

Thematic Working Group on Early School Leaving



Early warning systems in Europe: practice, methods and lessons



Education and Culture DG



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1 Introduction

In the past, many regarded early school leaving (ESL) as a phenomenon with two contradictory characteristics. On one hand, ESL was seen as something that was 'predictable' or 'expected' for example among some specific groups of students, communities or localities. On the other, ESL was regarded as something that happened suddenly.

This perception has however changed now. There is significant body of research evidence to show that many students who drop out of education show 'distress signals' for months, if not years. Young people give such signals at school and / or outside school. Students with more than one signal tend to demonstrate an even higher probability of dropping out. Such 'distress signals', typically known as 'early warning signals', are regarded as first signs indicating that students may be struggling with their studies, motivation or home life or are facing personal, social or emotional challenges that require attention. There is also a significant (and still growing) consensus on this among policy makers. In fact, systems, activities and programmes developed with the purpose of defining and helping teachers (and others working with young people) to identify and act upon different distress signals ESL risk factors are often referred to as 'early warning systems' (EWSs). Experience in countries where EWSs have been in place for some time has proven to produce good results when the EWS are accompanied by a clear and timely system of support for students identified as being at risk of leaving school early.

During the first Thematic Working Group (TWG) meeting the importance of having early warning systems in place was highlighted by several members, and consequently the collection and dissemination of information on EWSs and their strengths & weaknesses was highlighted as one of the more immediate priorities for the TWG. To start work in this field, it was decided to carry out an initial scoping exercise into the use of EWSs in the TWG member countries through a structured survey.

This short paper includes an overview of the survey results, thereby shedding light into the availability and use of EWSs in Europe. The short paper is based on 18 responses from European countries: Austria (AT), Belgium (Flanders) (BE fl), Belgium (Wallonia) (BE fr), Bulgaria (BG), Croatia (HR), Czech Republic (CZ), Estonia (EE), Hungary (HU), Ireland (IE), Latvia (LV), Lithuania (LT), Norway (NO), Poland (PL), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE) and United Kingdom (England) (UK). The majority of the responses came from national ministries of education.

The paper is structured in the following manner:

- The 2nd chapter provides an introduction to EWSs in Europe, by illustrating countries where specific 'systems' are in place, countries where EWS related activities and programmes constitute a part of the mainstream monitoring and management systems and countries where there are no specific activities in this field.
- The 3rd chapter describes the 'level of intervention', in other words explains whether the EWSs tend to be local, regional or national in scale.
- The 4th chapter discusses the 'early warning signals' that are being monitored and methods used by different countries to detect young people who may be at risk of dropping out.
- The 5th chapter provides more information on the main methods used to support young people who have been identified as potential early school leavers.
- The 6th chapter offers information on the impact of early warning systems on the incidence of ESL, lessons learned from practice and challenges that remain to be solved before EWSs can reach their full potential.
- The 7th chapter offers conclusions and some questions that could be addressed through future work in this area.

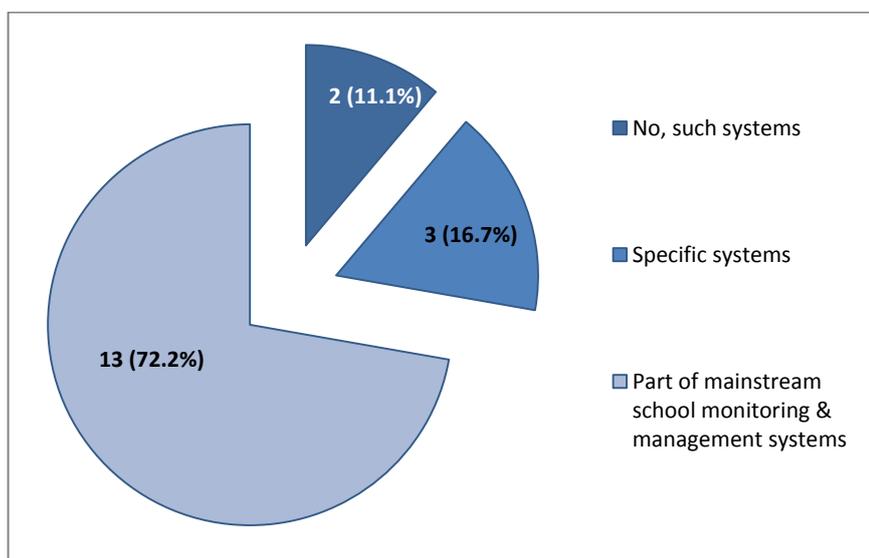
The following is worth bearing in mind about terminology when reading the results of this survey:

- The term 'student' is used to describe both pupils and students.
- The abbreviation 'EWS' (early warning system) is used as a broad term to describe *systems, activities and programmes* related to the identification early warning signals and risk factors related to ESL. This means that EWS can take different forms and a definition of the main characteristics of EWS can be only tentative. Typically they include the collection or use of data on students in order to identify risk factors and trigger targeted follow up. They are strongly linked to data collection systems in general and to early intervention mechanisms. This makes it often difficult to distinguish between specific EWS and broader interventions to reduce ESL.

2 Early warning systems in Europe

Most of the EU countries which took part in the survey operate an EWS or a related activity of which goal is to warn teachers, schools and/or authorities of students who may be at risk of dropping out. In most countries, such 'systems' are actually integral parts of mainstream school monitoring or management systems rather than separate mechanisms or entities as such. This indeed applies to over 70% of the countries which replied to the survey (Bulgaria, Belgium – Flanders, Belgium Wallonia, Spain, Hungary, Ireland, Estonia, Latvia, Lithuania, Poland, Sweden, Slovenia and Slovakia). Three countries that responded to the survey have specific systems, projects or programmes in this field (Austria, Croatia and the UK - England), while in two countries this approach is not at the forefront of education policy in an explicit manner and is instead being addressed through other means and targeted activities (Czech Republic and Norway).

Figure 1: Type and nature of Early Warning Systems (EWSs) in the 18 survey participating countries, 2012 (number of responses and share (%) from all responses)



Source: The EWS survey based on responses from 17 countries.

Note: The number of countries has been displayed in the graph, together with their share (%) of all responses (the latter has been included in brackets)

2.1 'Specific EWSs'

Only three countries are piloting or they have EWSs which have been created as 'separate entities' from other management and monitoring systems linked to the education system (Austria, Croatia and the UK - England). In **England** work in this field is focussed on local pilots, sharing of good practices and equipping schools with a greater responsibility to monitor the progression of their pupils, while in **Austria**, a national system is currently being piloted in two regions. These are introduced in the box below.

Examples of EWS pilot activities, Austria and England

In **Austria**, the programme Youth Coaching (*Jugendcoaching*) is being piloted in two regions (Vienna and Styria) and it is due to being mainstreamed during the school year 2013/2014. The programme provides guidance and counselling for students who are under-performing and / or are unsure about their educational pathway – and therefore have been identified as being at risk of dropping out of education early. Teachers are requested to identify these students by using a questionnaire and some schools use online tools for the identification of such individuals. <http://www.neba.at/jugendcoaching/warum.html>

In **England**, in 2012 / 2013, 44 out of 152 local authorities in England are involved in developing 'Risk of NEET indicators' (RoNIs), which are indicators and tools designed to assist secondary schools to identify students at risk of becoming NEET once they leave compulsory education.

In **Croatia**, the EWS practice is linked to the schools' responsibility to monitor the number of classes missed by students. If the number increases, it is the responsibility of the school to make sure that pedagogues, management and other experts will become involved, together with parents. The ministry of education has also started a project called 'e-register book' which aims to improve the communication between the school and parents. It ensures that parents have a constant access to school data about their children. This is also linked to teacher training to help teachers to identify at risk students.

2.2 EWSs as part of school monitoring and management systems

Most countries do not have a 'system' as such either with a clearly defined name or goals related to them. Instead the early warning arrangements are a part of mainstream school monitoring or management systems. In several countries, such as **Belgium (Flanders and Wallonia-Brussels)**, **Bulgaria**, **Hungary**, **Ireland**, **Latvia**, **Poland** and **Slovenia**, schools are encouraged and to a certain degree also 'expected' to develop their own systems or activities through national legislation which stipulates a responsibility for school actors to monitor the performance of their pupils. For example, in **Bulgaria**, the education act stipulates that teachers have to monitor and keep record of attendance and inform parents through a school report. In **Ireland**, schools have been obliged by law to submit an Annual Attendance Report to the National Educational Welfare Board on the levels of school attendance each year since 2000. Legislation also requires that schools make a referral to the National Education Welfare Board for all students whose non-attendance or suspension from school reach particular thresholds or where non-attendance is a cause for concern as well as for decisions taken to expel a student. In **Belgium** (Wallonia-Brussels federation), schools report unjustified absences of students to the compulsory schooling control service. The same service is also in charge of controlling that all children underage on the general population registry comply with their obligation to attend.

Recent legislative changes in **Estonia**, **Latvia** and **Sweden** have pushed this topic closer to the forefront of school development activities.

Examples of recent legislative changes stipulating new rules on monitoring truancy

In **Latvia** new regulations introduced in 2011 stipulate the role of schools in informing parents and local authorities of truancy and give a framework allowing schools to set up EWSs. The main aim of the new legislation was to create a more uniform approach to dealing with truancy at a school level.

In **Sweden**, the new Education Act and the new syllabuses/curricula (from July 1, 2011) make it more evident than before that schools are obliged to have EWSs in order to give each student the support needed to complete his or her education. Schools however are free to choose the method in which they are designed and implemented. Several other measures have also been introduced to help teachers, parents and students to identify risks earlier, for example national tests in more subjects and from earlier grades.

In some countries new national student registries have been introduced to collect detailed data about attendance; they are seen as mechanisms to create more effective EWSs (e.g. **Estonia, Lithuania and Slovakia**). In **Lithuania**, for example, a new register of children and young people not attending education was created in 2010. This register includes details of all children not attending school and information on pupils who miss at least half of lessons during one month. Since 2012, data included in the register has been shared with other agencies, including those dealing with social affairs, internal affairs and health care.

2.3 Countries with no specific system / programme in this field

Only two countries (Czech Republic and Norway) responded by saying that there are no early warning 'system's as such, though activities to carry out similar efforts exist in these countries too. Such activities are carried out in these countries either through individual projects working with specific marginalised groups which concentrate high levels of ESL (**Czech Republic**) or through other local interventions (**Norway**). In Norway for instance, it is up to individual teachers or 'Follow-up Services', which are locally-led teams with a primary task of contacting pupils who have dropped out of education, to inform schools and authorities of individuals who they think may be at risk of leaving education early. Individual support may also be offered to students who are not likely to make a transfer from lower to upper secondary studies.

3 Level of intervention

Most of the interventions mentioned above are national in scale. This is because many of them are driven by national legislation stipulating the responsibilities of schools, teachers, head teachers and / or authorities in monitoring attendance or academic achievement. This also applies to national student registries which are now used increasingly to support timely efforts to identify at-risk students. This seems to apply to many of the smaller Member States in particular.

Countries where the EWSs and related activities are driven by national policies, practices or programmes include for example **Austria, Bulgaria, Croatia, Estonia, Ireland, Latvia, Lithuania, Slovenia and Sweden**. It is however worth noting that even if the early warning systems and related activities in these countries may be led by national policies or legislation, they may have developed from local or regional pilot activities and / or may involve a significant variation in the way in which they are implemented at local level.

Indeed, in most cases, the responsibility for implementation is devolved to either schools (e.g. **Sweden**) or municipalities / local authorities (e.g. **Latvia, Lithuania**). In **Latvia** for example, the national policy sets the broad framework while the local / school specific systems are then designed to be more relevant to the local situation. This means, for example, that each school is able to determine the acceptable number of absences and consequent interventions. This typically leads to (large) differences between municipalities and schools, depending on their finances and willingness (related to the motivation and whether the issue is seen as a priority topic or not) to take the issue forward.

In **Ireland**, one body has been given the responsibility for monitoring and researching school attendance; this is the National Educational Welfare Board, which has held this responsibility since 2002.

The EWSs and related activities tend to be either regional or local in countries such as **Belgium (Flanders and Wallonia-Brussels federation), Norway, Spain and the UK**

(England). In **Belgium**, education is a regional competency, thus there is no national early warning system. Instead, each community have their own activities in this field. In **Flanders** for example, absences are recorded on an electronic system and when more than 30 half days are recorded, the student is referred to a specific Centre of School Counselling. Furthermore, an action plan to tackle truancy has been drafted and some cities such as Antwerp have developed their own responses to the problem¹. In the **Wallonia-Brussels federation**, schools communicate warnings when appropriate to the regional compulsory schooling control service, which in turn contacts the parents or other persons with parental responsibility for follow-up. In **Spain** many regions have developed their own action plans to combat absenteeism / truancy by establishing collaboration between schools and social services.

4 Early warning signals and methods employed to identify young people at risk of dropping out

4.1 Main early warning signals used

Distress signals that young people show range greatly from one young person to another. "Signals" are not all easy to identify and to interpret. For example, students whose marks are falling or who are failing certain subjects may struggle with academic skills or motivation; it may also be a sign of a student falling in with the 'wrong crowd' or of problems in the family or lack of support at home, etc. Students with poor behaviour may be confronted with personal, social or emotional challenges that require attention, but there may well be a wide array of other issues that affect his / her behaviour at school.

Practically all countries rely on monitoring truancy / absenteeism which triggers an action or a warning when a student is absent frequently or for a long time. The majority of countries also monitor marks / exam results, flagging up a warning if a student fails or receives poor marks / grades or has to repeat a year.

In around two-thirds of the countries, EWSs and related activities and programmes operate on the basis of teachers, youth and social workers and other professionals working with young people raising a concern about a person who they think may be at-risk of dropping. In fact, this increasingly often goes hand-in-hand with a legal obligation for schools and training institutes to inform authorities of young people who are at risk of ESL.

The following table summarises the use of different indicators as a recognised 'distress / early warning signals'. To be more specific, it specifies what share of national and sub-national early warning systems identified by the survey respondents monitor different 'signals'. These are discussed in greater length below.

Table 1: Early warning / distress signals

Early warning signals	Share % of all 'systems' and programmes	
	National	Sub-national
Poor attendance / truancy	100 %	100 %
Poor behaviour	60 %	38 %
Poor overall average (marks/grades)	60 %	85 %
Poor marks/grades in one or more subjects	53 %	77 %
Course/subject failure	27 %	38 %
Repetition of academic year	60 %	69 %

¹ <http://www.antwerpen.be/eCache/OND/80/22/329.html>
http://www.antwerpen.be/docs/Stad/Bedrijven/Lerende_stad/LS_Staf/aob/organogram_stad_def2.pdf

Contact with social services	27 %	46 %
Contact with law enforcement	27 %	46 %
Other (e.g. Severe psycho-social problems or fluency in the host language)	13 %	31 %

Source: Based on 15 responses (national) and 14 (sub-national)

4.1.1 Attendance / truancy

As shown by the table above, information about absences is the most common and often also the most practical indicator for identifying students in need of early intervention. All the EWSs (and countries) included in the survey reported absences / truancy being one of the key indicators. This is not surprising given that there are numerous studies to demonstrate that missing classes / playing truant is a cause for concern.

Different levels of absence trigger a warning in different countries. In some countries, there are no official guidelines for truancy and instead each individual school or school type have their own rules or policy on absenteeism (e.g. **Austria, Czech Republic, Latvia**). In others, the rules are tight (e.g. **Estonia, Lithuania and Sweden**) and already one absence can flag up a warning.

In some countries, the amount of absenteeism that triggers a warning is linked to monthly attendance or attendance per semester or a school year. In **Bulgaria** for example, more than five unexcused absences within one month obliges the school principal to take action. In **Slovakia** for example, 60 hours of unexcused absences act as an early warning signal. In some countries the level of unacceptable absences are linked to the level of education. In **Slovenia**, an absence of more than a week in the basic education and more than three days in upper secondary school is regarded as a form of 'distress signal'; in the French Community in **Belgium**, unjustified absences of 9 half-days in primary school and 31 half-days of secondary school must be signalled by school to the compulsory schoolomig control service.

4.1.2 Behaviour

Monitoring behaviour is a part of many national and sub-national early warning systems, but the 'standards' which determine what constitutes 'poor behaviour' are often determined at school level. For example, in **Ireland**, the Schools' Code of Behaviour determines how poor behaviour is 'picked up' by schools as an early warning signal. In **Slovenia**, the 'level' of poor behaviour that triggers a warning is also dependent on the rules of each school. However in upper secondary schools the types and levels of violations are listed at national level in the regulations governing school order.

Typically, poor behaviour will in the first instance lead into communication between the school and the parents, before further action is taken.

4.1.3 Academic achievement / test results

Low attainment is one of the most significant risk factors in relation to ESL. A poor general level of achievement may activate a warning in some countries, though this typically depends on individual school level policies and practices (e.g. **Poland, Slovakia**). In some countries, a concern is raised if a student receives poor grades in a number of different subjects. As an example, in **Slovenia**, three poor grades may act as a warning signal for teachers. In **Sweden**, if schools notice that a student falls behind in one or more subject, the parents / guardians are notified. In **Estonia**, a sudden decline in marks / grades is regarded as an early warning signal and schools are obliged to implement support systems for students who have received non-satisfactory marks / grades in order to help them achieve the prescribed learning outcomes.

It is however more common that poor marks in some specific subjects (e.g. Croatia) or national tests are used as warning signals (e.g. Latvia). Marks / grades in mother tongue and mathematics tend to be particularly closely monitored.

4.1.4 Repeating an academic year

Research suggests that repetition of an academic year does not necessarily lead to better achievement but instead sometimes results in weaker performance by the student concerned. Indeed, limiting grade repetition and replacing it with additional individual or group tutoring or other support has been associated with lower levels of ESL in some countries and contexts. It is therefore not surprising that the repetition of an academic year is considered in some countries as one of the signs that a student is struggling, though others argue that grade repetition does not necessarily act as an 'early' warning signal in a sense that action should have been taken earlier to reduce the chances of it happening in the first place. Repetition of an academic year is also typically something enforced by the school or the education system, rather than a signal of a student as such.

4.1.5 Other signals

Few other distress signals exist. In **Austria**, young people experiencing serious psycho-social problems are under closer scrutiny, including those with substance abuse and gambling problems. In **Croatia**, particular attention is paid to children studying Croatian as a second language as experience shows that those student have a higher chance of experiencing exclusion in later life.

4.2 Other methods employed to identify youth at risk

4.2.1 Collaboration between schools and social services / youth workers

The survey findings suggest that collaboration between teachers / schools and social services and law enforcement agencies is improving as a result of efforts to create EWSs. This is a fairly recent development or a requirement in many countries, although the survey did not investigate how well this is working in practice at local level.

Youth workers and social pedagogues are often involved in efforts to identify young people who are at risk of dropping out (as well as supporting them). In **Austria** for instance, youth coaches who have been employed as part of the national EWS pilot have an important role in identifying young people who are struggling with their studies, whether this is due to their academic performance or other school specific issues or social / personal / family related matters. In **Hungary**, the law on public education obliges education institutions to employ a person with a responsibility for child / youth welfare². They, among other tasks, keep an eye on students who are repeating an academic year or who experience other problems.

In **Sweden**, all school personnel, including teachers, school psychologists and counsellors, social pedagogues, career guidance practitioners, social workers, youth workers and others are by law obliged to react and report to the headmaster if they identify that a student may need special support. The head master then has the responsibility of taking action to investigate whether there is need for additional support.

In **Belgium** (French speaking community), in addition to teachers, school mediators and staff from psycho-social and medical centres are involved in assessing the risk of school dropout among students who miss classes, through their involvement in mediation activities. Concerning children underage not registered in any school, personnel from municipalities are tasked to liaise with their parents or legal representatives. EWSs may also be integrated into mainstream programmes in place to support vulnerable students. The School Completion Programme in **Ireland** for example aims to help students from disadvantaged areas stay in school to finish their upper secondary level studies. Attendance tracking & monitoring is one of the cornerstones behind the Programme and it often leads to the identification of other difficulties in the class or home which can be helped by offering other supports to those young people who have poor attendance in order to stimulate a heightened interest in school.

² From next academic year, the employment of such support workers is made on the discretion of head teachers and they will no longer be obliged to recruit such workers.

4.2.2 Use of research data / indicators to predict which / whether students are likely to drop out

On the basis of the survey responses, **England** is the only country where research has been carried out to develop specific sets of indicators to identify students who may be at risk of disengagement. Several English local authorities together with schools have developed so-called 'Risk of NEET indicators' (RoNIs). These indicators are designed to assist secondary schools to identify students at risk of becoming NEET (young people Not in Employment, Education or Training) once they leave compulsory education. Some of the major factors that have emerged in a number of the tools are: low SES, low attainment, and persistent absence or exclusion. However, the balance of different factors and the complexity of the analysis vary significantly between different local areas. This tool and relevant indicators are explained in the box below.

Risk of NEET indicators, England

The 'Risk of NEET' indicators provide a tool for the local authorities and schools to look at which students in years 9, 10 or 11 are at greatest risk of disengagement and to target resources and support on these young people early.

Local areas are able to design their own RoNI based on their own local data to ensure that they are as specific as possible to the risk factors that are prevalent in that area, although they may wish to save time by drawing on good practice from other areas. Local areas have reported that risk factors do vary significantly between local areas, reinforcing the importance of a local approach. At the moment 44 out of the 152 local authorities in England are involved in the development of such tools and indicators. They tend to use data on those young people who have disengaged from post-16 education or training as an input and then look to apply these characteristics to students in years 9, 10 and 11 (the final three years of compulsory schooling) in order to predict which young people are most at risk of later disengagement.

Some local areas have expanded this approach further, planning to test the effectiveness of the RoNIs in primary schools to allow support to be targeted at an even earlier age and / or applying the principle to post-16 training provider to try to predict which young people are at risk of dropping out. As an example, Medway have developed a specific 'data mining' approach which helps to pick up information from text included by advisers in young people's records³. This has helped to pick up issues that might otherwise have gone unnoticed (e.g. recording homelessness issues as 'sofa surfing' in the free text), making the process of linking characteristics more thorough.

The indicators are seen as an extra tool to help formalise and support for young people, but it is recognised that teachers and wider support staff, such as Education Welfare Officers, continue to play the most important role by discussing and sharing information on pupils to schools and authorities to identify those who need extra help.

4.3 Student registration systems

As already mentioned above, student registration systems have been developed in recent years in a number of countries (e.g. **Belgium, Estonia, Lithuania and Slovakia**) to support efforts in this area. Their primary purpose is to offer a single, accurate and up-to-date source of information on students and schools. They can assist in the identification of early warning signals for example by flagging up young people not attending compulsory education and collecting information on absences and academic achievement. In **Belgium** (Wallonia-Brussels federation), the compulsory schooling control service compares the general population registry and the lists of children underage attending school.

Student registration system, Estonia

The school act creates a framework under which schools can develop EWSs that correspond to their own specific requirements. This goes hand in hand the responsibility of local authorities to monitor

³ You can read more about Medway's work, which they are now offering as a service to other local areas at: <http://www.hiddenpatterns.co.uk/> and a letter about Worcestershire's work is at <https://www.edulink.networcs.net/sites/teachlearn/foundationlearning/Resources/2011.06.13%20Invitation%20for%20Early%20Intervention%20Funding.pdf>.

whether young people of compulsory school age attend school. In order to monitor attendance, an Estonian Education Information System (EHIS) has been established. Information from this system is compared to the information available in the Population Register concerning persons subject to the duty to attend education. Educational institutions have the obligation to enter information into EHIS and to check and amend student information. They are also obliged to inform their local authority when a student is absent more than 20% of lessons during a quarter of an academic year and the school is unable to contact the parent and identify a reason for the absence. Local authority again must appoint a person to monitor school attendance, to identify the reasons for absenteeism and work together with other professionals to find a route back to education for the dropout.

5 Responses to early warning signals

Identification of risk factors and students who display signs that they may be at risk of dropping out is not enough to tackle the problem of early school leaving. To achieve a real reduction in ESL rates, students identified by monitoring different distress signals need to be provided with timely support so that their underlying problems can be addressed. The aim of this chapter is to provide more information on the main methods used to support such individuals.

5.1 Informing and involving parents

Typically, the very first step in the process involves informing and involving parents. In **Poland** for instance, if a student misses more than half of his / her classes in one month, a warning letter is sent to his / her parents, which obliges them to send the child back to school by a specified deadline or asks them to attend a meeting at the school. This may then be followed by fines for parents and a design and implementation of an individual support programme for the child, involving academic and psychological assistance. Similarly in the French-speaking community in **Belgium**, a warning letter is sent to parents to arrange an interview and in case of non-presentation to the invitation, a staff school member or school mediator is sent to the students' home.

Most **Estonian** schools have joined the e-Kool system, which makes it possible for schools and parents to exchange information on a daily basis. See the box below for further information.

E-kool, Estonia

Over 70 % of Estonian schools use the e-Kool system, covering about 95 % of students. E-Kool systems in an internet based education information system which allows pupils, teachers, parents and school management to communicate with one and another.

E-Kool makes school information accessible for parents and students at home and makes statistical data about the school accessible to the municipality. The system also makes it easy for parents to obtain more accurate, timely information about their child's exam results / grades, attendance, homework and other notifications. There are also discussion forums for parents.

The system was developed as a response to the problem of parents not being aware of teaching-learning processes and poor, general communication between schools and parents. At the same time, schools have had to become more organised in gathering and presenting essential student and academic information for the municipality.

5.2 Multi-disciplinary support teams and individual action plans

Survey responses indicate that the set-up of multi-disciplinary support teams and / or individual action plans to help at-risk students are one of the most common form of response. Evidence in fact suggests that they tend to be the most preferred form of response, although it is at the same time recognised that in practice such support may not always be available, either due to financial shortcomings (and consequently lack of staff) and

sometimes due to lack of good collaboration between schools / teachers and other agencies. There also tend to be sometimes pretty significant differences between local authorities in the amount and level of support available.

Multi-disciplinary teams are put in place to support at risk students in a number of countries. As an example, in **Belgium** (Wallonia-Brussels), **Croatia**, **Estonia**, **Ireland**, **Lithuania**, **Poland**, **Slovakia**, **Slovenia** and **Sweden**, depending on the problem or risk factors, schools can resort to either in-school or external resources, including psychologists, child protection specialists, youth workers, social educators and special education teachers. A specific support person may also be assigned to the family and counselling may be provided for parents and teachers too. Some country examples are provided in a box below

Examples from Lithuania, Sweden, Estonia and Belgium

In **Lithuania** school social pedagogues offer counselling to families, they organise social skills development groups for pupils having behaviour problems, implement prevention programmes and, together with the class teacher, visit students' families.

In **Sweden**, the new education act stipulates new responsibilities for head teachers. The head teacher has the responsibility to investigate whether a student needs specific support and to ensure that an 'action programme' is set up for the student in need of such support.

In **Estonia**, schools usually have 'student assistance roundtables' which make decisions, together with parents and possible outside specialists, about the type of support required by at-risk students. The roundtables also monitor the effectiveness of the implemented measures and make suggestions for amendment(s), if necessary.

In **Belgium** (French-speaking Community), various professionals can be intervene with (groups of) students identified as risk both within schools ('intervention teams') and outside school, for example in psycho-social and medical centres or at students' home. Mediation services are in place both in Brussels and Wallonia.

5.3 Fines / sanctions / prosecution

It is clear from the survey responses that there is a tendency for the Member States to place greater or more financial responsibility on the parents (as well as students) to attend school. Benefit payments *may* be withdrawn or fines *may* be imposed on parents when unjustified absences (truancy) occurs in **Belgium (Flanders)**, **Bulgaria**, **Czech Republic**, **Estonia**, **Poland**, **Slovakia**, **Spain** and **Sweden**. In **Bulgaria** for example, more than five unexcused absences within one month will trigger the school principal to inform the 'Social Assistance' Directorate and the child allowance may be stopped. In some truancy cases, parents may also lose their allowance in **Flanders**. Fines may also affect students themselves. In **Sweden**, in principle an upper secondary level student may lose his / her study grant if he / she plays truant more than one lessons per month. In practice, such punishments are very rare.

Even if many authorities have the legal possibility to issue fines and withdraw benefits from parents whose children do not attend school, evidence from the surveys indicates that in practice such incidences are very rare, if ever used. There has been pressure on many governments to introduce such measures in order to demonstrate to parents 'in a tough but metaphorical manner' how important participation in education / training is. The criticism of such approaches is that they may not take into account the wider circumstances of the young person / family, which might be leading him / her to withdraw from education, or they may blame parents for the behaviour of their children without offering any efficient support. It is also argued that such fines tend to disproportionately affect poor families, with limited impact on ESL.

Prosecution is also possible as a last resort in **Ireland** in the **Czech Republic**, though once again very rare and only applies to exceptional cases.

6 Discussion

The aim of this chapter is to provide information on the impact of early warning systems on early school leaving, summarise the key lessons learned from practice and challenges that remain to be solved before EWSs can reach their full potential.

6.1 Impact of early warning systems on ESL

Very little evidence, especially data / information backed by evaluation and other research evidence, exists on the outcomes and impact of early warning systems, practices and activities on the incidence of ESL. Evaluations of existing systems / practices are rare, therefore it is difficult, if not impossible, to show causality between trends in national, regional or local ESL rates and existing early warning systems. This is further hindered by the fact that many EWS are relatively new, with a great deal of development and reforms having taken place in this field over the past few years. Moreover, it was noted that local evaluations / reviews may exist but they are not typically collated or analysed at national or regional levels.

On the basis of Eurostat and national data, most of the surveyed countries have seen reductions in ESL. Stakeholders tend to be of the opinion that the EWS have contributed to these reductions, alongside other measures undertaken in the past few years. This is because:

- Teachers in many contexts make more effort to work with parents as well as other experts and professionals to intervene early, tackle truancy and offer individualised support;
- Teachers in some countries / contexts are receiving more training on how to recognise distress signals and how to respond to them;
- There is a greater awareness of early warning signals and the need to take action if such signals are detected not only among teachers but also authorities and the wider range of professionals who work with young people; and
- (Genuine) collaboration between schools and other agencies, professionals and authorities working with young people has increased, with authorities and agencies from outside the field of education / training showing more concern than before.

Despite of these positive developments, it is also recognised that all of the above mentioned areas remain areas where **further improvement / resources are needed**. For example, more resources are needed for teacher training in this field and many professionals working with vulnerable, at-risk students report worrisome increases in case loads. There is also work to do in terms of eliminating significant local and regional differences in the level and quality of support for at-risk students.

The two countries where some evaluation and / or monitoring work has taken place in this field include Austria and Belgium (Flanders). In Austria it is too early to say what the key outcomes of the new Youth Coaching measure may be. An intermediate evaluation of the Youth Coaching pilot has revealed that the measure is effective in schools that have implemented similar programmes in the past. However, the stakeholders are looking forward to reading the results of the full evaluation, which will begin in the autumn 2012.

There has been no actual evaluation of the truancy registration system in Belgium (Flanders), but the truancy monitoring data does indicate that recorded, unjustified absences have been increasing continuously since the registration system was introduced. This is partially attributed to the better and continuously improving system of registration, but does not fully explain why the figures keep on growing.

6.2 Key lessons and success factors

The key lessons from the implementation of EWS as addressed by the respondents concern:

- (1) The importance of the role of teachers in EWSs;

(2) importance of individualised support and counselling;

(3) co-operation between schools and other key actors and professionals involved in the lives of young people.

Representatives from a number of countries, including Estonia, Lithuania, Poland and Slovenia, emphasised how the experience illustrates the **importance of teachers** in all early warning systems / practices. This involves, for example, training teachers on identification of different signals of ESL and risk factors associated with the phenomenon as well as organising team-based training sessions so as to increase awareness among all relevant actors.

Experience from a range of countries also demonstrates the importance of **individual support and guidance for students** identified at risk of dropping out early. Furthermore, in Sweden in particular it has been learnt that it is important to ensure the monitoring does not end when the young person enters specific support measures and that instead, their progress is still being followed up and support is received through to their first steps 'back' into the 'mainstream'.

Cooperation between schools and other supporting systems and professionals (e.g. social workers, counsellors, guidance advisors, health workers, the PES, etc.) was identified as crucial. Responsibilities and roles of different actors also need to be clearly defined.

In addition to the three most commonly stated lessons and success factors, the following were also highlighted with regards to EWSs:

- EWSs should leave flexibility for local implementation / targeting to ensure that they are as relevant as possible to the specific context of the school and local authority.
- EWSs should not forget the important 'human aspect': feedback from teachers and others working with young people is just as important (if not often more important) as more 'mechanical', often quantitative information, obtained through EWS.
- Extension of EWSs to primary education is recommended.
- It is essential to obtain a buy-in of local actors in indicators and methods related to EWSs.
- More 'meaningful' and regular involvement of parents in the school life of children is an important part of EWSs.

6.3 Challenges

While it is clear that EWS have emerged in the policy agendas of many countries especially in the past 2-5 years, there are also concerns 'on the ground', among staff working with at risk youth, including those where education and training services have been ring-fenced from the most severe budget cuts, about upcoming budget cuts and already increasingly difficult case loads. Budget cuts have already affected work in this field, for example in Latvia, Lithuania and Ireland. Latvia has seen a 40 % budget cut for education and budget cuts have also affected education provision in Ireland, though at-risk groups continue to be a priority.

Other identified challenges include, for example:

- Reduced local authority budgets to implement national programmes and activities linked to EWSs.
- Ensuring that legal responsibilities related to the identification of at-risk students are also implemented in practice.
- Ensuring that data from registration and absence portals is available in a user-friendly format for teachers and that it is used to inform policy-making at school, local, regional and national levels.
- Lack of training on ESL and risk factors as part of initial teacher training.

- Lack of coordination between different agencies and professionals involved in work in this field.
- Establishing buy-in from relevant parties to report on attendance and actively engage with other service providers.
- Unwillingness of some schools to link with outside bodies/agencies

7 Comparison of European vs US approaches

Many States and cities in the US have a longer track record in operating EWSs than most of the European countries. Many of their most successful early warning systems are based on the results of longitudinal studies following entire cohorts of students entering specific years and then following their performance, attendance and drop-out levels until the end of high school to determine the main risk factors and early warning signals associated with early school leaving. Such results are then made available to all school staff, teachers in particular, and have proven to produce good results when the EWS are accompanied by a clear and timely system of support for students identified being at risk of leaving school early.

An example of a well-established EWS from Philadelphia together with links to some relevant literature has been provided below.

An early warning system in Philadelphia⁴

Philadelphia has a long history of carrying out research on why students drop out of education. This research has been based on complex surveys and in-depth interviews with students. The results were found to be useful but they were rarely made available to those working at the classroom level (teachers and head teachers) and / or were not in a format that would provide particular benefits to individual teachers.

Consequently a longitudinal study was set up in 1996 to follow 14,000 students entering the middle school (the 6th grade of the US system when students are 11-12 years of age) for 6 years. On the basis of this data, the researchers looked for any signals, such as a poor course grade, a low test score, attendance, behaviour marks, special education status, etc. and determined signals that give students at least a 75 % probability of dropping out before finishing high school (equivalent to upper secondary education).

The findings were as follows:

- A 6th grader with even one of the following 4 signals had at least a 75% chance of dropping out before completing high school: final grade of F in mathematics, final grade of F in English, attendance below 80 % for the year and final "unsatisfactory" behaviour mark in at least one class. Students with more than one signal had an even higher probability of dropping out within six years.
- The signals that had the greatest predictive power related to *student action or behaviour in the classroom*, rather than to a particular status, such as receiving special education services.
- Similar indicators were developed for 8th graders, but it was found that schools should pay special attention to students who send a signal in the 6th grade as the earlier a student first sends a signal, the greater the risk that he or she will drop out of school. Overall, *80 % of the dropouts studied in Philadelphia sent a signal in junior high school (the middle grades) or during the first year of high school.*
- Similar indicators were also developed for high school students and the first year of high school was found to be particularly indicative of the future chances of dropping out. Many students who were doing moderately well in junior high school started to show distress signals at this stage. Students who earned fewer than two credits or attended school less than 70 % of the time had at least a 75 % chance of dropping out.

⁴ Based on reports and articles written by Ruth Curran Neild, Robert Balfanz and Liza Herzog

On the basis of this information, an on-demand, classroom-level data programme was developed for teachers which allow them to track individual students on a day-to-day basis and identify students who should be referred to additional support.

Information on other American early warning systems can be found

- Developing Early Warning Systems to Identify Potential High School Dropouts: http://www.betterhighschools.org/pubs/ews_guide.asp
- Approaches to dropout prevention - Heeding Early Warning Signs with appropriate interventions: http://www.betterhighschools.org/docs/nhsc_approachestodropoutprevention.pdf

8 Concluding remarks and questions for future TWG activities in this field

These survey results can be used as a form of indicative, baseline data on the 'existence' of early warning systems in Europe. The results show that:

- By promptly reacting to student distress signals, schools together with other actors and professionals working with young people can redirect possible dropouts from a route to potential disengagement, onto the path to school completion. However, scientific evidence to demonstrate this impact tends to derive from the US only and more should be done in Europe to investigate the net impact of existing EWSs; most of the evidence from Europe is anecdotal.
- This has been a very active ESL policy field in the majority of European countries over the past five years in particular. New laws have been drafted, new responsibilities have been assigned to schools and authorities in relation to identifying risk signals and potential dropouts, new registration systems have been introduced and more uniform response mechanisms have been developed. Despite of these positive developments, implementation remains patchy. In addition, the term EWS assembles currently a broad range of measures which combine data collection and early interventions; a clear definition of what EWS are and what they should achieve is missing. Furthermore, limited information has also been gathered on the evidence base that has been used to determine the 'signs', which are monitored under the existing systems.
- The majority of existing systems are focussed on systematic monitoring of truancy / absenteeism (or results / grades), but a requirement for schools to collaborate with other professionals is becoming increasingly common. With regards to latter, efforts in this field are however hampered by financial shortages and consequent staff shortages.
- Many of the existing early warning systems are driven by national policies or legislation, although the implementation tends to be left for local and school level actors – this tends to lead to variation in local 'buy-in', practices and systems. At the same time, many of the regional and national early warning systems have developed as a result of bottom-up or other local pilot activities.
- Early warning systems should operate through a three-step process:
 - a. The first step should involve an (on-going) assessment and identification of the signals to look for and when to look for them (for example at which stages of the education / training path). This assessment will need a constant revision and adaptation over time.
 - b. The next step should involve the development of systems and practices within schools and authorities that enable school staff and other professionals involved in the lives of young people to review such data and identify those students that show distress signals/ are at risk of dropping out.

- c. The third step should involve an assessment of problems / support needs of those individual young people and then responding to those needs before the young person makes the 'cumulative decision' to drop out.

Despite of the survey results providing useful 'baseline information', many questions remain unanswered and further work could be taken to investigate existing early warning systems further. For example:

- Are early warning systems defined in different European countries? How are they defined? At the moment there may be a tendency to include a broad range of different activities under the umbrella name for 'early warning systems' while they may not display all the features typically associated with EWSs.
- When schools or local authorities have the responsibility to report absences to a national or regional authority or a database, what is the outcome of this activity? Is this just a reporting arrangement or is the data used for policy making? Is relevant data made easily accessible, in a useful format for teachers and other staff working 'on the ground'?
- What distinguished EWS which are a pure bureaucratic exercise from systems which address systematically and successfully problems related to ESL? What type of commitment is needed at the different levels and what are the necessary conditions under which EWS add value to the work of schools?
- How have the early warning signals and indicators been decided? Have studies been carried out to identify *specific* indicators that predict students' probability to leave school early? To what extent does such data underpin existing systems?
- How do different countries / authorities / schools determine the different 'early warning signals' which are seen as being 'harmful' or worrying enough to trigger a warning and seen as something that should be investigated further .
- Evaluations looking at the link between early warning systems and early school leaving rates are very rare. In absence of (many) national evaluations, do local ones exist that could be investigated further or shared among TWG members?
- There seems to be an ever-greater willingness and effort to involve a broad range of professionals from psychologists, youth workers, counsellors, guidance practitioners, health professionals, etc, in early warning systems. How are these partnerships working in practice? Which (genuine) good practices exist? In contexts where some schools are somewhat unwilling to work in such partnerships, which good practices exist in forming effective partnerships? Are there examples of partnerships which operate under a more unified (single) structure?