

Summary of the background research: **Crocoos – Cross-sectoral cooperation- focused solutions for the prevention of early school leaving project –**

Author:

Judit Juhász

June 2015

The project is being financed by the European Commission and the Hungarian Ministry for Human Resources. The report was ordered by Tempus Public Foundation in the framework of CROCOOS – the Cross-sectoral cooperation focused solutions for the prevention of early school leaving project. The content of this publication does not necessarily reflect the official position of the European Union or the Ministry. Responsibility for the information and views expressed in the report lies entirely with the author.

Content

I.	Summary.....	3
II.	Early school leaving – a question of definition?	4
	The labour market situation.....	4
	ESL and education and the deficits/hitches of the data gathering process	6
	National definitions	8
III.	Policies and measures on system and institutional levels	10
	The European context	11
	The USA context	12
	The role of the school.....	15
	The role of the teacher.....	16
IV.	Data collection to tackle early leaving from places of education and training.....	20
	Data-collection in Europe	20
V.	Early distress signals of possible dropout	25
	What signals can be identified?	26
	Some signals in details.....	26
	Other signals and reasons for ESL	30
	Less widely observed distress signals.....	34
	Which is the biggest group of students at risk?	35
VI.	Professionals and their roles in tackling ELET	37
VII.	Parents involvement	39
	Why is it important to involve parents?.....	39
	The perspective of parents.....	40
VIII.	The aspect of the youth.....	42
	What do students say?	43
	US examples	44
IX.	Conclusions.....	45
X.	Bibliography.....	47
XI.	Appendixes	55

I. Summary

„... as many as 50 percent of high school dropouts can be identified by the sixth grade”

(Iver, M. A., Mac Iver, D. J. 2009 19.)

The present report aims to contribute to the three year long project [CROCOOS – Cross-sectoral cooperation focused solutions for preventing early school leaving](#) on the target of which is the development of policy level recommendations for the creation of an early warning system tackling early leaving from education and training schools and colleges in Hungary, Slovenia and Serbia. Recommendations are going to be based on the one and a half year long pilot projects starting in September 2015 in the mentioned countries. The specific contribution of the current report is to provide a summary of desk research on the most important aspects of a comprehensive early warning system based on European and overseas examples.

There are several reports covering the social environment, labour market and health related reasons and consequences as well as insights into individual causes and institutional or family related causes of young people leaving education before the expected final year or before getting a final degree so this report is not aiming at giving a full-detailed overview *per se*. It will, however, refer to those reports and their main messages. The suggestions and highlights of the report are, of course, based on this knowledge gained from international reports and research results.

This report partially uses the information already gathered for an Interim report¹ in the project, i.e. about the countries suggested for study visits and their practices concerning the 6 most indicative early distress signals.² Furthermore it is based on an 80-strong bibliography. Additionally, some study visit experiences helped us add rich perspectives to the text as well – however, during the upcoming months more school visits in other countries will be accomplished.

Some interviews were made with experts from other relevant projects and connected fields and these results/insights show up in the text as well.

This report is a basis for an online Resource Pool which will serve as a compilation of relevant knowledge for field experts of any relevant professions, especially for teachers.

¹ Jelena Joksimovic, Juhász Judit, Mihályi Krisztina, Tomcsik Dóra (2014): *Early warning systems in six European countries*. Desk research report on study visit countries in the framework of CROCOOS– Cross-sectoral cooperation focused solutions for the prevention of early school leaving project. Interim report. Tempus Public Foundation, Budapest.

² More details in Chapter IV. Early distress signals of possible drop out.

II. Early school leaving – a question of definition?

Leaving school early as a phenomenon is in the spotlight of current educational policy all over Europe, and the world; however, it may refer to different aspects in each country. The EU28 ministries have agreed to strive to achieve the goal of a level below 10% by the year 2020 while many member states have their individual national targets, along with national definitions. There are differences in the approach in terms of what is considered as the exact group of young people to be dealt with or considered and about the successful measures and interventions as well.

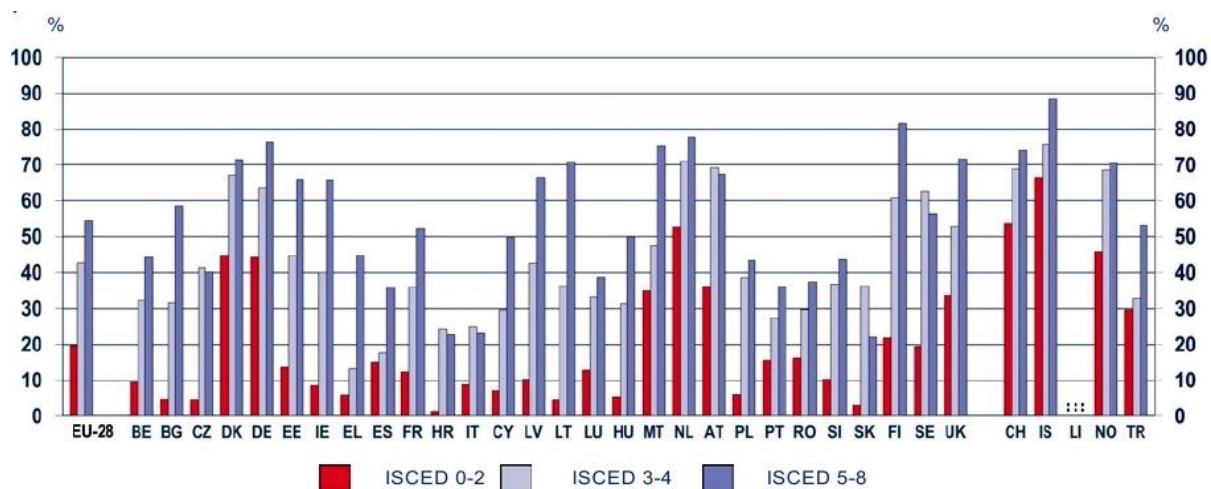
It is at the same time more and more evident that early leaving is not only a status or educational outcome but usually a long-term process of disengagement that occurs over time and it can be predicted to some extent from the detection of different distress signals. The way we define early leaving from education will typically determine the policy and measures that will be applied. When the focus is on the individuals' labour market position and individual opportunities for instance, interventions are then targeted towards career orientation, school-workplace relationships and the transition from school to work.

On the other hand, many policies try to pair up the processes of disengagement from education with their individual cognitive and psychological roots and processes. In the latter case suggested solutions are rather based on individual support, inter-personal relationships in school and influences from the whole learning environment (NESSE 2010 17.). In this chapter, some relevant aspects in terms of definitions are presented and we also analyze the most important individual and society level consequences in a nutshell.

The labour market situation

The connection between educational attainment and employability (see 1. Figure) is already a cliché in the international expert community (e.g. NESSE 2010; Eurydice-CEDEFOP 2014). The consequences of early school leaving are just as burdensome for the individual as for society. Unemployment is associated with worse health conditions, for instance an even a higher rate of depression shown by UK data (Eurydice-CEDEFOP 2014 22.). Besides, a later entry into the labour market, achieving lower positions and paying less tax while causing extra costs for society with possible needs for housing and life benefits are also disadvantageous for the individual and the state. "One European estimate puts the additional lifetime income for a student staying at school for an extra year at more than €70.000 (NESSE 2010 5.)." Today it is clear and widely accepted that lowering the rate of ESL is in the interests of the whole of society.

1. Figure Employment rates of 15-24 year olds by levels of education, 2013, %



Source: Eurydice-CEDEFOP 2014 49. (Eurostat EU-LFS)

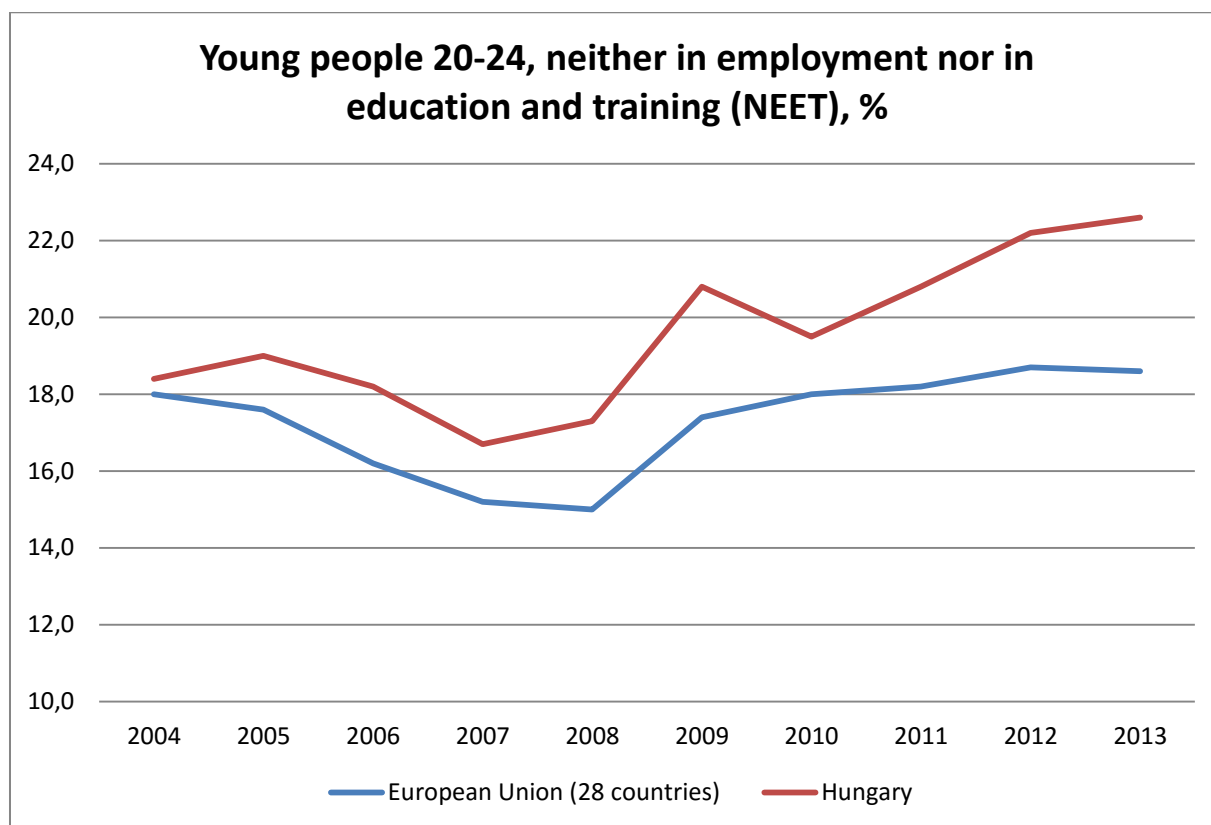
The European Union's early school leaving (ESL) definition fits this kind of approach by focusing on 18-24 year olds with a maximum of an ISCED 3c short/lower level of education, i.e. individuals currently not taking part in any³ education or training – these being a particularly vulnerable group on the labour market. This means that the emphasis is on the attainment of a qualification which is considered good enough for some chances on the labour market. According to the Eurostat Labour Force Survey⁴ (LFS) data, in the population in question there is a worryingly low level of education and an unemployment rate almost twice as high (41%) as for the whole youth population (23.5%) in 2013.

Another employment focused definition is NEET, i.e. young people between 15-24 who are not in employment, education or training, and this is for instance the national category in for example the UK, instead of ESL, for those young people who are at the forefront of policy level interventions. According to estimations in 2011, the annual economic loss to Member States due to labour market disengagement among young people was EUR 153 billion, corresponding to 1.2% of GDP (Eurydice-CEDEFOP 2014 23.). See the NEET rate for 20-24 year-olds in 2. Figure.

³ "The EUROSTAT definition of relevant education and training beyond lower secondary education 'includes initial education, further education, continuing or further training, training within the company, apprenticeship, on the- job training, seminars, distance learning, evening classes, self-learning etc. It includes also courses followed for general interests and may cover all forms of education and training as language, data processing, management, art/culture, and health/medicine courses' (EUROSTAT, 2005)." (NESSE 2010 14.)

⁴ "The European Union Labour Force Survey (EU LFS) is conducted in the 28 Member States of the European Union, 2 candidate countries and 3 countries of the European Free Trade Association (EFTA) in accordance with Council Regulation (EEC) No. 577/98 of 9 March 1998. At the moment, the LFS microdata for scientific purposes contain data for all Member States in addition to Iceland, Norway and Switzerland. The EU LFS is a large household sample survey providing quarterly results on labour participation of people aged 15 and over as well as on persons outside the labour force." <http://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>

2. Figure Young people (20-24) neither in education, employment or training, %, 2004-2013



Source: Eurostat 2015

People with a low level of education are three times more likely to be NEET compared to those having a tertiary education. Migrants' situations (a contemporary issue in this region) are also worrying: in their cases they have a 70% higher chance to be NEET compared to those originating in the country. Young people with a disability or some health related problem are 40% more likely to fall into the NEET group too. Naturally, family background has a high influence on these chances too (Eurofound 2012).

"Where there are European examples of low rates of youth unemployment there is typically an emphasis on the importance of education systems that successfully interact with the world of work and the institutional support that young people require in order to make that transition." (University and College Union 2012 3.). Data and experience clearly show that getting at least an upper-secondary degree has a huge impact on the individual's labour market situation and therefore on the person's entire life quality.

ESL and education and the deficits/hitches of the data gathering process

Recently a new expression was introduced for exactly the same group of people as ESL, i.e. *early leaving from education and training* (ELET) and this better describes how school is not the only learning environment. Remarkably, participation in non-formal education and training is about 12% in EU 28; however, there are huge discrepancies between countries, e.g. in Denmark it is approximately 40% while in Hungary it is only 3%, for 15-24 year olds (Eurostat 2013).

In the experience of almost every EU country, dropping out has different rates in line with the courses available at secondary education, often to the detriment of vocational school. (Portugal seems to be an exception, having lower dropout rate at vocational level, than seen at general secondary school level (Eurydice-CEDEFOP 2014 110.)). There is no reliable information about the exact rates by programmes though. *Early leaving from vocational education and training* (ELVET) is measured differently country by country due to a lack of common definition/measurement. The general ELET indicator doesn't contain information about the type of education and the programme from which the person dropped out; it describes the current educational situation of the individual instead.

In most cases the general problem with any dropout indicator is that country level measures are not suitable to distinguish dropping-out (*measures of the non-retention or non-completion*) from cases of student mobility (*incidence of programme interruptions, continuation in another school*) – and for the secondary school programme, the dropout indicator in place is the only available measurement. In Hungary, for instance, another problem is that schools have no monitoring obligation for children above the compulsory age (currently 16 years old) in terms of when they leave school, and this can cause parallelism in the statistics too (Salomvári 2014).

Furthermore ELET data does not distinguish between the following cases either and considers all early leavers as one:

- those who never started an upper-secondary education programme (non-starters);
- those who started a programme, but failed to complete it (drop-outs); and
- those who actually completed the programme, but failed the final assessment (Eurydice-CEDEFOP 2014 103-104.). (*Later in this text referred as “in school dropouts”.*)

Several countries use definitions that refer to programme interruptions or the non-retention of students by measuring the occurrence of dropping out or non-completion rather than the qualification attainment (Eurydice-CEDEFOP 2014 107.). As the Eurostat category is not particularly elaborate concerning the exact circumstances of an individual dropout, alternative definitions and approaches have also arisen.

Interestingly, the USA, Canada and the OECD define early school leaving in similar ways, all different from the EU definition though. About the clarity of definitions, the USA gives a good, standard, easy to follow up measure: early school leavers or dropouts are those who do/did not graduate from high school. This definition covers the whole country and provides an obvious goal: get young people re-enrolled and graduated if and when they drop out.

The OECD ESL focus is on 20-24 year olds covering education below upper secondary education and it is therefore closer to the US and Canada focus: the focus is the completion of upper secondary education (NESSE 2010 13.).

The PIAAC approach

To gain a more detailed picture of the exact population of ELET youths, the *International measurement Programme for the International Assessment of Adult Competences*⁵ (PIAAC) tried to figure out the nature of ELET, i.e. whether

- early leaving is an issue for those who discontinue an on-going course or fail the final examination, rather than those who never started an upper-secondary programme; and
- drop-out events are definitive, i.e. whether those dropping out return to education and training in future periods, and how often this occurs.

The operational definitions used to calculate the rates of early leaving identified within PIAAC differ from the EU measure of ELET, based on the labour force survey (LFS), in three ways:

- the age group is 16 to 24 (instead of 18 to 24);
- only formal qualifications are counted as current participation in education or training; and
- the PIAAC survey has been conducted in only 17 European countries.

With its obviously limited expansibility, PIAAC analysis in the 17 countries answers questions regarding the population of early leavers. It seems that early leaving is primarily a drop-out phenomenon so that young people, out of education, with a maximum of ISCED 3c short degree attainment also have or had an interrupted ISCED 3c long or similar level upper-secondary education. Consequently, starting neither upper secondary education nor training at all is not very common. The same dataset proved that about one in four young persons who dropped out of a programme went on to achieve an upper-secondary educational attainment and more than half of them obtained a VET qualification, even having dropped out at one point in time.

According to these results, about 30% of dropouts are not considered as early leavers as they might already have another qualification obtained before or they just continue and finish after their dropping-out in another educational place (Eurydice-CEDEFOP 2014 107.).

This shows that early leaving is a diverse phenomenon and dropping out or programme interruption does not necessarily mean early leaving, even though both are good indicators.

National definitions

The diverse aspects presented above are reflected in the national definitions for the youth cohort in question. National definitions are related to local data collection systems and the most common level of action, whether this means prevention, intervention or correction.

In national contexts, ESL or ELET can mean either not having completed compulsory education or not having achieved an upper secondary certificate or the school leaving certificate (Eurydice-CEDEFOP 2014). The GHK study (2005 136-137.) presents a wide range of national definitions with their specific approaches which show well how diverse the country level categories are. According to this report countries define ELET as a:

- Failure to complete upper secondary education (or high school) and not attending further education or training;

⁵ OECD, 2013. *Programme for the international assessment of adult competences – dataset*. [Online]
Available at: <http://www.oecd.org/site/piaac/>

- Failure to gain qualifications required for participation in higher education;
- Failure to complete compulsory schooling;
- Failure to gain qualifications at end of compulsory schooling;
- Failure to participate in education or training on completion of compulsory schooling;
- Failure to gain qualifications required to access to a range of labour market opportunities;
- Failure to participate in any form of education and training between the ages of 18-24;
- Failure to participate in any form of education and training by 18-24 years olds in the period of four weeks prior to the European Labour Force Survey.

Theoretical classifications view this issue as being a working situation or a personality question while some seek the reasons behind cases of early school leaving. At the beginning of the next chapter, Figure 3. shows some examples of these typologies.

Most countries use their own national definition for ELET, besides the EU LFS related one; however, in some countries the Eurostat definition is the one and only. Scandinavian states use only their own definitions, while in Estonia, France, Austria, Slovenia and Finland more than one definition exist within the country (Eurydice-CEDEFOP 2014). Importantly, most definitions have an effect on what is actually done and which target group is especially in focus. Furthermore they influence the cooperation and approach of all actors involved in young people's education and career chances.

III. Policies and measures on system and institutional levels

“Every 29 seconds an American high school student gives up on school...” (Adaptive Technologies Inc. 2008 3.)

In Europe and also further afield, many different typologies have been developed by researchers to classify students at risk or those who already dropped out (see 3.Figure as an example). These approaches contribute to the preferable directions of policy measure improvements and highlight the favourable focus of intervention as they show who are the most at risk, which subgroup might be less in the spotlight and which ones can be supported with the greatest return on investment. This chapter presents some of these typologies and the most relevant measures and policies in the European context; also it gives a short introduction to US policies. Besides, the role of the school and specifically the role of teachers in the process of an individual becoming a dropout or not, are also highlighted.

3. Figure Different classifications of early school leaving

Classification based on the ‘actual working and schooling careers after leaving school’ (Dekkers and Driesen, 1997)

- successful unschooled manual worker
- school returner
- money earner
- voluntary unemployed
- enforced unemployed

Classification based on the basis of individual characteristics (Janosz, 1994)

- maladjusted, who have poor grades and who behave poorly at school
- underachievers, who just have poor grades
- disengaged, who perform better than the maladjusted and the underachievers, but simply do not like school
- quiet, who, other than having slightly lower grades, resemble graduates more than dropouts.

Classification based on young people’s reasons for leaving school early (Dwyer & PRC, 1996)

- positive leaver, making a positive career choice with employment or further training
- opportune leaver, there is no definite career path, taking the opportunity to change life patterns
- would-be leaver, does not leave but reluctant to stay
- circumstantial leaver, forced to leave for non-educational reasons
- discouraged leaver, interest and performance in education is low
- alienated leaver, discouraged and non-compatible with school life.

Source: NESSE 2010 16.

The European context

In the European Union, policy level discussions started intensively around 2006 in the Cluster on Access and Social Inclusion⁶ after which the group initially stated aims for the whole community. Many countries, however, have started to deal with their own dropouts and prepared national level initiatives much earlier, e.g. the Netherlands in 2002.⁷ The *Recommendation on policies to reduce the number of students leaving education and training early*⁸ is a core document for the preparation of a comprehensive strategy to tackle early leaving from education and training. Many countries have still not adopted this kind of strategy yet, i.e. one which covers all levels of education from primary to secondary school and also general and vocational programmes, despite those areas setting up a coordination body to link different policy areas such as education and youth, social/welfare, employment and health. Many of these nations have different policy level documents that support the solution of this problem. The various recommendations promote a more collaborative approach with the involvement of any relevant areas or expertise while they also propose further analysis into prevention, intervention and compensation as well.⁹

The list below shows the most important policies and measures on each level in terms of action identified in different countries in Europe:

Prevention can happen by:

- Improving access to and quality of ECEC (early childhood education and care)
- Reducing grade retention
- Desegregation policies
- Positive discrimination measures
- Developing extra-curricular activities
- Increasing flexibility and permeability of educational pathways
- Inclusion of ELET in initial teacher education and professional training
- Education and career guidance

Intervention – by:

- Providing individual support
- Supporting low achievers
- Language support for students with a different mother tongue
- Specialist staff supporting teachers and students
- Identification of groups at risk of ELET
- Developing early warning systems for students at risk of ELET

⁶ Directorate-General for Education and Culture, EU see: *Study on reducing Early School Leaving*, 2011
http://www.europarl.europa.eu/meetdocs/2009_2014/documents/cult/dv/esstudyearlyschoolleaving/esstudyearlyschoolleavingen.pdf

⁷ Hermándy-Berencz Judit, Juhász Judit (2013): *Study visit to the Netherlands*. QALL project, Tempus Public Foundation, Budapest.

⁸ Council Recommendation of 28 June 2011 on policies to reduce early school leaving (Text with EEA relevance) (2011/C 191/01)

[http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011H0701\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011H0701(01)&from=EN)

⁹ Eurydice and CEDEFOP report (2014): *Tackling Early Leaving from Education and Training in Europe - Strategies, Policies and Measures*.

- Absenteeism management
- Networking with parents and other actors outside school

On Compensation level

- Reform of the *second chance* education system
- Identification of early leavers and measures to help them re-enter education and training (Eurydice-CEDEFOP 2014 57.)

The Recommendations claim that targeted support is needed to be given to those students especially at risk such as:

- Students from socially disadvantaged background;
- Students from a migrant background;
- Students with minority/Roma background;
- Others such as SEN (special educational needs) or special groups of students such as pregnant teens etc. (Eurydice-CEDEFOP 2014 64.).

In real practice, these three levels are not always obviously differentiated, since a measure could be preventive on one occasion and an intervention on another. Some of those listed are quite common across European countries (such as the formulation of early childhood education and care or education and career guidance.) Furthermore some sort of absenteeism management and second chance education possibilities exist in many places. Nevertheless there is no country where all of these measures together form a system. It is important to note that access to services is rarely equal and consistent, for instance in eastern European countries or economically underdeveloped regions and rural areas, when compared with urban locations, etc. According to the European level reports based on analysis from many countries, the above detailed collection of measures and policy initiatives seem to be a convincing baseline for a common framework in forming an ELET strategy and in tackling dropout.

The USA context

According to a study from 2008 there are close to one million new dropouts each year in the USA.¹⁰ Since the early 1980s the USA has been a leading example in the following up of school dropout rates and in making empirical research into this phenomenon. For this reason, despite its different cultural context the USA can show many examples and ideas about potential improvement for European systems.

One US milestone at policy level is The No Child Left Behind (NCLB) Act, which came into force in 2001 aiming to foster equity and quality by using testing methods and requiring higher level individual Maths and Reading performances. Since the introduction of this legislation, every state is obliged to have an accountability system based on a model program that was set up in Louisiana. This program has a 10 year target and a bi-annual evaluation. It combines achievement indicators with the attendance ones (Crain-Dorough, M. L. 2003 12-13.). But the regulation has received some criticism for a perceived encouragement of some individuals to actually leave school early because

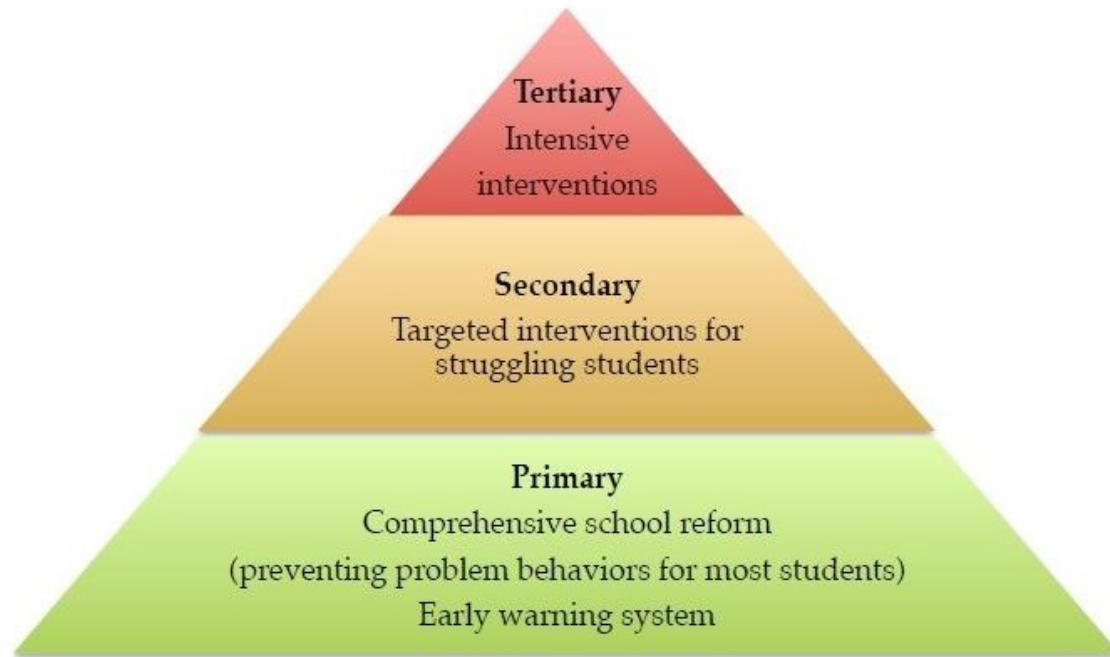
¹⁰ Adaptive Technologies Inc. (2008): *Using Predictive Modeling to Improve High School Dropout Prevention*. White paper, USA.

the scheme has made certain schools less attractive to less at-risk individuals since the retained at-risk ones are perceived to be lowering standards generally (Iver et. al. 2009). The USA approach seems to be really data oriented with measures based on longitudinal research and high scale results. This is backed up by findings of the NCLB law. Criticism claims that NCLB only measures cognitive skills, however many other competencies, such as social or physical ones are required for a successful life. These so called soft skills are stated to be hardly measured scientifically, however, many studies prove the opposite: social competencies can also be measured and tested. Furthermore, official tests do not incorporate the fact that cognitive attainment depends not only on cognitive skills but the mental and physical state of the person or his or her motivation, for instance (J. J. Heckman 2010. from 50m).

From a research perspective, one interesting model is detailed by Martha Abele MacIver and Douglas J. MacIver, and serves as a good example for an early warning system concept. They created a three tiered model (see 4. Figure) in their study for an integrated model tackling dropping out at school level. Their report is based on the result of a pilot project conducted in two deprived high schools in Philadelphia. "The two middle schools yielded positive results—including double-digit reductions in the numbers of students failing math and literacy or exhibiting poor attendance or behavior—in a matter of months." (Iver, M. A., Mac Iver, D. J. 2009 2.) The model is built up as follows:

- The primary stage, or foundation, of the prevention model involves district- and school-wide reforms aimed at providing high-quality instruction that promotes engaged learning and successful high school completion for every student. This stage includes a whole-school approach to encouraging regular attendance and other positive behaviour. These primary prevention strategies alone often succeed with a large majority (two-thirds to three-quarters) of students.
- The secondary stage targets interventions on small groups of students who need additional supports beyond the school-wide reforms to address attendance, behaviour, or academic struggles.
- The tertiary stage provides intensive intervention (often delivered one-on-one to students by specialists in social work, mental health, and so on) for the five to 10 percent of students who need more clinical support. (Iver, M. A., Mac Iver, D. J. 2009 10-11.)

4. Figure Three-Tiered Dropout Prevention Model for Districts and Schools



Source: Iver, M. A., Mac Iver, D. J. 2009 14.

The basis of their thesis is the so called ABC of dropping out (see 5. Figure).

5. Figure Focus of interventions concerning the ABC of dropout

Type of Intervention	Focus of Intervention (ABCs)		
	Attendance	Behavior	Course Failures
School-wide (all students)	Every absence brings a response Create a culture that says attending every day matters Positive social incentives for good attendance Data tracking by teacher teams	Teach, model, and expect good behavior Positive social incentives and recognition for good behavior Advisory Data tracking by teacher teams	Research-based instructional programs In-classroom support to enable active and engaging pedagogies Data tracking by teacher teams
Targeted (15 to 20 percent of students)	Two or more unexcused absences in a month brings brief daily check by an adult Attendance team (teacher, counselor, administrator, parent) investigates and problem solves (why isn't student attending?)	Two or more office referrals brings involvement of behavior team Simple behavior checklist students bring from class to class, checked each day by an adult Mentor assigned	Elective extra-help courses—tightly linked to core curriculum—preview upcoming lessons and fill in knowledge gaps Targeted, reduced class size for students whose failure is rooted in social-emotional issues
Intensive (5 to 10 percent of students)	Sustained one-on-one attention and problem solving Appropriate social service or community supports	In-depth behavioral assessment (why is student misbehaving?) Behavior contracts with family involvement Appropriate social service or community supports	One-on-one tutoring

Source: Iver, M. A., Mac Iver, D. J. 2009 26.

The role of the school

In spite of the fact that early leaving from education and training is a cumulative process, deriving from often severe social, personal and institutional circumstances, there seems still to be a much to do at school level in order to bring about successful prevention or intervention. In the CROCOOS project the focus is on schools, by testing certain methods on those students considered at-risk and by supporting teachers in their work to tackle this issue.

According to European data, the quality of the school seems to be indicative considering the perspectives of its students. “Going to a predominantly low SES¹¹ school will depress students’ average scores, while going to a high level SES school will tend to raise them. The effect is that a young person - with the same mix of dis/advantages and the same history of school achievement-

¹¹ Socio-economic status

will leave one school early but would probably not leave the other school early. This effect is widely noted and recognised. It is statistically significant in every country in PISA” (NESSE 2010 23. quote: Willms 2006 52.).

In a US study¹² the features of schools having low or high rates of dropping out have been collected using a three-phase study based on quantitative analysis. Phase one put the focus on students and created dropout clusters. Phase two was a classification of 301 schools by the rate of actual dropouts and those at risk, based on phase 1. Phase three led to the setting up of 4 school categories: *consistently high dropouts schools, consistently low dropouts schools, schools more effective in dropout prevention, and schools less effective dropout prevention* (Crain-Dorough, M. L., 2003 13.). The study resulted in clusters for achievement and for the types of dropout as well. According to this report, the characteristics of schools that have been unsuccessful with holding onto their at-risk youth include the following: “low expectations for success, inconsistent discipline, low teacher involvement and/or accountability, inattention to individual student needs, and a low level of engagement in productive learning activities” (Crain-Dorough, M. L. 2003 quote: Texas Education Agency 1989 4.). Characteristics of successful dropout reduction programs include these: strong commitment by instructional staff, quality leadership, small class size, and fair and consistent discipline that is clearly communicated (Texas Education Agency 1989).

Furthermore, these schools have a curriculum/set up expanded to include personal and career components; teachers/administrators who believe the students can succeed; students who participate in the programs by their own choice; the wide availability of support services; a high amount of personalized interactions among staff and students; learning that is emphasized over teaching; and funding that is available for smaller class sizes and more equipment and resources.

The significant role of the school environment is backed up by the Iver study detailed above (*see III. Chapter*) as well. It quotes results about Chicago Public Schools indicating that students’ course performances were related to three school factors: relationships with teachers, the relevance of classroom instruction to their perceived future, and teachers’ cooperation with each other. Data from the study even indicates that high levels of trust and personal support lowers the likelihood of failure while unsuccessful students hardly see teachers as helpful or motivating actors. Just as in families, so school expectations and requirements also have a great effect on final attainment. (Iver, M. A., Mac Iver, D. J. 2009 6. quote: Allensworth & Easton 2007).

The role of the teacher

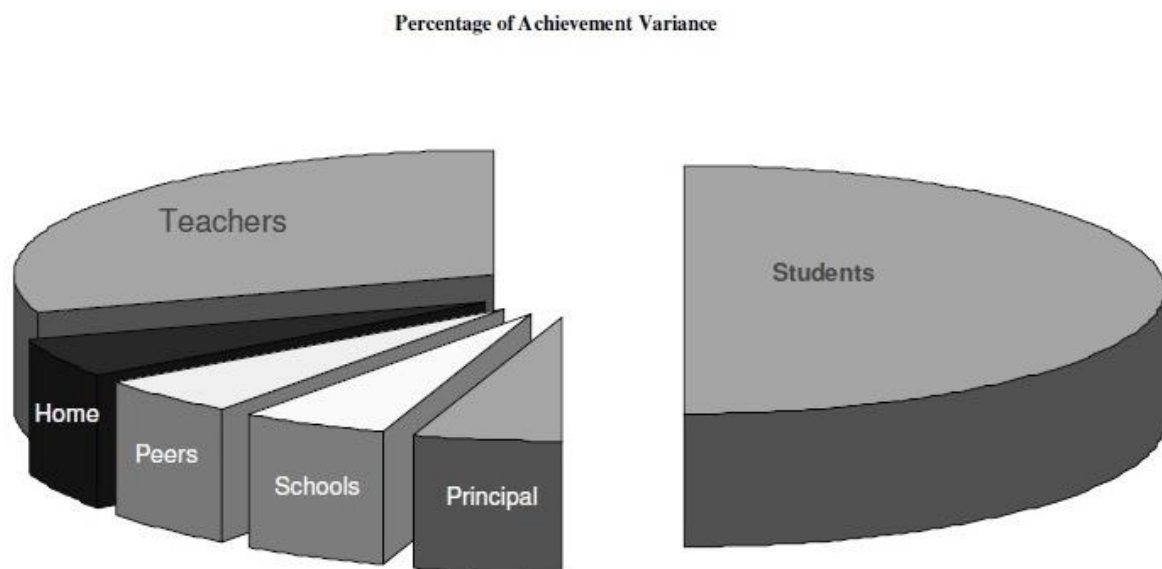
Research based on a very extensive report and an empirical validation in US schools conducted in more than 300 classrooms, involving 65 teachers and their students, and also into teachers’ roles in educational success states that almost all things that are done in the name of education have a positive effect on achievement. The author urges however that we move forward from this point and identify those attributes that have a marked and meaningful effect on student learning – not just a positive (aka greater than zero) effect (Hattie 2003 3-4.). For this reason the research was aimed at identifying the features of excellent teachers who scored higher on the National Board for

¹² Crain-Dorough, M. L., (2003): *A study of dropout characteristics and school-level effects on dropout prevention, Dissertation, USA*

Professional Teaching Standards (NBPTS) tests of excellence amongst teachers. To have a complete picture about excellence in schools, researchers involved students and conducted interviews both before and after the lesson observations with both target groups. Besides interviews, the researchers analysed lesson transcripts, scenarios and conducted student surveys too.

The results led to the creation of a profile with 5 main elements suggesting what makes an excellent teacher, namely: they can identify essential ways to teach their subject, they can guide learning through classroom interactions, they can monitor learning and provide feedback, they can show affective attributes, and they can influence student outcomes. These all are important factors in keeping students on track. The author concluded as well that teachers have a much greater effect on students' learning outcomes than any other thing, excluding the student's personality itself (see 6. Figure).

6. Figure The percentage of achievement variance explained by teachers' role in USA



Source: Hattie, J. 2003 3.

The researcher does not state that all 'non-excellent' teachers are ineffective, however, it claims that in this profession excellence is sometimes hidden and that some good teachers may, humbly, wish to hide their effectiveness, as may also be seen with some other professionals e.g. doctors or lawyers (for more details about the research see 6.-7. Appendix).

Beyond teaching excellence, a teacher's attitude towards students is also important in the learning process. In a Quebec research by Potvin et. al. the aim was to explore teachers' attitudes toward students' at risk: whether they had a different attitude and if that changed over time.¹³ During the 3 year long longitudinal research process, they observed a sample of 800 students in secondary school (12 and 13 years old). 292 teachers (140 women and 152 men) also participated in the study. They used two devices to measure teachers' attitudes and students' at-risk status. The TATS (Teachers'

¹³ Potvin, P., Fortin L., Marcotte, D., Royer, É., Doré-Côté, A. (2001): *Teachers' attitude toward students at risk of school dropout: a longitudinal study*. Presentation, International Association of Special Education Seventh Biennial International Conference Making a World of Difference Warsaw, Poland.

Attitude Toward their Students scale) was composed of 18 bipolar adjectives, each of which could be awarded a value between -3 and +3 ($\times 18 = -54$ to $+54$). The student questionnaire was used to identify individuals potentially at risk of school dropping out. The questions covered family and personal related issues, educational plans and school customs, teacher-student relationship and motivation for school. The higher the score in this test, the higher the risk for the student to drop out of school.

The study concluded as follows:

- Overall, teacher attitudes are positive toward 90% of the students and currently seem to have no up or down trend.
- In general, female teachers have more positive attitudes than male teachers.
- Attitudes are more positive toward female students than male students and towards at-less-risk students than towards at-risk students.
- The more at-risk the students were, the less positive were the teacher attitudes.

These results are in line with the notion that at risk students are not at all in a favourable situation in schools (Potvin et. al. 2001 24.). Interestingly, the study suggests that teachers have different attitudes towards students who fail for different reasons, also proved by another USA study presented in the Iver report. Those who fail due to a perceived lack of effort are in a better position considering teachers' reactions. Students who fail due to a perceived lack of ability or other mitigating circumstances got less attention and support as teachers feel less responsibility and show "less inclination to intervene and more inclination to give failing final marks in response to lack of effort." (Iver, M. A., Mac Iver, D. J. 2009 6.).

In the Potvin study teachers' attitudes turned out to be the second most important variable after depression in students' dropout likelihood. Quebec researchers put the emphasis on the support of teachers to be aware of their attitudes toward at-risk students and to identify and help those who show signs of depression or lower motivation. The same research analysed school 'climates' as well, this having a great effect on students' motivation towards school and it seems also to be based on a good quality relationship between teacher and student. When students feel good in the school, they are more engaged and tend to perform better. A key element is "meaningful social interactions" between students and teachers which has a positive influence on learning outcomes too.

In another Quebec study by Fortin et. al. teachers' attitudes towards the different subgroups were observed as well. The aim of the research was to make a more diverse and more complex typology of students at risk as, according to the researchers, previously some affected groups may not have been included. The sample they used contained 810 12-13 year-old students (7 graders), about 50:50 regarding genders. The students were observed in four different schools in Quebec. 317 students were at risk of dropping out while 493 were not, according to the Décisions screening test. The researchers considered the socio-economic status of students as follows: the proportion of mothers without a diploma was weighted as two thirds of the index, and the proportion of families in which neither parent worked full time was weighted one third of the index. One important conclusion of the report was that depressive type students were not so much in the focus of teachers as may have been expected, so that they were perhaps missing from the dropout risk typology as they normally cause no "problem", and this refers directly to behaviour issues in the classroom. In the meanwhile

these students usually face serious family or personal problems and, arguably, need urgent support.¹⁴

¹⁴ Fortin, L., Marcotte, D., Potvin, P., Royer, E., & Joly, J. (2005): Typology of Students at Risk of Dropping out of School: Description by personal, family and school factors. *European Journal of Psychology of Educatio*. XXI. 4.

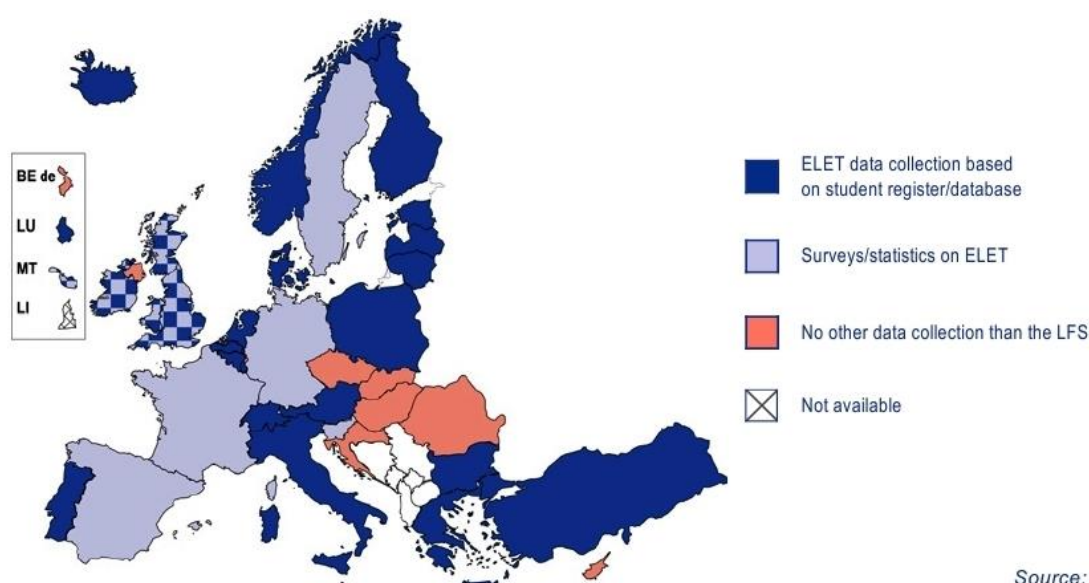
IV. Data collection to tackle early leaving from places of education and training

In the framework of CROCOOS project several methods and devices will be tested in schools in pilot countries followed up closely by evaluation activity. The aim of the next two chapters is to summarize internationally used ideas concerning data gathering and exploitation furthermore features that seem to be indicative for a risk of dropping out. A wide range of data can be seen as connected to early leaving from education and training. Quantitative and qualitative data has to be considered too as ELET is a process and has a lot to do with the individual's actual circumstances. With a preventive approach one has to be aware of the early distress signals derived from either personal, family-related, institutional or social causes.

Data-collection in Europe

As was already mentioned above, national definitions of early leaving are closely linked to the data collection tools used to measure the scale of the problem in a country (See 7. Figure).

7. Figure Sources used for production of national data on early leaving, other than Eurostat LFS, 2013/2014



Source: Eurydice.

Explanatory note

Data on ELET from student registers or student databases is collected automatically from school administration systems based on students' personal data, and they can be used for an ad hoc assessment of the scope of ELET at different public authority levels. Quantitative and qualitative studies or surveys are other tools being used that can contribute to a better understanding of the correlations and reasons for ELET.

Country specific note

Czech Republic: Although there is no other regular data collection on ELET than the LFS, the National Institute for Education (NÚV) has previously carried out surveys on an ad-hoc basis providing, amongst other data, facts and contextual information on drop-outs from education (especially from VET).

Source: Eurydice-CEDEFOP 2014 28.

European countries can be divided into two groups: one using only Eurostat data for their own analysis and the other group uses specific, country-related data collection methods and devices to

map their own system(s). Country-related data collection can either mean surveys and the collection of statistics about early leavers and also complex student registers. Most countries have a complex student database in which data specifically about early leavers are also collected. Many have a practice of conducting regular surveys mapping the current situations respectively. “In Malta and the United Kingdom (Scotland), for example, surveys are carried out to gather data about early leavers from places of education and training after compulsory education or after they have left the education system. (...), in the Czech Republic, Portugal and Romania surveys providing contextual information on early leaving and/or on the reasons for dropping out of school are carried out on an ad hoc basis.” (Eurydice-CEDEFOP 2014 29.). Furthermore, in some countries data collection happens at the level of individual training providers.

The uncertainty in the meaning and interpretation of collected data was already highlighted in Chapter II. And this is in terms of the understanding of dropping out as the non-retention or non-completion of a course or the mobility of students. According to reports, the monitoring of an individual trajectory in Europe happens only in Denmark, France and the Netherlands. Consequently, in other countries students either changing from course to course or them interrupting their schooling but continuing later can also be counted as them dropping out.

The type of data

According to the final report of the Thematic Working Group on Early School Leaving¹⁵ there are some essential elements of any data collection on ELET while much data is only collected by a small number of countries. Concerning ELET there seems to be a broad consensus on the following data being desirable to collect at national level:

Personal related data

- Age
- Gender
- Socio-economic background
- Education level of parents
- Citizenship/nationality
- Native/non-native origin
- Mother tongue
- Location of residence

School related data

- Accademic grade retention
- Absenteeism
- Educational track
- Student achievement
- Special needs
- Other

¹⁵ European Commission (2013): *Early warning systems in Europe: practice, methods and lessons*. Thematic Working Group on Early School Leaving (TWG on ESL), Brussels.

There are some exceptions from these general data gathering systems too, such as in Ireland for instance, where data on students' age is not collected. Information gathering about the student's family and social background always finds itself faced with the question of privacy and possible misuse: where are the limits of privacy? How can experts help a student with only limited access to data and information about the young person's past? How can a system avoid situations where a student's data is exposed to misuse? These questions arise in every country, however their relevance is different according to the cultural roots and expectations about data usage in the specific place. Accessibility of data is also a crucial question in inter-sectoral cooperation for individual cases. According to study visits and experts' experience, the law typically lets professionals share some individual data in cases of an issue that has to be solved in cooperation, however, many times this does not happen due to the fear of bureaucratic/other legal consequences or to insufficient relations between the parties – and this happens in many countries. Since 1993 certain sensitive data is not even allowed to be collected in some countries such as some issues pertaining to the Roma ethnic minority and individuals' backgrounds in Hungary. There is a continuous debate over this though, as some claim that ESL intervention could be better targeted in the presence of fully useful information. In Austria, for instance, no social background variables are collected as part of student records, besides gender and mother tongue, because of concerns over data protection. In Germany, data on students' socio-economic backgrounds and living areas are not available above the level of the respective province. In Poland, the Education Information System currently in place allows only for the collection of data in aggregated form, i.e. reflecting the total number of students in each category (Eurydice-CEDEFOP 2014 32.).

Some countries gather special additional data such as the highest degree or diploma obtained or, as in Sweden, the attainment of an upper secondary level qualification. "In the United Kingdom (Scotland), information about additional support to students is included in the ELET data collection, such as being looked after (by local authorities), free school meals and the deprivation index. In Finland, other elements of the ELET data collection include information about students' subject choices; in Greece, it concerns students' subjects and grades; and in Bulgaria and Malta, information about the geographical location of the school is gathered. In Malta, there is additionally information about the educational sectors (state, church or independent schools) that students attend as well as their use of school transport available" (Eurydice-CEDEFOP 2014 31.).

In some special cases data is collected on apprenticeships, especially in Germany and Austria.

Use of data

Countries use their data either to support individuals and/or to monitor and evaluate their education systems as a whole or to gather administrative information about a certain relevant financial situation. Most countries reported that they use data for policy making concerning ELET while only a few of them then provide targeted information (relevant to ESL) to schools. Some answered that they collect individual data specifically to support individuals better (Eurydice-CEDEFOP 2014 29.).

In most countries LFS data is collected by the national statistical bureaus. Other data is provided by schools to the top level educational authority, which then supervises the collection, analysis and final publication. In some cases middle level offices also taking part in data collection at regional or local level, or sometimes data collection responsibilities are distributed between local and top level offices.

Data collection can happen once a year, twice a year, quarterly or monthly. The lower the level of collection, the wider the scale of aggregation. In some cases data analysis happens once a year but school level data collection happens monthly for certain topics, for example about absenteeism. In the majority of European countries, data collected for ELET purposes is made publicly available (Eurydice-CEDEFOP 2014 34.).

Exploitation of existing data is another important, however seldom highlighted issue: in many cases states and offices collect dozens of information items per individual using only a small part of it for the amelioration or improvement of the system. In Hungary, for example, current analyses¹⁶ shows that by the connection of already existing social/education-related data base data, the analysis of even disparate data could result in an improved early warning system. Furthermore, educational data could be connected to other sectors such as employment data about adult learners; also health data as linked to individuals by the health identification number to analyse dropouts' health circumstances. Also both social system data and even settlement data could be analysed to have a much deeper insight into the social background of these students, also, geographically, for the mapping of locality related reasons and consequences.

Tangible examples of direct feedback for school derived from data gathering have been published in the USA. According to the Iver report (*see III. Chapter.*) collected data is often used directly as an input for teachers' work in the US. "Classroom teachers receive a report, generated from data collected by schools, summarizing information for all of their students. The report includes data on each student's:

- Attendance (prior year attendance, attendance so far this year)
- Behavior (number of negative behavior comments on the report card for the prior quarter)
- Course failure (math grades for the prior two quarters, literacy grades for the prior two quarters)
- Reading level and math and reading proficiency scores (from the most recently available information)" (Iver, M. A., Mac Iver, D. J. 2009 18.).

Another crucial example of direct data exploitation is the Talent Development Program at Johns Hopkins University, the Philadelphia Education Fund, and the School District of Philadelphia. In this model, teachers and administrators are alerted directly as soon as students begin to demonstrate risky behaviour. For this process they rely on the following data:

- Data on early warning indicators (every student's attendance, behavior, course failure, reading level, and math and reading proficiency scores)
- Meetings of school staff teams to discuss students, plan, and update interventions for students with early warning indicators
- A "second team of adults" to assist with interventions for at-risk students (Iver, M. A., Mac Iver, D. J. 2009 2.).

Having an insight into European and overseas examples, it seems generally desirable to have some kind of a data base containing students' behaviour and social circumstance data, however many problems still remain unsolved. The best exploitation of data for instance faces data protection,

¹⁶ Salomvári György (2014): *A lemorzsolódás kutatás módszertani lehetőségeinek feltérképezése a köznevelési információs rendszer nyilvántartásai alapján*. Elemző tanulmány, Oktatókutatató és fejlesztő Intézet, Budapest.

abuse and security issues. Positively speaking, many good examples of good data exploitation exist, and these practices can be advantageous for countries with less experiences. One of the most important conclusions is that any kind of data gathering and the usage of this information has to adapt to the local situation and in terms of those who work in the specific system.

V. Early distress signals of possible dropout

Despite the fact that many studies reliably report features that predict the possibility of later dropping out, distress signals are partially a matter of approach. These signs show up when a student is at risk, though, the actual dropping out typically happens only in cases of a set of simultaneous events (see 8. Figure as an illustration for this complex process). This does not mean that the particular warning sign makes it inevitable that ESL will occur. Being at risk means that the student has a problem about which he or she cannot turn to anyone. If it was the opposite way around, the student would not be a dropout simply because of the presence of the difficulties. Basically, distress signals are arguably those features that cannot be dealt within current educational system.

8. Figure Factors of disengagement

School Factors	Curriculum Factors	Family factors	Individual Factors
Teachers lack skills to work with disengaged students	Perceived irrelevance of curriculum	Education not valued – limited support to remain in school	Issues with self-esteem, confidence, social skills, coping skills and resilience
Lack of training opportunities for teachers	Prescribed academic curriculum	Absence condoned by parents	Negative experience of school including discrimination, academic failure and transfers to lower level of education
Lack of educational resources and support staff	Lock in to inappropriate vocational/academic courses	Household problems, processes and dynamics	Relationships with peers: <ul style="list-style-type: none"> • Outsider/loner/bullying • Friends beyond school attracting out of school • Alpha female/male – high degree of autonomy, behaviour problems and actively influencing others' disengagement • Colluder/disputant – non-attendance influenced by truanting peers
School admission policies	Reduction in pastoral time as a result of curriculum pressure	Contradictory social, behavioural and cultural expectations	
Lack of supportive pastoral systems	Inappropriate pedagogy – focus on curriculum content rather than learners	Expectations of assumption of adult roles and caring responsibilities	
Insufficient career advice and guidance	Incompatible learner and school norms		
Teacher/pupil relationships	Lack of alternative education provision with formalised accreditation		Lack of academic ability, special educational needs and difficulties in coping with traditional assessment procedures
Low status of vocational education			Boredom, alienation, discouragement, Health problems including mental, health problems leading to absence and substance misuse

Adapted from Ferguson et al, 2005, Kendall and Kinder, 2005 and ReStart, 2007

Source: NESSE 2010 26.

What signals can be identified?

In an earlier phase of the research an interim report was provided with a focus on the countries (Poland, Berlin, Germany, Lithuania, Sweden, UK, Ireland) that were suggested for a study visit. The report is based on desk research which presents these countries' practices when handling the most relevant early distress signals. These signals were identified by the Thematic Working Group Report¹⁷ and additionally validated by the expert group of the CROCOOS project. Inevitably this involved a narrowing approach with the intention of focussing on cases that could be easily observed in schools during the short period of observation time. Furthermore the aim was to find the cases where good-practice solutions may have been documented already, so as to use these examples in the improvement of the toolkit for the pilot project. Nevertheless it is a crucial element of the project to build on the already successful local methods and focus on the locally important problems.

These signals are:

- I. **Signals connected to official standards**
 1. Absenteeism
 2. Decreasing achievement
 3. School year repetition (*note: depends on the system of each country*)
- II. **Signals connected to behaviour**
 4. Being bored in the classroom (low motivation)
 5. Drastic behavioural changes (aggression, introversion, rhapsodic behaviour)
 6. Bullying (both sides)

The main outcome of the interim research was that an early warning system can be part of the mainstream or a separate system, and there is no country where a totally complex system exists. However, there were some very tangible examples given for tackling ELET in the observed countries. Another wider conclusion is that these signals seem to be very international, even beyond Europe. A USA researcher even claimed that an early warning system can be predictably built on only the three following features: Math course grades, English Language Art course grades, and attendance rate (Uekawa, K. 2010). Although they take into account local differences and particularities, the main signals of early school leaving seem pretty predictable.

Some signals in details

Absenteeism, considered unjustifiably as a very important signal as it is very easy to be followed up and identified so that policy level measures are easier to be built on this than on other, more complex or less tangible features. It is an overall well monitored and strictly followed up measure as well. Furthermore, the national regulatory environment usually has a detailed section about the consequences of non-attendance which many times links to financial issues too. An American research project offered really elaborated results about school absences not only in cumulative terms but about the time/occasions when it happens. It stated that first year rates of absenteeism

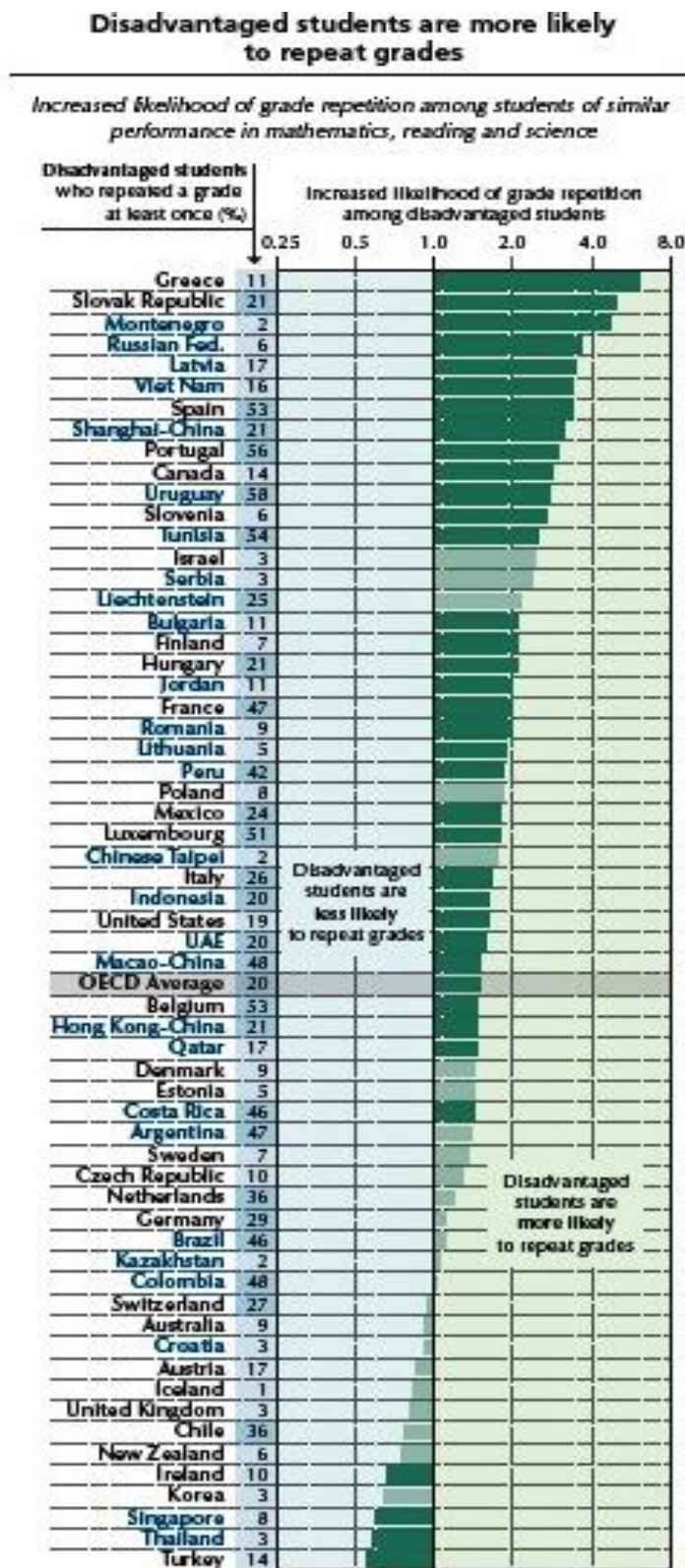
¹⁷ Reducing early school leaving: Key messages and policy support Final Report of the Thematic Working Group on Early School Leaving November 2013

are highly predictive for later school completion. According to its evidence only 1 or 2 weeks of absence during the first semester of high school are associated with lower rates of graduation (Allensworth & Easton, 2007). It even goes into more detail, claiming that the number of absences during the first 30 days of high school is one of the most indicative signals of ESL (Heppen, J. B., Bowles Therriault, S. 2008 3.).

Low levels of **grade retention** for example seem to be an important yardstick for analysing students' motivation or at least how they can maintain motivation. This is perhaps more indicative in some countries, not in all of them though. This point's importance is backed up by other studies as well: "A systematic review of seventeen studies examining factors associated with dropping out of secondary school prior to graduation confirms that grade retention is, in fact, a significant predictor of school dropout (Jimerson, Anderson, and Whipple, 2002). It is perceived by students as an extremely stressful life-event, which negatively affects their self-esteem (Anderson, Jimerson and Whipple, 2005) and thus increases school failure, high-risk behaviour and the likelihood of leaving early (Field, Kuczera and Pont, 2007; Rumberger and Lim, 2008)" (Eurydice-CEDEFOP 2014 43.). Grade repetition is as well problematic, as practically it is used as a form of punishment instead of a supportive method to help slower students.¹⁸ "According to results from PISA 2012, 12% of 15-year-old students across OECD countries reported that they had repeated a grade at least once during their compulsory schooling: 7% of students had repeated a grade at least once in primary school, 6% of students had repeated a grade at least once in lower secondary school, and 2% of students had already repeated an upper secondary grade, even though 15-year-olds have generally just begun their upper secondary education. Grade repetition is a costly way of handling underachievement: retained students are more likely to drop out, or to stay longer in the school system and spend less time in the labour force. As a result, some countries that had used grade repetition extensively have rejected that policy in favour of more intensive early support for struggling students. Grade repetition offers no clear benefit to the overall performance of a school system; and because, as PISA results show, socio-economically disadvantaged students are more likely than advantaged students to repeat a grade (20% of them, while 7% of advantaged), grade repetition may also reinforce inequities in the system" (PISA in Focus 2014/09; see 9. Figure).

¹⁸ PISA in Focus (2014/09): *Are disadvantaged students more likely to repeat grades?*
<http://www.oecd.org/pisa/pisaproducts/pisainfocus/pisa-in-focus-n43-%28eng%29-final.pdf>

9. Figure Disadvantaged students and grade repetition measures



Source: PISA in Focus 2014/09

The taking of **longer general paths** in education occurs in various countries with different implications and in different ways. This – the nine-year-long general education model – produced significant amelioration in the Polish system between 2000-2006 (Joksimovic, J., Juhasz, J., Mihalyi, K., Tomcsik, D. 2014 6.), and the path is even 10 years in Lithuania and the case in Germany is relevant too, as the real path choice there has to happen at the end of 10th grade. However, the ‘one year longer’ system alone is not a proper solution: the transformation has to happen as part of a curricular and structure reform. In Poland for instance, there is a 6-3-3 year system where each level has its own input and output criteria and evaluation. They have restructured curricula as well and adopted different approaches around them.

Career orientation is a crucial element of a good career choice. It is proved that in many cases wrong choices lead to dropping out. In Germany, for instance this system can happen with the strong involvement of companies and this more typically make students’ experiences really tangible and relevant. In the Netherlands help is offered when a student has difficulties and plans to change apprenticeship/study direction. Much empirical research backs up the importance of good guidance, even research which has been conducted among students themselves.

In the UK, English as a second language has been proven to be a strong predictive factor, so that **language support for migrants** is just as important as in any country with various minorities. Outcomes in the national language and literature subjects are under all conditions also a strong predicting factor. This has been proved by many European and non- European studies as well. Results in Math seem also to be indicative to some extent.

There are severe programs against **bullying**, e.g. one started in Sweden providing a model for every other country. “According to a research carried out by Theme Group Youth in 2012 the foremost reason for dropping-out from school is bullying.” (Joksimovic, J., Juhasz, J., Mihalyi, K., Tomcsik, D. 2014 42.). They started serious research on this theme in 2009 and prepared methods to tackle this behaviour differently for girls and boys, involving the whole school community, building on the central participation of students themselves too. It has a lot to do with school climates which of course have an effect on many other aspects of life in school.

The presence of **other specialists**, such as school psychologists or counsellors, peer helpers or teachers for special educational needs, means meaningful support for teachers in handling specific students.

The age limit of **compulsory education** seems to suggest: the longer the better; however, it does not necessarily mean students should plod on through school until 18. In the UK for instance, it can either mean participation in an apprenticeship programme or full time work with part time education or training programmes on the side.

In Ireland and in the UK there is a separate system almost like a comprehensive early warning system. They have a **special board** dedicated to monitoring, for example, student absenteeism and schools have to prepare yearly reports about this issue. In the English model there is RONI – a risk of NEET indicator - following the characteristics of post-16 drop outs focussing on current 9th, 10th graders.

About **boredom or low motivation** in school, not so many reports or written materials can be found for the examined countries. The Irish model is rather interesting as they officially also observe the

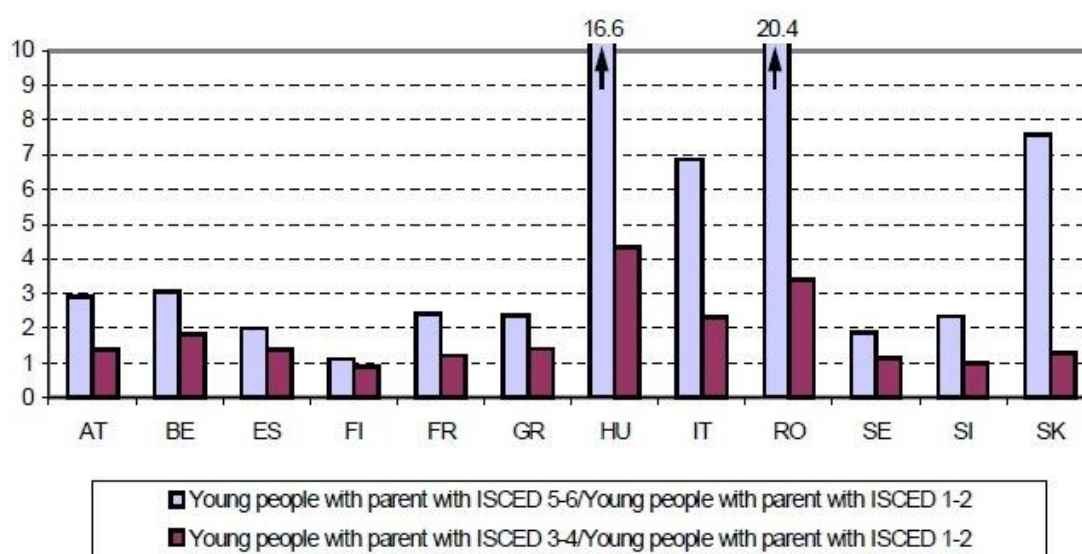
following as a signal of at risk: “Unwillingness to go to school, refusal to attend, truancy, deterioration in educational performance, loss of concentration and loss of enthusiasm and interest in school are all recognized as signals for student who is bullied and in possible risk of ESL” (Joksimovic, J., Juhasz, J., Mihalyi, K., Tomcsik, D. 2014 27.). According to our research, these sorts of softer signal are still less widely recognized in Europe. In the USA and Canada, however, there has been longitudinal researches going on for decades about the psychological aspects of dropping out.¹⁹

Naturally there are plenty of other early signals that can be indicative of the possibility of later ESL, so that in the second part of the research we have also focussed on these additional signals.

Other signals and reasons for ESL

Most of the signals are not even behavioural or attainment related but are “brought from home”. For instance, parents’ educational levels have a very important impact on their childrens’ future chances, proved besides many others by Iannelli’s study which observed country differences from this perspective. The author based the conclusions on twelve country examples using EU LFS 2000 ad hoc module data about school-to-work transitions. The relative advantage of having parents with upper-secondary or tertiary education in reducing the chances of ESL is strongest in the Eastern European countries (with the exception of Slovenia) and least significant in the Nordic countries (particularly in Sweden and Finland) (see 10. Figure) (Iannelli 2002 10.).

10. Figure Odd ratios of graduating from tertiary education by educational level of parents

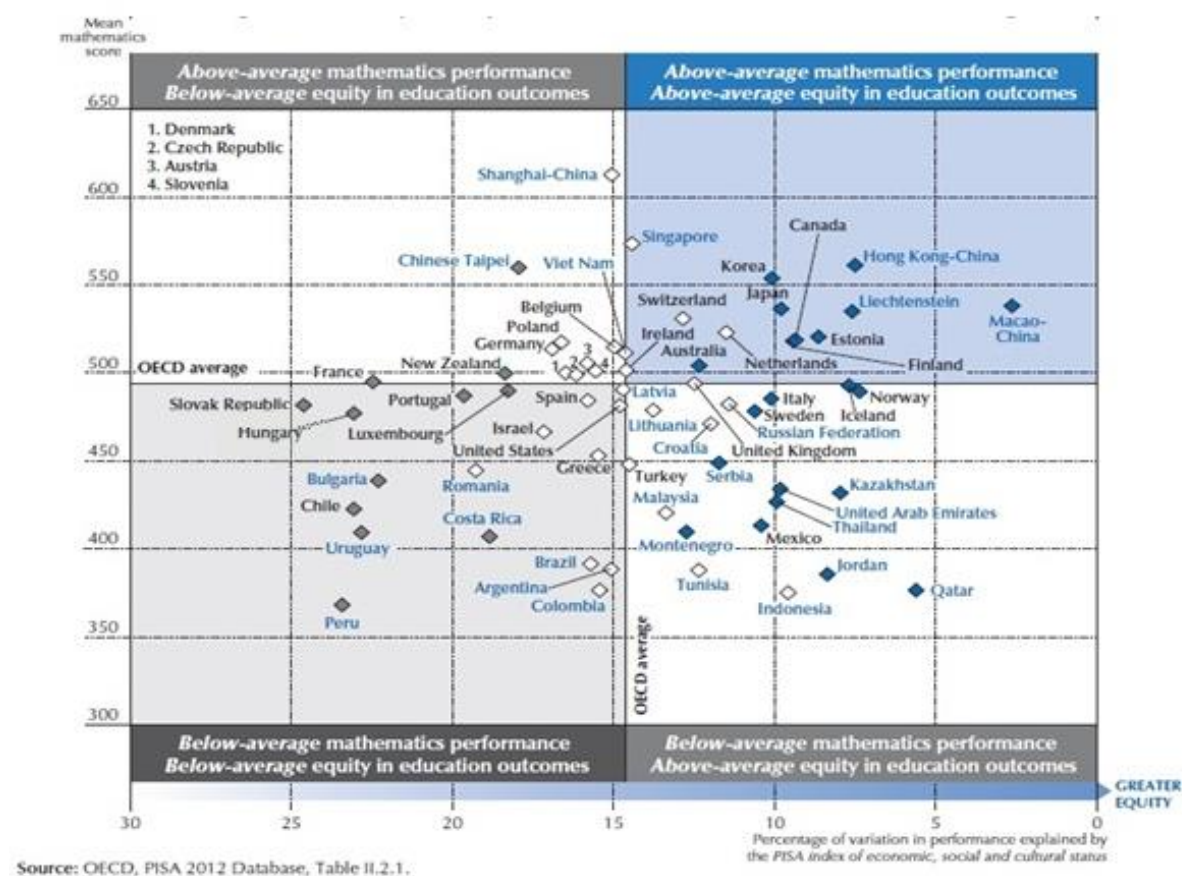


Source: Iannelli 2002 12.

¹⁹ I.e. Crain-Dorough, M. L., (2003): A study of dropout characteristics and school-level effects on dropout prevention, Dissertation, USA. Potvin, P., Marcotte, D., Fortin L., Royer, É., Leclerc, D., Blondin, D. (2002): A comparison of dropout students, at risk students and regular high school students, Université du Québec à Trois-Rivières, Trois-Rivières, Canada; Université de Sherbrooke, Sherbrooke, Canada; Université Laval, Québec, Canada; Université du Québec à Montréal, Montréal, Canada, 63rd Annual Convention of the Canadian Psychological Association University of British Columbia, Vancouver.

Education should, however, compensate and cater to these disadvantages derived from the socio-economic background instead of encouraging or even strengthening social inequalities. According to an OECD research project, some countries are far from having an equalizing system (see 11. Figure).

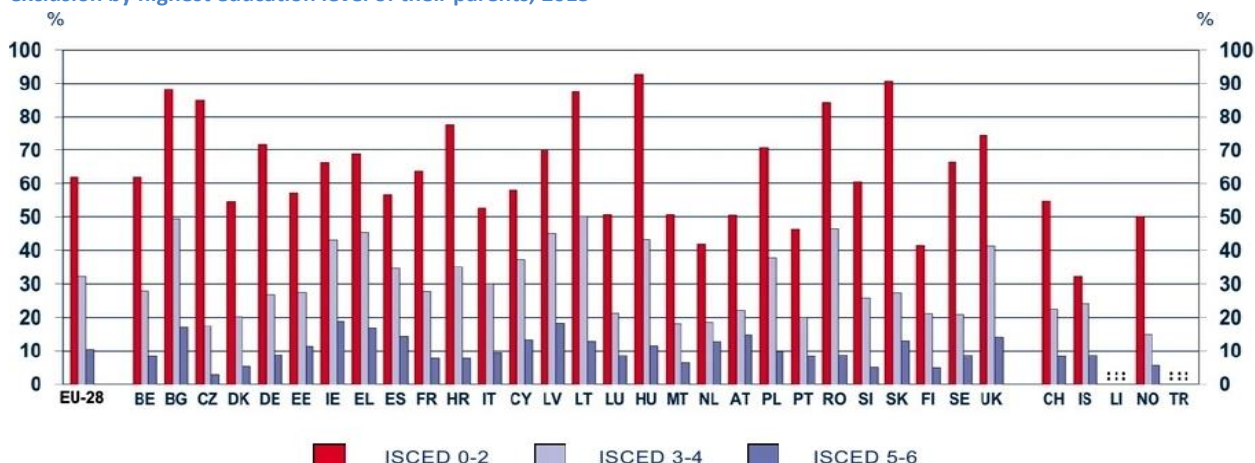
11. Figure The correlation of socio-economic status and performance in school, OECD, 2012



Much EU level and national research has proved that **socio-economic status (SES)** has a determining effect on early dropping out, specifically students with **early school leaver parents and unemployed parents** are at greater risk (e.g. Eurydice-CEDEFOP 2014; see 12. Figure). The level of **education of the mother**, in particular, is associated with higher risk (Nevala et al. 2011). This finding has also been confirmed by a study carried out in Croatia (Eurydice-CEDEFOP; 2014 36. quote: Feric et al. 2010).

12. Figure Percentage of children aged 0-17 at risk of poverty or social

exclusion by highest education level of their parents, 2013



Source: Eurydice-CEDEFOP 2014 37.

In light of these statistics, **socio-economic status** seems to be the most important predictive factor above all considering features students derive from their homelife. Besides that, having a **migrant origin or a minority background** with language and/or cultural difficulties is a risk factor, especially for males (**gender**) - they are twice as much at risk as females. In the EU, 16.9% of boys are early school leavers compared to 12.7% of girls. In all countries with the exception of Bulgaria and Romania, boys are significantly more likely to be early school leavers than girls. At the same time, reductions in rates of ESL have been faster for girls than for boys (NESSE 2010 15.).

Even so, migrant status and gender has no effect alone, except for case of socio-economically low level status. Some school related factors seem to be indicative as well, such as **grade repetition**, **early tracking** and **socio-economic segregation of schools**. By contrast, a good quality **early childhood education and care** (ECEC) has a preventive effect. According to PIRLS²⁰ 2011, the more time a child spends in ECEC, the better their reading results will be (Mullis et al. 2012; European Commission/EACEA/Eurydice 2014 47.) Additionally, a smooth transition from lower secondary to upper secondary level can save many from becoming an early leaver. **Flexible pathways and transition support system** are also both important factors in reducing dropping out related to wrong career choices. Numerous interviewees discussed issues related to students' inadequate orientation as being one of the reasons for dropping out (Eurydice-CEDEFOP 2014 114.).

Local labour markets also play an important role in the whole process with its complex push and pull factor. However, students in younger age groups usually do not consider their future job perspectives, rather their current feelings and well-being in a certain school.

Data collection on different levels in light of US research

²⁰ "For the past 15 years PIRLS (Progress in International Reading Literacy Study) has measured trends in reading comprehension at the fourth grade. First assessed in 2001, PIRLS has been on a regular 5-year cycle since then. Most recently, PIRLS was expanded in 2011 to include prePIRLS, which is a less difficult version of PIRLS." <http://timssandpirls.bc.edu/pirls2016/framework.html>

“Schools that place too much emphasis on achievement alone as a means of being “effective” may alienate their lower achieving students or force them out of school” (Crain-Dorough, M. L., 2003 10. quote: Wehlage & Rutter 1986).²¹

A company in the USA has examined the most important distress signals in Louisville schools as part of a pilot project of their innovative early warning system.²² They identified absenteeism, academic achievement, grade repetition, gender, programme, specific school, withdrawal codes and, positively, special enrollment in a programme between schools and local employers for students at risk. Ultimately, they identified that transition between different school programmes is the most risky period so that flexibility and career advisory are important elements for supporting and guiding students.

In the USA dropping out has been in the public conscience since the 1980s.²³ Many insightful typologies, risk factors and successful interventions have since been revealed as part of an evolution of ideas, building on each other's results. There was an interesting category suggested by Kronick and Hargis (1998), the 'in school dropouts', those who travel along the whole education path but fail the final examination.

Goldschmidt and Wang (1999) identified a sibling who dropped out as an additional risk factor to the common list of indicators. They also observed that most early leavers have a C level achievement, which means that **not only the very low performers drop out**.

In the Louisiana pilot, grade repetition and (hence) being older than classmates tended towards indicating dropping out; above ethnicity, poverty and all other aspects so that the suggested preventive methodology should also focus on these two.

Potvin et. al. in 2002 presented their results building on the outcomes of empirical research when they identified the most indicative features that distinguish at risk and already dropout students from regular ones. They worked on a 275 element sample for 5 years. Participants were 8th, 10th and-12th graders. Three groups were formulated from regular students, students that had been considered at risk and also those who had already dropped out. They used the already mentioned Décisions test (see Chapter 3) to identify/set up each group and then made a comparison of each group members' chances at school, family and personal levels.

They took into account various variables related to personal life, family and school. They drew these conclusions on different levels:

Personal variables

- Depression – seeking support, positive reappraisal, avoidance – behavioural disorder (externalization, internalization) - delinquency.
- At risk students perform better than dropout students at Mathematics and French.

²¹ Crain-Dorough, M. L., (2003): *A study of dropout characteristics and school-level effects on dropout prevention*, Dissertation, USA

²² Adaptive Technologies Inc. (2008): *Using Predictive Modeling to Improve High School Dropout Prevention*. White paper, USA.

²³ Crain-Dorough, M. L., (2003): *A study of dropout characteristics and school-level effects on dropout prevention*, Dissertation, USA.

- Depression, avoidance, marks in French and Mathematics decreased, while delinquency increased through grades 8, 10 and 12.

Family variables

- Parental style for regular students differs from at risk and dropout students on warmth/acceptance – parent/teen communication – affective support.
- Family climate for regular students differs from at risk and dropout in terms of cohesion – conflict – order and organization.
- Family conflict scores are higher for at risk and dropout students than for regular students.
- Parental warmth, affective support and communication with their teens, family's cohesion, but also: conflict and order/organization changed over the period.

School variables

- Regular students show higher scores for involvement – affiliation- teacher support – order and organization and rule clarity than at risk and dropout students.
- Teacher-student relationship were valued most positively by regular students, with moderate but significant scores from at risk students and particularly low scores for dropout students.
- Perception of teacher support and rule clarity changed over the high school period, while teachers' attitudes became increasingly negative as students got older (particularly for dropout students).

(Potvin, P. et al 2002 13-15.)

This study is especially rich concerning softer personal and family related features that might lie behind a student's dropout decision. From a CROCOOS project perspective these very concrete symptoms and indicators seem to be worth considering as the pilot project environment in schools with small group of students and teachers means a solid base for observation.

Less widely observed distress signals

The already mentioned (see Chapter 3) three-phase Crain-Dorough research in the US with the 4 school categories by dropout probability has provided comprehensive analysis of the personal and psychological aspects of being at risk of dropping out.²⁴ An interesting finding was the role of the so called *locus of control* (defined by Rotter in 1966) which "is the extent to which an individual perceives that an event occurs due to one's own actions (internal locus of control) or due to (bad) luck or chance (external locus of control)" (Crain-Dorough, M. L. 2003 34.). Other researchers have identified that issue as a significant predictor of academic success. Those who put this locus outside themselves show a higher tendency to leave school early.

Self-perception is also an important factor as this can become more positive within individuals after dropping out of school when the environment outside of school provides more opportunities for

²⁴ Ibid.

status attainment than the school. This has a huge significance in terms of the decision not to come to school any more.

Feelings of alienation and cultural mistrust also arise among students and this can be assisted via counselling programs or career orientation with the involvement of employers.

Another interesting finding of US research related to cigarette smoking. Using *cigarettes* during the seventh grade indicated higher dropout likelihood even after we adjust the figures demographically, i.e. for family structure, academic orientation, early deviance, and school environment for Asians, African-Americans, and Whites, but not for Hispanics. For Hispanics, early marijuana use points more to dropping out of school rather than tobacco use. These much elaborated results can serve as a checklist for teachers; however, it cannot replace individual care and attention.

A surprising female-focussed result came out of research considering *pregnancy*. According to researchers' data adolescent childbearing seems to have no effect on dropping out of high school in the US when underlying socioeconomic factors are taken into account.

Nevertheless ELET is not the exclusive problem of children in poverty. American experts use the expression *Non-traditional dropouts* for those middle-class students facing serious problems other than poverty. At-risk students from this category usually show serious behavioural disorders, they may face family dysfunction, and many have psychiatric disturbance, family patterns of substance and child abuse, and family breakup, also abuse disorders, conduct disorders, and adjustment disorders – as was observed by teachers and professionals.

James J. Heckman²⁵ observed the issue of dropping out from another perspective, analysing data about cognitive and non-cognitive skills. He found that the cognitive skill (test) results of dropout and non-dropout students were the same; however their *social skills* were much weaker. He stated that, even with statistical control/weighting, for their skill results Afro-American and Hispanic students, even in poverty, had a higher chance of getting into college than Native Americans, despite the fact that altogether they are below-represented in higher education. And this strengthens the notion that social skills are much more important than one might consider. It even has a lot to do with results on cognitive tests considering motivation or well-being as factors.

Which is the biggest group of students at risk?

Fortin and colleagues (already presented in Chapter 3) made a typology²⁶ of dropout students based on the three main sources of being at risk: personal issues, family or school related. Fortin et al. (2005) showed that seven factors were the best predictors of a student's dropout status: depression effects, low family cohesion and organisation, low student involvement in school, negative teachers' attitudes, and poor performance in Mathematics and French. The researchers' studies added credence to the main signals already detailed above; but they also added new perspectives by taking a wider view. For example, students who do not value academic success or adhere to school values, or have high anxiety or depression are also at risk and should be supported. These researchers

²⁵ J. J. Heckman (2010): The Economics of Investing in Children. Keynote address at the Center for Child and Family Policy's tenth anniversary event, March 29, 2010. <https://www.youtube.com/watch?v=RtaQ5PmJmS8>

²⁶ Fortin, L., Marcotte, D., Potvin, P., Royer, E., & Joly, J. (2005): Typology of Students at Risk of Dropping out of School: Description by personal, family and school factors. *European Journal of Psychology of Education*. XXI. 4. 363-383.

believe that family circumstances are strong predictors of later dropping out. Beyond the economic difficulties of a family parental expectations towards the child and their so called poor parenting practices have their consequences as well.

At a school level, they say that the most important factor is teacher-student communication; furthermore, the organization of a classroom and task orientation better stimulated the students' performances. They offered interesting views about school rules i.e. whether they are too extensively in focus, or unclear or inconsistent; all of these could trigger lower achievement and greater risk of dropping out.

In their research they used a 39 question survey conducted among students, and they collected school level data too, specifically Maths and French results, and truancy. Furthermore they analysed behaviour problems, academic results, levels of family functionality, levels of emotional support from parents and the classroom climate. They identified 4 subgroups (The Antisocial Covert Behavior Type, The Uninterested in School Type, The School and Social Adjustment Difficulties Type and The Depressive Type), of which, interestingly, only 2 typically had low academic achievements or particularly problematic behaviour. The other two consisted of those students facing family level problems and special types of behavioural issues such as tendencies to lie or involvement in gangs. More precisely only 1/3rd of at risk students seemed low academic achievers (this backs up the observation of US researchers), **for the other 2/3rd low motivation and being uninterested in school seem to be a much higher risk factor.**

They identified the Uninterested in School type as the biggest subgroup of at risk students, and the most similar to non-at risk ones at the same time. This group is influenced by many factors so that intervention should target them for the sake of the highest chance for reward – researchers suggest.

VI. Professionals and their roles in tackling ELET

All studies agree that multi-sectoral involvement and cooperation at governmental level, both horizontally (different sectors) and vertically (central, regional, local levels) are essential. However, monitoring the effectiveness of this cooperation exists in only a few countries. In the Netherlands and the United Kingdom (Scotland), stakeholder cooperation is systematically monitored and evaluated, while in Finland and Switzerland it is an explicit requirement in policies to reduce early leaving (Eurydice-CEDEFOP 2014 75).

As detailed above, the Recommendations²⁷ proposed a multi-sectoral approach in tackling early leaving from education and training. Education has its natural connection with employment as eventually students will appear on the labour market for what they are hopefully prepared. However, this sequentiality is not always fluent. The Youth Guarantee programme²⁸ has an influence on this sequentiality whereby the cooperation of the two sectors is required. Secondly social affairs have to be strongly connected to education considering that ELET rather effects the socially disadvantaged. Youth and family care systems can support teachers in identifying distress signals and can warn them about possible risks concerning any specific student. Besides this, these professionals have an important role, simply by being an alternative group of adults offering a supportive background when family and school do not do this well enough. The health sector must be involved as well, considering the many health related problems that can lead to dropping out, while malnutrition, eating disorders, mental illnesses and so on have a lot to do with education difficulties too.

Particular professionals have particular roles in the support of students and in the coordination of different stakeholders in order to support young persons at risk. **School headmasters** are crucial not only due to their powerful position in decision making but also due to their roles as role models in connection with disadvantaged students and those with a lower level of attainment. They are also important in establishing and coordinating partnerships and teamwork with other schools and other professionals in connected fields.

In OECD countries we often see different levels of school autonomy regarding decision making in terms of budget, resource allocation, curriculum and cooperation. About 2/3^{ths} of students in all these countries attend schools that have no influence on the salaries of teachers, for instance, as salaries are decided by an authority. However, the possibility to formulate their own curricula and assessment systems depend very much on various local regulations; even in the same country it can vary. Research suggests that greater autonomy does lead to better cooperation among schools, this being proved by examples from Great Britain and China. School leaders often also need support to refine their leadership approach, or to have state of the art administration techniques that ease the workload of teachers. In this sense autonomy contributes to tailor-made cooperation strategies in schools that can really learn from each other in fields of knowledge each other lack.

Teachers naturally are of central importance, having the primary and continuous contact with students, hence they are the ones who are most likely to spot distress signals and to offer an

²⁷ Council Recommendation of 28 June 2011 on policies to reduce early school leaving (Text with EEA relevance) (2011/C 191/01)

[http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011H0701\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011H0701(01)&from=EN)

²⁸ Council Recommendation of 22 April 2013 on establishing a Youth Guarantee.

intervention process which is tailor made. Teachers should retain close contact with families to learn about the circumstances of the student; however, often this does not happen fluently. Their responsibility is not limited to identifying and solving such problems solely but also in understanding their own limits of expertise and limited capacity to make contact with other, relevant professionals as early as possible. (More about teacher-parent relationships is in the upcoming chapter.)

In most European countries, **psychologists** are involved in the process of supporting at-risk students – whether in schools or other institutions. Their role is not only individualized or for group sessions or via guidance sessions with students but also in how they support teachers in dealing with students.

Social workers or education welfare officers have an important role in providing financial assistance or crisis intervention for students with financial problems or family related difficulties – what is more, they sometimes offer group activities and age-group related solutions or individual counselling. In most cases this takes place at external organizations or institutions, however sometime these psychologists are part of an on-site school team.

Education and career counsellors/advisers advise at-risk students to avoid bad career choices, which is proven to be one of the strongest reasons for dropping out. They work within or outside schools depending on the specific country.

Youth workers or peer-helpers are involved in more than half of the countries in scope, providing non-formal learning opportunities. The cooperation of youth and education sectors is not always smooth, either in terms of responsibility, professionalism or answerability.

Special pedagogues, therapists, doctors and nurses offer their services to pedagogical advisory or expert committees, often at separate institutions. Usually they are involved in cases of students with special educational needs (based on Eurydice-CEDEFOP 2014 72-73.).

Based on literature and study visit experiences, successful, targeted programs to tackle early leaving from education and training are usually realized via a cooperation of different experts. Some of these professionals are already in the school with their regular place and activity, and with their particular limits. Overall, however, most of the work and responsibility still falls to teachers. Special training for them to be more prepared is generally not available or not sufficient, while good enough support is also, often not available. Successful examples back up the notion that timely and tailor made interventions are needed to ensure the highest level of efficiency.

VII. Parents involvement

Involvement of parents has a crucial role throughout the individual's educational career. The motivation and expectations of a young person is highly dependent on parental demands and reflections. The whole family environment has a determining influence on related school success. According to research, dropouts come most often from families characterized by:

- a lack of supervision, a permissive parenting style,
- leaving their offspring to make more decisions themselves,
- poor aspirations regarding their children's schooling,
- less engagement with their children's schooling,
- negative reactions to school underachievement,
- low level of verbal interaction between **mothers** and children (NESSE 2010 19.).

For systems to be effective for parents too, they have to help parents feel safe and comfortable as well, and this is based on a partnership with the school. However, there is an "apparent paradox of parental involvement" while different social class families expect different things from school: middle class parents usually consider schooling of their children a shared responsibility, while working class parents tend to expect teachers to deal with all school-life issues and leaving them out of positions of responsibility. "The same phrases, "contacting the school", "checking homework", "helping with homework" and "talking to teachers" appear to have different meanings for (middle class and working class) parents' (Lareau, 1996:59; see also Lawson, 2003:123)" (NESSE 2010 21.).

Why is it important to involve parents?

Raising parental awareness can help with the identification of learning difficulties and early signs of disengagement, allowing for timely intervention (European Commission 2013 14.), which also helps teachers to act earlier and to target their actions well. According to reports about European policies, cooperation with parents is seen as a key factor. Concerning the most important distress signals, for instance absenteeism, parental involvement is supported by the law from the most trivial circumstances right up to the most serious. Nowadays, projects and new initiatives promote the much more general involvement of parents, not only in problem cases, but also in the establishing of the basic frameworks of life in schools, such as curricula or school catering.

Parents have a vital role in the future attainment and aspirations of their children, also via their communication with students and expectations for them. In general, higher class parents have higher expectations and are more likely to encourage their children to perform well in school – and of course they usually see learning and knowledge as being of very important value in life. According to studies, lower class families often have other values and expectations, as their (not just parental) experiences with schools and learning may also have been less favourable.

Through these mechanisms the already existing social differences are getting stronger as they define future aspirations and relations to school much earlier than at the time of the actual school beginning. However, the perspective of parents can be reasonable. According to rational choice theorists, individuals evaluate the costs and benefits of each investment in life. Education is an

investment that is worth it especially for those from a higher class family background as they have more to lose without an education: social status and a risk of downward mobility. Furthermore, with their better financial situations, the relative cost of extra years in education are not so high for them as for poorer individuals and families (Iannelli 2002 2.). These life experiences and individual choices form the values behind such decisions within the family. Values help to determine the communication about school issues at home. Vitaro and colleagues from Quebec analysed the features of a student being at risk of dropping out arising from parental style, and also considering communication between the child and relevant adults about school-related themes. In their research they tested a prediction model covering 751 low SES (socio-economic status) students. Their research proved the powerful influence of early disruptiveness and early academic performance on the likelihood of dropping out, case by case. They asked different age groups different questions in order to map their at home experiences. They found parental style to be more important for the 11-12 years old age group than for any other, that is the crucial age. They used these questions in the survey for boys:

- Do your parents congratulate you for things you have done?
- Do your parents complain if you don't have good grades?
- Do your parents explain to you the reasons for some decisions they make with regard to you?
- Do you tell your parents what you would like to become when you grow older?
- Do your parents acknowledge your personal feelings?
- Do you speak to your parents about your feelings and personal thoughts?
- When your parents ask you to do something you don't like, do they first give you some explanation?
- Do your parents know where you are when you go out?
- Do your parents know who you hang around with?

(Vitaro, F., Larocque, D., Janosz, M., Tremblay, R.E. 2001 6-7.)

The perspective of parents

As part of the CROCOOS project, an interview was made with the president of the European Parents Association (EPA)²⁹, Eszter Salamon, who shared examples of strong parental involvement. She mentioned a Catalan school where school catering is solely organized by parents (another similar example was from Austria, where parents can vote for the textbooks to be bought.) She claimed that parental involvement in connection with school work planning, i.e. the curriculum, can lead to a much more participative and democratic atmosphere. According to her experiences, and knowledge gained from much international research, parents can be best involved if the scheme incorporates their expertise and they are given a kind of platform inside the school to share their knowledge and skills. Many times home-school relationship are limited to discussions about problems with the children. Experts and parents suggest that good news, informal activities and parent-child-teacher

²⁹ EPA website: http://euparents.eu/Main_page

common activities should play a much greater role in future in order to make fluent and frustration-free connections more likely. The most important factor is sufficient and effective communication between parents and teachers; however, teachers are not well trained for that. In order to improve in this area many experts recommend that teacher education should include non-child focussed communication skills as well. Improved and organized parental representation is important for educators. The president of the advocacy group highlighted for instance that

visits to family homes were a crucial first step from the teacher's side. Many times there is a discrepancy between the values reflected in schools and at home, often in terms of the roles of the young persons at home (tasks, punishment, reward, responsibilities, expectations, and independency). Regular, also informal meetings of teachers and parents can contribute to the harmonisation of these values, or at least in finding compromises and to understand each other's perspective more.

Hungarian group discussion with parents

"Oh, Mum, are you putting me in jail, again?!"

As part of the CROCOOS project, a group interview was made in Budapest in order to gain a more practical insight into parents' aspects. According to the six participants (1 father, 5 mothers) parents can feel a huge contrast between their own school memories and their children's current experiences with education. They specified certain key-elements that make a good teacher: a person who can always be asked for advice; who has a wide range of knowledge; who loved us; someone respected; who is open and interesting. One of them told a story about a 70 year old teacher, very strict and maximalist, but loved by everyone. Her secret was that she loved her students and put as much energy into the process as she expected from others. In other words, a good teacher is a role-model or a role-model, but first of all, they should be someone with a very particular personality.

Besides this, they mentioned community as an important factor, sharing that they used to have many opportunities to talk and were still in touch with former classmates and teachers.

About present situations they claimed that school currently undermines students' initial intellectual curiosity, trying to produce uniform students by breaking down personalities. They believe that real knowledge comes today from outside of the school.

Parents feel they are alone.

Teachers often only give negative feedback, sometimes they even say they don't like the students – one mother told researchers. Furthermore teachers seem to have no idea how to teach e.g. with inadequate learning techniques for the students, all the while expecting parents to know how to do so. After all parents feel that they are left to deal with any difficulties with their child, even though they are also expected to solve problems occurring in school.

"Schools today only punish."

About the punishment-reward techniques nowadays, schools they had a very pessimistic opinion too. According to their experiences it seems that schools convey mostly negative messages about the behaviour and knowledge of students, and rarely share any good news. A 10 year-old learns

because of personality questions, so there is no chance for his or her attention when the teacher cannot be respected – told one parent. The whole education system is outdated: current youth has completely different needs and interests than former generations, but teachers are trained the same way as before and they do not know the techniques needed to retain childrens' attention.

Good old days...

Former class teachers knew much more about the family background of each student so that they had realistic expectations from the children – they told. Class teacher's family visits used to be common – today it happens rarely.

Today school is an authority-zone, instead of a safe environment that gives a place for community feeling.

Parents feel they are rejected and are not treated as partners. Teachers are very much overloaded and sometimes under too much pressure. The participants confirmed the view that a different/new headteacher can have a great impact on the attitude and behaviour of the same old teaching staff.

In choosing a school, the most important factor is the flow of sympathy between the teacher(s) and the child or young person, they said. It is a strong expectation of parents that teachers should respect every student and remain open regardless of the student's personality and skills. Choosing a life-path at 14 years old seems to be too early, so up until 18 they should only learn general issues, such as reading and maths, but that at a high quality – told one.

Keywords for a good school:



VIII. The aspect of the youth

There are lots of reasons from the perspective of the actual student behind their decision not to go to school anymore. Typical motives seem quite alike in Europe and in North America. Many students

have to help their family outside school so that they either have to work or stay at home with a smaller sibling or an ill relative. Some students experience abuse in or are neglected by their family – and this often goes unreported. Drug or alcohol problems are also present, usually attached to criminal or semi-criminal activities with a certain group of peers. Teen pregnancy is also an issue in early school leaving, especially in traditional families where parents expect girls to become mothers rather than bread-winners or academics in the first place.

Special needs are not always recognized and may be handled as behavioural issue, so this also contributes to the alienation of some students. Depression or other mental illnesses are also risk factors. Naturally, some outside influences and students being uninterested in school are also simple but important reasons also to be considered. Generally, there is a lack of proper support from teachers and/or parents to help students overcome their difficulties. Many studies report the perspective of students in too nonchalant or upbeat a fashion, papering over negative issues. In this short introduction, the aim was only to highlight some results that can be generally instructive and worth considering among all circumstances.

What do students say?

In a Dutch survey 1700 early leaver students were asked about their main reasons for leaving school early. 30% of them connected their dropping out **primarily to school related reasons** while personal and labour market reasons were less of an issue, in second and third places. 10% claimed that their education at the school did not meet their expectations.³⁰ This result further implies the importance of the role of schools in this whole phenomenon.

In the framework of the Safe Arrival Project, the successful Sandwell method (originating in the UK) was recently used. This system is based on the opinion of all stakeholders from education to health and social sectors, and on the experiences and views of students themselves. The most interesting part of the project is the fundamental integration of students' statements about their reasons for leaving school early. To identify these reasons, primarily a 68 question survey was prepared for students based on and finalized following a stakeholder roundtable discussion about the most important factors in terms of dropping out. As a result, 5 features seem to be the most crucial:

1. bullying occurred
2. the outdated infrastructure of the school
3. if the student does not study at home
4. if the parents do not study with the student in early school years
5. if the student is not willing to work in a chosen profession

These markers made it easy to distinguish between the already dropped out and those who were still in school, more or less at risk. This is just an example of how the focus can be put on students not only in the aspect of “saving” them from dropping out, but involving them in the whole discussion and exploring this issue.

³⁰ Hermándy-Berencz Judit, Juhász Judit (2013): *Study visit to the Netherlands*. QALL project, Tempus Public Foundation, Budapest.

US examples

Studies of young people who left school early seem often to state that dropout students very often cite **negative school experiences** as an explanation for leaving school and they claim their teachers were unsupportive, controlling and uninterested in them.³¹ Importantly, at the beginning of their school careers, students usually like school and are well motivated to show their knowledge and talent, however after a while disengagement happens until a certain point of complete alienation in some cases (Crain-Dorough, M. L. 2013 12.). Some students stay in school despite the odds. According to the Crain-Dorough study this is also felt to be important for the teachers since they also felt at these times that their success was important for the school staff as a whole. Basically, interpersonal relationships and the level of professional competence were significant for at risk students in order for them to have a successful school career (Crain-Dorough, M. L. 2013 47.). Student-teacher relationships as a factor is backed up by many other studies i.e. Potvin et. al. 2001, just as the satisfaction level of students with teachers, which correlates with school success in both directions.

Focus group discussions among 16-25 year old dropouts in the US proved that most of them believed themselves to have had the ability to attain a higher degree if they had stayed in school longer or had been expected to perform better by the parents and teachers. Most of them regretted leaving school early and said that higher degrees/qualifications would be crucial for their careers. Many even wished they could have returned to school if their age had allowed this (Burrus, J., Roberts, R.D. 2012 3.).

These examples show the importance of professionals getting in touch with young people in their sensitive period, but also shows how small things can be enough to encourage good behaviour despite the odds. With a different mind-set, teachers and other adults around children and young people can contribute much, with many of the youngsters graduating from school and starting with better chances.

³¹ Adaptive Technologies Inc. (2008): *Using Predictive Modeling to Improve High School Dropout Prevention*. White paper, USA.

IX. Conclusions

The current report aims at giving an introduction to the state of the art European policy along with research results from Europe and overseas regarding early leaving from places of education and training. Following the logic of **CroCooS – the Cross-sectoral cooperation focused solutions for preventing early school leaving** project, it describes what an early warning system means, what policy circumstances can be identified, what kind of early distress signals can be observed and what the methods and dilemmas of data gathering are. Furthermore it gives a little insight into the different actors' roles, such as school leaders, teachers, other professionals and parents and shows something from the students' perspective. With this logic it reflects the construction of an early warning system from system level upwards, along with policy, regulation and centralized databases, right up to the individual student's situation, highlighting the importance of each actor during the process.

The report hopes to add impetus to the pilot project in three Eastern-European countries; furthermore information gained here will be presented online to give further ideas to professionals. The aim is to give a support, however, only real practice can tell us what is useful in the specific environment.

**

Many research based studies and policy level reports back up the notion that institutional factors may play an important role in weakening (but also reinforcing) the association between social background and young people's educational attainment (Iannelli 2002 3.). To engender equity in society, equity in education is a precondition; however, without a balanced school system society would never become more equal either. It is also important to reflect on the relationships and circumstances of e.g. people in poverty or disabled individuals and institutions: how can systems and professionals handle those that do not fit into the mainstream. An early warning system should partially serve as a conscience for all of those having responsibility in the support of children and who possess a certain position that has an effect. More concretely, a proper early warning system should be sufficient not only in terms of prediction but with the monitoring of the efficiency of interventions and our ability to improve continuously too. One suggested method for such prediction could be based on the following logic:

- Individual level: the system has detailed data on the already dropped out students → in cases of the appearance of the same signals in later students it sends a warning signal to all relevant actors.
- Mezzo level: for the specific school, either based on preliminary defined criteria or the experiences of similar schools, a warning system operates, sending a signal in cases of a certain amount/threshold-reaching of distress signals or levels of droppingout on school level.

- Macro level: at municipality or regional level, based on the data and statistics of the specific location, a warning signal is sent out to other similar municipalities. This level is not so closely connected to the individual, so a lower pay-off is expected (Salomvári 2014).

This three-level structure is just an example offered for the framework of a complex and comprehensive early warning system; however, it shows important building blocks to make up the whole construction: an EWS has to have elements relating to individuals, institutions and localities. It also implies the need for inter-sectoral cooperation from teachers through to town mayors, involving all other key professionals.

Success in education systems has more than one side. The performance of the students is still important, however, there is the need for more and more focus on equity when considering how good an educational system is.

X. Bibliography

Adaptive Technologies Inc. (2008): *Using Predictive Modeling to Improve High School Dropout Prevention*. White paper, USA.

http://adaptiveinc.com/pdf/ATi_Using%20Predictive%20Modeling%20to%20Improve%20High%20School%20Dropout%20Prevention.pdf [downloaded 30. June 2015]

Arnold, R. (2011): *The role of mental health collaborations in dropout prevention efforts: Recommendations for school and community counselors*. Retrieved from http://counselingoutfitters.com/vistas/vistas11/Article_85.pdf

Bekker, S. (2010): *European Employment Observatory EEO Review: Youth Employment Measures, 2010 Netherlands*. ReflecT, Tilburg University.

<http://ec.europa.eu/social/BlobServlet?docId=12087&langId=en> [downloaded 30. June 2015]

Brussels, 26.2.2015 SWD(2015) 36 final COMMISSION STAFF WORKING DOCUMENT Country Report Hungary 2015 Including an In-Depth Review on the prevention and correction of macroeconomic imbalances {COM(2015) 85 final}

http://ec.europa.eu/europe2020/pdf/csr2015/cr2015_hungary_en.pdf [downloaded 30. June 2015]

Brüsszel, XXX COM(2014) 418/2 Ajánlás A TANÁCS AJÁNLÁSA Magyarország 2014. évi nemzeti reformprogramjáról és Magyarország 2014. évi konvergenciaprogramjának tanácsi véleményezéséről {SWD(2014) 418} http://ec.europa.eu/europe2020/pdf/csr2014/csr2014_hungary_hu.pdf [downloaded 30. June 2015]

Bureau for Academic Recognition and International Exchange (2002): *The education system in Poland before and after the reform of 1999*. Internet Archive. (Retrieved August 13, 2012.)

<http://web.archive.org/web/20090327141545/http://buwilm.edu.pl/educ/schemat.htm>

[downloaded 30. June 2015]

Burrus, J., Roberts, R.D. (2012): *Dropping Out of High School: Prevalence, Risk Factors, and Remediation Strategies*. *R&D Connections*, 18. February.

https://www.ets.org/Media/Research/pdf/RD_Connections18.pdf [downloaded 30. June 2015]

CEDEFOP (2014): *Early leaving from vocational education and training – Sweden*. ReferNet, Skolverket, Sweden.

Community Health Systems Resource Group, The Hospital for Sick Children For the Ontario Ministry of Education and Training, Special Education Branch Toronto (2005): *Early School Leavers: Understanding the Lived Reality of Student Disengagement from Secondary School*. Final Report, Canada. <https://www.edu.gov.on.ca/eng/parents/schoolleavers.pdf> [downloaded 30. June 2015]

Council Recommendation of 28 June 2011 on policies to reduce early school leaving (Text with EEA relevance) (2011/C 191/01) [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011H0701\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011H0701(01)&from=EN)

Council Recommendation of 22 April 2013 on establishing a Youth Guarantee. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:120:0001:0006:EN:PDF> [downloaded 30. June 2015]

Country Reports by the Institute for Educational Research and Development, TÁMOP, 2014

Crain-Dorough, M. L., (2003): *A study of dropout characteristics and school-level effects on dropout prevention*, Dissertation, USA. http://etd.lsu.edu/docs/available/etd-0710103-021510/unrestricted/Crain-Dorough_dis.pdf [downloaded 30. June 2015]

Cross, A. E. (2010): *Exploring the virtual landscape for social change in higher ed*. A thesis. B.U.S University of Maine. http://www.academia.edu/7160001/EXPLORING_THE_VIRTUAL_LANDSCAPE_FOR_SOCIAL_CHANGE_IN_HIGHER_ED [downloaded 30. June 2015]

Day, S., Sandals, L., Kettlewell, K., Easton, C., Durbin, B. (2012): *The evaluation of the raising the participation age locally-led delivery projects (RPA) 2011 to 2012: survey and case study findings*. ISOS Partnership & National Foundation for Educational. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197696/DfE-RR236b.pdf [downloaded 30. June 2015]

Department for education (2014): *Behaviour and discipline in schools, advice for headteachers and school staff*. UK. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/393770/Behaviour_and_Discipline_in_Schools_-_A_guide_for_headteachers_and_school_staff_080115.pdf [downloaded 30. June 2015]

Department for education and skills (2013): *Anti-bullying procedures for primary and post-primary schools*. <https://www.education.ie/en/Publications/Policy-Reports/Anti-Bullying-Procedures-for-Primary-and-Post-Primary-Schools.pdf> [downloaded 30. June 2015]

Department for education and skills (2013): *Delivering Equality of Opportunity in Schools (DEIS)*. An Action Plan for Education Inclusion, Ireland. http://www.education.ie/en/Publications/Policy-Reports/deis_action_plan_on_educational_inclusion.pdf [downloaded 30. June 2015]

Department of Children and Youth Affairs, Department for education and skills, Child and Family Agency (2014): *Information Booklet for DEIS schools participating in the Home School Community Liaison Scheme*. Ireland. <https://www.education.ie/en/Schools-Colleges/Information/Home-School-Community-Liaison-HSCL-Scheme/Information-Booklet-for-DEIS-schools-participating-in-the-Home-School-Community-Liaison-Scheme.pdf> [downloaded 30. June 2015]

Department of education and science (2007): *Youthreach and Senior Traveller Training Centre Programmes funded by the Department of Education and Science Value For Money Review*. https://www.education.ie/en/Publications/Value-For-Money-Reviews/vfm_review_youthreach_sttc_programmes.pdf [downloaded 30. June 2015]

Ministry of Education, Culture and Science (2013 July) : *Key Figures 2008-2012*. Education, Culture and Science. <http://www.government.nl/documents-and-publications/reports/2013/07/31/key-figures-2008-2012.html> [downloaded 30. June 2015]

Education Welfare Act 2000, Ireland:
<http://www.irishstatutebook.ie/pdf/2000/en.act.2000.0022.pdf>

Eurofound (2012): *NEETs – Young people not in employment, education or training: Characteristics, costs and policy responses in Europe*. Publications Office of the European Union, Luxembourg. www.eurofound.europa.eu/publications/htmlfiles/ef1254.htm

Network of experts in social sciences of education and training (NESSE) (2010): *Early school leaving. Lessons from research for policy makers*. An independent expert report submitted to the European Commission. <http://www.nesetweb.eu/sites/default/files/early-school-leaving-report.pdf> [downloaded 30. June 2015]

European Commission (2013): *Country Questionnaires*. Thematic Working Group on Early School Leaving (TWG on ESL), Brussels.

European Commission (2013a): *Early warning systems in Europe: practice, methods and lessons*. Thematic Working Group on Early School Leaving (TWG on ESL), Brussels. http://ec.europa.eu/education/policy/strategic-framework/doc/europe-warning-systems_en.pdf [downloaded 30. June 2015]

European Commission/EACEA/Eurydice/CEDEFOP (2014): *Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures*. Eurydice and CEDEFOP Report. Publications Office of the European Union, Luxembourg. http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/175EN.pdf [downloaded 30. June 2015]

Eurydice (2012): *Strategies to counter bullying*. http://www.nfer.ac.uk/shadomx/apps/fms/fmsdownload.cfm?file_uuid=09F2CF13-C29E-AD4D-0855-E0C5DD51968F&siteName=nfer

Fortin, L., Marcotte, D., Potvin, P., Royer, E., & Joly, J. (2005): Typology of Students at Risk of Dropping out of School: Description by personal, family and school factors. *European Journal of Psychology of Education*. XXI. 4. 363-383. <http://link.springer.com/article/10.1007%2FBF03173508#page-1> [downloaded 30. June 2015]

Hattie, J. (2003): *Teachers make a difference*. Paper delivered at the 2003 ACER Conference 'Building Teacher Quality'. http://www.acer.edu.au/documents/RC2003_Hattie_TeachersMakeADifference.pdf

Heid, S., Fischer, T. (2012): *Reduction of Early School Leaving of Young People*. Country Analysis and Reports, Germany. http://www.fch.lisboa.ucp.pt/resources/Documentos/CEPCEP/RESLEA_WP2_Germany.pdf [downloaded 30. June 2015]

Heppen, J. B., Bowles Therriault, S., (2008): *Developing Early Warning Systems to Identify Potential High School Dropouts*. American Institutes for Research. http://www.betterhighschools.org/pubs/ews_guide.asp [downloaded 30. June 2015]

Hermándy-Berencz Judit, Juhász Judit (2013): *Study visit to the Netherlands*. QALL project, Tempus Public Foundation, Budapest. <http://oktataskepzes.tka.hu/hollandia> [downloaded 30. June 2015]

Horn Dániel (2008): *A lengyel oktatási szerkezet változásai a rendszerváltás óta*. MTA KTI Kongresszus, Budapest. http://econ.core.hu/file/download/konf/Kongresszus_Horn.ppt [downloaded 30. June 2015]

Iannelli, C. (2002): *Parental Education and Young People's Educational and Labour Market Outcomes: A Comparison across Europe*. Arbeitspapiere, Mannheimer Zentrum für Europäische Sozialforschung. http://edoc.vifapol.de/opus/volltexte/2014/5139/pdf/wp_45.pdf [downloaded 30. June 2015]

Iver, M. A., Mac Iver, D. J. (2009): *Beyond the indicators: An integrated school-level approach to dropout prevention*. Arlington, VA: The Mid-Atlantic Equity Center, The George Washington University Center for Equity and Excellence in Education. <http://diplomasnow.org/wp-content/uploads/2013/06/dropout-report-8-11-09.pdf> [downloaded 30. June 2015]

Jakubowski, M. et. al. (2010). *The Impact of the 1999 Education Reform in Poland*. The World Bank Human Development Network, Education Team. <https://openknowledge.worldbank.org/bitstream/handle/10986/3749/WPS5263.pdf?sequence=1> [downloaded 30. June 2015]

J. J. Heckman (2010): *The Economics of Investing in Children*. Keynote address at the Center for Child and Family Policy's tenth anniversary event, March 29, 2010. <https://www.youtube.com/watch?v=RtaO5PmJmS8>

Janosz, M., Le Blanc, M., Boulerice, B., & Tremblay, R. E. (2000): Predicting different types of school dropouts: A typological approach with two longitudinal samples. *Journal of Educational Psychology*, 92. 171-190. http://www.researchgate.net/publication/232546461_Predicting_different_types_of_school_dropouts_A_typological_approach_with_two_longitudinal_samples [downloaded 30. June 2015]

Janowski, A. (1999). Poland. In: Smith, P.K., Morita, Y., Junger-Tas, J., Olweus, O., Catalano, R., Slee, P. (1999): *The Nature of School Bullying. A Cross-National Perspective*. <http://books.google.de/books?id=4kNpAwAAQBAJ&pg=PA264&lpg=PA264&dq=polish+education+bully&source=bl&ots=DprOfalw5c&sig=SNMEKaaVBxnvqCl8iLg8gdgZE88&hl=hu&sa=X&ei=dUpuVPigKsTcPZHcgYAI&ved=0CEAQ6AEwBA#v=onepage&q=polish%20education%20bully&f=false>

Judge, B. (2012): NEWB: One Child, One Team, One Plan (OCOTOP). *TUI Comments*. Letter of Teachers' Union of Ireland to NEWB. http://www.newb.ie/downloads/pdf/newb_ocotop_schools_guidance.pdf [downloaded 30. June 2015]

Jugović, I. and Doolan, K. (2013): Is there anything specific about early school leaving in Southeast Europe? A review of research and policy. *European Journal of Education*, 48 (3), 363-377. http://www.readcube.com/articles/10.1111%2Fejed.12041?r3_referer=wol&tracking_action=preview_click&show_checkout=1&purchase_referrer=onlinelibrary.wiley.com&purchase_site_license=LICENSE_DENIED_NO_CUSTOMER

Kostka, J., (2014): *Roma Rights 2013: National Roma Integration Strategies: What Next? National Roma Integration Strategy: Do Good Intentions Fail?* <http://www.errc.org/article/roma-rights-2013-national-roma-integration-strategies-what-next/4238/5> [downloaded 30. June 2015]

Kreft, W, Watts, A.G. (2003): *Public Policies and Career Development: A Framework for the Design of Career Information*. Guidance and Counselling Services in Developing and Transition Countries, Country report on Poland, World Bank.

http://siteresources.worldbank.org/EDUCATION/Resources/278200-1126210664195/1636971-1126210694253/Case_Studies_Emerging_Issues.pdf [downloaded 30. June 2015]

Lannert Judit (2013): *A korai iskolaelhagyás elleni stratégia és a koragyermekkori nevelés. QALL-Végzettséget mindenkinek!* projekt, TEMPUS Közalapítvány, Budapest.

http://oktataskepzes.tka.hu/document.php?doc_name=Projektek/2013/QALL/07_korai_neveles_lannert_final.pdf [downloaded 30. June 2015]

Maksimović, I., Bratic, G. (2013): *Mapping of VET educational policies and practices for social inclusion and social cohesion in the Western Balkans, Turkey and Israel, Country report: Serbia*. A project implemented with the support of LSE Enterprise European Training Foundation. [http://www.etf.europa.eu/webatt.nsf/0/BC38E4BBD64E01FEC1257C2100332376/\\$file/SERBIA%20-%20FINAL%20Report.pdf](http://www.etf.europa.eu/webatt.nsf/0/BC38E4BBD64E01FEC1257C2100332376/$file/SERBIA%20-%20FINAL%20Report.pdf) [downloaded 30. June 2015]

Ministry of Education, Culture and Science The Netherlands (2014 March): *The approach to Early School Leaving*. Policy in the Netherlands and the provisional figures of the 2012-2013 performance agreements. http://www.aanvalopschooluitval.nl/userfiles/file/2014/VSV-Boekje_UK_2014.pdf [downloaded 30. June 2015]

OECD (2010): *Vignettes on Education Reforms: England, Poland and Sweden. Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States*. <http://www.oecd.org/unitedkingdom/46581501.pdf> [downloaded 30. June 2015]

OECD (2012): *PISA 2012 Results: What Makes Schools Successful? Resources, Policies and Practices Volume IV*. <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-volume-IV.pdf>

OECD (2013): *Education Indicators in Focus – 2013/04 (April)* [http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B013%20\(eng\)--FINAL.pdf](http://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B013%20(eng)--FINAL.pdf) [downloaded 30. June 2015]

OECD (2014): *Resources, policies and practices in Sweden's schooling system: an in depth analysis of PISA 2012 results*

Peer Review on Early School Leaving. Background paper, Berlin, Germany, Submitted: March 2013 http://ec.europa.eu/education/events/2013/documents/peer-backde_en.pdf [downloaded 30. June 2015]

Pirchio Sapienza, S., Passiatore, Y., Tritrini, Ch., Taeschner, T. (2013): *The Role of the Relationship between Parents and Educators for Child Behaviour and Wellbeing. International Journal about Parents in Education*, Copyright 2013 by European Research Network about Parents in Education, Vol. 7, No. 2, 145-155. <http://www.ernape.net/ejournal/index.php/IJPE/article/viewFile/275/199> [downloaded 30. June 2015]

PISA in Focus (2014/09): *Are disadvantaged students more likely to repeat grades?* <http://www.oecd.org/pisa/pisaproducts/pisainfocus/pisa-in-focus-n43-%28eng%29-final.pdf>

Potvin, P., Fortin L., Marcotte, D., Royer, É., Doré-Côté, A. (2001): *Teachers' attitude toward students at risk of school dropout: a longitudinal study*. Presentation, International Association of Special Education Seventh Biennial International Conference Making a World of Difference Warsaw, Poland. <http://www.pierrepotvin.com/6.%20Publications/pologne.pdf> [downloaded 30. June 2015]

Potvin, P., Marcotte, D., Fortin L., Royer, É., Leclerc, D., Blondin, D. (2002): *A comparison of dropout students, at risk students and regular high school students*, Université du Québec à Trois-Rivières, Trois-Rivières, Canada; Université de Sherbrooke, Sherbrooke, Canada; Université Laval, Québec, Canada; Université du Québec à Montréal, Montréal, Canada, 63rd Annual Convention of the Canadian Psychological Association University of British Columbia, Vancouver. <http://www.pierrepotvin.com/6.%20Publications/vanc02.pdf> [downloaded 30. June 2015]

Preventing early school leaving, SALAR, 2013 <http://webbutik.skl.se/bilder/artiklar/pdf/7164-925-6.pdf> [downloaded 30. June 2015]

QALL project (2014). http://oktataskepzes.tka.hu/pages/content/index.php?page_id=1141

Reducing early school leaving: Key messages and policy support Final Report of the Thematic Working Group on Early School Leaving November 2013
http://ec.europa.eu/education/policy/strategic-framework/doc/esl-group-report_en.pdf
 [downloaded 30. June 2015]

RESL.EU project, (ongoing) <https://www.uantwerpen.be/en/projects/resl-eu/>

RESLEA Project, 2012-2014 www.reslea.eu

Rumberger, R., Ah Lim, S., (2008): *Why Students Drop Out of School: A Review of 25 Years of Research*, Flyer, California Dropout research Project, University of California Linguistic Minority research institute. <http://www.slocounty.ca.gov/Assets/CSN/PDF/Flyer+-+Why+students+drop+out.pdf> [downloaded 30. June 2015]

Salomvári György (2014): *A lemorzsolódás kutatás módszertani lehetőségeinek feltérképezése a köznevelési információs rendszer nyilvántartásai alapján*. Elemző tanulmány, Oktatókutató és fejlesztő Intézet, Budapest.

Skolverket (2011): *Evaluation of anti-bullying methods*. Sweden. http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwtpubext%2Ftrycksak%2FRecord%3Fk%3D2849 [downloaded 30. June 2015]

Skolverket (2012): *Educational equity in the Swedish school system?* Sweden. http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwtpubext%2Ftrycksak%2FRecord%3Fk%3D3322 [downloaded 30. June 2015]

Statistical Yearbook of Education 2012/2013, Budapest, 2013. http://2010-2014.kormany.hu/download/c/93/21000/Oktat%C3%A1si_%C3%89vk%C3%B6nyv_2012.pdf

Strand, M. A-S., Granlund, M. (2013): *The School Situation for Students with a High Level of Absenteeism in Compulsory School: Is There a Pattern in Documented Support?* Jönköping University. <http://www.tandfonline.com/doi/abs/10.1080/00313831.2013.773561> [downloaded 30. June 2015]

Student Individualized Growth Model and Assessment (SIGMA). A Microsoft Education Analytics Platform Approach to Students at Risk May. 2010.
<https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCE>

[QFjAA&url=http%3A%2F%2Fdownload.microsoft.com%2Fdownload%2F4%2F1%2F8%2F4182DF40-7EA3-4C13-91D0-E3B75D639590%2FStudent_Individualized_Growth_Model_and_Assessment.pdf&ei=nquSVZaYE4Su-AGbq73oBg&usg=AFQjCNGSd7LfKpkQr5BOFj9HXPYe7grjrg&bvm=bv.96783405,d.cWw](http://www.microsoft.com/download/details.aspx?id=7EA3-4C13-91D0-E3B75D639590%2FStudent_Individualized_Growth_Model_and_Assessment.pdf&ei=nquSVZaYE4Su-AGbq73oBg&usg=AFQjCNGSd7LfKpkQr5BOFj9HXPYe7grjrg&bvm=bv.96783405,d.cWw) [downloaded 30. June 2015]

Taylor, C. (2012): *Getting the simple things done. Charlie Taylor's behaviour checklists*. Department for education, UK.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/283997/charlie_taylor_checklist.pdf [downloaded 30. June 2015]

Taylor, C. (2012): *Improving attendance in school*. Department for education, UK.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180772/DFE-00036-2012_improving_attendance_at_school.pdf [downloaded 30. June 2015]

Theme Group Youth in Working Life (2013): *10 Reasons for dropping-out*. Ungdomsstyrelsen, Stockholm. http://www.temaunga.se/sites/default/files/tenreason2013_.pdf [downloaded 30. June 2015]

TITA Scientific base (Abstracts) (2014): Educational Research Institute, Ljubljana.

Uekawa, K. (2010): *Creating an Early Warning System: Predictors of Dropout in Delaware*. Regional Educational Laboratory Mid-Atlantic, Regional Educational Laboratory Mid-Atlantic.
<http://www.doe.k12.de.us/site/handlers/filedownload.ashx?moduleinstanceid=2801&dataid=9385&FileName=MA1275TAFINAL508.pdf> [downloaded 30. June 2015]

UNESCO (2010): *World Data on Education*, VII. Ed. 2010/11
<http://www.ibe.unesco.org/en/services/online-materials/world-data-on-education/seventh-edition-2010-11.html>

United Nations Development Programme Bratislava Regional Center, the Roma Initiatives Office and the Making the Most of EU Funds for Roma program of the Open Society Foundations, and the Central European University/Center for Policy Studies (2014): *Faces and Causes of Marginalization of the Roma in Local Settings: Hungary – Romania – Serbia Contextual inquiry to the UNDP/FRA Regional Roma Survey 2011 in CEE and SEE October 2012 – April 2014*.
<https://cps.ceu.hu/research/roma-marginalization>

University and College Union (2012): *Funding our Future. Approaches to youth unemployment and NEETs: International examples*. UK. <http://www.ucu.org.uk/index.cfm?articleid=3001>

Vitaro, F., Larocque, D., Janosz, M., Tremblay, R.E. (2001): *Negative Social Experiences and Dropping Out of School*. *Educational Psychology*, Vol. 21, No. 4, Research Unit on Children's Psycho-social Maladjustment, University of Montreal, Montreal (Quebec), Canada.
<https://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCEQFjAA&url=http%3A%2F%2Fwww.andrews.edu%2F~rbailey%2FChapter%252013%2F5493404.pdf&ei=nKySVa-2JcH-AHX7qKoAw&usg=AFQjCNHSpqXwOhQbaSfmGWgzCOCTUlipEg&bvm=bv.96783405,d.cWw>
 [downloaded 30. June 2015]

Vuure, P.v., Kaar, R.v.h. (2012): *The Netherlands: ERM Comparative Analytical Report on Recent Policy Developments related to those Not in Employment, Education and Training (NEET)*, HIS. <http://www.eurofound.europa.eu/observatories/emcc/comparative-information/national-contributions/netherlands/the-netherlands-erm-comparative-analytical-report-on-recent-policy-developments-related-to-those-not> [downloaded 30. June 2015]

Wondratschek et.al. (2014): *The Short- and Long-Term Effects of School Choice on Student Outcomes: Evidence from a School Choice Reform in Sweden*. <http://ftp.iza.org/dp7898.pdf> [downloaded 30. June 2015]

XI. Appendixes

1. Appendix

Sample Student Data Entry Screen and Report Screen

Student Data Entry Screen (Semester 1):

Student Information				Semester One Student Data						
Last Name	First Name	Student ID	Grade	20 Day Count	Days Absent Quarter 1	Days Absent Quarter 2	No. Courses Failed (All)	No. Courses Failed (Core)	No. Credits Earned	GPA
Example Student 1		1234	9	6	7	4	0	0	3	3.90
Example Student 2		5678	9	0	5	15	2	2	2.5	1.80
Example Student 3		9512	9	0	1	0	0	0	3	4.00
Example Student 4		7532	9	1	2	3	2	0	3	3.10
Example Student 5		6541	9	5	6	12	3	1	1.5	2.10
			9							
			9							
			9							



Student Report Screen (Semester 1 and Full Year):

Student Information				Semester Indicators of Risk					Full Year Indicators of Risk			
Last Name	First Name	Student ID	Grade	Flag for 20 Day Count Attendance	Flag for Q1 Attendance	Flag for S1 Attendance	Flag for Course Fs	Flag for GPA	Flag for Attendance	Flag for Course Fs	Flag for GPA	Flag for "Off-Track"
Example Student 1		1234	9	Yes	Yes	Yes	No	No	Yes	No	No	On-Track
Example Student 2		5678	9	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Off-Track
Example Student 3		9512	9	No	No	No	No	No	No	No	No	On-Track
Example Student 4		7532	9	No	No	No	Yes	No	No	Yes	No	On-Track
Example Student 5		6541	9	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Off-Track
			9									
			9									
			9									

Source: Heppen, J. B., Bowles Therriault, S., 2008 6.

2. Appendix

Sample Early Warning Indicator Data Sheet for Classroom Teachers

Student Name	2007-2008: Days Absent	2008-2009: Days Absent	Negative Behavior Comments	Math Grade 3/1/2008	Math Grade 6/1/2008	Literacy Grade 3/1/2008	Literacy Grade 6/1/2008	Reading Level 6/1/08	PSSA 2008 Math	PSSA 2008 Reading
Student A	53	0	10	D	D	F	F	5	Proficient	Basic
Student B	36	2	7	B	D	D	D	6	Basic	Basic
Student C	14	0	1	C	B	C	C	6.5	Basic	Proficient
Student D	5	1	6	C	B	D	C	7	Basic	Basic
Student E	18	0	7	C	C	D	F	5.5	Below Basic	Below Basic
Student F	29	2	1	D	C	D	D	6	Below Basic	Below Basic
Student G	6	0	8	D	D	F	D	5.5	Below Basic	Below Basic
Student H	46	2	3	B	B	D	F	5.5	Basic	Below Basic
Student I	41	0	4	D	C	D	D	3.5	Below Basic	Below Basic
Student J	17	0	1	B	B	C	D	2	Below Basic	Below Basic
Student K	61	4	7	C	F	D	C	7	Below Basic	Basic
Student L	24	0	10	F	F	C	D	6.5	Below Basic	Basic
Student M	18	0	2	B	D	D	C	3.5	Below Basic	Below Basic
Student N	3	0	6	B	B	B	C	7	Basic	Basic
Student O	2	1	5	C	D	D	D	5.5	Basic	Basic
Student P	15	1	4	D	D	F	D	5.5	Basic	Below Basic
Student Q	15	1	10	C	D	D	D	6.5	Below Basic	Below Basic
Student R	6	0	1	D	D	D	D	3	Below Basic	Below Basic
Student S	16	1	4	D	D	D	D	5	Below Basic	Below Basic
Student T	15	0	7	C	F	D	D	6	Below Basic	Basic
Student U	18	0	6	C	D	D	D	6.5	Below Basic	Below Basic
Student V	23	0	7	C	F	C	F	6	Below Basic	Below Basic
Student X	16	0	6	C	F	D	D	6.5	Basic	Basic
Student Y	18	1	3	B	C	D	D	6.5	Basic	Basic
Student Z	4	0	7	C	C	D	D	6.5	Proficient	Below Basic
Student AA	42	2	1	D	C	D	D	5.5	Below Basic	Below Basic
Student AB	13	0	2	D	D	D	C	4	Below Basic	Below Basic
Student AC	8	0	2	D	D	D	D	2	Below Basic	Below Basic
Student AD	22	1	8	C	F	D	D	6	Below Basic	Below Basic
Student AE	50	1	0	D	D	C	C	4.5	Below Basic	Below Basic
Student AF	18	0	6	C	C	F	D	5	Below Basic	Below Basic
Student AG	1	0	3	NG	D	NG	D	6	Below Basic	Basic

Source: Iver, M. A., Mac Iver, D. J. 2009 23.

3. Appendix

Sample Intervention Recording Sheet for Grade-Level Teachers

Date	October 7, 2008
Grade Level	6th

Grade Group Team Members	K S	M. D	K C	E. Y	E T
Meeting Facilitator	B. W	M. P		T B	
	A. M	, L. H			

Student	Presenting EWI from 6/08		EWI Today		Level of Concern	Student Strengths	(Tier)-Responder = Intervention	Status	CSAP Tier	Notes	(Tier)-Responder = New Intervention
	Code	Notes	Code	Notes							
Student A	B	3 neg comm in M	BML	F on 2 math quizzes	2	PA	(T)-MT=SGL				
		BRL -3.5				C					
		D in Math				T					
Student B	A	78% attendance	AB	Absent 5 days	3	C	(t)hrt & cy=ch				
							(t)hrt & cy=gbr				
							(t)hrt & cy=p/s/t c				
							(t)cy=ri				
Student C	Ac	F in M & L	DPA	Literacy	3	AS+	(t)cy=hs				
	B	6 neg comm 3&3	N/IH			AC+					
			NP			KBL					
			NGC								
Student D	A	79% attendance	LS	Behavior	3	FR	(t)hrt & cy=ch				
		BRL -3.5	CO				(t)hrt & cy =p/s/t c				
		D in M & L	AC				(t)cy =dc				
							(t) cy =ri				
Student E	B	12 neg comm 8&4	LS			WG					
	Ac	F in M	DA								
		BRL - 3.5	AC								
			CO								
			LS								
New Student											

Source: Iver, M. A., Mac Iver, D. J. 2009 24.

4. Appendix

Sample Intervention Code Sheet for Grade-Level Teachers

CODE DIRECTORY										
Presenting EWI	EWI Today		Level of Concern		Responder		Intervention-Service		Student Strengths	
A Attendance	ATTENDANCE - A		1	Mild	ADMIN	Administrator	IN	Investigate deeply	AC+	Attends class on time
	AB	Absent two or more days betw grade group meetings	2	Moderate	C	Counselor	O	Other	AS+	95% attend.
B Behavior	LATE	Late two or more days betw grade group meetings	3	Severe	C & E	Consultation & Evaluation	ATTENDANCE/LATENESS		C	Cooperative
Ac Academics	BEHAVIOR - B		Intervention- Tier		CA	Counseling Asst.	CH	Call home	DH	Does homework
	AC	Annoys classmate(s)	W	Wholeschool/ Classroom	CD	CADE	DC	Daily check-in	FR	Friendly
	CO	Calls out		CIS	Communities in Schools	GBM	Greet by name	KBL	Knows Basic Lit.	
	DA	Disrespectful to adult		CRL	Com Rel. Liaison	P/S/T C	Contract	KBM	Knows Basic Math	
	DP	Defaces property	T	Targeted	CY	City Year	R/CM	Referral/case managemt	O	Other
	F	Involved in fight	I	Intensive	ELLT	ELL Teacher	RI	Rewards/Incentives	O+	On time to class
	LS	Leaves seat/classroom	Status		ESRT	Empow Sch Resp Team	BEHAVIOR		PA	Poss. Attitude
	MAC	Makes inappropriate comments	1	Improved	HRT	Homeroom Teacher	Start w/ Above Interventions		SA	Strong Art skills
	RH/S	Roams hallways/stairwells	2	Same	JHU	JHU Content Advisors	CCUE	Clear consequences uniformly enforced	SC	Strong Computer
	U	Not in uniform	3	Worse	LS	Literacy Specialist	D S	De-escalate by adult	SLS	Strong Lit skills
	ACADEMICS -LITERACY/MATH - Ac				LT	Literacy Teacher	I/R	Incentive/Rewards	SM	Strong Music skills
	BML	Doesn't have basic math facts			MS	Math Specialist	IM	I-Messages	SMS	Strong Math skills
	BRL	Below reading level			MT	Math Teacher	PCW	Pre-class Work	SPE	Strong in Phys Ed
	DPA	Does not pay attention			N	Nurse	PF	Positive feedback	SS	Strong Science
	LBL	Low benchmark in literacy			OCT	Other Content Teacher	PR	Predictable routines	SSS	Strong SS skills
	LBM	Low benchmark in math			Par	Parent/Caregiver Support	ACADEMICS -L/M		T	Tries hard
	LODT	Low on other diagnostic assess.			PLCA	PLC Academic Dean	AEH	Aligned Extra Help	WG	Well groomed
N/IH	No/incomplete homework			PLCD	PLC Discipline Dean	ASA	After-school Activity	WH	Good work habits	
NGC	Does not grasp concept[s]			PM	Peer Mediation	DI	Differentiate Instruction			
NP	Not prepared for classwork			PO	Parent Ombudsman	GR	Guided Reading			
RDA	Refuses to do assignments			RDGS	Reading Specialist	HS	Homework Support			
				SA	Student Advisor	MM	Math manipulatives			
				SET	Special Ed Teacher	SGI	Small group instruction in math			

Source: Iver, M. A., Mac Iver, D. J. 2009 25.

5. Appendix

Middle School Students Exhibiting Warning Signals

Early Warning Indicator*	Number of students off-path	Number of these students still off-path in March 2009	Percent reduction in the number of students off-path
Failed math	65	25	62 percent
Failed literacy	86	22	74 percent
Less than 80 percent attendance rate	38	23	39 percent
Three or more negative behavior comments on report card	409	225	38 percent

Source: Iver, M. A., Mac Iver, D. J. 2009 27.

6. Appendix

Major dimensions of excellent teachers in the Hattie study on teacher's role in educational success

“Expert teachers :

can identify essential representations of their subject:

- much more responsive to students,
- expert teachers are VERY context bound, and find it hard to think outside the specifics of their classrooms and students. Generalization is not always their strength,
- problem solving attitude and flexibility in teaching,
- That is, they are greater seekers and users of feedback information about their teaching
- Too often, they see such feedback as providing information about children, their home backgrounds, and their grasp of curricula – and too rarely do they see such feedback as reflecting on their expertise as teachers.
- Expert teachers are better decision-makers and can identify what decisions are important and which are less important decisions
- They were skilful in keeping the lesson on track and accomplishing their objectives while also allowing students' questions and comments as springboards for discussions. Moreover, they achieved a balance between content-centered and student-centered instruction.

can guide learning through classroom interactions,

- They build climates where errors are even welcomed, where student questioning is high, where engagement is the norm, and where students can gain reputations as effective learners.
- Expert teachers have a multidimensionally complex perception of classroom situations
- Expert teachers are more context-dependent and have high situation cognition

can monitor learning and provide feedback,

- Expert teachers are more adept at monitoring student problems and assessing their level of understanding and progress, and they provide much more relevant, useful feedback.
- Expert teachers are more adept at developing and testing hypotheses about learning
- experts develop automaticity so as to free working memory to deal with other more complex characteristics of the situation, whereas experienced non-experts do not optimise the opportunities gained from automaticity.

can attend to affective attributes,

- By having such respect, they can recognize possible barriers to learning and can seek ways to overcome these barriers.
- Expert teachers are passionate about teaching and learning

can influence student outcomes,

- Expert teachers engage students in learning and develop in their students selfregulation, involvement in mastery learning, enhanced self-efficacy, and self-esteem as learners.
- Expert teachers provide appropriate challenging tasks and goals for students
- Expert teachers enhance surface and deep learning”

(Hattie, J. 2003 7-10.)

7. Appendix

Methods of teacher assessment in the Hattie study on teacher's role in educational success

"Teacher Interviews before and after the lessons observed

Before

- What did you think about as you planned?
- Distinguishing Expert Teachers from Novice and Experienced Teachers. 11
- What factors influenced your planning?
- If one of your students had difficulty understanding (specific content from lesson observed), what are some suggestions you could generate for helping him/her to make connections?

After

- What were the most important decisions you made during today's lessons?
- What influenced your lesson planning?
- What expectation do you have for [student's name]
- How does [student's name] approach to learning vary from day to day?
- Would you rate this lesson as successful? Why or why not?
- How else could the lesson have gone?
- What particular things do you want to accomplish as teacher?

Lesson transcripts

- Analyze to determine teachers ability to use classroom data to define and address learning.
- Determine the degree to which questions were used to assess skill, obtain control, or exercise management in the classroom.
- Determine how teachers generate specific modifications to activities that address the changing social and cognitive needs of students.
- Coded independently based on surface and deep learning opportunities, teacher questions and student responses to teacher, to each other, and to concepts.

Classroom observations

- Code students off- and on-task behaviour.
- Student engagement in lesson.
- Class groupings.
- Management vs. instructional time.
- Nature of classroom activity (e.g., development of new content, review, practice, enrichment, assessment, homework, transitional, lesson close, assigning tasks, relationships)
- Code feedback – amount and nature, and from whom to whom.
- Determine teachers ability to identify events occurring simultaneously in the classroom.

Scenarios

It is five weeks into the school year, and you have just been assigned a new English class, because the previous teacher left abruptly. The previous teacher left a grade book with grades and attendances recorded, student information cards containing demographic information on one side and teacher comments about the student on the other, corrected tests and homework assignments, and the text book. Question: Imagine that you have no more than 4-5 minutes before you meet the class for the first time, what would you plan to do in the first lesson?

Student Interviews before and after the lessons observed

- Tell me what you did during this lesson (Probe for examples)
- What do you think your teacher wanted you to learn today?
- What expectations do you believe the teacher has of you?"

(Hattie, J. 2003 5.)

8. Appendix

On-track indicator by Consortium on Chicago School Research

“The Consortium on Chicago School Research introduced the “on-track indicator” in 2005 by combining two highly predictive ninth-grade risk factors: course credits earned and course grades.

First-year high school students in the Chicago Public Schools are classified as “on track” if they earn

- (a) at least five full-year course credits and
- (b) no more than one F in one semester in a core course during the first year of high school.

On-track students are more than 3.5 times more likely than students who are off track to graduate from high school in 4 years (Allensworth & Easton, 2005).

The on-track indicator reflects students’ academic performance during their first year of high school, a critical transition period in the education pipeline. In Chicago, the on-track indicator is a better predictor of graduation than students’ background characteristics or middle school achievement test scores. For example, Chicago students who are in the highest quartile in eighth-grade achievement scores but fall off track in their freshman year are far less likely to graduate than students who were in the lowest quartile on eighth-grade achievement but are on track at the end of freshman year (Allensworth & Easton, 2007).” (Heppen, J. B., Bowles Therriault, S., 2008 2.)

Key Data for an "Early Warning System" with On- and Off-Track Indicators That Become the Basis for Tiered Interventions

Purpose: This tool provides various ways to analyze school data related to students who are in danger of falling off-track, students who are slumping and entering a danger zone, and students who are firmly on-track. By knowing the number of all students in each category it is possible to see which groups of students need help, and to make some estimates about the kind of help that can be targeted to their unique circumstances. While our example uses first-time ninth graders, this analysis can also be done beneficially for students in all other grades – 6, 7, 8 and 10 especially. It is also useful to disaggregate the information, especially by gender.

Foundation: Matching interventions with need is the most important part of an Early Warning System. The essential first step is to systematically understand how many students are in each category in each school. The second step is to look at the absolute numbers and determine what is feasible given the capacity in the school and community.

Inventory One: In Danger of Falling Off-Track In the Past Semester					
	Missed 5-9 days of school	Had 2 or more in-school suspensions	Had C or D average	Received one F in a core academic subject	
All students					
First-time 9th graders					
Students who are repeating a grade					

Students who are two or more years overage for grade					
Inventory Two: Fallen Off-Track In the Past Semester					
	Missed 10 or more days of school	Had 3 or more in-school suspensions	Had 1 or more out-of-school suspensions	Received two or more Fs in a core academic subject	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
Inventory Three: Academic Slumping Coupled with Attendance Slumping average, with multiple days missed in a specific time period					Number of students with a C or D
	C/D average	0-4 days missed	5-9 days missed	10-19 days missed	20+
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
Inventory Four: On-Track for Success					
Number of students with an A or B average, 95% or higher attendance, and no suspensions					
	A or B average	95% attendance	No in- or out-school suspensions		
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
All of our examples are for a 9th grade early warning system. Use a similar approach to analyze grades 6, 7, 8 and 10.					
The charts below are ways to collect the needed data					

ATTENDANCE. Number of students with this number of missed days in a specific time period	0-4 days	5-9 days	10-19 days	20+ days	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
BEHAVIOR - IN-SCHOOL SUSPENSIONS. Number of students with this number of in-school suspensions in a specific time period	0-1	2-3	4-5	6+	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
BEHAVIOR - OUT-OF-SCHOOL SUSPENSIONS. Number of students with this number of out-of-school suspensions in a specific time period	0-1	1	2	3	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					

ACADEMIC FAILURE. Number of students with this number of Fs in a specific time period	1	2	3	4	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					
ACADEMIC FAILURE. Number of students with an F in English, mathematics or both in a specific time period	1	2	3	4	
All students					
First-time 9th graders					
Students who are repeating a grade					
Students who are two or more years overage for grade					

Source: Guidance, resources and tools to help your community and your schools raise graduation rates and better prepare young people for success. Robert Balfanz and Joanna Hornig Fox from the Everyone Graduates Center at the Johns Hopkins University School of Education and by John M. Bridgeland and Mary Bruce of Civic Enterprises.