning context: (formal or non-formal) | Formal |

### B. SUMMARY

The Co-Designing Learning Environments project aims to adapt physical learning environments in order to better support the teaching and learning of key competences that are important for the 21st century. This is a cross-curricular project (visual arts, physics, chemistry, mathematics, ICT, mother tongue and literature, English and Spanish) but is conducted mainly as a part of the visual arts course. During the project there is a focus on all eight key competences but the ultimate objective is for these competences to be even more conscientiously included in the teaching and learning process after the reforms. Goals and standards are defined together with different stakeholders but are based on previous research on ideal learning environments.

The goals of the project are:

- to transform the natural science classroom and its closely connected hallway into a space that enables diversified learning and the adoption of all eight key competences;
- to involve the members of the school community in the transformation process by means of a user-centred co-design and development process for any schools involved in the project.

The approach is systemic and holistic, with changes designed in harmony with the vision and the mission of the school and social practises and new infrastructure co-designed and co-developed simultaneously with internal and external stakeholders.

After the co-design and the reforms, support will be offered to teachers for the implementation of new practices and evaluation of the impact will be based mainly on qualitative data (e.g. user perception and user experiences). Furthermore, the possible scalability of the project will be analysed.

---

**Relevant links:**
- Agora Center: https://agoracenter.jyu.fi/
- University of Jyväskylä Teacher Training School: www.norssi.jyu.fi/

**School education levels:** Upper secondary

**Target groups:** Students, teachers

**Time frame:** 6 August 2012 to 31 December 2013

**HTTP://KEYCONET.EUN.ORG/CASE-NOTES/FINLAND3**
A. BASIC INFORMATION

Country: France

Title of initiative: [FR] Donner du sens à des compétences scientifiques transdisciplinaires en lycée  
[EN] Giving meaning to cross-disciplinary scientific competences in the Lycée

Coordinator/Organization: Karel Dassonville, Life sciences teacher  
Lycée Silvia Monfort, 6, rue de l’Orme de Sours, B.P. 9 - 28600 LUISANT

Key competences addressed: [FR] Compétences de base en sciences  
[EN] Basic competences in the sciences
- Associated competences: management of material requirements and procedures
- Competences linked to science subjects

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)  
Reflection within the school related to recent developments in the Lycée curriculum.

Partners: University of Orléans

Scope: (student/teacher/school level; local/regional/national)  
Students and teachers

Learning context: (formal or non-formal)  
Formal. Takes place in the context of the introduction of the new curricula for Maths, Physical Sciences, Life and Earth Sciences, and Engineering as part of the 2010-2013 Lycée reform. This experiment allows greater pedagogical freedom within the teaching of exploratory methods (Scientific Methods and Practices, Science and the Laboratory) and in guided personal work (TPE) at Première S level [age 16-17, science option] (future project).

B. SUMMARY

The project “Giving meaning to cross-disciplinary scientific competences in the Lycée” is a reflection within the Lycée Silvia Monfort related to recent developments in the curriculum. The low number of students choosing the science option in baccalauréat courses and lower than expected exam results led to a reconsideration of the way sciences are taught within the school.

The project aims to enable students to identify the scientific competences directly usable in all the disciplines of the Science Pole of teaching in the Lycée: Maths, Physical and Chemical Sciences, Life and Earth Sciences, and (currently to a lesser extent) Engineering Sciences. In the medium term, the project has three objectives: to enable students to advance in all the scientific disciplines by breaking down the barriers separating their knowledge, competences and attitudes; to inspire students to pursue studies and careers in the sciences and to nurture the development of a scientific culture within the school.

This programme is currently being implemented in all the lycée levels [age 15-18], in order to establish a vertical coherence of pedagogical practices throughout the school. The first generation of pupils concerned by the project will take the baccalaureat examination in june 2014 and chose its future upper education orientation.

School education levels: Upper secondary

Target groups: Currently all students in Seconde year [age 15-16] of the Lycée (280 students) and ultimately all students in the Lycée

Time frame: (start and end date) 2011-2015

FRANCE [2]
TOWARDS SOCIALIZATION IN LOWER SECONDARY SCHOOLS

A. BASIC INFORMATION

Country: France

Title of initiative: [FR] Vers un collège socialisant [EN] Towards socialization in lower secondary schools

Coordinator/Organization: Headmaster of Collège Paul-Émile Victor Branne (lower-secondary school)

Key competences addressed: The key competences addressed are those of the socle commun des connaissances et des compétences (core curriculum of knowledge and competences):
[FR] maîtrise de la langue française
[EN] command of the French language;
[FR] pratique d’une langue vivante étrangère
[EN] use of a foreign language;
[FR] compétence de base en mathématiques et culture scientifique et technique [EN] basic competence in mathematics, science and technology;
[FR] maîtrise des techniques usuelles des TIC
[EN] command of common techniques in ICT;
[FR] culture humaniste [EN] humanistic culture;
[FR] compétences sociales et civiques
[EN] social and civic competence;
[FR] autonomie et initiative [EN] autonomy and initiative;

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): Curricular reform
Local decision to organize groups according to their competences rather than in traditional class groups

Partners:
- Bodies of the Académie (local education authority) and pedagogical inspectors
- Elementary inspector for the link between elementary and lower-secondary school
- Non-educational participants
- Participants from the educational sector for some training sessions

Scope: (student/teacher/school level; local/regional/national)
- Students and teachers
- Regional level

Learning context: (formal or non-formal)
- Formal framework of acquisition of lower secondary school competences

School education levels: (primary, lower secondary, upper secondary)
- Lower secondary

Target groups: All students of the school

Time frame: (start and end date)
- September 2008—on-going
- First evaluation set for September 2015


B. SUMMARY

The project in Collège Paul-Émile Victor Branne is a global strategy developed by the school within the framework of the implementation of the socle commun des connaissances et des compétences (core curriculum of knowledge and competences), which aims to develop competence-based learning and differentiated pedagogical approaches. The initiative, which started in 2009, changed the way teachers work and stimulated reflection on other points relating to pedagogy and communication to parents and other actors from the world of education.

The project focuses on developing the key competences of communication in the mother tongue and in foreign languages and mathematical competence and basic competences in science and technology. Competence rubrics by subject as well as cross-curricular rubrics have been prepared, with the aim of enabling all teachers to adopt a differentiated pedagogy. The overall aim is to tackle the issue of low achievement and high dropout rates and to enable every student to acquire the skills required for social integration by the end of his/her Collège education.

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/FRANCE2
### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>France</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of initiative:</td>
<td>[FR] Livret de Compétences Expérimental (LCE) [EN] Pilot Competences Portfolio</td>
</tr>
<tr>
<td>Coordinator/Organization:</td>
<td>Mme N. Arrestier, head teacher of the Collège de Montas-truc (lower-secondary school)</td>
</tr>
<tr>
<td>Key competences addressed:</td>
<td>All competences acquired inside and outside of school</td>
</tr>
<tr>
<td>Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):</td>
<td>National Pilot of the Competences Portfolio</td>
</tr>
</tbody>
</table>
| Partners: | - School Inspectorate  
- University of Toulouse |
| Scope: (student/teacher/school level; local/regional/national): | Students |
| Learning context: (formal or non-formal): | Mainly non-formal |
| School education level/s: (primary, lower secondary, upper secondary): | Lower secondary |
| Target groups: | Two Quatrième classes [age 13-14] (48 students) |
| Time frame: (start and end date): | 2010 - 2013 |

### B. SUMMARY

This Pilot initiative has been running since September 2010 and concerns two classes in *Quatrième* [age 13-14], i.e. 48 students.

Each student is monitored over two school years by a teacher/tutor who guides the individual student in the creation of a personal Competences Record.

The project aims to:

- Teach individual students to understand themself better by identifying their aspirations and potential and recognising competences developed in and out of school.
- Enable each student who has developed competences in various extra-curricular activities to make best use of his/her time at Collège by compiling a Pilot Competences Portfolio (Livret de Compétences Expérimental - LCE), which had been promoted as an experimental project at the national scale until June 2012 and which takes the form of both a paper document and a digital record (Webclasseur). Since 2012, this lower secondary school has a project about no marks assessments.

[HTTP://KEYCONET.EUN.ORG/CASE-NOTES/FRANCE3]
A. BASIC INFORMATION

Country: France

Title of initiative: [FR] Nouvelle organisation pédagogique [EN] New pedagogical organisation

Coordinator/Organization:
Name: Philippe PICARD
Position: Deputy Head
Tel: (+33) 2 47 56 20 57 / 2 47 56 94 13 (direct)
e-mail: adjoint.0370007g@ac-orleans-tours.fr

Institution: Collège André BAUCHANT
Address: 6 rue de Torchanais, F-37110 CHÂTEAU-RENAULT
Tel: 02 47 56 20 57
e-mail: ce.0370007g@ac-orleans-tours.fr

Key competences addressed: The key competences addressed are those of the socle commun des connaissances et des compétences (core curriculum of knowledge and competences):
[FR] maîtrise de la langue française
[EN] command of the French language;
[FR] pratique d’une langue vivante étrangère
[EN] use of a foreign language;
[FR] compétence de base en mathématiques et culture scientifique et technique [EN] basic competence in mathematics, science and technology;
[FR] maîtrise des techniques usuelles des TIC
[EN] command of common techniques in ICT;
[FR] culture humaniste [EN] humanistic culture;
[FR] compétences sociales et civiques
[EN] social and civic competence;
[FR] autonomie et initiative [EN] autonomy and initiative;

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)
Linked to curriculum reform and introduction of a socle commun des connaissances et des compétences (core curriculum of knowledge and competences)

Partners: None

B. SUMMARY

The Collège André Bauchant has chosen to implement a new type of internal organisation which is innovative in both structural and pedagogical terms, for classes in two year groups.

As regards teaching, the curricula are treated as core objectives and the subject teaching times are partially deployed in the form of interdisciplinary workshops, which has modified the timetables of some subjects and therefore required an exemption from local education authorities, due to its affect on compulsory education. In parallel, the pilot initiative sets up a non-numerical assessment, based on cross-disciplinary competences defined by the teaching team.

Structurally, the annual, weekly and daily timetables are reorganised in such a way as to alternate reception, support and workshop time with lesson times.

http://keyconet.eun.org/case-notes/france4
FRANCE [5]
COMPETENCES AND SELF ESTEEM

A. BASIC INFORMATION

Country: France

Title of initiative:
[FR] Compétences et estime de soi
[EN] Competences and self esteem

Coordinator/ Organization:
M. Joyet, head teacher
Mme M.H. Pierre, teacher
Collège L. Drouyn
1 tour de Vérac
33 240 Vérac
(N : 44.991846, E : -0.339468)

Key competences addressed:
The key competences addressed are those of the socle commun des connaissances et des compétences (core curriculum of knowledge and competences):
- [FR] maîtrise de la langue française
- [EN] command of the French language;
- [FR] pratique d’une langue vivante étrangère
- [EN] use of a foreign language;
- [FR] compétence de base en mathématiques et culture scientifique et technique [EN] basic competence in mathematics, science and technology;
- [FR] maîtrise des techniques usuelles des TIC
- [EN] command of common techniques in ICT;
- [FR] culture humaniste [EN] humanistic culture;
- [FR] compétences sociales et civiques
- [EN] social and civic competence;
- [FR] autonomie et initiative [EN] autonomy and initiative;

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):
Local initiative launched in 2009 and linked to the implementation of the core curriculum of knowledge and competences.

Partners:
The Rectorat of Bordeaux and national body in charge of the follow up of innovations and pedagogical pilot projects

Scope:
Local level project concerning all students, the pedagogical community of the Collège and parents

B. SUMMARY

The L. Drouyn Collège in Vérac has been implementing a pedagogical project on competence-based teaching and evaluation. The pedagogical team has carried out an analysis of competences to implement and certify the acquisition of the core curriculum of knowledge and competences. They have developed an IT tool adjusted to the evaluation of disciplinary or cross-curricular competences; a tool that permits the follow up of all students’ progress. In parallel they have also introduced non-numerical evaluations to reinforce students’ self-esteem and involvement in their studies.

This initiative, launched in 2009, has already resulted in a change in students’ attitude towards their studies, has had a positive influence on students’ achievement, on the involvement of students and their families and on the image of the school.

http://KeyConet.eun.org/Case-notes/france5
FRANCE (6)
SOFTWARE APPLICATION FOR MONITORING LEARNING

A. BASIC INFORMATION

Country: France

Title of initiative: [FR] Conception, développement et diffusion d’un logiciel de suivi des apprentissages
[EN] Design, development and distribution of a software application for monitoring learning

Coordinator/Organization: Pierre Lacueille (pierrelacueille@gmail.com)
Doyen des IA-IPR
Rectorat de Bordeaux

Key competences addressed: All competences prescribed in secondary school competency framework (common core of knowledge and competences used in compulsory and vocational education)

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.) Initiative at level of regional education authority (Académie de Bordeaux) in particular to assist setting-up of common core.

Partners: None

Scope: Students and teachers in regional area

Learning context: Formal

School education levels: Lower secondary and upper secondary (including vocational education)

Target groups: Teachers

Time frame: September 2012 - June 2014

B. SUMMARY

The project consists in the development and deployment of a software application for monitoring competency-based learning. In its architecture, the software favours an approach through complex tasks and highlights the links between complex tasks, skills and the resources brought into play (knowledge, skills, and attitudes). It also opens the way to remedial strategies by easing the identification of pupils’ difficulties related to the mastering of real competences in complex tasks solving. The software will offer various ways of resolution, with well-fitted resources adapted to pupils needs.

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/FRANCE6
IRELAND [1]

KEY SKILLS FOR JUNIOR CYCLE
EDUCATION

A. BASIC INFORMATION

Country: Ireland

Title of initiative: Key Skills for Junior Cycle Education

Coordinator/Organization: National Council for Curriculum and Assessment (NCCA)

Key competences addressed: The initiative aims at developing 6 Key Skills:
- Managing Myself
- Staying Well
- Communicating
- Being Creative
- Working with Others
- Managing Information and Thinking

These 6 key skills relate to the following key competences of the European Framework:
- Digital Competence
- Learning to Learn
- Social and Civic Competences
- Sense of Initiative and Entrepreneurship.

The transversal skills of critical thinking, creativity, initiative, problem solving, decision making and constructive management of feelings also correspond closely with the 6 Key Skills.

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): This is a system-wide initiative aimed at embedding key skills within the curriculum and all teaching and learning in the context of introducing a new junior cycle programme for 12-15 year old students in all schools in Ireland in 2014.

Partners: The Department of Education and Skills, State Examinations Commission, Teachers’ Unions, School Management bodies and other stakeholders in education are supportive of this initiative.

Scope: (student/teacher/school level: local/regional/national) This is a national initiative that will impact upon all teachers and students at lower secondary level over time.

Learning context: (formal or non-formal) Formal

School education levels: (primary, lower secondary, upper secondary) Lower secondary

Target groups: All teachers in Irish secondary schools and their junior cycle [lower secondary] students are the primary target group. Initially, we will work with 48 schools in a development network, but will also work with other networks that are being established by partner organisations. Providers of pre-service and in-service professional development for teachers are also targeted.

Time frame: (start and end date) 2012-2014 for introduction and initial development. September 2014 for introduction to all schools.

Relevant links:
- Check out the framework for the Key Skills for Junior Cycle http://www.juniorcycle.ie/NCCA_JuniorCycle/media/NCCA/Documents/Key/Key-Skills-Overview-Feb-2013_screen.pdf
- Additional resources and information are available for teachers and schools here http://www.juniorcycle.ie/Curriculum/Key-Skills-(1)

B. SUMMARY

Both research and direct experience of working with schools has convinced the National Council for Curriculum and Assessment in Ireland that the embedding of key skills within teaching is a major lever for change — leading to more student-centred and effective learning. Six key skills have been identified as important for students to develop during junior cycle [lower secondary] education — Managing Myself, Staying Well, Communicating, Being Creative, Working with Others, and Managing Information and Thinking. These skills will be a key feature of a new junior cycle which is being introduced by schools in September 2014. This initiative will impact upon all teachers and all students within junior cycle education (12-15 year olds).

The new junior cycle is the most significant reform of the formal curriculum in Irish education for decades and key skills is a major part of that. The embedding of key skills within a new junior cycle programme is a very ambitious project. A range of supports are currently being developed to enable teachers to begin exploring how they can develop these key skills within their classrooms.

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/IRELAND1
# Ireland [2]

**NCE-MSTL & NCCA Collaboration: Draft Revised Senior Cycle Physics Syllabus – Physics Network**

## A. Basic Information

<table>
<thead>
<tr>
<th>Country</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of initiative:</strong></td>
<td>NCE-MSTL &amp; NCCA Collaboration: Draft Revised Senior Cycle Physics Syllabus – Physics Network</td>
</tr>
</tbody>
</table>
| **Coordinator/Organization:** | 1. Dr. Jennifer Johnston - National Centre for Excellence in Mathematics and Science Teaching and Learning (NCE-MSTL)  
2. Anna Walshe - National Council for Curriculum and Assessment (NCCA) |
| **Key competences addressed:** | Initiative supporting the development of the Key Skills Framework (NCCA 2011)  
- Critical and creative thinking  
- Being personally effective  
- Working with others  
- Communicating  
- Information processing |
| **Type of initiative and channels used for implementation:** | Curriculum review will be introduced through legislation. Linked to the national rollout of the draft revised Senior Cycle [upper secondary] Physics and Biology syllabuses. |
| **Partners:** | NCE-MSTL & NCCA |
| **Scope:** | Teacher, student and school level  
Linked to national initiative |
| **Learning context:** | Formal |

## B. Summary

The NCE-MSTL and NCCA Collaborative Physics Network has made a significant contribution to the forthcoming implementation of the revised Senior Cycle Science syllabuses in Ireland by designing, implementing and evaluating teaching and learning activities that aligned with and reflected the Inquiry Based Teaching and Learning (IBTL) approach, that embedded the ‘key skills’, and that probed for a deeper understanding of Physics from students.

This initiative is timely as it is informing decisions on assessment and Physics activities that incorporate the ‘key skills’ in high-stakes senior cycle subjects, the purpose of which was to promote an increased emphasis on student discussion, debate, critical thinking and problem solving. A key outcome of this project was the development of specific tasks that operationalised the learning outcomes (Millar, 2012) of the revised syllabus and embedded the ‘key skills’ in the learning outcomes. The study was evaluated through teacher interviews and lesson observations, video recorded lessons, student written work, and student presentations. The key findings emerging from this study in relation to the ‘Asteroids, Impacts and Craters’ task development played a major role in the development of the teacher resource material that is contributing to the rollout of the revised syllabus.

**Target groups:** Physics teachers and 5th year physics students

**Time frame:** For this initiative: January 2012 – April 2012. Linked to the implementation of physics syllabus, for approval by NCCA early 2013. National rollout to follow. Date to be agreed. On-going impact on physics education in senior cycle classrooms.

**School education levels:** Upper secondary

**School education levels:** (primary, lower secondary, upper secondary)

**Target groups:** Physics teachers and 5th year physics students

**Time frame:** (start and end date)

**Relevant links:** NCCA: www.ncca.ie  
NCE-MSTL: www.nce-mstl.ie

[http://KeyConet.eun.org/Case-notes/ireland2](http://KeyConet.eun.org/Case-notes/ireland2)
KEY SKILLS FOR SENIOR CYCLE – A WHOLE SCHOOL APPROACH

A. BASIC INFORMATION

Country: Ireland

Title of initiative: Key Skills for Senior Cycle – a whole school approach

Coordinator/ Organization: National council for Curriculum and Assessment (NCCA)

Key competences addressed: Five key skills:
- Information processing
- Critical and creative thinking
- Working with others
- Communicating
- Being personally effective.

These five key skills relate to the following key competences of the European Framework:
- Digital Competence
- Learning to Learn
- Social and Civic Competences
- Sense of Initiative and Entrepreneurship

The transversal skills of critical thinking, creativity, initiative, problem solving, decision making and constructive management of feelings also correspond closely with the five Key Skills

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)
This started as a small school-based curriculum development initiative to support the embedding key skills in the reformed curriculum for senior cycle (upper secondary) in Ireland.

Partners: Four participating schools, with support from all the teachers and the administration within those schools.

Scope: School level systemic change (within a small network)

Learning context: Formal

School education levels: Upper secondary

Target groups: All teachers in the four schools and senior cycle students within those schools. (While the initial target group was senior cycle students, over time this project spread to include junior and senior cycle students, 12-18)


Relevant links:
- For more information on the five key skills: http://www.ncca.ie/en/Curriculum_and_Assessment/Post-Primary_Education/Senior_Cycle/Key_Skills_Framework/KS_Framework.pdf
- To hear teachers and students talking about their experiences: http://www.ncca.ie/en/Curriculum_and_Assessment/Post-Primary_Education/Senior_Cycle/Key_Skills/
- To download a report on this work: http://www.ncca.ie/en/Publications/Reports/Key_Skills_Initiative_Phase_three_Stories_from_the_Learning_Site.pdf

B. SUMMARY

This project set out to explore how key skills might be embedded in teaching within a whole school setting, taking account of different local circumstances. The evidence shows that a whole school approach to key skills implementation can be successful. Key skills are relevant to all subjects and to all teachers. All the schools have said that the key skills project has provided an important lever for change – encouraging reflective practice and more innovative teaching approaches. It has also facilitated students in becoming more reflective as learners and more successful in their learning.

The process required significant time and support. However it is now self-sustaining and continuing to have an impact on teaching and learning. The schools involved in this initiative are very willing to sharing their experiences with others.

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/IRELAND3
**IRELAND [4]**

**KEY SKILLS IN A BSc SCIENCE AND MATHS EDUCATION DEGREE**

### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of initiative:</strong></td>
<td>Key Skills in a BSc Science and Maths Education Degree</td>
</tr>
</tbody>
</table>
| **Coordinator/Organization:** | Ms. Majella Dempsey  
National University of Ireland Maynooth |

**Key competences addressed:**

- Five key skills:
  - Information processing
  - Critical and creative thinking
  - Working with others
  - Communicating
  - Being personally effective.

These five key skills relate to the following key competences of the European Framework:

- Digital Competence
- Learning to Learn
- Social and Civic Competences
- Sense of Initiative and Entrepreneurship

The transversal skills of critical thinking, creativity, initiative, problem solving, decision making and constructive management of feelings also correspond closely with the five Key Skills.

**Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):**

- Module as part of a third level undergraduate BSc Science and Maths Education Degree.  
Key Skills in Teacher Education.

**Partners:**

- Schools facilitating student placements.

**Scope:**

- (student/teacher/school level; local/regional/national)
  - Initial teacher education.

### B. SUMMARY

This initiative focuses on the embedding of key skills in initial teacher education in Ireland through the introduction of a module on this topic as part of a third level undergraduate BSc Science and Maths Education Degree at the National University of Ireland Maynooth.

The module has been developed around active learner centre pedagogies for the development of the key skills of working with others, communicating, being personally effective, critical and creative thinking and information processing in upper secondary education. Assessment of key skills underpins the work on this module. This module is focused on the embedding of key skills in the teaching and learning of Science and Mathematics. Students examine the key skills relevant to the junior and senior cycle curricula and explore key methodologies for developing skills that they will implement and evaluate during their teaching placement.

This initiative has a clear potential for creating a far reaching impact on teaching and learning in Science and Maths teaching. However, this will not be evident until a more comprehensive evaluation of the initiative is carried out with participants when they are teaching for a few years.

**Relevant links:**

- [www.nuim.ie/academic/education/Courses/initial.shtml](http://www.nuim.ie/academic/education/Courses/initial.shtml)

**Learning context:**

(formal or non-formal)

**School education levels:**

(primary, lower secondary, upper secondary)

**Target groups:**

Undergraduate students participating in a BSc Science Education programme.

**Time frame:**

(start and end date)

Run in the second semester of year 3 of the undergraduate degree.

**[HTTP://KEYCONET.EUN.ORG/CASE-NOTES/IRELAND4]**
IRELAND (5)
PROJECT MATHS

A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of initiative:</td>
<td>Project Maths</td>
</tr>
<tr>
<td>Coordinator/Organization:</td>
<td>National Council for Curriculum and Assessment (NCCA)</td>
</tr>
<tr>
<td>Key competences addressed:</td>
<td>Mathematical proficiency and the five key skills of the NCCA Framework of Key Skills (senior cycle) are also embedded in the curriculum. These are: information processing, communicating, being personally effective, working with others, and critical and creative thinking.</td>
</tr>
<tr>
<td>Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):</td>
<td>Curriculum reform at lower and upper secondary level, introduced through legislation.</td>
</tr>
<tr>
<td>Partners:</td>
<td>Department of Education and Skills (DES)</td>
</tr>
<tr>
<td>Scope: (student/teacher/school level; local/regional/national)</td>
<td>National</td>
</tr>
<tr>
<td>Learning context: (formal or non-formal)</td>
<td>Formal</td>
</tr>
<tr>
<td>School education level(s): (primary, lower secondary, upper secondary)</td>
<td>Lower and upper secondary</td>
</tr>
<tr>
<td>Target groups:</td>
<td>All students of mathematics</td>
</tr>
</tbody>
</table>
| Time frame: (start and end date) | · September 2008 in an initial group of 24 schools  
· September 2010 in all other schools |
| Relevant links: | www.ncca.ie/projectmaths  
www.projectmaths.ie |

B. SUMMARY

Following a review of post-primary mathematics education in 2007, the National Council for Curriculum and Assessment (NCCA) prepared a strategy, Project Maths, for the phased implementation of syllabus change in mathematics over a four-year period from September 2008. This change involved the review of mathematics syllabuses at both junior cycle and senior cycle and a complete change in the approach to the teaching and assessment of mathematics.

The focus has been on the development of mathematical competence, while the five key skills (communicating, working with others, critical and creative thinking and information processing and being personally effective) have also been embedded in the curriculum.

Beginning with an initial 24 schools, the Project Maths initiative was unique in Ireland in that it placed teachers at the centre of the curriculum development process. Teachers’ experiences and feedback informed refinements and subsequent revisions as the new curriculum was being rolled out. This initiative has now been mainstreamed in all Irish schools.

Project Maths can be summarised as the desire to allow students to learn mathematics by thinking mathematically, particularly in concrete, real-life situations. The biggest change was the contextualisation of content, the change in teachers’ beliefs about mathematics, teaching and learning and the evaluation of student comprehension.

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/IRELAND5
**Malta (1)**

**Core Curriculum Programme (CCP)**

### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Malta</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of initiative:</strong></td>
<td>Core Curriculum Programme (CCP)</td>
</tr>
<tr>
<td><strong>Coordinator/Organization:</strong></td>
<td>Curriculum Management and E-Learning Department (CMeLD) within the Directorate for Quality and Standards in Education (DQSE)</td>
</tr>
</tbody>
</table>
| **Key competences addressed:** | - Communication in mother tongue  
- Communication in foreign languages  
- Mathematical competence and basic competences in Science and Technology  
- Digital competence  
- Learning to learn |
| **Type of initiative and channels used for implementation** (e.g. curriculum reform introduced through legislation etc.) | This programme was a curriculum initiative to support Basic Skills learners (low ability learners) during the last three years of the secondary cycle. The continuum of achievement outlined in the National Curriculum Framework (NCF) 2012 states that the curriculum will meet the needs of learners according to their stage of development. It is envisaged to be a seamless process in order to ensure continuity in the educational pathways followed by learners. Moreover, the NCF endorses learner-centred learning, which requires the development of knowledge, skills and attitudes that promote self-directed and lifelong learning. |
| **Partners:** | State secondary schools, with support from the CMeLD, education officers, programme mentors, teachers and senior management teams within schools. |
| **Scope:** (student/teacher/school level; local/regional/national) | School level systemic change (within a small network) |
| **Learning context:** (formal or non-formal) | Formal |
| **School education levels:** (primary, lower secondary, upper secondary) | Between Form 3 and Form 5  
Final three years of secondary cycle  
Learners aged approx. 13-16 |

### B. SUMMARY

The Core Curriculum Programme in Malta is based on the three aims of the National Curriculum Framework (NCF p.6), which seeks to prepare all children to become lifelong learners who are confident, successful, creative, connected and engaged in the community and the world around them, and able to secure social justice (Ministry of Education and Employment, 2012).

This programme of learning that targets the needs of lower-level learners is characterised by a constructivist approach and three main theoretical understandings upon which this approach is based:

- The Assessment for Learning pedagogy;  
- The theories of the Zone of Proximal Development and Scaffolding as proposed by Lev Vygotsky, Ausubel and Bruner;  
- Inquiry-Based Learning.

The programme will give a core entitlement to learners, which covers the subject-specific key competences including Maltese, English, Mathematics, Science with Design and Technology and ICT as well as PE, Religion, Social Studies, History and Geography. The learners will also opt to study any one of the following: PE Certificate (Level 1), Music, Art, Home Economics, Textile Studies, Design and Technology or Graphical Communication.

Learners following the Core Curriculum Programme will carry out projects that enhance their ‘soft competences’. Evidence through different methods of assessment will be collected in a portfolio, which will be used to instil learning to learn skills.

Project Maths can be summarised as the desire to allow students to learn mathematics by thinking mathematically, particularly in concrete, real-life situations. The biggest change was the contextualisation of content, the change in teachers’ beliefs about mathematics, teaching and learning and the evaluation of student comprehension.

**Target groups:**  
- Basic skills learners in Form 3, continuing until the end of their secondary cycle.  
- Teachers of this cohort and the class mentor who will be leading the CCP group.

**Time frame:** (start and end date)  
September 2013 – on-going

**Relevant links:**  
For more information on the Core Entitlement:  

**http://keyconet.eun.org/case-notes/malta**
A. BASIC INFORMATION

Country: Norway

Title of initiative: [NO] Ungt Entreprenørskap [EN] Junior Achievement Young Enterprise Norway

Coordinator/Organization: JA-YE Norway is a member of the European parent organisation, JA-YE Europe. Contact: Cathrine Jansen Cathrine.Jansen@ue.no - Tel: 23 08 82 65/ Mobile: 90 75 61 16.

Key competences addressed: [NO] Entreprenørskap; [EN] Sense of initiative and entrepreneurship [NO] Lære å lære; [EN] Learning to learn

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): Implemented in the curriculum of several subjects, worked with as a cross-curricular method from lower-secondary education to Graduate programme in colleges and universities.

Partners: Junior Achievement Young Enterprise - Europe

Scope: (student/teacher/school level; local/regional/national) 1250 schools in 17 counties, coordinated on a national level. All levels in the school system, from primary school to masters programmes in higher education.

Learning context: (formal or non-formal) Formal learning context. Competitions on a regional and national level outside schools and beyond the limits of regular schooling.

School education levels: (primary, lower secondary, upper secondary) From primary school to higher education, approximately 8000 teachers and 20,000 pupils involved.

Target groups: Pupils and teachers in the educational system in Norway. Local businesses in the private and public sectors.

B. SUMMARY

JA-YE Norway was established in 1997 based upon a bipartisan agreement regarding the focus on entrepreneurship in schools. The motivation for introducing the initiative is threefold: Political, Economic Development and General Education. The programme aims to connect theory and practice so that education is more meaningful for students within three overarching objectives: Enthusiasm, Teamwork and Future.

The activity is divided into three different programmes; Grundercamp (Innovation Camp), Business-oriented programmes and mini-companies.

On a national level, the culture of entrepreneurship is now widely known in Norwegian schools, with participation from 120 schools in 383 municipalities in Norway, with a total of around 8000 teachers.

Surveys show that students who are involved with a local business are more likely than other students to start up a business after graduating.

Relevant links:
- Ungt Entreprenørskap: http://www.ue.no

http://keyconet.eun.org/case-notes/norway1
### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Norway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of initiative:</td>
<td>[NO] Senter for IKT i utdanningen [EN] The Norwegian Centre for ICT in Education</td>
</tr>
<tr>
<td>Coordinator/Organization:</td>
<td>Directorate of Education</td>
</tr>
<tr>
<td>Key competences addressed:</td>
<td>[NO] Digital kompetanse; [EN] Digital competence</td>
</tr>
<tr>
<td>Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):</td>
<td>Follow up to the 2006 national curriculum (Knowledge Promotion)</td>
</tr>
<tr>
<td>Partners:</td>
<td>No information provided</td>
</tr>
<tr>
<td>Scope:</td>
<td>Student National</td>
</tr>
<tr>
<td>Learning context:</td>
<td>Formal</td>
</tr>
<tr>
<td>School education levels:</td>
<td>Primary, lower secondary, upper secondary</td>
</tr>
<tr>
<td>Target groups:</td>
<td>Students, teachers and policy makers</td>
</tr>
<tr>
<td>Time frame:</td>
<td>2010 – on-going</td>
</tr>
</tbody>
</table>
| Relevant links: | - The Norwegian Centre for ICT in Education: https://iktsenteret.no/english  
- National Education Portal: www.utdanning.no |

### B. SUMMARY

The objective of the Norwegian Centre for ICT in Education is to contribute to the implementation and development of ICT policy, especially the inclusion of digital competence in Norwegian schools, as stated in the national curriculum. The centre will further cooperation with relevant public and private institutions and also participate in international cooperation. The main goals are to improve the quality of education and to improve learning and learning outcomes for children, pupils and students through the use of ICT in education.

The centre has been important in following up the 2006 national curriculum, which emphasised digital competence. This is done partly through policy initiatives, research and development projects and collaboration with schools. The centre has also developed several tools for monitoring, supporting and assessing schools, teachers and students in their engagement with digital technologies for learning.

### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Norway</th>
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</thead>
</table>
| **Title of initiative:** | [NO] Realfag for framtida. Strategi for styrking av realfagene 2010-2014  
| **Coordinator/Organization:** | Directorate of Education |
| **Key competences addressed:** | [NO] Å kunne regne som grunnleggende ferdighet;  
[EN] Mathematical competence and basic competences in science and technology |
| **Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)** | National initiative, strategy defined by the Ministry of Education and Research |
| **Partners:** |  
- National Education Authorities  
- Organisation of Municipalities  
- Organisations of Employers in Trade and Industry  
- Trade Unions |
| **Scope:** | Student, teacher, school level  
Local, regional, national |
| **Learning context:** | Formal |
| **School education levels:** | Primary, lower secondary, upper secondary |
| **Target groups:** | Students and teachers |
| **Time frame:** | 2010–2014 |

### B. SUMMARY

**Science for the future: Strategy for strengthening mathematics, science and technology (MST) 2010 –2014.**

In its 2010 strategy document, the Ministry of Education and Research stated that high competence in Mathematics, Science and Technology (MST) is a prerequisite to meet the great challenges of today and tomorrow. With policy concerns of decreasing numbers of MST graduates and skills shortages in these areas, the strategy aims to increase the number of MST students by 15%. Norway needs a sufficient number of people with insight into MST in order to understand these challenges and to act accordingly. As a national strategy this initiative involves many partners and targets teachers and students at all levels of education, from kindergarten to higher education.

The initiative has generated many activities on different levels and scale since 2010. The Ministry of Education is now in the process of making plans for ways of following up this priority area for Norwegian schools.
### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Norway</th>
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</thead>
</table>
| Title of initiative: | [NO] Den kulturelle skolesekken  
[EN] The Cultural Rucksack |
| Coordinator/Organization: | The secretariat for the scheme is the Arts Council Norway. Contact: Vera Micaelsen, +47 21 04 58 39 |
| Key competences addressed: | [NO] Å oppleve, gjøre seg kjent med og utvikle forståelse for profesjonell kunst- og kulturuttrykk av alle slag;  
[EN] Cultural awareness and expression |
| Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): | National initiatives and activities connecting the cultural sector and schools. |
| Partners: | Ministry of Culture and Ministry of Education and Research |
| Scope: (student/teacher/school level; local/regional/national) | Students |
| Learning context: (formal or non-formal) | Formal and non-formal |
| School education levels: (primary, lower secondary, upper secondary) | Primary, lower secondary, upper secondary |
| Target groups: | Children and young people |
| Time frame: (start and end date) | 2001 – ongoing |

### B. SUMMARY

The Cultural Rucksack (Den kulturelle skolesekken) is a national programme for art and culture provided by professionals in Norwegian schools. The programme helps school students to become acquainted with all kinds of professional art and cultural expressions.

The objectives of the programme are:

- To enable children and young people in primary and secondary school to enjoy artistic and cultural productions provided by professionals.
- To facilitate students’ access to a wide range of cultural expressions, so that they can become acquainted with and develop an understanding of culture in all its forms.
- To assist schools in integrating different forms of cultural expression with their own efforts to attain learning goals.

As a national initiative that targets cultural awareness and expression as a key competence, the Cultural Rucksack has been successful in initiating and creating activities that combine activities in the cultural sector with education. Still, there are several challenges in improving this as a key competence area within curricula and school focus areas, and to overcome the risk of the Cultural Rucksack becoming just an extra-curricular activity.

**POLAND [1]**

**STUDENTS’ ACADEMY**

### A. BASIC INFORMATION

**Country:** Poland  
**Title of initiative:** 
- [PL] Akademia uczniowska  
- [EN] Students’ Academy  
**Coordinator/Organization:** Centrum Edukacji Obywatelskiej (Centre for Citizenship Education)  
**Key competences addressed:** 
- [PL] Matematyka, nauki przyrodnicze;  
- [EN] Math and science  
- [PL] Technologie informatyczne i telekomunikacyjne (TIK);  
- [EN] Information and communication technologies (ICT)  
- [PL] Współpraca zespołowa; [EN] Teamwork  
- [PL] Rozwiązywanie problemów; [EN] Problem solving  
**Type of initiative and channels used for implementation:** Following the introduction of the new national core curriculum the project aims to improve the development of achievement standards, teaching programmes and additional modules for optional extra-curricular activities.  
**Partners:** Międzynarodowy Instytut Biologii Molekularnej i Komórkowej (International Institute for Molecular and Cell Biology)  
Polsko-Amerykańska Fundacja Wolności (Polish-American Freedom Foundation)  
**Scope:** (student/teacher/school level; local/regional/national) School National  
**Learning context:** Formal  
**School education levels:** Lower secondary (ISCED 2)  
**Target groups:** Students aged 13-16 and teachers

### B. SUMMARY

The Students’ Academy program (Akademia uczniowska) is conducted by the Centre for Citizenship Education (Centrum Edukacji Obywatelskiej) in collaboration with the International Institute of Molecular and Cell Biology (Międzynarodowy Instytut Biologii Molekularnej i Komórkowej) and the Polish-American Freedom Foundation (Polsko-Amerykańska Fundacja Wolności), with support from the European Union through the European Social Fund.

In the classroom as well as during extra-circular activities known as School Science Clubs (Szkolne Koła Naukowe), lower secondary students (gimnazja ISCED 2) perform experiments and conduct projects (projekty gimnazjalne) in math and natural sciences, which include elements such as peer teaching projects. More than 300 high schools from 5 Polish provinces have participated in the project. Teachers who join the programme can benefit from e-learning courses that cover experiment preparation and implementation, project-based learning management, methods to increase student motivation and the role of feedback in the learning process.

[Relevant links: Students’ Academy: http://www.ceo.org.pl/pl/au  
Polish-American Freedom Foundation: www.pafw.pl/programy/program/198]
**A. BASIC INFORMATION**

**Country:** Poland  
**Title of initiative:**  
[PL] Baza Narzędzi Dydaktycznych  
[EN] Teaching Tools Database  
**Coordinator/Organization:**  
[PL] Instytut Badań Edukacyjnych (IBE)  
[EN] Educational Research Institute  
**Key competences addressed:**  
[PL] Rozwój krytycznego myślenia /  
[EN] Critical thinking  
[PL] Umiejętność rozwiązywania problemów/  
[EN] Problem solving  
**Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)**  
Support for the implementation of the new core curriculum that has been used in Polish schools since 2009. The new core curriculum emphasises the importance of higher order skills: critical thinking, scientific reasoning and problem solving  
**Partners:** N/A  
**Scope:** (student/teacher/school level; local/regional/national)  
- Teachers, teacher trainers, students  
- National level  
**Learning context:** (formal or non-formal)  
Formal  
**School education level/s:** (primary, lower secondary, upper secondary)  
Lower secondary schools  
**Target groups:** Teachers, teacher trainers, students  
**Time frame:** (start and end date)  
5 October 2011– 30 June 2015  
**Relevant links:** www.bnd.ibe.edu.pl

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**B. SUMMARY**

Our experience and our research shows that supporting students and teachers while introducing changes into the education system is crucial for the benefit of the education. New curriculum reform of 2008 in Poland underlined the concept of critical thinking and problem solving in teaching at all school levels. The Educational Research Institute developed a tool for teachers representing lower secondary schools aimed at supporting their preparation for work with students. The Tools Data Base is shaped in a way to help teachers understand how the tasks for students should be prepared in order to get them involved in reasoning and searching for best problem solutions.

A special website was constructed and is open for everybody wishing to participate. Although mainly addressed to teachers, also students and parents can benefit from it.

[HTTP://KEYCONET.EUN.ORG/CASE-NOTES/Poland2](http://KEYCONET.EUN.ORG/CASE-NOTES/Poland2)
A. BASIC INFORMATION

Country: Portugal

Title of initiative: [PT] Português Língua Não Materna (PLNM) [EN] Portuguese as a Second Language (PSL)

Coordinator/Organization: Ministry of Education and Science/Directorate-General for Education

Key competences addressed: [PT] Comunicação em línguas estrangeiras [EN] Communication in foreign languages; [PT] Consciência e expressão culturais [EN] Cultural awareness and expression;

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): Creation and development of a PSL curriculum area through legislation

Partners: Regional Directorates of Education

Scope: National, regional and school level

Learning context: Formal

School education levels: Primary, lower secondary and upper secondary

Target groups: Students whose first language is not Portuguese

Time frame: 2009—on-going

B. SUMMARY

For students from an immigrant background, the knowledge of the language of the host country is fundamental for access to the curriculum and academic success and favours the integration of students not only at an educational level but also at a socio-affective level.

In order to respond to the linguistic and cultural diversity in Portuguese schools, the Ministry of Education and Science created the subject of Português Língua Não Materna (Portuguese as a Second Language – PSL) within the national curriculum.

When students whose first language is not Portuguese enter the Portuguese education system, they are placed according to their language proficiency level (elementary, intermediate or advanced) according to which they carry out specific PSL activities. Only when these students reach the advanced level, are they integrated into Portuguese classes.

Relevant links:
- ACIDI - Alto Comissariado para a Imigração e Diálogo Intercultural (High Commission for Immigration and Intercultural Dialogue):
  - http://www.acidi.gov.pt

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/PORTUGAL1
### A. BASIC INFORMATION

| **Country:** | Portugal |
| **Title of initiative:** | [PT] Clube Europeu  
[EN] European Club |
| **Coordinator/Organization:** | Daniel Sampaio Secondary School |
| **Key competences addressed:** | [PT] Comunicação em línguas estrangeiras  
[EN] Communication in foreign languages;  
[PT] Competência digital [EN] Digital competence;  
[PT] Aprender a aprender [EN] Learning to learn;  
[PT] Competências sociais e cívicas  
[EN] Social and Civic competences;  
[PT] Consciência e expressão culturais  
[EN] Cultural awareness and expression; |
| **Type of initiative and channels used for implementation** (e.g. curriculum reform introduced through legislation etc.) | The implementation of a bilateral and multilateral network of contacts aiming to provide students with a global education both at a language and citizenship level. Integration of the European Club into the Comenius programme and bilateral contacts for student exchanges. |
| **Partners:** | Other European schools, local authorities and non-governmental organisations. |
| **Scope:** | School level. |
| **Learning context:** | Formal and non-formal |
| **School education levels:** | Lower and upper secondary. |
| **Target groups:** | Students in grades 9 to 12 – ages 14 to 18 |

### B. SUMMARY

Our school has had as one of its goals, and as part of its Educational Project, the promotion of multicultural awareness and the acceptance of differences among the students. Therefore, we have been systematically working with other European schools in multilateral as well as in bilateral projects, which have so far led to more than 300 student mobilities within 16 student exchanges and multinational project meetings. This programme has been implemented as part of our European Club activities. These European projects have constituted a valuable asset to the school, its students and their families, contributing to the students’ autonomy and awareness of diverse cultures and realities, thus enabling them to grow as European citizens and more tolerant human beings. As a result of this programme our students have also proved to be more proficient in using English and more confident in applying for Erasmus programmes, which will obviously be very useful in their future careers.

**Time frame:** 2003 – on-going  
**Relevant links:** European Club website: www.clubeuropeu.wordpress.com
Portugal [3]

EduScratch

A. Basic Information

Country: Portugal

Title of initiative: EduScratch

Coordinator/Organization:
- Miguel Figueiredo and Teresa Marques
- School of Education
- Setúbal Polytechnic Institute ICT Competence Centre

Key competences addressed:
Main focus:
[PT] Competência digital [EN] Digital competence;

Secondary focus:
[PT] Competência matemática e competências básicas em ciências e tecnologia [EN] Mathematical Competence and Basic Competence in Science and Technology

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):
This initiative aims to promote the educational use of the programming language Scratch by supporting, teaching and sharing good practice among members of the Portuguese educational community.

It contributes to the curricular integration of ICT as well as giving context to the implementation of ICT curricular targets in grades 7 and 8 (ages 12-13).

The initiative has been implemented by the Directorate General for Education in partnership with the Portuguese Ministry of Education and Science and one of its ICT Competence Centres.

Partners:
- Directorate General of Education (DGE)
- Ministry of Education and Science
- School of Education: Setúbal Polytechnic Institute
- Sapo Portal (Portugal Telecom)

Scope:
Teachers and students
National
School support at a regional level

B. Summary

The EduScratch initiative was implemented by the Directorate General for Education in partnership with the Portuguese Ministry of Education and Science and one of its ICT Competence Centres. The initiative aims to contribute to the creation and development of a community of practice for teachers around the educational use of Scratch, an intuitive programming tool. This tool allows the development of computational thinking and has proven to have huge potential in developing different types of skills (digital and also subject-specific) in students.

Work on this initiative coincides with curriculum reforms in the Portuguese education system introduced in August 2012. The new curriculum requires the existence of an ICT subject in grades 7 and 8 that includes a target dedicated to the exploration of computational environments. Work carried out within the EduScratch initiative also counts towards corresponding to these new curriculum demands.

Relevant links:
- ICT Competence Centre website: http://projectos.ese.ips.pt/ctic/
- Facebook – EduScratch: https://www.facebook.com/eduscratch
- Twitter-Eduscratch: https://twitter.com/eduscratch
- SAPO Scratch website: http://kids.sapo.pt/scratch/
SLOVAKIA [1]
HANDS-ON PROJECT - PROJECT METHODS

A. BASIC INFORMATION

Country: Slovakia
Title of initiative: [SK] Projekt Vyhrňme si rukávy - metódy
[EN] Hands-On Project - project methods
Coordinator/Organization: Faculty of Education of Trnava University

Key competences addressed: The initiative addresses all the key competences listed in the 2006 European Parliament’s Recommendation on key competences for lifelong learning, especially:
- basic competences in science and technology
- transversal skills, particularly problem solving and decision-taking

Type of initiative and channels used for implementation: The initiative was the subject of a pilot project from 2004-2008. This was a joint project of the Slovak National Institute for Education and the Faculty of Education of Trnava University.

Partners: 
- The Slovak National Institute for Education (guarantor of evaluation of the pilot project)
- Vančurova Primary School in Trnava
- Atomova Primary School in Trnava
- K Mahra Primary School in Trnava

Scope: Regional primary schools
Learning context: Formal learning
School education levels: Primary and lower secondary
Target groups: Students and teachers
Time frame: After the conclusion of the pilot project in 2008 the project methods are currently being used in primary schools.

B. SUMMARY

The methods of Project Hands-On develop basic competences in science and technology. The project is based on a constructivist approach, which starts from assumption that children have some knowledge about the world they come into contact with, with the teacher acting as a facilitator in this process.

Through this process students have the chance:
- to build on their previous experience and knowledge and to connect these with new experiences and information in order to construct their own knowledge (to create concepts),
- to express their own opinions, to ask questions, to learn how to look at and define scientific problem that they will examine,
- to define assumptions (hypotheses) individually or in a group, to find and suggest procedures for proving these assumptions,
- to discuss their own concepts, findings and thoughts with classmates in a group, with a teacher or with an expert researcher in the field in question (from the Slovak Academy for Sciences and other research institutes),
- to verify their conclusions using literature or again discuss them with experts and record them using graphics,
- to present their findings in a classroom to their peers, interpret findings and conclusions and compare to those of others.
- to develop their own skills of communication, critical thinking, ability to cooperate and problem solving (transversal skill: learning how to learn),
- to create a positive social environment in cooperation with others in the classroom,
- to involve experts from the scientific community and parents in the teaching process.

Relevant links:
- Fibonacci Project: http://fibonacci.truni.sk/
- Department of Chemistry, University of Trnava Faculty of Education: http://katchem.truni.sk/
- La main à la pâte programme, Slovakia: http://pdf.truni.sk/vsr/
- Vančurova Primary School: http://zsvancurovatt.edupage.org/text/?text=text2&subpage=5&
- K Mahra Primary School Educational Programme: http://zskmahratt.edupage.org/files/primarne_PR(1).pdf
- K Mahra Primary School: http://zskmahratt.edupage.org/album/?
- Fibonacci Project at the Department of Chemistry, University of Trnava Faculty of Education: http://pdf.truni.sk/katedry/kch/aktivity?projekt-fibonacci
**SLOVAKIA [2]**

**INTEGRATED THEMATIC INTEGRATION-ITI**

### A. BASIC INFORMATION

**Country:** Slovakia

**Title of initiative:** [SK] Integrované tematické vyučovanie - ITI

**Coordinator/Organization:**
- The Slovak National Institute for Education (guarantor of evaluation of the pilot project)
- The Susan Kovalikovej Association (ASK): Education for the 21st Century in Slovakia

**Key competences addressed:** The initiative addresses all the key competences listed in the 2006 European Parliament’s Recommendation on key competences for lifelong learning, particularly:
- social and civic competences
- the transversal skills of creativity, critical thinking and problem solving.

**Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)** The initiative was implemented as a pilot project over a period of 9 years. Pedagogical research has proven that the initiative has been successful.

**Partners:**
- State and municipal school departments at various levels
- Schools at local and regional level
- Higher education institutions
- Methodology and Pedagogy Centre (an institution responsible for in-service teachers’ education and training)
- The Children of Slovakia Foundation

**Scope:** The initiative reaches students and teachers at all levels

**Learning context:** Formal, parts of the programme also apply to informal learning

**School education levels:** All school education levels, with an emphasis on primary education

**Target groups:** Students and teachers

**Time frame:** ITI started in 1992, mainly as a “bottom-up” initiative, with teaching staff beginning to exchange experiences and class observations (internal school reform). The initiative was subject to an official pilot project evaluation process from 1992 to 2001. After the successful evaluation of the pilot project the project has continued as an officially recognised experimental initiative, though state support is not very strong.

### B. SUMMARY

The innovative programme **Integrované tematické vyučovanie** (Integrated Thematic Instruction - ITI) represents an important initiative in Slovakia, particularly for the first years of primary education. It began in 1992 as a “bottom-up” initiative by teachers, taking the form of exchanges of experience and classroom observation (internal school reform), with expert support from the NGO Susan Kovalikovej Association (ASK): Education for the 21st Century in Slovakia. The programme was disseminated via internal school reforms and was run as a pilot project over 9 years of compulsory schooling and pedagogical research was carried out to evaluate its success.

The programme’s use of innovative methods and practices was inspired by international professional pedagogical literature and educational programmes, which were developed and applied creatively within the framework of the Slovak curriculum and the situation of Slovak schools. The schools mostly apply selected single elements and methods of the programme that can function independently and help to enhance the quality of education. These are:

- Holistic teaching in context, not only between particular subjects (cross-curricular integration), but also in students’ lives and their close environment.
- The curricula of particular subjects are integrated on a thematic basis representing the key curriculum.
- Social teaching and prosocial education is an integral part of the educational programme. The social curriculum is partially finished, with an elaborated methodology of life-skills development and revised tools of classroom management (rules of classroom life, community as an integrated form of teaching), cooperative conflict solving and peer mediation.
- An emphasis on children’s creativity and self-reflection on their activity and development.
- Teachers create stimulating conditions for learning, e.g. relevance of content, possibility of task selection, an enriched environment, etc.
- Application of constructivist methods, cooperative teaching, project-based learning, experiential learning, mental mapping, problem method, Gardner’s theory of multiple intelligences in the creation of tasks for students with different types of intelligence, revised Bloom taxonomy and others.

In a survey, 38% of primary school teachers stated that they use methods and elements of the programme. Incentives are given to school administrations to support teachers’ initiatives (soft management skills) and the schools carry out self-evaluation. The accredited educational programmes for teachers are ready and the support materials for students and teachers are being prepared. These activities, however, are mainly sporadic, and a more systematic approach on the side of the state administration is necessary in order to fully implement this successful pilot initiative.

**Relevant links:**
- National Institute for Education: www.statpedu.sk
- Susan Kovalikovej Association: http://www.ask21.sk
- Community of Valča: http://www.oheevela.sk/sz_characteristika

**http://keyconet.eun.org/case-notes/slovakia2**
**Spain [1]**

**PICBA (Programme for the Curricular Integration of Key Competences in Andalusia)**

### A. Basic Information

<table>
<thead>
<tr>
<th>Country:</th>
<th>Spain</th>
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</table>
| **Title of initiative:** | [ES] Programa de Integración de las Competencias Básicas en Andalucía (PICBA)  
 [EN] Programme for the integration of key competences in education in Andalusia |
| **Coordinator/Organization:** | [ES] Consejería de Educación de la Junta de Andalucía (CEJA)  
 [EN] Regional Ministry of Education of Andalusia |
| **Key competences addressed:** | [ES] Comunicación lingüística  
 [EN] Linguistic communication  
 [ES] Razonamiento matemático  
 [EN] Mathematical reasoning  
 [ES] Conocimiento e interacción con el mundo físico y natural  
 [EN] Knowledge and interaction with the social, physic and natural world  
 [ES] Competencia digital y tratamiento de la información  
 [EN] Digital competence and information processing  
 [ES] Social y ciudadana [EN] Society and citizenship  
 [ES] Cultural y artística [EN] Cultural and artistic  
 [ES] Competencias y actitudes para seguir aprendiendo de forma autónoma a lo largo de la vida  
 [EN] Attitudes for lifelong learning in an autonomous way  
 [ES] Autonomía e iniciativa personal  
 [EN] Autonomy and personal development |
| **Type of initiative and channels used for implementation** (e.g. curriculum reform introduced through legislation etc.): | Regional programme aimed at the integration of key competences in the curriculum through the development of teacher training modules. |
| **Partners:** | 82 public Primary and Secondary schools |
| **Scope:** (student/teacher/school level; local/regional/national): | Regional |

### B. Summary

The Project Programme Integration of Key Competences (PICBA) was conceived in Andalusia as an instrument for cooperation between education administrations, including the national administration by accepting the COMBAS Programme (presented in the Spanish case study) as a reference for action, with the objective of improving the results of the entire school population through the development of key competences. This context, which called for the participation of over 100 schools, is characterised by seeing curricular integration as a holistic act in which all departments of the educational system cooperate (training consultants of teacher training centres, the inspection agency, educational orientation, innovation programmes, managers and teachers of schools and training coordinators). This proposal has led to the curricular acceptance of the officially established curriculum by connecting all its elements and facilitating a student evaluation process that will recognise their competence performance level. The future perspectives at PICBA lead to the analysis of new challenges, such as: a curriculum model in view of the change in educational law that Spain is undergoing, professional competences, academic texts and the preparation of integrated teaching units, the inclusion of families and the community in the entire competence proposal, the evaluation of student performance and improvement plans for schools etc.

**Relevant links:**
- PICBA Programme:  
  - http://www.juntadeandalucia.es/educacion  
  - Enter the Colabor@platform: https://sites.google.com/a/red-innova.net/web/publicaciones/atlanida-colaboraciones-con-la-red-europea-keyconet

**Learning context:** (formal or non-formal)  
- Formal school education

**School education levels:** (primary, lower secondary, upper secondary)  
- Primary and secondary school levels

**Target groups:**  
- Primary and secondary teachers and students

**Time frame:** (start and end date)  
- During the years 2011-2012: March 2011 – June 2012. In 2013, this programme is being developed in a total of 46 primary and secondary schools in a new phase of consolidation.

**Related links:**
- [KeyConet.Eun.org](http://KeyConet.Eun.org)
**Spain [2]**

**Teacher Training Centre, Alzira, Valencia, Spain**

### A. Basic Information

**Country:** Spain

**Title of initiative:** [ES] Centro Profesorado Alzira, Valencia, España. La participación y motivación del alumnado como reto: programaciones didácticas de aula integrando las competencias básicas.  

**Coordinator/Organization:** Centre for Training, Innovation and Educational Resources (CEFIRE) in Alzira, in the Autonomous Community of Valencia.  
Coordination and organisation:  
- Jaume Tuset, director of the CEFIRE, and team: Ana Llavador, Teresa Ripoll, Mª Teresa Montalvà and Ángel Ribera.  
   Educational evaluation:  
   - Internal: teachers at centres, such as Esperanza García and Fani Pastor.  

**Key competences addressed:** The eight key competences added to the Spanish state compulsory education curriculum in accordance with the Organic Law of Education (LOE, 2006):  
[ES] Comunicación lingüística  
[EN] Linguistic communication  
[ES] Matemática  
[EN] Mathematics  
[ES] Competencia en el conocimiento y la interacción con el mundo físico  
[EN] Awareness of and interaction with the physical world  
[ES] Tratamiento de la información y competencia digital  
[EN] Awareness of and interaction with the physical world  
[ES] Competencia social y ciudadana  
[EN] Social competence and citizenship  
[ES] Competencia cultural y artística  
[EN] Cultural and artistic competence  
[ES] Aprender a aprender  
[EN] Learning to learn  
[ES] Autonomía personal  
[EN] Personal autonomy

**Type of initiative and channels used for implementation** (e.g. curriculum reform introduced through legislation etc.)  
This initiative began with the experience of a group of schools within the area of influence of the CEFIRE, about how to improve the motivation of students to learn. The inclusion of key competences in the Organic Law of Education (LOE) broadened the horizon of these experiences, although it was necessary to carry out an assessment for their integration into lesson plans. The CEFIRE welcomed the possibility that the Atlantida Innovation Group would implement its initiative in this way. The education channel in such schools was used to implement this initiative, along with other schools with less experience in this field.

**Partners:**  

**Scope:** (student/teacher/school level; local/regional/national)  
22 centres within the area of influence of the CEFIRE and 8 centres from bordering areas. 500 teachers in total. 1 coordinator for the initiative in each school.

**Learning context:** (formal or non-formal)  
Three learning contexts were used:  
1. In the CEFIRE: a network of coordinators for the initiative in each school and management teams in schools.  
2. In each school: top-down educational training and reflection (by the coordinator for the initiative to the departments for teaching coordination, the teachers of the various cycles and the educational coordination committee (ECC) of each school).  
3. In each classroom: the students.

**School education levels:** (primary, lower secondary, upper secondary)  
All compulsory education levels.

**Target groups:** Primary and secondary education teachers.

**Time frame:** (start and end date)  
Start: September 2009  
End: September 2012 (due to closure of the CEFIRE by decision of the Autonomous Community of Valencia).

**Relevant links:** http://www.proyectoatlantida.net/ Atlantida Innovation Group materials related to the Alzira experience: curriculum specification, integrated teaching units and the new teaching plan for the entire community can be found here.
B. SUMMARY

The Project Programme Integration of Key Competences (PICBA) was conceived in Andalusia as an instrument for cooperation between education administrations, including the national administration by accepting the COMBAS Programme (presented in the Spanish case study) as a reference for action, with the objective of improving the results of the entire school population through the development of key competences. This context, which called for the participation of over 100 schools, is characterised by seeing curricular integration as a holistic act in which all departments of the educational system cooperate (training consultants of teacher training centres, the inspection agency, educational orientation, innovation programmes, managers and teachers of schools and training coordinators). This proposal has led to the curricular acceptance of the officially established curriculum by connecting all its elements and facilitating a student evaluation process that will recognise their competence performance level.

The future perspectives at PICBA lead to the analysis of new challenges, such as: a curriculum model in view of the change in educational law that Spain is undergoing, professional competences, academic texts and the preparation of integrated teaching units, the inclusion of families and the community in the entire competence proposal, the evaluation of student performance and improvement plans for schools etc.

SPAIN [3]
EL HIERRO. COMPETENCES FOR LIFE: SCHOOL, FAMILY AND COMMUNITY

A. BASIC INFORMATION

Country: Spain

Title of initiative: [ES] El Hierro. Competencias para la vida: Escuela, Familia y Comunidad

Organisation of the initiative: The Island Council for Education and Culture, composed of representatives from all schools, family associations and the relevant politicians from the 3 councils and the Cabildo (local administration) of the island.

General coordination of the initiative: Araceli Castañeda, Inspection of Education Services.

Pedagogical coordination of the initiative: the Atlántida Innovation Group and the Valverde Teacher Training Centre.

Key competences addressed: This initiative addresses the contextualisation in El Hierro of the eight key competences specified by the Organic Law of Education (LOE, 2006) for students at various educational stages, following the relevant European recommendations:

- [ES] comunicación lingüística [EN] linguistic communication
- [ES] matemática [EN] mathematics
- [ES] conocimiento e interacción con el mundo físico [EN] awareness of and interaction with the physical world
- [ES] tratamiento de la información y competencia digital [EN] information processing and digital competence
- [ES] competencia social y ciudadana [EN] social competence and citizenship
- [ES] competencia cultural y artística [EN] cultural and artistic competence
- [ES] aprender a aprender [EN] learning to learn

In a complementary way, the initiative also addresses the development of professional competences and civic responsibility regarding obligations and rights related to the development of competences. A synergy of inter-connected actions between educational, family and municipal institutions in El Hierro (the Canary Islands) has facilitated the development of this complete group of competences.
Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)

The core of this initiative is focused on the curricular integration of key competences, with the intention of specifying, at a local level, the curricular design of the LOE. Its implementation is a result of a proposal made by the Inspection of Education Services of El Hierro and the team of head teachers of schools, to continue with the approach that had been prepared by the Atlantida Innovation Group with the support of the Department for Education of the Canary Islands. Therefore, in 2009 an ad hoc educational guidance service was created that, as the community as a whole grew, led to the creation of the post of Consultant of the Island Council for Education and Culture.

Partners:
- **Design and guidance of the initiative:** the Atlantida Innovation Group (headed by José Moya within the teachers sector and by Florencio Luengo within the family and community sector) with the support of representatives from the University of La Laguna (Víctor Hernández) and the La Gomera Teacher Training Centre (Nieves Alcalá), among others.
- **Organisation and setting up of the initiative:** the Island Council for Education and Council of El Hierro, presided over by the Inspección of Education Services and with the participation of teachers’ representatives, school head teachers, parents’ associations, the Cabildo, councils, teacher training centres, educational guidance teams, cultural centres and the Atlantida Group.

Scope:
(*student/teacher/school level; local/regional/national*)
The initiative has been implemented locally: on the island of El Hierro, the Canary Islands (approximately 10,000 inhabitants). The intention is to involve all students through the actions of teachers and families.

Learning context:
(*formal or non-formal*)
The following learning contexts have been identified: Ongoing teacher training processes (formal education) and, in a complementary way, training sessions for families and representatives with political responsibility (informal and non-formal education).

School education levels:
(*primary, lower secondary, upper secondary*)
Primary and secondary (compulsory education in Spain) and nursery (non-compulsory education).

Target groups:
The initiative is aimed at the following groups:
- Teachers from all schools (approximately 125), coordinated by their respective management teams and the Inspection of Education Services.
- Representatives from family associations and from the general community.

Time frame:
(*start and end date*)
Start: October 2009
End: June 2013.

Relevant links:
- www.gobiernodecanarias.org/educacion/cep_hierro/
- Valverde Teacher Training Centre
- acaspadh@gobiernodecanarias.org
- Inspection of Education Services
- http://www.proyectoatlantida.net/
- Material from the Atlantida Group about El Hierro and products

B. SUMMARY

All of the teachers on the island of El Hierro, the Canaries, followed a training process based on the inclusion of key competences in curriculum practices. This process, supported by the hard work of the educational supervision service and following the approach of the Atlantida model (see the Case Study presented by Spain), made it possible to identify major changes in the development of competences by students.

Based on these achievements in a population of approximately 10,000, a greater level of integration was sought for competences in children and young adults through the joint action of all the organisations in the educational community (schools, family associations, three councils and the Cabildo) and, consequently, a strategy that was consistent with this approach was designed. This was how the Island Council for Education and Culture came about. This organisation, with the objective of developing the COMPETENCES FOR LIFE: School, Family and Community project in turn generated conditions so that the community as a whole could design a draft of the Citizenship Charter of Competences for Life with the fundamental objective of establishing guidelines, rules and conditions that would promote sustainability and the educational and cultural improvement of the island. Various projects or teaching units in schools feed back into this process, as well as other complementary initiatives within the family or social sector.

[http://KeyConet.EUN.ORG/Case-NOTES/SPAIN3](http://KeyConet.EUN.ORG/Case-NOTES/SPAIN3)
SPAIN [4]
FAMILIES AND SCHOOLS:
EDUCATING TOGETHER BASED ON KEY COMPETENCES

A. BASIC INFORMATION

Country: Spain

Title of initiative:
- [ES] Familia y escuela educando juntos en clave de competencias básicas
- [EN] Families and Schools: Educating Together Based on Key Competences

Coordinator/Organization:

Key competences addressed:
The eight key competences added to the Spanish state compulsory education curriculum in accordance with the Organic Law of Education (LOE, 2006):
- [ES] matemática [EN] mathematics
- [ES] comunicación lingüística [EN] linguistic communication
- [ES] conocimiento e interacción con el mundo físico [EN] awareness of and interaction with the physical world
- [ES] tratamiento de la información y competencia digital [EN] information processing and digital competence
- [ES] competencia social y ciudadana [EN] social competence and citizenship
- [ES] competencia cultural y artística [EN] cultural and artistic competence
- [ES] aprender a aprender [EN] learning to learn

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.):
Once the key competences were incorporated into Spanish legal and educational regulations in accordance with the European approach, the Association of Compañía de María began a process of ad hoc curriculum adaptation for its network of 22 schools. To carry out this work, it was helped by the experience of the subject provided by the Atlantida Innovation Group in various regions in Spain. In this case the advice was focused on the curricular integration of key competences through two lines of work:
1) The definition of the educational project that will represent the identity of the network of schools, assuming key competences as its central hub (cooperative work between teachers and students’ families).
2) The integration of competences into the third level of curriculum specification (the classroom), in keeping with the educational project of the schools.

B. SUMMARY

Compañía de María is a religious organisation that offers 22 private, state-subsidised schools, located in 9 different regions in Spain, with very diverse characteristics and contexts. Within this diversity, the objective of this network is to bring together a set of shared principles that, in accordance with the analysis carried out, show the need to generate one single shared framework for all schools, thereby redefining the educational project based on competences so that it can facilitate educational change. The proposal for curricular integration accepted in 2009 so far has made it possible to provide, with its own identity, a model for educational change. This situation has made it possible to prepare a set of documents that enrich and feed back into said principles: an evaluation guide that includes good practices coordinated by teachers and a set of materials prepared by families. This constitutes the provision of resources that facilitate the continuity of the debate in this field in view of the key practices that key competences provide.

Partners:
- Regarding the design of and consultation about the initiative: the Atlantida Group.
- Regarding the organisation and setting up of the initiative: the Association of Compañía de María schools, a private religious organisation supported by public funds in accordance with the constitutional democratic legislation of Spain.

Scope:
- (student/teacher/school level; local/regional/national) 22 private state-subsidised schools located in nine regions in Spain. The initiative involved approximately 1,200 teachers, 19,000 students and representatives from families of 14 schools.

Learning context:
- (formal or non-formal) A formal and informal education project in the context of a network of private schools that offers its services to the public.

School education levels:
- (primary, lower secondary, upper secondary) Nursery (non-compulsory education), primary and secondary (compulsory education).

Target groups:
Directly: teachers from the 22 schools in the Compañía de María network and family groups. Indirectly: student groups.

Time frame:
- (start and end date) Start: October 2010 End: June 2013 (its continuity being planned with the intention of disseminating and consolidating the lines of work).

Relevant links:
Internal intranet for access to the schools as a communication tool and in order to share materials.
www.proyectoatlantida.net
Material about key competences provided by the Atlantida Project and final products of the plan.

http://KEYCONET.EUN.ORG/CASE-NOTES/SPAIN4
## A. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country:</th>
<th>Sweden</th>
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| Title of initiative: | [SE] Entreprenörskap i skolan  
[EN] Entrepreneurial approach |
| Coordinator/Organization: | Skolverket (National Agency for Education) |
| Key competences addressed: | [SE] Initiativförmåga och företagaranda  
[EN] Sense of initiative and entrepreneurship;  
[SE] Kommunikation på modersmålet  
[EN] Communication in the mother tongue;  
[SE] Kommunikation på främmande språk  
[EN] Communication in foreign languages;  
[SE] Matematiskt kunnskap och grundläggande vetenskaplig och teknisk kompetens  
[EN] Mathematical competence and basic competences in science and technology;  
[SE] Digital kompetens  
[EN] Digital competence;  
[SE] Lära att lära  
[EN] Learning to learn; |
| Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): | National initiative by the government, run by the National Agency for Education. The National Agency provides funds for schools and non-profit organisations to organise in-service training for teachers, events, as well as carry out projects. |
| Partners: | National Agency for Education |
| Scope: (student/teacher/school level; local/regional/national) | Students and teachers  
Local and national |
| Learning context: (formal or non-formal): | Formal |
| School education levels: (primary, lower secondary, upper secondary): | All school levels |
| Target groups: | Primary target group: teachers |

### Time frame:

- **(start and end date)** 2009 – on-going

### Relevant links:

- [http://www.skolverket.se/](http://www.skolverket.se/)

## B. SUMMARY

The Entreprenörskap i skolan (Entrepreneurial approach) initiative is an on-going project run by Skolverket (National Agency for Education), which aims to encourage entrepreneurship in schools. The initiative focuses on providing in-service training for teachers, counsellors and head teachers in order to provide them with an understanding of what entrepreneurial learning means in schools and with the basic attitudes and skills necessary to work on entrepreneurial activities in educational institutions. The initiative also promotes schools’ cooperation with employers, facilitates the exchange of experience between schools and allocates development funds.

The overall aim is that children and students are provided with teachers and a learning environment that stimulate and develop entrepreneurial skills and develop attitudes that foster entrepreneurship, innovation and entrepreneurial thinking.

A. BASIC INFORMATION

Country: Sweden
Title of initiative: [SE] Framtidskompetenser [EN] Future Competences
Coordinator/Organization: Rektorsakademien (Principal Academy)
Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): School projects
Partners: Rektorsakademien and municipalities
Scope: (student/teacher/school level; local/regional/national) Student, teacher, schools
Learning context: (formal or non-formal) Formal
School education levels: (primary, lower secondary, upper secondary) All educational levels but the primary focus is on upper-secondary schools
Target groups: Teachers, head teachers, students, parents and employers

B. SUMMARY

The Framtidskompetenser (Future Competences) initiative of the Rektorsakademien (Principal Academy) was set up to help schools better prepare their students for today’s society and working life and also for that of tomorrow. Through this initiative, Rektorsakademien helps schools to integrate skills and competences into the traditional syllabi and curriculum. Schools will pay a participation fee, in return for which they receive training, guidance and materials. Schools are asked to select one or two competences that they intend to focus on, and guidance from Rektorsakademien and exchanges of experience and best practice between schools will be available to help them with this. Schools are also asked to form an Advisory Committee with representatives from the private or public sector as well as teachers and students which will support and advise the school management team in their work with Future Competences and help to ensure a close contact with the demands of working life.

Relevant links:
Rektorsakademien: http://rektorsakademien.se/framtidskompetenser

Time frame: Still in pilot phase, planning to start in January 2013

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/SWEDEN2
Sweden [3]  
Science and engineering for all

A. Basic Information

Country: Sweden

Title of initiative: [SE] Naturvetenskap och Teknik för Alla (NTA) [EN] Science and Technology for All (STA)

Coordinator/Organization: KVA - Kungl. Vetenskapsakademien (The Royal Swedish Academy of Science)  
IVA - Kungl. Ingenjörsvetenskapsakademien (The Royal Swedish Academy of Engineering Science)

Key competences addressed: [SE] Matematik och naturvetenskapliga ämnen [EN] Mathematical competence and basic competences in science and technology

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.) Professional development and support for teachers, teaching methodologies

Partners: The Royal Swedish Academy of Science and the Royal Swedish Academy of Engineering Science in cooperation with municipalities throughout Sweden

Scope: Students and teachers  
Local and national

Learning context: Formal

School education levels: From pre-school to the end of compulsory education

Target groups: Teachers and students

Time frame: 1997 – on-going

Relevant links: www.nta.kva.se

B. Summary

The NTA programme (Naturvetenskap och Teknik för Alla - Science and Technology for All), run by the Royal Swedish Academy of Science (KVA) and the Royal Swedish Academy of Engineering Science (IVA), was established in 1997 in order to counter declining results in national and international tests in mathematics and science. The programme focuses on providing professional development and support for teachers in order to develop and expand their attitudes and approaches to and knowledge of science and technology and to improve teaching and learning in STEM (science, technology, engineering and mathematics). The ultimate aims of the programme are to support teachers in their efforts to stimulate students’ curiosity, interests and knowledge in science and technology, to enhance scientific literacy and to encourage more young people to choose an education leading to a career in science or technology.

http://keyconet.eun.org/case-notes/sweden3
**SWEDEN [4]**

**ONEEIGHTY**

A. BASIC INFORMATION

**Country:** Sweden  
**Title of initiative:** Oneeighty  
**Coordinator/Organization:** Rektorsakademien (Principal Academy)

**Key competences addressed:**
- **[SE]** Kommunikation på modersmålet  
- **[EN]** Communication in the mother tongue  
- **[SE]** Kommunikation på främmande språk  
- **[EN]** Communication in foreign languages  
- **[SE]** Matematiska kunskaper och grundlägga-de kompe-tens inom teknik och vetenskap  
- **[EN]** Mathematical competence and basic competences in science and technology  
- **[SE]** Digital kompetens  
- **[EN]** Digital competence  
- **[SE]** Lätt att lära  
- **[EN]** Learning to learn  
- **[SE]** Social kompetens och samhällskunskaper  
- **[EN]** Social and civic competences  
- **[SE]** Initiativförmåga och entreprenörskap  
- **[EN]** Sense of initiative and entrepreneurship  
- **[SE]** Kompetens och medvetenhet inom kultur  
- **[EN]** Cultural awareness and expression

**Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)**

- School projects

**Partners:** N/A

**Scope:**  
- (student/teacher/school level; local/regional/national)  
- Primary students but also teachers  
- National level

**Learning context:**  
- (formal or non-formal)  
- Formal

**School education levels:** All educational levels but the primary focus is on lower and upper secondary schools.

**Target groups:** Students are the primary target group. Teachers and head teachers are the secondary target group.

**Time frame:**  
- (start and end date)  
- In September 2007 the method and development project for Oneeighty was launched by the Rektorsakademien.

**Relevant links:**  
- http://oneeighty.se

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**B. SUMMARY**

Oneeighty is a well-functioning method that has existed as a project for six years. The aim of Oneeighty is to make the whole person visible, both socially and in terms of their knowledge. We want to find out as much as possible about the young people we meet. What they like, their interests, how they learn, the basic knowledge they acquired at school, their needs, social situation, etc. We create an online relationship via chat on the Oneeighty internet platform but also on other virtual meeting places used by young people. Together with the young participants, we make a plan for what they want to accomplish with us in Oneeighty.

Oneeighty is the beginning of something new. It is a place that is used as a starting point for getting ahead in life. By offering a variety of options and strategies, we support the young people to create a motivating and secure place for themselves in society. Oneeighty’s task is to interpret and translate the opportunities available, both for society and for the young. The young people that participate in Oneeighty leave the project prepared to take on life with increased self-esteem and with confidence in their own ability to continue lifelong learning.
UNITED KINGDOM [1]
BUILDING A CULTURE OF ACHIEVEMENT THROUGH THE ASDAN CERTIFICATE OF PERSONAL EFFECTIVENESS

A. BASIC INFORMATION

Country: UK – England

Title of initiative: Building a culture of achievement through the ASDAN Certificate of Personal Effectiveness

Coordinator/Organization: Award Scheme Development and Accreditation Network (ASDAN)

Key competences addressed:
- Problem Solving
- Improving Own performance
- Working With Others
- Research
- Discussion
- Presenting
- Communication
- Entrepreneurial learning skills

Type of initiative and channels used for implementation (e.g., curriculum reform introduced through legislation etc.): Curriculum and assessment leading to qualification

Partners: 5,000 schools, colleges and training providers are registered as examination centres with ASDAN across the UK

Scope: National

Learning context: (formal or non-formal) ASDAN programmes and qualifications support both formal and informal learning contexts

School education levels: (primary, lower secondary, upper secondary) Secondary schools and post-16 colleges of further education

Target groups: All attainment levels

Time frame: (start and end date) ASDAN has been operating since the early 1980s; the ASDAN Certificate of Personal Effectiveness was launched in 2002/03

Relevant links: www.asdan.org.uk

B. SUMMARY

The UK system of awarding bodies, particularly in England, has made it possible for Awarding Organisations such as ASDAN to develop a qualification such as the Certificate of Personal Effectiveness (CoPE) within a national framework for qualifications. The CoPE is designed to widen access to further and higher education by developing generic, cross-curricular “effectiveness skills”. These comprise skills that are nationally recognised as “Wider Key Skills” (problem solving, improving own learning and performance, working with other) and additional skills identified by ASDAN as important through consultation with employers and higher education institutions (research skills, discussion skills and oral performance and presentation skills). The development of these skills is based on a methodology involving experiential learning by way of personal challenges which permit the incremental development and recognition of skills through formative assessment and on “learning to learn” through a process summarised as “PLAN>DO>REVIEW”. Portfolio assessment facilitates this methodology, enabling learners to document their progress with the help of their teachers. An example of a portfolio using the “plan, do and review” process is available here: http://www.asdan.org.uk/media/downloads/CoPE.DemoPortfolio.L1.SamplePages.pdf

To implement CoPE programmes, ASDAN has developed materials, held workshops and created a network to help teachers develop the methodology. Some initial teacher training providers have incorporated the methodology into their programmes but this is restricted by existing teacher training requirements. Nonetheless, an independent evaluation found that students on CoPE programmes achieved improved outcomes in the more established subject-based national qualification. This was particularly the case for students from lower socioeconomic groups. Further research investigating the causation of this improvement is planned. The dissemination of research findings and the recognition of employers and higher education institutions have been crucial in encouraging students to choose to work towards the CoPE.

http://keyconet.eun.org/case-notes/uk1
United Kingdom [2]
National Curriculum Citizenship

A. Basic Information

Country: UK – England

Title of initiative: National Curriculum Citizenship

Coordinator/Organization: Association for Citizenship Teaching (ACT)
Liz Moorse

Key competences addressed: Social and civic competences

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): National Curriculum reform introduced through legislation and supported by policy on assessment by teachers, development of ISCED Level 2 and 3 public qualifications (General Certificate of Secondary Education – GCSE and A level, respectively), initial teacher education qualification and the development of a 'subject community' to support the teaching of Citizenship in schools.

Partners: The UK government’s Department for Education (in England), teacher training providers, local education authorities, schools

Scope: School, teacher, student National

Learning context: Statutory (compulsory) curriculum in secondary education Non-statutory (non-compulsory) curriculum in primary education

School education levels: Secondary (age 11-16) Primary (age 5-11)

Target groups: Teachers, teacher educators, local education advisors, qualification developers, students

Time frame: 2000 – on-going

B. Summary

Citizenship education in schools in England has gradually developed from a concern regarding young people’s political engagement and social values via roots in NGOs in the 1970s, the introduction of a National Curriculum in the 1980s and the creation of the Citizenship subject in the late 1990s.

Following a change of government that saw the emergence of strong ministerial backing for the subject and cross-party support, Citizenship was introduced into the National Curriculum for primary and secondary schools in 2001. This provided an important lead time before the subject became compulsory at lower secondary level in 2004. The implementation of the subject then involved the creation of initial teacher education programmes that incorporated the subject, notably though specialisation in the subject at secondary level.

The revision of Ofsted’s school inspection framework led to the incorporation of Citizenship in individual school inspection reports and national subject-specific reports. The Qualifications and Curriculum Authority (QCA), which had published the new curriculum, led the development of national qualifications in the subject at lower and upper secondary level (subsequently regulated by the national examinations regulator). The QCA also developed guidance on teaching and assessing the subject in schools, notably through the exemplification of national standards informing teachers’ summative assessments but also through their formative assessments.

A government-commissioned longitudinal study by the National Foundation for Educational Research informed policy makers about the impact of the Citizenship subject. This source and other sources indicate that the implementation has made progress but that it will be a long-term process requiring protected space in the primary and secondary curriculum, and continued investment in teacher education.

A more recent change in government led to a review of the National Curriculum which potentially threatens the status of the Citizenship subject. This revised curriculum, published in September 2013, focuses on the knowledge aspects of Citizenship; whilst increasing volunteering is a stated aim there is little room for this within the allotted time in schools. Changes in educational structure in the UK mean that the National Curriculum now only applies to schools managed by Local Authorities; Academies and Free Schools are often guided by, but not bound by, the National Curriculum.

Relevant links:
- National Curriculum Citizenship – Primary (http://www.education.gov.uk/schools/teachingandlearning/curriculum/primary/b0198824/citizenship) and Secondary (http://www.education.gov.uk/schools/teachingandlearning/curriculum/secondary/b0199157/citizenship)
- Association for Citizenship Teaching (http://www.teachingcitizenship.org.uk/)
- Citizenship Studies subject criteria for the development of GCSE and A level qualifications
**A. BASIC INFORMATION**

**Country:**
11 European countries (Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Romania, Slovakia, Spain, Sweden)

**Title of initiative:**
Global Enterprise Project (GEP)

**Coordinator/Organization:**
Junior Achievement Young Enterprise (JA-YE) Europe

**Key competences addressed:**
- Sense of initiative and entrepreneurship
- Social and civic competences
- Cultural awareness and expression digital competence
- Learning to learn
- Communication in foreign languages

**Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)**
Student programme (entrepreneurship education)

**Partners:**
- European Round Table of Industrialists
- European Schoolnet

**Scope:**
Learning-by-doing in a school entrepreneurship educational programme, with practical hands-on activities led by a volunteer business consultant for secondary school students (15-18 years old)

**Learning context:**
The first part of the programme is delivered in schools during school hours while the second is delivered after school as an informal education activity

**School education levels:**
Upper secondary (15-18 years old)

**Target groups:**
Secondary school students (all type of secondary schools including vocational education institutions)

**Time frame:**
The project lasts one full school year in each school, and is a 3-year initiative which was launched in September 2011 and will run until June 2014.

**Relevant links:**
www.globalenterprise项目.eu

**B. SUMMARY**

The labour market of the 21st century is global and Europe’s younger generation must be better equipped with the skills they need to excel in the hyper-competitive global economy. Clearly, every effort must be made to accelerate change within our education systems to help young people succeed. Employability and entrepreneurship are crucial enablers and go hand-in-hand.

The Global Enterprise Project (GEP) aims to increase 15,000 young people’s entrepreneurial potential and employability by exposing them early on to the realities of global business, thus raising their awareness of globalisation and the opportunities it offers them. Through a pan-European partnership between European businesses and education, students will learn-by-doing, testing their entrepreneurial abilities, developing transversal and life-long skills, and interacting with people from a variety of industries and career backgrounds.

A partnership of three European networks (JA-YE Europe, European Schoolnet and ERT) aims to bring the world of work and education closer together to develop the right mix of skills that better anticipate the skills of the future.

In GEP, secondary school students between the ages of 15 and 18 from several European countries learn about various industries in the context of the global economy, create and manage their own real enterprises, develop enterprise ventures with peers in other countries, strengthen their entrepreneurial know-how and apply their academic skills in new ways. This is achieved with the support of teachers working closely with business professionals who will share their experience, expertise and raise awareness of the variety of career opportunities that exist in today’s global environment.

[http://keyconet.eun.org/case-notes/europe]
### A. BASIC INFORMATION

<table>
<thead>
<tr>
<th><strong>Country:</strong></th>
<th>35 European countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of initiative:</strong></td>
<td>Company Programme</td>
</tr>
<tr>
<td><strong>Coordinator/Organization:</strong></td>
<td>Junior Achievement Young Enterprise (JA-YE) Europe National JA-YE offices in the 35 participating countries</td>
</tr>
<tr>
<td><strong>Key competences addressed:</strong></td>
<td>Sense of initiative and entrepreneurship, Social and civic competences, Cultural awareness and expression digital competence, Learning to learn, Communication in foreign languages</td>
</tr>
<tr>
<td><strong>Type of initiative and channels used for implementation:</strong></td>
<td>Student programme (entrepreneurship education)</td>
</tr>
<tr>
<td><strong>Partners:</strong></td>
<td>Several partners in each country (private donors and public bodies)</td>
</tr>
<tr>
<td><strong>Scope:</strong> (student/teacher/school level; local/regional/national)</td>
<td>Learning-by-doing in a school entrepreneurship educational programme, with practical hands-on activities led by a volunteer business consultant for secondary school students (16-18 years old)</td>
</tr>
<tr>
<td><strong>Learning context:</strong> (formal or non-formal)</td>
<td>In most countries the Junior Achievement (JA) Company Programme is part of the school curriculum and is delivered during school hours. In a few countries (e.g. Belgium) the programme is delivered outside normal school hours. In all programmes there are also elements of informal educations since part of the mentoring activity with a business volunteer is delivered outside school hours.</td>
</tr>
<tr>
<td><strong>School education levels:</strong> (primary, lower secondary, upper secondary)</td>
<td>Upper secondary (16-18 years old)</td>
</tr>
<tr>
<td><strong>Target groups:</strong></td>
<td>Secondary school students (all type of secondary schools including vocational education institutions)</td>
</tr>
</tbody>
</table>

### B. SUMMARY

Today’s job market is more competitive than ever, and employers expect high levels of entrepreneurial skills from the next generation of employees. Unfortunately, many students do not have the opportunity to learn and develop in these areas, leaving them to struggle in the real world.

According to a 2011 European Commission report, less than 5% of young people in Europe participate in entrepreneurship education in school.

The JA-YE Company Program brings the theory of business to life by using volunteers, acting as consultants and mentors, to help young people in secondary schools create and manage a mini-company. For nearly 90 years, this experience has enjoyed tremendous success as Junior Achievement’s signature programme, offered across the globe. In Europe the Company Programme is among the most successful concepts identified by the EU in its search for educational strategies that can aid long-term growth and employability. Every year more than 250,000 students in 35 European countries take part in the JA-YE Company Programme.

[http://keyconet.eun.org/case-notes/europe2](http://keyconet.eun.org/case-notes/europe2)
EUROPE [3]

VINTAGE - ONLINE TOOL FOR SELF-EVALUATION OF KEY COMPETENCES IN ADULT AGE

A. BASIC INFORMATION

Country: Italy

Title of initiative: VINTAGE - Online tool for self-evaluation of key competences in adult age
Project Number: 527349-LLP-1-2012-1-IT-GRUNDTVIG-GMP
Agreement Number: 2012-4192/001-001

Coordinator/Organization: Learning Community SRL – a private institute for educational research and experimentation

Key competences addressed: The 8 Key Competences

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.)
Development of a framework, VINTAGE (an Online tool for self-evaluation of key competences in adult age) and of a basic portfolio

Partners:
- ASSOCIAZIONE FORMAZIONE ‘80 IT: http://www.formazione80.it/
- PLATform Opleiding, Onderwijs en Organisatie BV. (PLATO), NL: http://www.socialsciences.leiden.edu/plato/
- DIE BERATER® AT – Adult education provider: http://www.dieberater.com/
- WISAMAR DE – Body providing guidance and information on Lifelong Learning: www.wisamar.de
- Meath Partnership (MCRSDP) IE – Meath Community Rural and Social Development Partnership Ltd: www.meathpartnership.ie
- Swedish TelePedagogic Knowledge Centre (STPKC): www.pedagogic.com

Scope: The European Grundtvig Project targeting adult learners, with a secondary target of experts, practitioners and teachers in adult education.

B. SUMMARY

Key Competences (KC), assumed as a reference model for education and training in Europe (2010 Joint Progress Report), are often acquired and developed in non-formal and informal contexts; this means that they are not assessed or recognised and are therefore not used by adults for their personal and professional development. There is a lack of a KC culture and the value of these competences is not sufficiently appreciated. This is confirmed by the European Council conclusions of 11 May 2010 on competences supporting lifelong learning and the ‘new skills for new jobs’ initiative, which invites the member states and the Commission to “Develop the Europass framework in line with the implementation of the EQF [European Qualifications Framework] and with a view to recording and highlighting more effectively the knowledge, skills and competences acquired by citizens throughout their lives in a variety of learning settings, including by considering the development of a ‘personal skills passport’ based on existing Europass elements”. In fact, the Europass CV format includes sections for the recording of, for example, Digital Competences, or Social Competences, but in a different way from the description of foreign language competences; there is still a lack of specific descriptors for these KC. The VINTAGE project aims to: design a framework for the assessment of KC as well as a basic portfolio to report the results of self-assessment and to develop an online digital tool for the self-assessment of KC. The Project will involve two target groups – 1) teachers, trainers, counsellors and practitioners working in NVAE; 2) adult/elderly learners attending courses in NVAE – with 20 to 50 participants from each partner country (IT, NL, DE, SE, IE, AT).

http://keyconet.eun.org/case-notes/europe3

Learning context: Both formal and non-formal

School education levels: Non-vocational adult education

Target groups: The European Grundtvig Project targeting adult learners, with a secondary target of experts, practitioners and teachers in adult education.

Time frame: January 2013 – December 2014

Relevant links: http://vintage.euproject.org
http://www.scribd.com/VintageProject
## A. Basic Information

| Country: | France, with Estonia, Finland, Romania, Slovakia and the UK in a consulting capacity |
| Title of initiative: | Company Programme Self-Assessment Tool |
| Coordinator/Organization: | Learning Community SRL – a private institute for educational research and experimentation |
| Key competences addressed: | Sense of initiative and entrepreneurship. In particular, the assessment tool focuses on:  
  - Creativity  
  - Self-confidence  
  - Taking initiative  
  - Teamwork  
  - Resourcefulness  
  - Perseverance  
  - Taking responsibility |
| Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): | Self-assessment tool for students involved in the Company Programme (Mini-Companies) |
| Partners: |  
  - JA-YE Europe  
  - JA Estonia  
  - JA-YE Finland  
  - JA Romania  
  - JA Slovakia  
  - EPA France  
  - YE UK  
  - Citibank |
| Scope: (student/teacher/school level; local/regional/national): | Secondary school students |

## B. Summary

The main aim of the project is to create an impact self-assessment tool to enable the JA-YE Europe Company Programme to show evidence of its results through self-assessment.

The self-assessment tool has 3 phases of assessment throughout the programme implementation: at the beginning (stage zero), at the initialisation stage (stage one) and at the completion phase (stage two).

This assessment method allows students to monitor their progress in achieving certain competences throughout their Company Programme school year.

The tool was developed by EPA (Entreprendre Pour Apprendre) France, the French organisation of the JA-YE Europe network, and will be now translated into other languages and adapted to all European organisations implementing the Company Programme.

An online platform will be set up by JA-YE Europe in order to gather all results. The platform will allow JA-YE Europe to have comparable European data on the impact of a programme that enrols 230,000 students throughout Europe every year.

THE ENTREPRENEURIAL SCHOOL

A. BASIC INFORMATION

Country: Italy, Norway, Poland, Slovakia, Denmark, UK Finland and Portugal

Title of initiative: The Entrepreneurial School (TES)

Coordinator/Organization: JA-YE Europe

Key competences addressed: • Entrepreneurship • Sense of initiative

Type of initiative and channels used for implementation (e.g. curriculum reform introduced through legislation etc.): Creating trans-European models for primary and secondary school teachers to support the development of their skills and methods in applying entrepreneurial learning to different teaching subjects and to different contexts.

Partners: • JA-YE Europe • European Schoolnet • The European Round Table of Industrialists (ERT) • University of Warwick [UK] • Junior Achievement Slovakia[SK] • Lappeenranta University of Technology [FI] • Junior Italia [IT] • University College Copenhagen [DK] • Fundacja Mlodziezowej Przedsiębiorczości (JA Poland) [PL] • Ungt Entreprenørskap (YE Norway) [NO] • Apreender a Empreender (JA Portugal) [PT]

Scope: (student/teacher/school level; local/regional/national) Primary and Secondary (including vocational) teachers; 8 countries but also European Level tools

Learning context: (formal or non-formal) Formal

B. SUMMARY

The Entrepreneurial School (TES) project will produce a Virtual Guide to Entrepreneurial Learning. This guide will include 75-100 entrepreneurial tools and methods organised in 35 teacher-friendly packages.

The materials will be for primary, secondary, upper secondary and vocational schools. Initial teacher training and continuous professional development is also a main focus.

The objective of the project is to make it easy for teachers to apply entrepreneurial learning in any subject area and for any age group. Schools will have access to a quality framework and assessment tool that helps educators set milestones and assess progress.

TES won co-funding from the European Commission's Competitiveness and Innovation Programme (CIP), which aims to promote projects with a high-added value at the European level in education for entrepreneurship.

TES will train over 4000 teachers in the next 3 years across 18 countries.

http://keyconet.eun.org/case-notes/europes
A. BASIC INFORMATION

Country: Europe

Title of initiative: TRANSversal key competences for lifelong learning: TraIning teachers in competence based education [TRANSIt]

Coordinator/Organization: Katerina Riviou, Ellinogermaniki Agogi

Key competences addressed: All 8 key competences according to the European Reference Framework, especially transversal ones and the cross-cutting themes that exist in all.

Type of initiative and channels used for implementation (e.g., curriculum reform introduced through legislation etc.): COMENIUS Multilateral project aiming at training teachers so that they can design cross-curricular activities that support the key competence development of their students.

Partners:
- Ellinogermaniki Agogi (Greece)
- NHL University of Applied Sciences (Netherlands)
- Universal Learning Systems (Ireland)
- University of Barcelona (Spain)
- Association de Préfiguration de Internet of Subjects (France)
- Bundesministerium für Unterricht, Kunst und Kultur (Austria)
- Computer Technology Institute & Press “Diophantus” (Greece)

Scope:
- Teachers/students (indirectly)
- Primary/secondary education
- Local/regional/national/European/international

B. SUMMARY

The aim of the TRANSIt is to have a positive impact on the development of students’ key competencies through building teachers capacity on competence oriented education. To achieve this, a pilot teacher training methodology will be developed on the didactics and e-assessment of key transversal competences, which could be adopted by interested stakeholders promoting educational change. The methods of the project are founded on a holistic view of students learning, personal and social development, going beyond subject boundaries and finding application in a wide spectrum of curriculum subjects. The TRANSIt approach contributes to the development of creativity, adaptation to the rapidly changing circumstances, intercultural and multilingual competences, social development, “learning to learn” competences and an improved perception of one’s own capacity to solve problems. TRANSIt aims to add its contribution towards the improvement of the quality of competence education by improving a) teachers’ awareness of key competences and b) teachers’ professional skills regarding the didactics and e-assessment of the key competences with the use of ePortfolios, supporting them to bring European and national policies into practice. The impact of the training material will be assessed by authentic (non-traditional) assessment methods analysing qualitative dimensions,
such as the behavioural change of teachers towards the importance of competence acquisition by their students, qualitative and quantitative characteristics of user-generated content uploaded in the e-portfolios. An effective training approach will directly contribute to designing such teaching and learning activities that may increase students’ motivation and thereby supporting and enhancing the acquisition of transversal key competencies by all students, closely reflecting the aim of the LLP programme in terms of improving students’ motivation to learn, and learning to learn skills.

HTTP://KEYCONET.EUN.ORG/CASE-NOTES/EUROPES
European Schoolnet is the Coordinator of the KeyCoNet Project.

European Schoolnet is a network of 30 Ministries of Education from across the European member states, leading educational innovation at European level. As a major international think tank, European Schoolnet operates key European services in education on behalf of the European Commission, member Ministries of Education and industry partners.

European Schoolnet’s activities are divided among three areas of work:

- Policy, research and innovation: information sharing and evidence building.
- Schools services: enhancing cooperation between schools across Europe.
- Advocacy: how ICT and digital media contribute to transforming teaching and learning processes.

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http://keyconet.eun.org