

content of the reports but felt that no single report needed to follow these guidelines too rigidly, especially if that would make the reports stretch to an inordinate length. In actuality, these guidelines provided the basic structure to most of the reports.

1. **National and Regional Context.** Size; population; ethnic, linguistic, migrant and other minority communities
2. **Educational Context.** Types of school in primary and secondary education: age of entry and transitions; open or competitive entry systems; compulsory and post compulsory
national curricula and examinations; transition to tertiary (post-compulsory) and higher education (universities and similar institutions)
3. **ESL Context** Facts and Figures? Problems and issues identified nationally and locally? Recent and current policies and initiatives.
4. **Current role and/or examples** of RECs working locally with schools to address ESL. Primary, secondary, or both. Specific projects and initiatives. Rationale behind them.
Hopes and Fears? Apparent success or failure? Goals and targets? How is success and failure measured or to be measured.
5. **Implications of 1-4 above** for the national group's case studies.

For example, Greece's social and educational context, nationally and regionally, means that significant ESL initiatives have been directed towards Roma children and their families. When this is taken together with the composition of the Greek partnership, does this mean it is both logical and very important to focus on case-studies of local initiatives to reduce ESL amongst Roma children in local primary education? If so, which local initiatives can we look at more closely over a period of several months? Can we draw upon measures or studies of their effectiveness, which have already been undertaken? Can we "cut into" an existing initiative by asking school leaders, teachers, pupils, parents and other local stakeholders how well an initiative appears to be working and why? What would such a case study tell us about best RECIPE practice - the best ways in which RECs can work with schools to reduce early school leaving.

The main findings from the SoA reports are summarized below. Details of the case studies for which they formed national and regional contexts are provided in the case-study reports and the overview of them. Similarly, full details of the initial States-of-the-Art in partners own countries and regions are provided in the full SoA reports themselves in www.recipeproject.eu

IRELAND

Education in Ireland is compulsory from age 6-16 or until students have completed three years of post-primary education. While there is no national provision for pre-schooling in Ireland, first level/primary schools accept children on or after their fourth birthday and cater for pupils from 4-12 years. The curriculum is child-centred and allows flexible timetabling and teaching methods. The second level/secondary school spans a six-year cycle, from 12-18. Students take two key public examinations following a state prescribed curriculum - the Junior Certificate (age 15/16) and the Leaving Certificate (age 17/18). The latter determines entry to higher education.

Our Irish partner was Clare Education Centre (CEC), located in the county and market town of Ennis in the West of Ireland. Education Centres are an integral part of the Irish education system. There are 21 in total, typically co-ordinating the local delivery of national initiatives and programmes and delivering a range of in-service training courses to the schools within their region. CEC services the CPD needs of 118 primary and 18 post-primary schools in County Clare, a significant number of which have high or very high proportions of children from immigrant and travelling communities. Nationally, in relation to all of Ireland's 4 000 or so primary and post-primary schools, CEC administers the School Leadership Programme, the Maths Recovery Programme in disadvantaged (DEIS) schools and the Leaving Certificate Applied Programme for vocational education at post-primary level. The Centre has a full-time staff of eight and over 100 part-time staff of trainers and advisors.

Like most other European countries, Ireland has taken steps to overhaul its collection of education data as an aid to assess the effectiveness of measures taken to combat ESL. It now has various time series, one of which shows that a total of 11 493 students enrolled in post-primary schools in 2011 did not enrol in the subsequent year as compared with a total of only 7 713 who enrolled in 2009/10. However, ESL rates in 2013 were twice as high within schools coming under the aegis of DEIS (Delivering Equality of Opportunity on Schools) as they are in non-DEIS schools. The former typically have high proportions of children from recent migrant or traveller communities and are typically located in areas of multiple social and economic disadvantage.

Overall, however, in 2009, there was still an estimated 11.5% of Irish people aged 18-24 who had not completed the Leaving Certificate or equivalent and a range of national targets for educational completion was established with a series of linked national programmes typified by the School Completion Programme. This is based on a number of key principles: local partnerships working between schools and other youth-related agencies; targeting young people at risk of ESL.

Close school-family liaison;

A whole school approach to make curricula and pedagogical styles more individualised and practically oriented where appropriate;

Support to at risk students being offered in-school, after-school, out-of-school, and during holiday time.

Regionally, SCP initiatives are focused through local steering committees who use inter-agency working to link groups, agencies and schools. They co-ordinate the delivery of a locally appropriate range of core elements including home links, attendance monitoring, educational and behavioural support; parent educational

links; attendance tracking, in school/ out of school activities and initiatives. In Clare over 400 students at risk of early school leaving are supported through provision of SCP strategies and systems, including the provision of alternative learning environments and opportunities.

On a day to day basis, this means that SCP has project workers/student support workers employed in the schools to work with school management, teachers, support workers from other agencies, parents and students in ever changing and creative ways to reach the national aim of breaking the pattern of early school leaving and tackling educational disadvantage. On a practical level this means such things as

Telephoning students in case of absence from school and making house calls if absenteeism persists and/or students need support to attend;

Helping in the classroom by staying with and supporting the young person;

Working with the resource team to ensure that each student is receiving the necessary supports and, if not, applying for additional teaching hours; and

Offering extra classes. refers students to other agencies if needed, undertakes intensive numeracy and literacy work, provides uniforms, books and pens and meets with parents.

SCP also provides summer camps and after school programmes such as music, art, crafts and sports. SCP staff work with the schools by offering alternative learning and educational provisions such as the ORBITAL (Outdoor Resources Brought Into Teaching and Learning) programme and withdrawal timetables for set periods of time for students not coping or managing themselves in mainstream classes. The local co-ordinators and project workers also work with school management on school policy to ensure that the needs of the most disadvantaged and marginalised students are recognised and met.

Clare Education Centre (CEC) works with its regional network of schools and a number of other partners including a university college of education, to support a range of initiatives and programmes clustered around the School Completion Programme and intended to reduce ESL. Nationally, SCP has experienced considerable success with a retention figure of around 90% in January 2014. However, two broad conclusions from CEC's SoA report provided a focus for its case studies of implementing RECIPE strategies.

Firstly, the relative success of SCP indicates that any further reductions of ESL are likely be relatively hard won as those students still at risk from early leaving tended to have chronic school attendance issues, difficult personal histories, and problematic, often disadvantaged, family and community backgrounds.

Secondly, that the earlier interventions could be made the more successful they appeared to be. "It is well established that the decision to leave school is made well in advance of it actually happening, often while the pupil is still in primary school. RECIPE will attempt to investigate how an enhanced curriculum at Primary level can influence pupils to stay in school until completion. Clare Education Centre will work with a number of partners including Mary Immaculate College of Education, Renaissance Learning, PDST, DES to focus its case studies on "Maths Recovery in the Classroom" and the LEGO Education Innovation Studio."

.GREECE

Our Greek partners represent the Directorate of Primary Education for Western Thessaloniki (The Directorate). Thessaloniki is Greece's second city, a bustling cosmopolitan port and industrial-commercial centre with borders not far from Albania, Bulgaria and Turkey. Their SoA report outlined the structure of the Greek Educational System where education is compulsory from ages 6-15 and encompasses kindergarten, primary education (elementary schools) and lower secondary (middle school). Post compulsory education is provided through 3 years of General High schools aimed at entry to higher education, or 2-3 years at Technical-Vocational Institutions. In 2012, the Greek ESL rate for non-completion of compulsory education was 11.4%. Three principal initiatives of particular relevance to the RECIPE project have been adopted nationally to reduce this rate through early intervention at primary levels.

Reception Classes 1 and 2

The first two years of primary school emphasise and facilitate the social and educational integration of children from migrant groups, Roma communities, and others in need of specialized and intensive help in acquiring sufficient proficiency in the Greek language to benefit from and remain in mainstream education. There are also reception classes exclusively for Roma students, who often face problems in learning to read and write Greek due to not attending school regularly and lack of support from their familial environment. They do not operate independently as separate full-time classes, but are integrated with general school provision. They operate for a few hours during the school day, mainly when mathematics and language are taught. During the remaining school hours students attend their normal classes. In Reception Class I the student is given intensive lessons on the Greek language for a year. In Reception Class II the student is given supportive lessons on Greek language learning for two years, along with attending their regular class lessons. This presupposes the differentiating of teaching to students' individual needs and abilities, initial diagnostic tests, and the written permission of parents

Integration Classes.

This initiative brings together groups of students with special educational needs, including those with particular social and economic disadvantages into small classes for intensive, individualised support for a maximum of 15 hours per week until they can be integrated into mainstream education. The Integration Class provides individualized programs for students with broadly defined special educational needs. They must have an official diagnosis or have been observed and evaluated by teachers as having specific difficulties confirmed by the School Advisor. Again, parent's written permission is necessary.

Students are offered either a specialized programme for groups with broadly similar needs or a specialized personal program for those with more severe special educational needs (e.g. Downs Syndrome, autism). The I.C. teacher, along with the classroom teacher and the parents, decides upon hours of attendance so that students remain integrated into mainstream provision. The usual schedule is 2-3 hours a week for groups with mild educational needs, 5- 8 hours a week for groups

with more severe educational needs, and around 10 hours a week of individualized programmes for students not yet able to read and write.

The I.C. teacher can

(a) address individual difficulties students face (e.g. difficulties in writing, reading in a slow pace, difficulties in grammar use, in writing skills, in mathematics, and others) and

(b) teach cognitive and metacognitive strategies of knowledge management and methods of study in school and at home.

The integration class does not have to follow the precise pacing of the general curriculum. Each student's educational needs are individually evaluated and their personal curriculum during the evaluation procedure is guided by the special teacher. This means for example that a 4th-grade student will not be taught division inside the integration class according to his class's curriculum if the student does not yet understand multiplication. The students' "educational gaps" need to be filled for them to gain the ability and confidence to respond to more demanding school work.

Collateral Support

Specialist support and educational staff is provided to individual students whose needs and circumstances prevent their benefiting from these "regular" integration classes. If a student cannot attend an integration class or their needs - assessed by the State Diagnosis Centre - require an even more individualized support and intervention program, then collateral support is recommended for the student in the classroom, throughout the whole duration of classes, by specialized educational staff appointed by the Ministry of Education. The approval for collateral support lasts for a year, except for children with autism, in which case it is renewed every year. Staff recruitment, as in the integration and reception classes is conducted by the Regional Directorates of Education.

These regional directorates are the Greek form of REC. In addition to providing the typical services of a REC, they appoint and co-ordinate the School Advisers who play a central role in these three initiatives. They also organise the Support Centres for Differential Diagnosis for Children with special needs (DDSC's) These are decentralized public bodies providing diagnosis, evaluation and support services for students and especially for those who have special educational needs. DDSCS also has responsibility for support, information and awareness activities for teachers, parents and communities. Founded in 2000, they are composed of inter-disciplinary staff including social workers, psychologists, speech therapists, and specialists in Special Education.

Within a national and regional context in which these three types of "top-down" initiative seemed to have had markedly positive effects, the Greek partners chose to focus on two related "bottom-up" initiatives intended to provide complementary support to students at risk of educational disengagement during crucial phases of primary education. These were "Playing in the School Yard" and "Robotics in Schools".

DENMARK

Education in Denmark is free and compulsory at the primary and lower secondary levels, with at least 82% continuing to higher levels, which are also government subsidized. There are some Danish private schools, which are also government-subsidized via a voucher system; at least 13% of all students attend these private schools at the lower levels

The lower secondary school consists of levels 7 - 9 in the public schools. It is crucial for the students' chances to progress to upper secondary education..Approximately 92 per cent of the students who finished the public school in 2011 progressed into upper secondary education. However, that leaves a relatively large group of students who still find it difficult to choose and complete an upper secondary education.

In Denmark as whole the ESL rate in 2012 was 9.1%, an issue being addressed by our Danish partner, the Department of Schools and Education for the Municipality of **Albertslund**, Greater Copenhagen. Until recently, each county had its own REC but most of them, including Albertslund have been merged into Municipal departments. It is these latter, which have the responsibility for putting into effect a new agreement relating to all compulsory education and working towards three main goals. These are:

Challenging all students to reach their full potential;
Lowering the significance of social background for academic results;
Enhancement of student wellbeing through enhanced respect for professional knowledge and practice in the school.

In order to fulfil these three goals, three main areas of improvement are identified:
A longer and more varied school day with improved methods of teaching and learning;
Enhanced professional development of teachers, pedagogical staff and school principals;
fewer and clearer objectives and more simplified and regulations

The clarification and simplification of the Common Objectives places a particular emphasis on the improvement of teaching and learning, with **action-oriented** teaching at its core. This should produce more co-operation and team-teaching to support the principals' work with action-oriented teaching and the teachers' daily work with the planning, execution and evaluation of their . Clarification and simplification is expected to help the principals, teachers, parents and students understand the objectives better as active partners in students' learning.

The core elements of Action Learning are.

(a) team-working between teachers and between teachers and pupils, and
(b) active reflection by teachers and pupils on what tasks they are undertaking, what learning are these actions intended to support, what are the learning goals for each task and how successfully have these learning goals been achieved. The underlying principles are close to those developed by the advocates of "Assessment for Learning" or "The Reflective Practitioner".

The Common Objectives are intended to support methods of working in the public school of tomorrow. Among those envisioned are: more varied teaching and the use of alternative learning environments;

Practice- and action-oriented teaching; and
increased implementation of ICT based teaching.

The objectives will be digitized and supported by guidelines and tools, i.e. by specific examples of how to organise the teaching and how to ensure coherence with the daycare pedagogical teaching programs and the academic objectives for upper secondary education

The ambition of these innovations is that at least 95 per cent of a youth cohort should complete at least one programme of post-compulsory education. Students should therefore be provided with precise guidelines and the appropriate competences for them to choose and later complete the type of post-compulsory education which suits them best. As part of the initiative to strengthen the students' knowledge of the labour market and their educational readiness for it, an integral part of the longer and varied school day in the final years of compulsory schooling should be UEA (educational, vocational and labour market guidance).

In the UEA class the students' educational choices are to be systematically discussed in relation to students' acquisition of a general knowledge of society and an understanding of the labour market. UEA must ensure that students have some knowledge of the post-compulsory education system and what the various types of education may lead to. Within "The Resource Centre for the Public School" examples of practice-oriented educational programs for UEA have been developed. This material will be placed at schools' disposal by the corps of learning consultants and the new joint portal of knowledge and other resources

Albertslund's current work to combat ESL has developed around these innovations and a National Youth Strategy which ran from 2009-2014. Between 2007- 2014 the proportion of young people completing 9th grade education increased from 74% to 84% to meet targets established by the Youth Strategy. As a follow up to this strategy, the target has been raised to 95% with similar measurable targets for pupils' positive attitudes to their school experience, and equal levels of attainment for native and non-native speakers of Danish.

Albertslund introduced "Action Learning" as the pedagogical basis for all public schools in the Municipality and every teacher was expected to participate in the training it provided. Success in reducing ESL is seen to be closely associated with this holistic introduction of a new methodology designed to break down more traditional individualised habits and create new environments for more educational engagement and more effective learning based on closer collaboration between teaching and pedagogical colleagues and more active participation of students in the ongoing assessment of their learning

For their own RECIPE case study our Albertslund partners looked in detail at how Action Learning has been introduced into the work of specific groups and teams of teachers. They interviewed teachers on the ways in which Action Learning has influenced their everyday classroom practice and their broad pedagogical approach,

especially in working with students at risk of not completing their secondary education.

PORTUGAL

In the recent past, Basic Education in Portugal consisted of nine years of schooling divided into three sequential cycles of education of four, two and three years. Now, full-time education is compulsory from 6-18 years old. Children aged six by 15th September must be enrolled in their first school year in that calendar year. State-run schools are free of charge; private school tuition is refunded by the State in part or fully, when state-run schools in the area are filled to capacity. Schools do not give (or sell) any books or materials; financial assistance is available for poorer families and the school books are chosen at school level every four years.

Basic Education (*Ensino Básico*) lasts for nine years divided into three stages of four, two and three years respectively. The stages are respectively *1º Ciclo* (1st Cycle), *2º Ciclo* (2nd Cycle) and *3º Ciclo* (3rd Cycle). A Diploma/Certificate is awarded at the end of the third stage. Secondary Education (*Ensino Secundário*) is compulsory since the school year of 2012/2013 and consists of a three-year cycle on completion of basic education and attainment of the Certificate of Basic Education. There are two types of courses: general courses and technical/vocational courses, providing instruction in technical, technological, professional fields and in Portuguese language and culture. Permeability between the courses is guaranteed. The teaching and practice of technical, technological or artistic courses is provided by vocational schools and special schools for education in Arts. Courses are sanctioned by the *Certificado de Habilitações do Ensino Secundário/Diploma de Ensino Secundário* (Secondary School Credential/Diploma), which is the prerequisite for access to higher education through national access examination. 1st Cycle State - run schools are owned by the municipalities; all other State-run schools are owned by the State.

In 2011, educational targets were related to the national reform programme set out in PORTUGAL 2020. They included a reduction in dropout rates within the educational and vocational training systems and an increase in the number of graduates from higher education. Goals were established of reducing to 10% the rate of early exit from education (intermediate target of 15% in 2014) and for 40% of the 30-34 age group to be graduates by 2020 (30% in 2014)..

The qualification structure of the employed population has altered very significantly in recent years. At present, there are more employed people with secondary and higher education than employed people with qualifications up to the 1st cycle of basic education. This was not the case in 2006. Although in recent years, public education and vocational training policies have resulted in very significant improvements, some limitations remain:

- The dropout rate in the educational and vocational training systems remains higher than the European Union rate (31.2% in Portugal vis- à- vis 14.4% for EU27);
- The relative weight of workers with school qualifications up to basic education is still above the European Union average (63% of the employed population - aged 20-64 years).

In Portugal, Teacher Training Centres have many REC-type functions such as providing CPD, evaluating teacher's classroom practice, and approving the progress of probationary teachers. However, they are established by associations of schools rather than municipal or national authorities. Resources and staff are allocated by the head teachers, who also appoint one of their number as Director. There are no RECs in Portugal but clusters of school have significant autonomy in forming their own partnerships and support systems.

Another distinctive feature of the Portuguese educational system is the involvement of voluntary organisations such as EPIS - Entrepreneurs for Social Inclusion, an association initiated and supported by business leaders - in national initiatives to reduce ESL. They help to resource and support the work of specially trained and dedicated teams of mediators who identify high risk students early in their school careers and work to monitor and support their subsequent school careers.

In the school year 2007/8, EPIS mediators identified and supported 5812 such students nationally. At the end of 2008/9 the transition rate of pupils at risk increased from 63% to 77%. However, in 2012, national rates for non-completion of compulsory education were still high at around 20%.

By contrast, our Portuguese partner, the Carlos Gargate School cluster in Greater Lisbon had completion rates for these years of around 100%. This was significantly better than completion rates when the cluster was formed in 1995-96 - 90% for 5th and 6th grade students and about 80% for 7th, 8th and 9th students. As a case-study in reducing ESL rates, there are striking parallels between the radical pedagogical innovations introduced since then, and those introduced into Danish schools through "Action Learning". There is the same strong emphasis on collaborative working between teams of teachers with strong support from related professionals, all focussed around precisely targeted support for the needs of individual students.

Associated with this whole school approach to explicit pedagogical development is the work within the cluster of the Benfica Foundation. Its project - "Para ti se nao faltares" - is a socio-educational intervention programme for 10-16 year olds at risk of suffering from social and educational exclusion. Using the Benfica brand to attract, motivate and retain "at-risk" students, they are invited to become involved in four types of activities - sports, ICT, journalism, and mathematics - but also rewarded for the development of a range of social skills and personal and behavioural characteristics such as persistence, punctuality, and the conscientious completion of tasks. In terms of transferable "best practice" there are striking parallels with the use of playground breaks in Greece, and project work in LEGO and robotics in other case studies, to increase students' engagement with school work and enhance their social and personal skills and self-esteem.

The casestudies of the Portuguese partners focused on these initiatives associated with EPIS and the Benfica Foundation. They illustrate "best practice" undertaken by agencies, which in effect are filling a vacuum created by the absence of RECs as such.

NORWAY

The Norwegian educational system aims to be among the best in the world with regards to both academic levels and breadth of participation and completion rates. Universal schooling for children was introduced in Norway 250 years ago. From 1889, seven years of compulsory education were provided; in 1969 this was increased to nine years and in 1997 to ten years. Education for all is a basic precept of Norwegian educational policy. Children and young people must have an equal right to education, regardless of where they live, gender, social and cultural background or any special needs. All public education in Norway is free of charge, while kindergartens have parental fees. Private education, regulated by the *Private Education Act* of 2003 and subsequent amendments is not common, particularly at primary and lower secondary level. Private schools have normally to be based on pedagogical ideas or religious beliefs. The typical private school in Norway is either Rudolf Steiner, Montessori or Christianity based. The law does not allow private schools to make profits.

Transitions between the different levels in the education system have recently been defined as a challenge. Currently, efforts are being made to make the transitions smoother, e.g. through better sharing of information and methods across levels. For RECIPE purposes, these levels are: *kindergartens* - in which children under compulsory school age have a legal right to a place; *primary and lower secondary* education for children aged 6-15 - grades 1-10 (local authorities are required to offer before and after school care for pupils in grades 1-10); *upper secondary education* - normally providing three years of general education or four years of vocational training after the 10-years of compulsory education.

Until quite recently in Norway, most of the statistics and national ESL programmes focused on the dropout challenge in post-compulsory education. However, a range of studies and research findings have emphasised that the seeds dropout are frequently sown much earlier, and that it is the responsibility of people engaged on all levels of education, including kindergarten institutions.

Since 1994, when there was a change in the National Curriculum which led to a situation where virtually all Norwegian 16-year-olds proceeded into post-compulsory education, there has been a stable drop-out rate in the country, as shown in the figure detailed in the full SoA report. It shows the percentage of students completing upper secondary/ vocational education with a valid certificate of competence within five years after they started this education for the first time. The picture is more or less the same for students starting in the years after 2004. These figures proved an obvious challenge to both national and regional authorities, and it soon became an important focus point for political discussion.

Successive white papers have defined targets and identified strategies to combat ESL. Three overall targets were defined: all students leaving compulsory education shall have sufficient basic competencies to be able to take part in further education and work; all students able to do it, should finish upper secondary education with competence and qualifications for higher education or sustainable employment; all students shall experience being included and successful.

With the drop-out numbers and a White Paper from 2008 (31, *'Quality in Education'*) as a background, the social-democratic government launched a special drop-out programme in 2010, called "NyGIV". The name chosen indicates 'a new start' and

'new possibilities', at the same time as the last three letters, GIV, are short for 'completing upper secondary education and training. Throughout a three-year project period from 2011-2013 both lower and upper secondary education were involved. The aim was to create a support system that would give students at risk of dropping out better chances of completing basic education. The defined target was to increase the completion rate from 70 to 75 % within 5 years (i.e. by 2016). This was intended to be accomplished among other things through more practical and varied teaching methods in both lower and upper secondary education, and consequently an important issue was to give teachers in all schools on these levels in-service training focusing on this in reading/writing and numeracy. These teachers were then intended to contribute to providing programmes locally to support students at risk of dropping out.

Because of the distinct correlation between lower secondary final grades and the chance of completing upper secondary education, the project task at lower secondary level was to give the 10 % with the lowest results after the autumn term in 10th grade an offer of being part of a NyGIV intensive group for parts of the school week during the last term. The offer also included being followed up closely in the transition to upper secondary level and through to the final year of schooling or training. The 10 % of target students were to be chosen from the group of final year students within a municipality, and not from individual schools. The consequence of this was that the number of "NyGIV students" at one school could vary from 0-30.

Co-ordinating delivery of the NyGIV programme was one of the services provided by Karmøy's Department of Education and Culture. In Norway, it is usual for all municipalities to provide services administering and supporting their educational provision. In Karmøy, close to the south-west region of Stavanger and its thriving off-shore oil and gas industries, REC services are organised and provided by its Department of Education and Culture, our partner institution in the RECIPE project. A distinctive feature of the Norwegian educational system is that every municipality is legally obliged to have an Educational Psychological Counselling Service (PPT) to support children, adolescents, and adults experiencing educational disengagement.

As noted above, ESL had been identified as a significant national issue which formed part of the background to the launch of the Ny Giv initiative. From 2010-2014. Karmøy's monitoring of this programme demonstrated clearly the importance of earlier intervention. The two Karmøy case studies reflect this concern as well as the continuing legacy of the New Possibilities programme.

The Incredible Years (TIY) programme was introduced in accordance with research results emphasizing the importance of early years schooling, Karmøy decided to put its emphasis within this initiative on school and kindergarten programmes for 3-6 year olds and their parents.

The **Vågen Learning Centre has operated since** the end of the 1980s Karmøy as an alternative learning arena for lower secondary school children, initially boys with behavioural problems but later also girls, who had effectively disengaged themselves from attending conventional schools

CONCLUDING OBSERVATIONS

At a very specific level, it is noteworthy that at the outset of the project, our Irish and Greek partners had independently identified robotics-linked projects at primary level as particularly effective ways of motivating and retaining students at risk of ESL and facilitating their successful transition to secondary education. The range of wider social skills and general curriculum knowledge which the Greek project aimed to develop through these projects were notably similar to those encompassed by our Irish partners.

The Directorate provided technical resources and CPD support for the adoption of the Robotics Programme into seven primary and middle schools including two Intercultural Schools set up to cater largely for the specific needs of children from Roma communities, many of whom had very problematic and often very “anti-education” family backgrounds, when indeed they had a family at all. The Robotics Programme had also been introduced into the elementary and middle schools of Volos Juvenile Prison, which has a high proportion of Roma pupils.

Comparisons between the Greek and Irish robotics programmes, provide instructive contrasts and similarities in the role and effectiveness of RECs. In Ireland the case study initiatives were introduced in more of a top-down fashion, whilst in Greece they were developed by groups of enthusiastic and committed school leaders and teachers who then approached The Directorate for help and support.

More generally, the SoA reports indicate similar issues of non-completion in all our partner countries, with a range of similar initiatives being co-ordinated and supported by quite a wide variety of different types of REC. What seems particularly significant is a sort of “downward drift” towards a number of initiatives directed towards the roots of ESL in children’s experience of their primary and lower secondary schools, and even in kindergartens. This accords with much recent research and partners’ own experience, and underlies their selection of case-studies which include these earlier years.

Overall, our SoA and case-study reports seem to demonstrate the effectiveness of certain core underlying principles for combatting ESL. These could be summarized as student-centred, holistic, opportunity-oriented learning, student-centred, in so far as curricula and learning styles are adapted to the needs and circumstances of individual students who take a responsible role for their own progress. Holistic, in so far as the whole school and all its staff are committed to these principles and trained and supported to apply them. Opportunity-oriented in so far as the courses students take are meaningfully oriented towards realistic opportunities to realise their personal and working potential.

There were two very general mechanisms which seemed to underpin the effective implementation of these principles.

Firstly, teaching and learning methods which incorporate Action Learning/Assessment for Learning. These centre upon processes of ongoing formative assessment, ideally in each learning situation, involving feedback from students and their peers as well as teachers and support staff where appropriate. Secondly, whole school awareness of and responsiveness to each students’ individual needs and circumstances, including their prior learning experience and attainment, their general aptitudes and interests, their preferred learning styles, their

awareness of the opportunities open to them and their aspirations in relation to their opportunities.

Very often, students' family circumstances underpinned these diverse individual needs, especially amongst those at risk from early leaving. It is clear from our SoA reports and case studies that the more effectively parents are engaged in supporting their children's learning, the more effective RECIPE strategies will be.

The case studies also indicate, for students who are or seem to be less academically inclined at a particular stage of their schooling, the importance of a curriculum which emphasises practical work with practical outcomes and the practical relevance of their courses to their present and future interests. Equally, for school students of any age who seem to be at a very disturbed and challenging stage of educational disengagement, meaningful and positive relationships with adults who may be the only supportive ones in their lives, are particularly important.