



# 01: LITERATURE REVIEW ON TELLING DIGITAL STORIES

STUDY







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# IO1 Study: Telling digital stories to fight against early School-Leaving

“Si vous ne communiquez pas avec des histoires, vous ne communiquez pas.  
Les faits parlent mais les images font vendre”

“If you don't communicate with stories, you don't communicate.  
Facts speak but images sell”

James Carville & Paul Begala,

[http://mag.formation-prise-de-parole.fr/s-inspirer-d-autres-speakers/storytelling-si-les-orateurs-devenaient-con-  
teurs/](http://mag.formation-prise-de-parole.fr/s-inspirer-d-autres-speakers/storytelling-si-les-orateurs-devenaient-con-<br/>teurs/)

## Summary:

The study lays the foundation for the ensuing development work of the My Story Map project. It sums up the results of national and transnational desk-based research activities.

This report is in part based on the methodology and work undertaken by the Erasmus Plus “Tell Your Story” Project. The research undertaken there has been updated by My Story Map for two different target groups, namely teachers and teacher training as well as in terms of including the latest articles, projects, initiatives and for several additional partner countries.

The report confirms that Early School Leavers are a non-homogeneous group. The youngsters with difficulties at school are mainly studying in a vocational high school rather than secondary schools. It confirms the main causes of dropping out are: i) the school environment, ii) pupil-related such as low levels of performance and family-related like single parenthood.

The state of the art focuses on four key areas, firstly the current situation regarding prevention of, intervention against, and compensation of early leavers from education and training in the countries participating in the project (AT, BE, FR, SI, UK, IT) and in other European countries and at European level.

Secondly, the research examines some solutions and progress made within the strategic framework Education and Training 2020 and synthesises the present state of research on the potential for story-telling and digital story mapping to engage young people at risk (Marta, 2015).

Thirdly, the report introduces teaching and training opportunities in the partner countries, specific to the project target groups.

Finally, the report explores policies at different scales, strategies for engagement, the reported use of tools, pedagogical approaches, success stories and concludes with recommendations that influence the rest of the My Story Map project.



## 1. INTRODUCTION

The My Story Map Project focuses on young people either leaving school early or at risk of exiting the school system without getting qualifications (Moulin et al., 2014). The project develops a cross-sectorial approach for preventing and combating school dropout, also when it has happened already, and aims at developing new training, new techniques and new working methods for educators from different sectors: school, adult education, youth field.

As a target group, My Story Map addresses young people from 15 to 25 years of age who already dropped out of school, combining personal development and non-formal educational practises. The purpose is to support them to identify possible future directions in their life, such as resuming the interrupted learning cycle or tracing other training opportunities. This would avoid potential marginalisation in the future. The outcomes of this process will use expressive techniques such as the story map, more suitable and aligned with the communicative strategies of young people, which then could also be used as original material in schools for campaigns of prevention against school dropout.

The project uses storytelling through maps as a self-efficacy enhancing tool, addressing students between 15 and 18 years of age within the school. Through the methodology of the “reality task” the student at risk of dropping out can become the main actor of a process of peer education, within his/her own group and anyway within his/her own school.

School dropout can be faced only if the main learning actors (both inside and outside of the school) are properly trained. Structured in several steps, “My Story Map” project covers a research phase (increasing knowledge) and training development (increase of competencies). Based on initial research, the project develops training modules designed specifically to prevent and tackle the phenomenon.

The specific aims of the project are to:

- 📍 explore factors of preventing drop-out rates from school through story mapping;
- 📍 enhance communication and digital competence, two fundamental key competences both for early school leavers and those at risk of early school leaving;
- 📍 raise awareness of the reasons of early school leaving and for the personal consequences of this decision on one own’s life;
- 📍 foster an aware analysis of one own’s schoolastic pathway in order to redefine life objectives in terms of both educational possibilities and job opportunities;
- 📍 make available tools documenting and advising against early school leaving, usable also by future generations of students at risk of dropping out;
- 📍 contribute to reducing drop-out rates from school;

The project also fosters:

- 📍 **a cross-sectoral approach:** the project develops strategies which can be received and implemented by schools, vocational training institutions, life-long learning centers, youth centers and youth organisations;
- 📍 **the application of pupil-focused strategies:** the project makes use of the motivating potential of new media and the media preferences of young people;
- 📍 **a focus on teachers, trainers, educators:** early school leaving can only be tackled if the educators are trained to do so. The project develops relevant training modules designed specifically to prevent and tackle the phenomenon.
- 📍 **extra-curricular activities:** the informal learning approach of the project is fit to meet the pre-conditions of successful educational work with the target groups, as it raises self-esteem, improves motivation and supports learning processes;
- 📍 **personalised learning:** the digital stories with maps can be highly customized and thus offer very personal learning pathways which are designed on the specific learning needs of very individual.

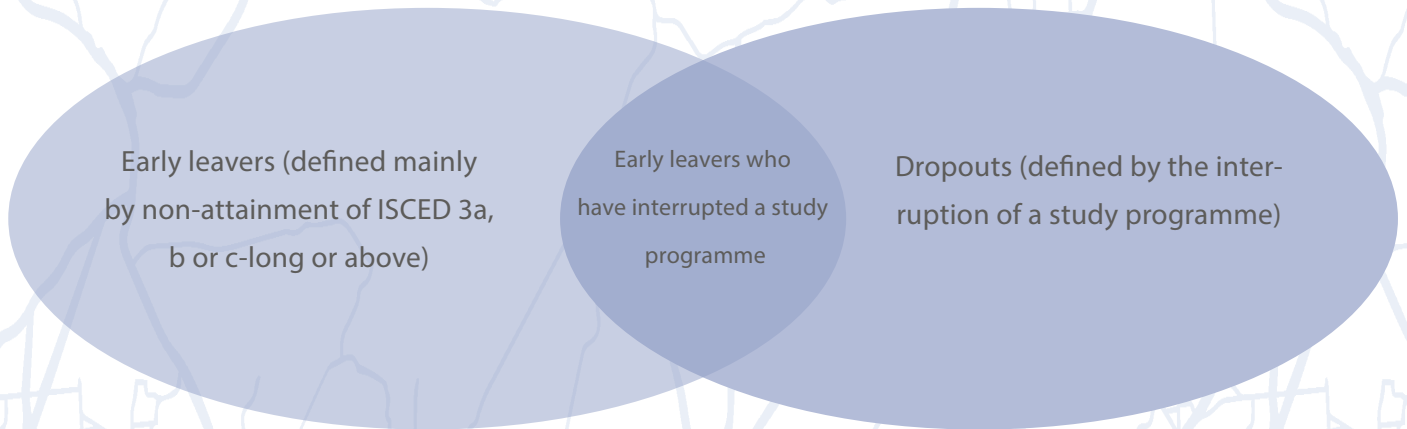
The project promotes an approach based on research-action, which takes into consideration 'data-based' insights.

According to Kuran (2013), young people who leave school before the end of the educational program or before they finish, without going to another school or another educational institution are commonly treated as "drop-outs" (Figure 1). They are perceived to be at risk of marginalisation, poverty and economic and social exclusion. Recognising these social implications and the high costs of early drop-out rates meant that reducing the number of early school leavers has become a central theme in the strategic Education and Training 2020 framework for European cooperation and a central component of the Europe 2020 Strategy (European Commission, 2010).

CEDEFOP (2016a) use the commonly adopted Eurostat definition of early leaving from education and training, a term that replaced early school leaving, as the percentage of the population aged 18 to 24 achieving a lower secondary level of education or less (ISCED 0, 1, 2 and 3c short) and declared as not having received any education or training in the four weeks preceding the EU labour force survey (LFS).



Figure 1: Early leavers and drop-outs (Cedefop, 2016a)



European Commission authorities developed a Europe 2020 Strategy in order to support youth and to engage young people to develop their own opinions and attitudes about the economy and society. Reducing ESL to less than 10% by 2020 is a headline target for achieving a number of key objectives in the Europe 2020 strategy and one of the five benchmarks of the strategic framework for European cooperation in Education and Training 2020 (European Commission, 2011a,b).

Europe 2020 plans proposed three mutual reinforcing priorities: 'smart growth' based on knowledge and innovation, 'sustainable growth' promoting a greener economy and 'inclusive growth' fostering high employment and social cohesion. High rates of ESL are detrimental to the objective of making lifelong learning a reality and a constraint to smart, sustainable and inclusive growth in Europe.

As a result, under the Lisbon Agenda the target of being the most competitive and socially cohesive region in the world was set, suggested the rate of ESL should be at or below 10% by 2020 in each EU country.





## 2. PURPOSE OF THIS REPORT

This report is IO1: a study: Telling digital stories to fight against early school-Leaving.

The first phase of the My StoryMap Project is concerned with pedagogical, policy and education research. The study lays the foundation for the ensuing development work of the project. It sums up the results of national and transnational desk research activities focusing on two key areas:

1. the current situation regarding prevention of, intervention against, and compensation of early drop-out from education and training in the countries participating in the project (FR, AT, BE, IT, ES) and at European level (progress made within the strategic framework Education and Training 2020)
2. 2a synthesis of the present state of research on the impact of story-telling and digital mapping on diverse target groups.

Special emphasis will be placed on conclusions and recommendations for the development of the educational outputs of the project. These outcomes form the basis of the first three intellectual outputs:

- “desk research” aimed at exploring and deducing useful results from community projects already implemented on the topic of prevention, intervention and compensation of early-school leaving, and on the results of the focus group of the European Union on the subject. The research will be used to capitalize the teachings and recommendations within the “My Story Map” project;
- research resulting in a learning module on digital storytelling (I.O.2) and
- research leading to a module on digital mapping (I.O.3).

Following this phase of educational and pedagogical research, two intellectual outputs will follow, aimed at engaging directly early-school leavers in an educational action as “digital peer educators” by implementing I.O.2 and I.O.3 with young people, who will produce their life stories through the digital maps.

The resulting digital products will be organized, enriched with extra related content (such as video, photos, audio messages, etc.) and showcased in an online exhibition (I.O.5) which will be part of a communication campaign (StarWall) aimed at using the social networks as a mean of dissemination of educational messages.



### 3. EARLY SCHOOL LEAVING

#### Introduction

According to Timmerman et al. (2014), early school leaving (ESL) is a concept created by the European Union, which refers to people aged 18 to 24 who leave education and training without attaining upper secondary qualification or equivalent. However, it is not well-defined either in research or policy.

The European Commission defines early school leaving as:

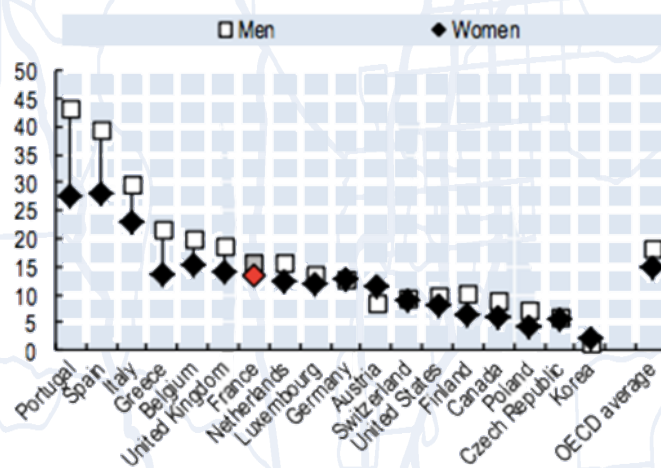
“persons aged 18 to 24 fulfilling the following conditions: (1) the highest level of education or training attained is ISCED 0, 1, 2 or 3c short, (2) no education or training has been received in the four weeks preceding the survey. The reference group to calculate the early school leaving rate consists of the total population of the same age group (18 to 24).”

(European Commission, 2013a, p.8)

This definition is used to gather data on young people in school, who have left school and in transition from school education to the workplace. The EU definition of early leaving combines three main dimensions: an age parameter of young people (18 to 24), their current status (not in education and training) and education achievement (completion of upper secondary education). This definition was designed to allow international comparisons to be made between different education systems across the EU and beyond, but it should be reflected on critically (European Commission, 2013b).

In OECD countries school dropout rates have been decreasing considerably in recent years (OECD, 2016), although some EU countries have seen modest increases. National rates of ESL vary greatly between EU member states and also display significant regional variations within states. Some EU countries like Spain and Portugal (Figure 2) have very high levels, while others such as Poland and the Czech Republic ESL is very low.

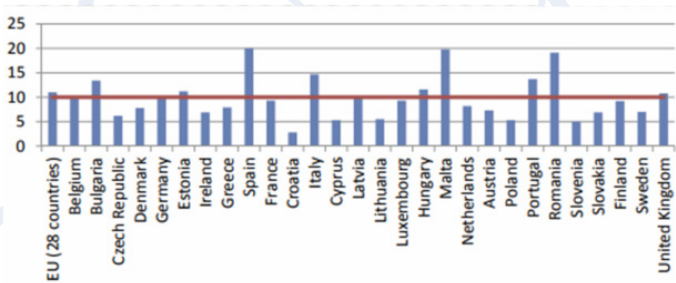
Figure 2: The rate of Early School Leaving (OECD, 2016)



## Early School Leaving in the EU

The rates of Early School Leaving across the EU in 2015 are shown in Figure 3 (CEDEFOP, 2016b). Overall there has been a reduction of early-school leaving rate since 2004, but differences between countries remains high, and significant regional variations within states are also evident, which according to Minguez (2013), are primarily dependent on the amount of social spending on education.

Figure 3: Early School Leaving rates for EU countries (EUROSTAT, 2015a, b)



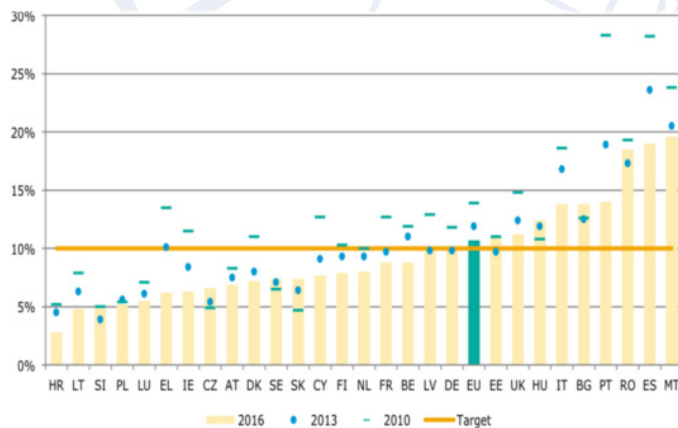
Source: Eurostat, 2015.

According to the European Commission (2017a; 57) “The EU average share of early leavers went down continuously from 13.9% in 2010 to 10.7 % in 2016 (with 11.9 % in 2013). [...] The greatest reduction since 2010 has been achieved by Portugal, now at 14.0 %, followed by Spain at 19.0 % since 2010 — when the targets were agreed and these two countries had the highest shares of early leavers (Portugal: 28.3 %, Spain: 28.2 %).

There was also remarkable success in Greece, where in 2016 the share was 6.2 %, well below the target. The 16 other Member States that have already reached the target for 2020 in 2016 are Croatia, Lithuania, Slovenia, Poland, Luxembourg, Ireland, the Czech Republic, Austria, Denmark, Sweden, Slovakia, Cyprus, Finland, the Netherlands, France and Belgium, with Latvia (10.0 %), Germany (10.2 %) and Estonia (10.9 %) very close to the target.”

Figure 4 shows the downward trend of early leavers for each EU country between 2010 and 2016.

Figure 4: Early leavers from education and training 2010-2016



Source: Eurostat, EU Labour Force Survey, 2010-2016, online data code: [edat\_lfse\_14].

Overall, the share of early leavers (ESL) continues to fall, with a growing number of countries that have reached the ET 2020 target and their own national targets. The ESL share is lowest for women, while non-native people and young people in rural areas show higher ESL rates (European Commission, 2017).

Across the EU, young men are more likely to become early school leavers than women (Figure 5). Indeed, this gender gap in ESL persists in all but one member state, and is particularly high in Cyprus, Malta and Portugal.

“The ESL gender gap has remained almost constant at 3 pp, with young men showing higher rates of early leavers from education and training (at 12.2 %) than young women (at 9.2 %), though both rates decreased slightly since 2015, when they stood at 12.4 % for men and 9.5 % for women.” (European Commission, 2017a).

The European Commission (2017a) suggest that reaching the goals of Education and Training 2020 is likely become particularly challenging because of high migration rates where migrant children may have little formal schooling or have received education in a different language. This is confirmed by data from Flanders (Belgium) and Spain, which confirms that migrants and ethnic minorities experience higher rates of ESL, as compared to native populations.

Figure 5: Early leavers from education and training (5) by gender and migrant status

	Total	Males	Females	Native-born	Born within the EU	Foreign-born Born outside the EU	Born within or outside the EU
<b>EU</b>	<b>10.7</b>	<b>12.2</b>	<b>9.2</b>	<b>9.8</b>	<b>17.5</b>	<b>19.4</b>	<b>19.7</b>
BE	8.8	10.2	7.4	7.6	16.0	18.9	17.8
BG	13.8	13.7	13.9	13.8	:	:"	:"
CZ	6.6	6.6	6.6	6.6	10.4 <sup>u</sup>	11.2 <sup>u</sup>	10.8 <sup>u</sup>
DK	7.2	8.5	5.9	7.2	:"	8.8 <sup>u</sup>	7.9 <sup>u</sup>
DE	10.2	10.9	9.4	8.2	:	:	23.1
EE	10.9	14.3	7.4	10.9	:"	:"	:"
IE	6.3	7.8	4.6	6.5	7.0 <sup>u</sup>	:"	5.2
EL	6.2	7.1	5.3	5.5	16.5 <sup>u</sup>	18.5	18.1
ES	19.0	22.7	15.1	16.1	36.6	31.9	32.9
FR	8.8	10.1	7.5	8.2	16.1	16.3	16.3
HR	2.8 <sup>u</sup>	3.5 <sup>u</sup>	2.0 <sup>u</sup>	2.7	:	:"	:"
IT	13.8	16.1	11.3	11.8	26.1	31.4	30.0
CY	7.7	11.4	4.3	4.6	13.6 <sup>u</sup>	22.1	18.2
LV	10.0	13.7	6.2	10.1	:	:"	:"
LT	4.8	6.0 <sup>u</sup>	3.6 <sup>u</sup>	4.8	:	:"	:"
LU	5.5	6.8	4.2 <sup>u</sup>	4.1	9.2 <sup>u</sup>	:"	8.5
HU	12.4	12.9	11.8	12.4	:"	:"	:"
MT	19.6	23.1	15.8	19.5	:	:"	:"
NL	8.0	10.1	5.8	7.9	6.4 <sup>u</sup>	9.0	8.3
AT	6.9	7.7	6.0	5.5	7.2 <sup>u</sup>	20.4	14.7

Eurostat, EU Labour Force Survey, 2010-2016, online data code: [edat\_lfse\_14].

European Commission/EACEA/Eurydice (2016). Structural indicators for monitoring and education and training systems in Europe – 2016. Eurydice Background Report to the Education and Training Monitor 2016

They confirm that Early School Leaving rates also vary strongly by migrant background. The rate is 19.7% for foreign-born children compared to 9.8% for native-born children. These children face additional difficulties in school like lower socio-economic situation of their family or lower average parental education, which means they are less likely to help their children with homework.

The situations in the Member States are quite distinct with respect to migration patterns, language requirements, similarities and dissimilarities between receiving and sending countries, qualifications of migrants, and many more aspects. This leads to differences in the rates of Early School Leaving for native versus foreign born migrants.

There are no differences in Denmark, Netherlands, there are similar rates in Belgium, the Czech Republic, Spain, Finland and France, foreign-born ESL is three times higher in Austria, Germany, Greece, Italy, Slovenia, Cyprus and Sweden.



The early abandonment of education and training is a phenomenon that, although to a different extent, concerns all European states (Indire, 2016). European countries have committed themselves to reducing the proportion of young people who leave studies and training early (ELET), to less than 10% by 2020. In June 2011, ministers of education agreed to establish a working group bringing together political decision-makers and industry professionals across Europe. They studied examples of good practice and promoted an exchange of experiences on this phenomenon. Their report confirms that early leaving is a complex challenge at the individual, national and European levels. Young people who leave early education and training are often disadvantaged from both a social and economic point of view compared to those who take them forward and obtain the qualifications needed to succeed in life.

Some countries (Bulgaria, Latvia, Portugal, Romania, United Kingdom and Turkey) point out the lack of a good quality orientation. The results of the OECD's TALIS survey show that about 42% of European teachers need training in vocational guidance and in student counseling. Only one-third of countries declared that the staff responsible for guidance receive initial training on the skills needed to manage groups at risk of early leaving (Bulgaria, Czech Republic, Germany, Spain, Italy, Cyprus, Malta, Romania, Slovakia, Sweden, Finland, Switzerland and Iceland).

The most recent Early Leaving rates reveal large disparities between European countries. In the 28 EU member states, rates range from 3.9% in Slovenia to 23.6% in Spain with an EU average of 12%. Other European countries with rates of over 20% are Malta and Iceland and in 2013 Turkey recorded a 37.5% ELET rate. The objective of the Europe 2020 Strategy remains to bring rates below 10% by 2020.

EUROSTAT (2018) present an overview of 2016-7 European Union (EU) statistics related to young people neither in employment, nor in education or training (NEET). Their research provides information on the transition from education to work and focuses on the number of young people who find themselves disengaged from both education and the labour market. It complements information on early leavers from education and training, as well as employment rates of recent graduates and participation of young people in the labour market.

In 2016-7, there were almost 17 million young people in the EU aged 20–34, who were NEETs - neither in employment nor in education and training (EUROSTAT, 2017), this corresponded to approximately 16.9 million young people. This was said to be closely linked to economic performance. At this time the lowest NEET rates were below 10.0% in Luxembourg, the Netherlands, Sweden, Iceland and Switzerland. There were 11 Member States that recorded NEET rates above the EU-28 average of 18.3 %. Greece and Italy had the highest proportions of NEETs were found, where approximately one third of all young people aged 20–34 were neither in employment nor in education and training (30.7 % and 30.5 % respectively); there were also very high NEET rates in the former Yugoslav Republic of Macedonia (37.7 %) and Turkey (34.0 %).



The concept of NEETs (young people not in employment, education or training) has been widely used since 2010 as a tool to inform youth-oriented policies in the 28 Member States of the European Union and has proved a powerful tool in enhancing understanding of young people's vulnerabilities in terms of labour market participation and social inclusion. For instance, the OECD recognises NEET situations (Not in Education, Employment, or Training) as fundamentally important. These are early school leavers who do not complete secondary education (OECD, 2012a). NEET rates across the OECD among migrants are more than 1.5 times higher than those born in their country of residence. However the NEET concept has sometimes been criticised because of the heterogeneity of the population it captures. While all NEETs share the common feature of being young people who are neither in the labour market nor in education, the various groups within this category have very different characteristics and needs. This has important consequences for project developments and policy responses.

Eurofound (2013) identified five categories of NEETs as conventionally unemployed, unavailable, disengaged, opportunity seekers and voluntary NEETs., each with very different characteristics and needs. In 2016, this was revised based around seven definitions:

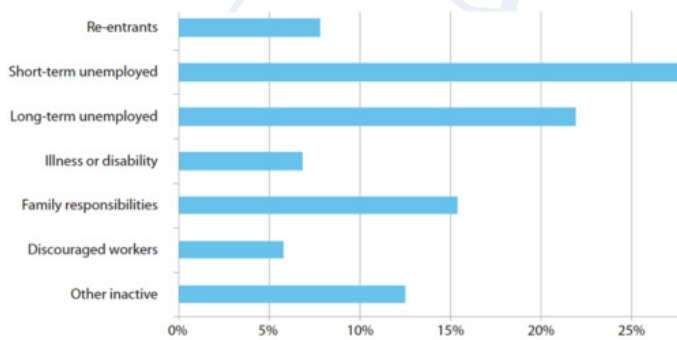
1. **Re-entrants:** young people who will soon re-enter employment, education or training and will soon begin or resume accumulation of human capital through formal channels. They are people who have already been hired or enrolled in education or training.
2. **Short-term unemployed:** young people who are unemployed, seeking work and available to start within two weeks, and have been unemployed for less than a year. A short period of unemployment during the transition from school to work can be considered normal, and the level of vulnerability among people in this category can be expected to be moderate.
3. **Long-term unemployed:** young people who are unemployed, seeking work and available to start within two weeks, and have been unemployed for more than a year. People in this category are at high risk of disengagement and social exclusion. Long-term disengagement damages young people's employability, their human capital and their future employment outcomes; in some cases, the damage will last the rest of their lives.
4. **Unavailable due to illness or disability:** young people who are not seeking employment or are not available to start a job within two weeks due to illness or disability. This group includes those who need more social support because illness or disability means they cannot do paid work.
5. **Unavailable due to family responsibilities:** includes those who are not seeking work or are not available to start a new job because they are caring for children or incapacitated adults, or have other less specific family responsibilities. Young people in this group are a mix of the vulnerable and non-vulnerable; some are not able to participate in the labour market because they cannot afford to pay for care for their child or adult family member, while others voluntarily withdraw from the labour market or education to take up family responsibilities.
6. **Discouraged workers:** young people who have stopped looking for work because they believe that there are no job opportunities for them. They are mostly vulnerable young people at high risk of social exclusion who are very likely to experience poor employment outcomes over the course of their working lives and are at high risk of lifelong disengagement.



7. **Other inactive:** all NEETs whose reasons for being NEET do not fall into any of the previous six categories. This group is a statistical residual category, and it is made up of those who did not specify any reason for their NEET status. It is likely to be an extremely heterogeneous mix that includes people at all extremes of the spectrum of vulnerability: the most vulnerable, the hard-to-reach, those at risk of being deeply alienated, the most privileged, and those who are holding out for a specific opportunity or who are following alternative paths, such as careers in the arts, that have little formal presence in the labour market or education.

The proportion of NEETs under these categories in 2013 is shown in Figure 6 and by education level in Figure 7.

Figure 6: NEETS aged 15-24 in the EU (Eurofound 2013)



Source: Eurofound elaboration based on EU Labour Force Survey 2013.

Figure 7: Education level of categories of NEETs aged 15-24 in the EU (EUROSTAT 2013)

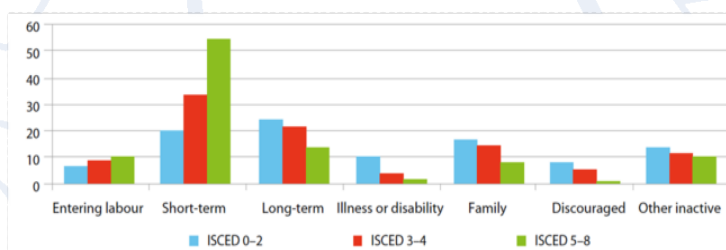
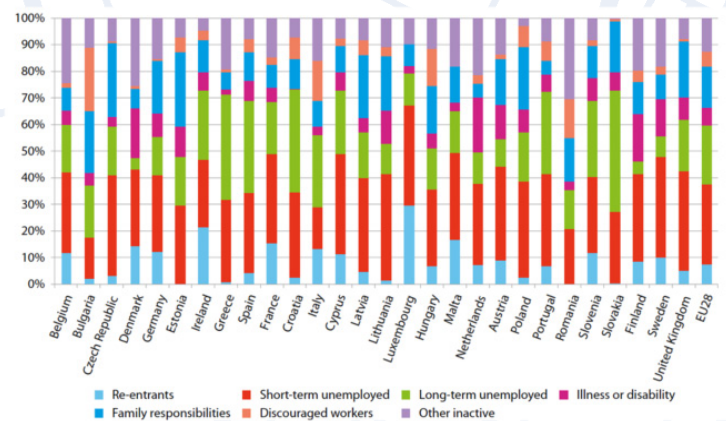


Figure 8: Categories of NEETs aged 15-25 by EU Member State (EUROSTAT, 2013)



A comparison of the composition of the NEET population among different Member States (Figure 8) reveals its heterogeneity (Mascherini and Ledermaier, 2016). Three main clusters of countries have been identified.

1. Austria, Belgium, Denmark, Finland, France, Germany, Luxembourg, Malta, the Netherlands, Slovenia, Sweden and the UK are characterized by low NEET rates with a very low share of long-term unemployed and discouraged workers and a larger share of short-term NEETs, young NEETs with disabilities and, in some case, NEETs with family responsibilities.
2. Croatia, Cyprus, Greece, Ireland, Italy, Portugal and Spain are characterized by a higher NEET rate than the EU average and a high share of long-term unemployed and discouraged workers. Structural barriers to young people's entry into the labour market persist.
3. Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia. They have marked differences in the size of their NEET rates but have a larger share of NEETs due to family responsibilities and a high share of young women who are NEET. Some also show a considerable share of long-term unemployed and discouraged workers.

Further data and commentary is provided in Annexes 1 and 2.



## 4. FACTORS AFFECTING ESL IN THE EU

### Types of early leavers

School failure results from a combination of obstacles and disadvantages. These limit the pupils and result in them being at risk of early school leaving. Much early research focused on avoiding stereotyped views of early school leavers. For instance, Minguez (2013) examines the situation of early-school leaving in six different countries: Germany, Denmark, Spain, Finland, Belgium and the UK, studying the “impact of investment in education, gender, ethnic and family background” in ESL. The research showed there are big differences between the countries but recently there is a more nuanced understanding of early leaving, with the interaction of family, individual and policy factors found to shape a gradual process of disengagement from school and depending on the amount of social spending on education.

Research by Fortin et al. (2006) has tried to identify different types of early leavers and those who are at risk of early leaving (Figure 9). According to Cedefop (2016a), there are three categories that seek to explain early leaving based on a combination of factors related to young people’s education experience, their emotional and mental well-being, their behaviours and, in some cases, their family background. From this work it can be confirmed that not all early leavers have low academic performance. Some may be very able and have even been strong performers in the past.

Figure 9: The characteristics of early school leavers (Cedefop, 2016a)

Kronick and Hargis., 1990			
Low achievers	Push-outs	Quiet	Non-curricular
Continued failure, truancy, high level of disruptive behaviour	Perceive school as not being for them, frustrated with school and in consequence rebellious	Low achievers with continued failure but don't show disruptive behaviours	Their problems lie outside of school (drugs, alcohol, abuse, poverty, health)
Janosz et al., 2000			
Maladjusted	Low achievers	Disengaged	Quiet
High level of misbehaviour (many sanctions, high truancy). Poor school performance. Weak commitment to education	Weak commitment to education. Average to low levels of misbehaviour. Very poor school performance	Average to low level of school misbehaviour (disciplinary sanctions). Low commitment to school (do not like it, don't care about grades, little aspirations). Average performance (but actually compared to their low personal investment in education their performance is quite good)	No evidence of school misbehaviour. Moderate to high level of commitment to education (positive views about school, no major problems with absenteeism). Average to poor performance. Generally go unnoticed until they decide to leave
Fortin et al., 2006			
School and social adjustment difficulties	Uninterested in school	Depressive	Antisocial covert behaviour
Low academic performance. High behaviour problems. Delinquency. High level of depression. Teachers have very negative attitudes towards them. Low level of family cohesion, support, organisation	Slightly high depression levels. Good academic performance but lack of motivation and experience boredom. Teachers have very positive attitudes towards them. Good social skills. Functional family	Average grades. Low incidence of behaviour problems. Teachers have positive attitudes towards them. Very high level of depression. Very low level of family cohesion, support, organisation-high level of parental control	Good academic performance. Teachers have very positive attitudes towards them. Antisocial behaviours (lying, fighting, theft, vandalism). High level of depression. Low level of family cohesion, support, organisation





## Causal Factors

According to Cedefop (2016a) many factors can cause Early School Leaving. They suggest these are based on (i) the individual and their family background; (ii) their education and training; (iii) aspects related to employment; and (iv) other issues like changing school or moving home. This study highlights the need for better data and its systematic use for shaping targeted policy to tackle early leaving.


El-Mahdi and Moullet (2016) confirm ESL is more frequent in vocational secondary schools than in general and technical secondary schools and they attempt to understand the causes behind leaving. Four different categories of early-school leavers are suggested, i) the unexpected, as they have a similar profile as the non-ESL, ii) the disengaged, who do not graduate, iii) the abandoned, who are predominantly male and iv) the expected, where dropping out is predictable.

Parents are one of the main factors that ensure and influence the harmonious development of children. Tomiță and Panzaru (2013) analyse the role of parenting on Early School Leaving in 27 European Union countries and assess the impact of family policies on children's academic success. They address two components related to the environment in which the child develops: the affective component (given by the constant presence of the parent in early life) and the economic component (given by the financial support the family benefits from). They suggest that the physical presence of parents with children and their active involvement is essential in child development, with long-term impact on behaviour that develops.

Foreign-born students are more likely to leave education and training early. Students with a migrant background generally face greater challenges in accessing and participating in education than those born in the country of residence (European Commission/EACEA/Eurydice/ Cedefop, 2014). The reasons for this are primarily due to language difficulties and/or cultural barriers, socio-economic segregation and limited access to sufficient learning support.

Tumino and Taylor (2015) assess the impact of local labour market on Early School Leaving. They suggest that when there are relatively high levels of unemployment, the demand for education increases and the level of ESL is reduced, as education is perceived to significantly improve employment chances. Family resources and the environmental conditions in which the children are raised influence school leaving decisions, so local labour market conditions matter mainly in cases of young people from disadvantaged socio economic groups. They suggest that economic recovery policies should also seek to increase the expected net gains from education for young people, and from lower socio-economic groups in particular.





Martinelli (2016) considers the issue of weak literacy development and early school leaving in Malta. In spite of a lack of a direct or indirect causal link between the two, in the case of Malta these issues seem to be almost exclusively specific to children attending the State school. Children from the Church and the Independent sectors are minimally affected or not at all. These two phenomena are examined against a background of parental education, socioeconomic status and social capital. He suggests that while literacy is likely to be a contributory factor to early school leaving, the two may be facets of deeper underlying deficits such as the inability of parents to support their children's learning and to act as their point of reference and educational compass outside the school. This results in alienation from schooling.

This article posits a view that poor literacy achievement and early school leaving are associated. The State school cohort that constituted 58% of the total population assessed by PIRLS 2011 was the only cohort scoring below the international average. Children from this cohort were experiencing literacy difficulties; the Church and Independent school cohorts scored above the international midpoint. In the Ali and Farrugia (2013) study, the students who did not register for any school leaving examinations quoted subject difficulty and problems with reading and writing for doing so. These students came exclusively from the State secondary sector. Furthermore, these children were already absenting themselves from school. There is a clear association between the two although one cannot attribute causality. It is possible that poor literacy, a dearth of books in the home and ESL are co-occurring, interlinked manifestations of deeper underlying causes such as inadequate support to learn at home, parents who are unable to support children in their learning and possibly, alienation from schooling. In the Maltese context, poor literacy is an attributed cause for children not sitting for any school leaving examinations but then poor literacy underlies weak performance in most subjects because it is through reading and writing that content may be accessed and processed.







Burman et al. (2013) confirm ESL is the end point of a long and complex process whereby the youngster increasingly retreats from education and training. In this process individual as well as institutional factors may play a role. The school situation can enhance or reduce the rate of early leavers.

### 4.3 Early Leaver Profiles

The profiles of young people who do not continue in education and training vary. While some experience difficult personal situations that lead them to quitting education early, others are similar to those who eventually persist in education. The Cedefop study (2016b) identified six profiles of early leavers and learners at risk of early leaving. These profiles illustrate how different risk factors can interact and lead to early leaving (Figure 10).

The profiles show different levels of disengagement and different types of challenge. Professionals who design measures to tackle early leaving need to reflect on the specific characteristics of their target group/s and select actions accordingly. This approach also requires policy-makers to refine and target their responses.

Figure 10: Early Leaver Profiles (Cedefop, 2016b)

<p>Learners escaping the system</p> 	<p>They are not radically different from other students. Their education performance is average and they have low future education aspirations. Education is not major interest: they need motivation and encouragement to raise their aspirations.</p>
<p>Learners confronting the system</p> 	<p>Still in education and training but with high levels of absenteeism, low interest in education and training and gaps in basic skills, which is an obstacle for further progression. They need a combination of motivational activities and remedial training.</p>
<p>Learners disengaging due to difficulties adapting after transition</p> 	<p>They are starting to disengage during the transition period from one track to another. They have difficulties adapting to new work rhythms; they have inaccurate programme expectations and do not mix well with the group. They need support to engage fully in the programme.</p>
<p>Learners disengaging because they cannot find a placement of their choice</p> 	<p>Typically this can happen due to lack of placements in apprenticeship or a particular VET programme, lack of information and guidance or a combination of unrealistic expectations and lack of work-readiness. They need to be reoriented towards a more suitable track, possibly a bridging programme.</p>
<p>Learners who had to leave education and training because of caring, parenting or working obligations</p> 	<p>They are not interested in education but need a source of income or have other duties. Even if they see the relevance of education and training, external circumstances make it hard for them to enrol (e.g. lack of childcare). They need solutions that enable combining working and learning, possibly with support from social services.</p>
<p>Learners combining multiple disadvantage, possibly facing health and psycho-social issues</p> 	<p>They ended up leaving education and training for various reasons. They need complex support of which education and training is only a part.</p>



## Early School leaving in partner countries

In Italy surveys by Checchi (2014) aimed to clarify the size and economic cost of school leaving and investigate the value of actions that schools and other organisations have in place to counteract the phenomenon. According to European Union data, in 2000 early school leavers represented 25.3% of the school population in Italy, significantly higher than in France and the UK. This had been reduced to 17% by 2011. Checchi (ibid) says "The schools and the third sector bodies had responded in many different ways to the question of intervention to combat school drop-out. School projects seemed to be increasingly activated with links to third sector organisations.

Despite considerable progress school dropouts, according to Ferraro and Burba (2017), remains a serious problem for Italy with two important consequences: "[...] on the one hand, the pathological repercussions on the functioning of the educational system and the consequences on the economic-productive system and, on the other hand, the problematic effects on the evolution of individual stories (training, work, social)". The analysis of experts point out that the phenomenon of dispersion includes a series of problematic situations much wider than that indicated by the statistical data.

"... early school leaving must be seen not only as an escape from the obligation or abandonment of the school by the students before the end of the cycle of studies undertaken, but as a reality that also includes repetitions, delays with respect to school age, school changes, irregular frequencies, even numerous cases of poor performance compared to the possibilities. The concept of school dropout is to be understood in relation to the idea of schooling existing in a given society; for western countries regular training is scheduled for up to 18 years.

There is a dispersion of talents every time we are faced with a feeling of serious malaise that prevents the pupil from living a fully formative educational experience. It is an individual and social problem, to be attributed to a multiplicity of factors".

Checchi (2014) comments that the share of young people who leave school early in Italy fell to 13.8% in 2016 but that there remain large differences between Italian regions, especially between the North-East and the South, where ESL is much higher (18.4%).

Ambrosini and De Simone (2016) describe delays, repetitions, absences, irregular frequencies, and poor quality of educational outcomes as indicators of school failure and academic dispersion leading to abandoning studies. They say it represents symptoms of social unease connected to marginalization and risk in cultural, social, economic and family contexts. Quality schooling is cited as a crucial factor in preventing social exclusion by being able to supporting students in achieving their educational success, to motivate studies, and regain the trust of the students and families. In most cases, children who come from more deprived family and social backgrounds are most at risk.



In France according to Esterle-Hedibel (2006) the main area referred to is “*décolarisation*”, a notion that literally can be translated as “*unschooled*”. It originated in the 1960s and 1970s when a national education system became important, however there are very few studies about it (Berthet and Zaffran, 2014).

The phenomenon of school-dropping / unschooling mostly concerns youngsters aged from 13 to 18. They come from various social environments but mainly from less privileged backgrounds. There are three different kinds of factors: institutional, psychological and social. Blanco (2016) describes it as a phenomenon affected by factors outside the educational system, suggesting therefore that solutions must be found by combining internal and external actors, such as the families, associations (Tanon & Cordier, 2000). When teenagers decide to leave school, this decision has generally a meaning for themselves and is justified by their self preservation, the expression of themselves even if socially it can be suicidal.

Since 2000, French researchers and policy makers talk about “*drop-outs*” or *décrocheurs*. Bautire et al (2002) aim to understand the origins of early school leaving through cognitive withdrawal from the interactions between the students and the school institution, its policies and the way the classes are set. Esterle-Hedibel (2006) discovered two types of high school drop outs, those who “*give up*” and the ones that are “*excluded*”. Those excluded are usually reacting to the cognitive uncoupling by rejecting school before leaving it. Geay and Meunier (2003) try to go beyond the institutional and social approaches of “*deschooling*”, developing interpretations in terms of psychological weaknesses and the breaking up of family structures.



Broccolichi (2000) reports on a longitudinal study with French people who entered middle school in 1989. The dropouts showed higher risk of failure in middle school leading to discipline problems rebelling against the system that didn't include their needs. Most of them didn't have a positive figure or good guidance to help them through their difficulties. Sylvie Bianco (2016) suggests that since it is a phenomenon with some factors that are coming from outside the educational system, solutions must be found by combining both internal and external actors to education, such as the families and associations. When teenagers decide to leave school, this decision has generally a meaning for themselves and is justified through their own self preservation.

Geay (2013) sought to identify the different ways the situation of the drop-outs can be characterized. After a series of interviews in Picardie and Poitou-Charentes, it reviews the different reasons that can be found, taking in account the legal definition of dropouts in France (people between 6 and 17 who leave school before the end of mandatory education). The research showed that the notion itself of “*drop-out*” includes a variety of personal realities and situations that can be overshadowed: there can be family reasons, personal reasons, the influence of other people but all of these reasons always overlap with learning difficulties.



In Spain, data from the national labour force survey showed that the early school leaving (ESL) rate fell below the psychological barrier of 20% (at 19.97%) for the first time since records began (CEDEFOP 2016c). It is still higher than the European average of 11.1%, and a 15% target set by the EU for 2020, but the acting Education Minister Iñigo Mendez de Vigo sees this trend as moving in the right direction.

The Spanish definition of Early School Leaving as the percentage of the population aged 18-24 with at most the lower secondary education certificate (school leaving certificate) and not in further education or training programmes of baccalaureate or intermediate vocational education and training cycles, has been used alongside with “school failure”, a somewhat different term which refers to leaving education without having acquired the certificate of compulsory secondary education. Therefore, ESL includes school failure by definition.

ReferNet Spain and Blasco (2013) confirm Spain is country that has been fighting high rates of ESL for many years. Thanks to the national and local policies nowadays this numbers are improving, but ESL still continues to be a concern for the Spanish Government, and a need for improving detected at national level and also at European level. According to the European Commission and the European Council, problems were detected in the Spanish education system including low levels of achievement at secondary level, too many students were leaving school early and they had a vocational training system insufficiently tailored to market needs.

ReferNet Spain and Blasco (ibid) identified three categories of early school leavers in Spain as (i) children from low educational background, especially when it comes to their mothers’ educational attainment level; (ii) immigrants, the ESL rate reached 44% in 2011, 43.6% in 2012. The two points decrease may be linked to the present economic crisis which has provoked the immigrant population decline; and (iii) ESL is higher among males, than among females, this applying also to male immigrants that to female.

As a result Early School Leaving was confirmed as a major concern for the Spanish Ministry of Education, Culture and Sport. Despite a reduction in ESL, Spain was still far from reaching the European benchmark, which was set at 10% by the year 2020. Spain’s challenge would be to descend to 15%, which seems quite realistic at the moment of writing. They suggested VET could be a key factor to both reduce early school leaving and increase the qualification level of the population. Thus the basis for a dual qualification system should improve qualification levels and reduce ESL in the future via an integrated system of VET measures that open new learning opportunities (Steiner and Lassnigg, 2009).

Spanish regions have made great efforts to reduce ESL. Some of them, such as the Basque Country, Cantabria and Navarra, are below the European average; even the highest, like Ceuta, Melilla, have managed to reduce the ESL rate from 35.3% in 2012 to 25.2% in 2015. ESL was significantly lower among women (18.1% in 2014, and 15.8% in 2015) than men (25.6% in 2014, and 24% in 2015).



These reductions are attributed to a combination of socio-economic circumstances, measures set up for the school leaving prevention in recent years and a greater awareness in society. Measures taken to prevent ESL include updating of vocational education and training (VET) curricula to better match the needs of industry and of society in general. Vocational training is increasingly seen as a convenient choice to help youngsters enter the labour market. Government policies now focus on lifelong learning as a core element for the development of a smart, sustainable and inclusive economy.

Fernandez (2010) asked directors and counselors of school centers about the causes of school failure. These interviews revealed four big groups of causes: some linked to society in general, others to the family, a third group to the educational institution and, finally, those that can attributed to the student as an individual (Table 1). In general teachers and educators saw the failure as something complex that requires a multidimensional explanation.

Table 1: Causes of Early School Leaving in Spain

<b>1. SOCIO-CULTURAL CAUSES</b>
1.1. Loss of value of the studies. «Show off suspense». It is not perceived relationship between study, work and salary.
1.2. Immediate satisfaction: effort or deferred satisfaction is not valued. You want money immediately. Early night leisure. Regarding the future:«Someone will solve it for me».
1.3. Neighborhood or area (peripheral, marginal) in the city, or depressed area (small towns) in rural area. Includes those who come from a center of primary determined. Also the idea of closed communities, which they prevent knowing other options.
1.4. Being a gypsy, especially girls from 12 years of age.
1.5. Being an immigrant, poorly schooled, with low educational level for their age at the time of access, which speaks another language or is incorporated in half of course.
<b>2. FAMILY CAUSES</b>
2.1. Social class of parents. Profession. Level of studies. Employment situation (unemployment, labor uprooting).
2.2. Employment of children in the family (future) and as help (current).
2.3. Expectations of the usefulness of training and culture. Family perception of the need for the title and the education system as something imposed: no There is a penalty if you fail at school.
2.4. Unstructured and problematic families.
2.5. Bankruptcy of the family of origin (divorce, reconstituted families, single parents). End of the traditional family model (mother at home). Little cohabitation with the children, paternal absence.
2.6. Relationship of the family with the educational center: lack of involvement or lack of family interest, failure to attend meetings.
<b>3. INSTITUTIONAL CAUSES</b>
3.1. Compulsory, rigid and rigid common curriculum that prevents diversification, very theoretical and not very flexible. There is no alternative for those who reject it, who are “forced”.
3.2. Low educational level in primary school, by automatic promotion or by characteristics of the concrete centers.
<b>THE MOTIVATIONS OF SCHOOL FAILURE 167</b>
3.3. The system does not compensate for deficiencies of sociocultural origin, because lack of means (for example, social workers in educational centers).
3.4. The transition from primary to secondary involves a change in the teacher-student relationship, worse direct attention to the student and a relaxation of control.



3.5. The teachers: there is no renewal in the way of teaching, they are poorly trained pedagogically They do not know how to recover the delays of students.

3.6. Other institutions with responsibility in the subject (town halls, inspection) do not worry, or are not effective in their response to situations raised from the centers; For example, parts of absenteeism but no action is taken.

3.7. Image of the concrete center: depending on the reputation, it causes concentration of students with certain characteristics (good or bad).

#### 4. CAUSES ATTRIBUTABLE TO THE INDIVIDUAL

4.1. Lack of intellectual capacity by nature.

4.2. He does not like to study, disinterest in content.

4.3. The gap between the knowledge of the student and the group generates boredom and demotivation.

Serrano et al. (2013) analyze the recent evolution of the educational dropouts in Spain based on microdata from different statistical surveys, investigating the reasons claimed by leavers and long-term potential effects on productivity. The characteristics of the young people who leave education and of their situation in relation to the labor market shows that they do become employed, but the risk of being unemployed for a longer period of time is higher than that of young people who do not leave school early. The jobs they get generally correspond to low skilled jobs with lower training requirements and worse characteristics. An analysis of the determinants of leaving indicates that the personal factors are very important. Family characteristics are also decisive as a family where education is valued more and where the environment is more favorable to learning offers greater financial capacity and less ESL. However, the variable with the greatest impact on early school leaving is related to the previous educational performance of the student. Failure to successfully complete compulsory education is the main factor influencing early leaving. It may, in turn, be related to personal characteristics and family characteristics and the education environment in which student develops (quality of education, characteristics of the educational center, type of classmates in the classroom, etc.).

The cycle of economic growth strongly influences the increase in early leaving during periods of economic crisis. Estimates confirm that in periods of abundant employment for young people the probability of early leaving rises, while it decreases as the youth unemployment rate increases. In Spain the local / regional labour market characteristics also seems to be a very important component of the environmental effect. Some basic factors favouring school leaving include the importance and availability of work in some job sectors like construction; fewer opportunities for highly skilled jobs and low unemployment of low-paid, poorly qualified workers.

The costs of early leaving, from the point of view of young people who leave as the whole of society, are substantial. This is indicated by the estimates about the impact of abandonment on the labor insertion in issues that affect market participation of work, the probability of employment, the stability of employment, wages and the productivity. There are few examples of action on other variables, such as gender issues or the level of education. Serrano et al. (ibid) suggest activities should focus on changing those aspects of the environment that encourage students to stay in school such as activities that lead to jobs necessitating higher qualifications, so that the young see the benefits of prolonging their studies.





Teleprensa (2018) introduced the European Commission 2017 Monitoring Report, an annual publication that reflects the evolution of education and training in the 28 countries of the European Union, emphasizing the evolution of the main recent and ongoing policy measures in each member state since mid-2016. This report applauds Spanish policies to reduce the rate of early school leaving of education and training “in a significant way”, highlighting the Spanish progress in the last 8 years until placing this rate at the end of 2016 at 19%. (Currently stands at 18.2%). “Spain is close to its goal of Spain for Europe 2020 of 15%,” says the report.

According to the Monitor Report 2017 (European Commission, 2017b), the Spanish executive is making an effort in this regard, mentioning among the most recent measures the implementation of a Program of Territorial Cooperation endowed with 13.5 million euros aimed at supporting specific measures to help learning. “This is a Program in which regions can receive funding for the implementation of measures to prevent early school leaving, for guidance and follow-up measures, as well as to draw up plans for young people who leave the system school”. The study highlights that the Program also finances measures aimed at students with great potential. “As part of the plan, the Ministry of Education, Culture and Sport have created a series of online collaboration platforms in which regional administrations can share experiences and learn from each others.

According to a study by the BBVA Foundation (Esema Fundación BBVA, 2018), in recent years Spain has reduced the percentage of youth dropping out from school from 31.7% in 2013, to 18.3% in 2017 and the rate of young people who neither work nor study (NINIS) has been reduced by 6.9%. This data shows the positive trends in Spain. Spain has also greatly reduced the school drop-out rate and unemployment among those under 25, although the unemployment is double the European average. Young people who neither study nor work are four percent above the European average, although in 2017 they had been reduced by 2% compared to 2013.

In some Spanish communities such as Andalusia, Canary Islands, Castilla La Mancha or Extremadura, youth unemployment rate exceeded 60%, above the average for Spain (55.5%) in 2013. The Balearic Islands on the other hand had the lowest youth unemployment rate, 45.2%, but this was still double the EU rate (23.7%). This was caused by the economic crisis as in 2007, many Spanish communities were below the European average. With the crisis, early school leaving reduced as employment opportunities for young people are lower and therefore many continue to study. In 2017, early leaving was 18.3% in Spain. European 2020 Strategy proposed a figure of 15%, so in three years it should be reduced by almost 3%. The percentage of young people who neither study nor work in communities such as the Basque Country, Cantabria or Galicia is below the average of the European Union, although others such as Andalusia are greater than it.



Active policies to reduce youth unemployment are still necessary, despite the generalized recovery observed since 2013. Esemciales Fundación BBVA (2018) suggest early school dropout must be combated through actions that allow the young people who leave it to become reincorporated in the educational process. Future forecasts are positive and will depend in part on the situation of the young people.

According to Scholiers and Herremans (2015), in Flanders (Belgium) the rate of NEETs aged 15-29 is greatest for those groups not born in Belgium (23.6%). This percentage is more than 2.5 times higher than among the group of young people who were born in Belgium (9.1%).

The proportion of NEETs is even higher among those who experience discomfort due to a disability, disorder or illness (34.8%). This is more than three times higher than people who are not affected by a handicap, disorder or illness (9.3%). The level of education achieved is also an important factor. 13.8% of low-skilled young people are NEETs, compared with only 7.7% of highly-educated young people and the NEET ratio for low-skilled workers aged between 18 and 29 is much higher at 30.3%.

According to Statistics Belgium (2017), the number of early school leavers in Belgium had declined from 13,8% in 2000 to 8,8% in 2016. However there were still some significant inequalities as early school leaving affected more males (10,2%) than females (7,4%) and regionally, in Flanders the amount was lowest: 6,8% (men 8,5%, women 5,1%), and highest rates were in Brussels 14,8% (men 16,3%, women 13,5%).

In Belgium, the key indicator that appears to be important to Early School Leaving is the educational deprivation indicator (onderwijs kansarmoede-indicator, OKI). This involves the following student characteristics:

- 📍 the language that the student speaks in the family;
- 📍 the mother's educational level;
- 📍 the area where the student lives and
- 📍 whether the student is receiving an education allowance.

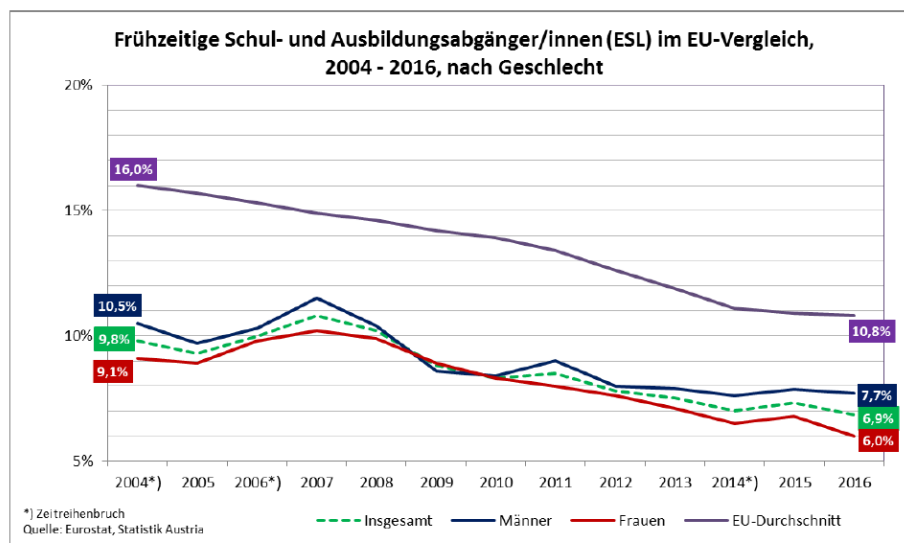
Early school leavers tend to have more of these characteristics present. The level of education also shows differences. ESL is lowest in ASO (general education) and TSO (technical education), but most in BSO (vocational) and DBSO (part-time vocational education) where it is more than 50%. The nationality of the leaver is important, it is least ESL with Belgians and most with non-European non-Belgians (migrants). The mother tongue at home is important, least where solely Dutch is spoken at home. The education level of the mother also shows a clear correlation.



In Austria, relatively few people are concerned by Early School Leaving as the ESL rate in 2015 was only 7.3 % and 6,9% in 2016 (European Union, 2016), which is low compared to the EU-wide average of 10,8% (Figure 11). A more realistic calculation for Austria would give higher results as at this time many young people were participating in informal educational activities and learning activities for leisure time were not included. However, according to international risk comparison, social exclusion is especially high in countries with rather low ESL rates (Steiner, 2012).

Figure 11: ESL in Austria in comparison to EU 2004-2016 related to sex  
 Translations: Insgesamt = Total, Männer = Men, Frauen = Women, EU-Durchschnitt = EU average

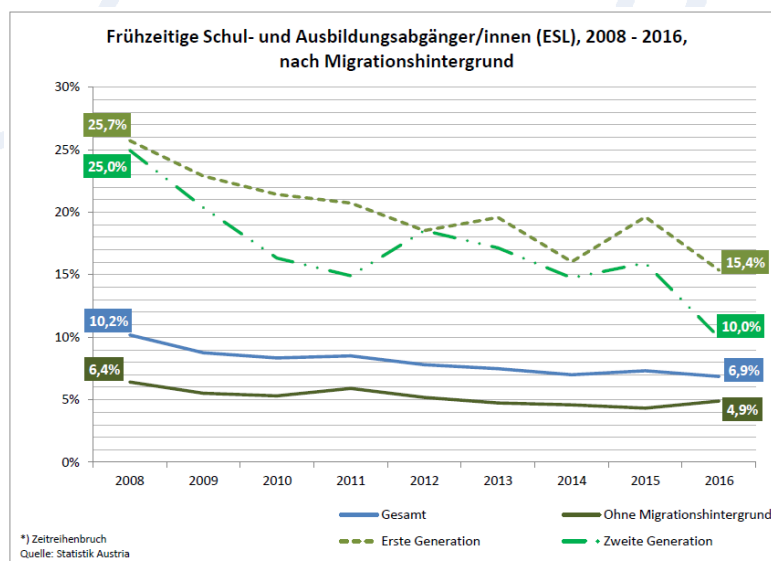
**EU-Benchmark basierte Daten zu Schulabbruch 2016**



Source: Eurostat and Statistik Austria, published by the Austrian Ministry for Education, Science and Research, [https://bildung.bmbwf.gv.at/schulen/unterricht/ba/schulabbruch\\_daten\\_2004-2016.pdf?64sm05](https://bildung.bmbwf.gv.at/schulen/unterricht/ba/schulabbruch_daten_2004-2016.pdf?64sm05)

A group that is specifically concerned by ESL is migrants (Figure 12).

Figure 12: ESL 2008 – 2016 related to Migration background

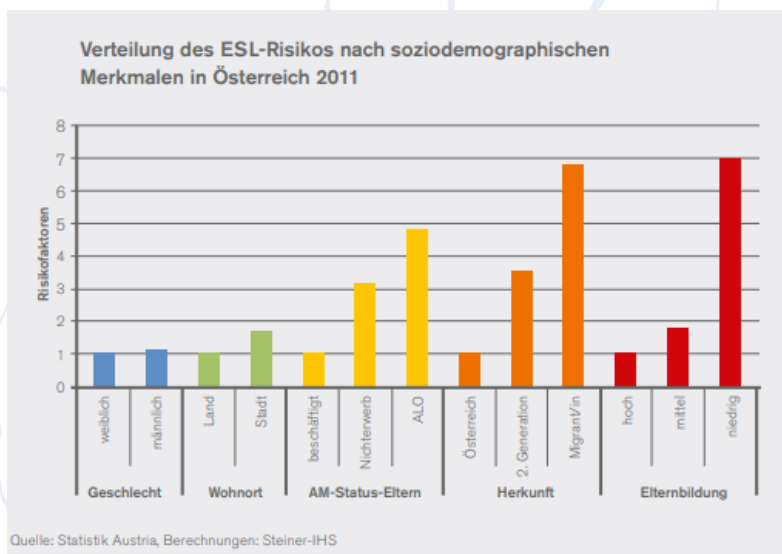


Translations: Gesamt = Total, Ohne Migrationshintergrund = without migration background, erste Generation = first generation, zweite Generation = second generation. Source: Statistik Austria, published by the Austrian Ministry for Education, Science and Research [https://bildung.bmbwf.gv.at/schulen/unterricht/ba/schulabbruch\\_daten\\_2004-2016.pdf?64sm05](https://bildung.bmbwf.gv.at/schulen/unterricht/ba/schulabbruch_daten_2004-2016.pdf?64sm05)



Figure 13 shows the relationship between ESL risk and socio-demographic backgrounds in Austria in 2011.

Figure 13: The distribution of ESL risk related to sociodemographic characteristics in Austria 2011



Source: Federal Ministry of Education Austria (2016), p. 17

Translations: Geschlecht = Sex, Männlich = male, Weiblich = female, Wohnort = residence, Land = rural area, Stadt = City, AM-Status Eltern = labor market status of parents, beschäftigt = employed, Nichterwerb = not working, ALO = unemployed (registered), Herkunft = origin, Österreich = Austria, 2. Generation = 2nd generation, Migrant/in = migrant, Elternbildung = education level of parents, hoch = high, mittel = middle, niedrig = low

According to explanations by the Austrian Ministry of Education (2017) the following summary relates to the groups mostly affected by ESL.

- 📍 ESL risk is comparably higher for young men (but: among migrants, women are more strongly affected than men!).
- 📍 ESL rates in the cities are higher than in rural areas (even if the qualification structure in the cities is higher, more people with migrant background in cities).
- 📍 Children with underprivileged educational backgrounds are at up to 5 times higher risk than those with well-educated parents.
- 📍 Children with migrant background are at particular risk. Concerning ESL pupils with “non-German everyday language” are affected four times as often as those with German mother tongue. As statistics show those from the second generation (meaning born with parents that emigrated to Austria) are still affected almost as often as migrants from the first generation.

Early School Leaving has a strong impact on the employment status in Austria. Graduation of the compulsory school (ISCED 2-level) is the absolute minimum qualification of the Austrian educational system. Consequently, persons who have not completed 9 years of compulsory education and don't even hold a completion certificate from a lower secondary school, are not able to participate in any other qualification within the educational system (Litschel and Löffler, 2015). Since for the labour market the positive qualification for secondary level II is the informal qualification minimum and the employment perspectives for ESL are very bad.



## 5. EARLY SCHOOL LEAVING POLICIES IN EUROPE

The rise of early school leaving is a multi-stakeholder, multi-level political issue concerning all levels of policy, at European, national, regional and local levels (Magalhães et al. 2015). Each country is mandated by European priorities to take measures against Early School Leaving and the low performance of students regardless of their economic and cultural circumstances. National goals and policies of EU Member States in ESL have been formed mainly on the basis of recommendations of Council of the European Union (2013) on existing policies.

### European policies

This issue is of high importance for EU policy makers. This is apparent when looking closely at the EU 2020 strategy. Decreasing ESL rates across all EU countries is one of the main targets of this strategy leading to a smart, sustainable and inclusive economy (European Commission, 2010). However, even though reducing early school leaving rates is presented as a main EU target this does not imply that different EU member states adopt a similar viewpoint or approach. In some countries, such as Poland, early school leaving is not the commonly used terminology and it does not seem to be a policy issue, while in the case of the UK policy attention is focused more on the category of NEETs (young people not in education, employment or training).

Compensation policies and measures are considered important in order to mitigate against Early School Leaving. According to the European Commission Monitoring Report (European Commission, 2017) the majority of European countries/regions have initiatives to identify people who have left education and training early and help them re-enter the system. In most cases, these initiatives have been introduced fairly recently or are part of early leaving strategies. For the most part, they are special programmes or schools that allow early leavers or at-risk students to complete their basic education and acquire key competences, for example in Spain there is the 'New Opportunities' programme.

In terms of intervention policies and measures students can receive educational support inside or outside the regular classroom from members of the teaching staff, always within regular school hours. The aim is to boost learning and school performance, thereby improving students' social integration. In Europe eleven countries (IE, EL, ES, LT, LU, HU, MT, SI, FI, IS, CH) reported having on-going policies and measures in place to ensure the integration of students with special educational needs and thus contributing to reducing early leaving. In eight countries, student support measures are focused on the provision of financial help. Students are financially assisted, for example, through the provision of free textbooks, free school transport and/or scholarships (BG, EL, ES, HR, MT, RO), free school meals (IE, SI), or financial incentives for students or their families if they continue to attend school (ES, MT).



The majority of European countries/regions have initiatives to identify people who have left education and training early and in need of compensation policies and measures that can help them re-enter the system. In most cases, these initiatives have been introduced fairly recently or are part of early leaving strategies. For the most part, they are special programmes or schools that allow early leavers or at-risk students to complete their basic education and acquire key competences. Examples of such initiatives are the 'Time-out' project in Belgium (German-speaking Community) and the 'New Opportunities' programme in Spain

In several countries/regions, the policies and measures for reducing ELET rates are not directed only at students with special educational needs but also other at-risk groups, such as: students with behaviour problems, emotional disorders, lack of motivation or difficulties in adjusting to the education system.

There are also some specific policies and measures for specific groups like Roma students that focus on awareness-raising. For instance, the Fundación Secretariado Gitano is implementing a programme called 'When I grow up I would like to be'. It aims to raise awareness of the value of education among Roma students and families and involves public authorities in the fight against inequality in education. For the campaign, a photo-van travelled across Spain taking pictures of the 'dreams' of Roma girls and boys (e.g. being a doctor or a teacher) and their parents. The message of the campaign was that 'whatever your dream might be, finish secondary education' and 'Roma with Education is Roma with a future'. 1100 families participated in the photo-van campaign in 2010, with 1 083 photos taken in 14 different cities.

Besides that, in some countries students receive educational support inside or outside the regular classroom from members of the teaching staff, always within regular school hours. The aim is to boost learning and school performance, thereby improving students' social integration. There are also policies and measures aimed to ensure the integration of students with special educational needs and thus contribute to reducing early leaving. Some of the student support measures are focused on the provision of financial help and financial incentives for students or their families if they continue to attend school.

One recurring issue shared by all formal educational systems across Europe has been how they deal with the processes of declining school engagement apparent among various socially vulnerable groups, including recent migrants. This was addressed as part of a Framework 7 research project "Reducing Early School Leaving in Europe" (<http://RESL.eu>), nine European countries participated with the aim to generate as much as possible innovative cross-country and cross-case insights. They concluded that Early School Leaving (ESL) is a multi-faceted and complex problem caused by a cumulative process of disengagement. It is a result of personal, social, economic, education or family-related reasons. Schools play an important role in addressing ESL but they should not work in isolation. Comprehensive approaches are required that focus on the root causes.



As part of the RESL.eu project, Ryan et al. (2014) undertook a comparative analysis of nine countries. The purpose was to deal with development and implementation of education policies and political instruments dealing with ESL after the Lisbon Strategy and building towards achieving the targets of EU 2020 (Figure 14). They take into account the interactions of supranational, national and local institutions involving the reconfiguration of educational governance and regulation. Their analysis showed that the definition, steering and implementation of policies and public actions were informed mainly by the international setting and involved multi-scale governance (supernational, national and sub-national) by many stakeholders in the country. They say that Europeanisation of national policies has taken place on the basis of the countries' diverse interpretation and implementation of common definitions and set within the framework of funding programs of cooperation, support, research and development.

The goals, 'drivers' and rationales underpinning education and social policies related to ESL suggest that in all nine countries economic concerns prevail over educational and social goals. There are close relationships between social and economic policies, on the one hand, and educational policies, on the other. In line with the Lisbon Strategy, education is pointed out simultaneously as a factor of economic competition and a factor of social cohesion. Even if an EU influence on ESL policies and measures is neither visible nor recognised by some actors, the 'soft' introduction and development of EU ideas is present in all countries involved and reshaped the ways in which different countries address the educational issues of ESL and seek to make the best of EU funding schemes to develop and implement its ideas.

Minguez (2013) examined the complexity of education systems and Early School Leaving in six different countries: Germany, Denmark, Spain, Finland, Belgium and the UK, studying the impact of investment in education, gender, ethnic and family background in early-school leaving. There are big differences between the countries, depending on social spending on education. In Sweden, Denmark and Finland, a comprehensive education system exists with the highest investment in education in Europe. In Germany, France and the Netherlands, there is an inclusive and selective education system with a strong emphasis on vocational training. In the UK and Ireland, a particular emphasis is placed on young peoples' personal responsibility to pursue their own welfare by means of rapid and stable insertion into the job market. In Spain, Greece, Portugal, Italy, there is a rigid education system. In Germany, Austria and Denmark, there is strong difference between academic and vocational education, the latter being an opportunity for potential drop out pupils, but then with limitations in the educational pathway.



Figure 14: Policy goals, drivers and rationales in 9 EU countries (Ryan et al., 2014)

Country	Goals/Drivers	Rationales
Belgium	<ul style="list-style-type: none"> <li>Youth employment and labour market insertion; being competitive in the current knowledge economy</li> <li>reducing social stratification and enhancing social mobility opportunities</li> </ul>	<ul style="list-style-type: none"> <li>economic competitiveness</li> <li>social justice</li> </ul>
United Kingdom	<ul style="list-style-type: none"> <li>reducing youth unemployment/NEET figures by raising attainment and improving young people's labour market opportunities</li> </ul>	<ul style="list-style-type: none"> <li>assumption of direct link between educational outcomes and labour market opportunities</li> <li>free market principles in education as a mechanism of raising attainment</li> </ul>
Sweden	<ul style="list-style-type: none"> <li>increasing competences to adjust to the labour market by means of vocational tracks and skills directed at children and youth with social problems, disabilities and migrants</li> </ul>	<ul style="list-style-type: none"> <li>adjustment to the labour market</li> <li>reduction of social inequalities and social exclusion</li> </ul>
Portugal	<ul style="list-style-type: none"> <li>lowering the age of vocational training in education for the school "less able" populations</li> <li>reducing cost in education</li> </ul>	<ul style="list-style-type: none"> <li>reinforcement of the link between education and the labour market with a neo-meritocratic conservative view</li> </ul>
Netherlands	<ul style="list-style-type: none"> <li>reducing social exclusion, youth unemployment and invest in knowledge economy</li> </ul>	<ul style="list-style-type: none"> <li>increase quality of education</li> <li>reinforcement the link between education and the labour market</li> </ul>
Poland	<ul style="list-style-type: none"> <li>equal access to universal, uniform and free education</li> <li>ESL as not a priority of educational policy</li> </ul>	<ul style="list-style-type: none"> <li>ESL as a problem of specific groups</li> <li>reinforcement of the link between education and the labour market with a neo-meritocratic conservative view</li> <li>reduction of social exclusion and inequalities</li> </ul>
Spain	<ul style="list-style-type: none"> <li>improving graduation rates at the end of compulsory education</li> <li>reducing youth unemployment</li> </ul>	<ul style="list-style-type: none"> <li>ESL not seen as the main problem of youth education</li> <li>major concern about NEET youth</li> </ul>
Hungary	<ul style="list-style-type: none"> <li>improving graduation rates at the end of compulsory education</li> <li>reducing youth unemployment</li> </ul>	<ul style="list-style-type: none"> <li>ESL as a problem of specific groups</li> </ul>
Austria	<ul style="list-style-type: none"> <li>improving education /training and increasing qualification levels of disadvantaged children/youth</li> <li>youth employment and labour market insertion</li> </ul>	<ul style="list-style-type: none"> <li>fight social exclusion, poverty and inequality of educational opportunities</li> <li>reduction of follow-up costs (economic and social) due to inadequate education</li> </ul>





## Policy examples

Note: this includes some countries not among the project partners.

**Slovenia:** With the growing number of people with completed tertiary education and low ESL Slovenia has reached the national targets for Europe 2020 (European Commission, 2016). However, the proportion of tertiary education graduates among the unemployed is increasing, which suggests problems with youth employability. The proportion of young people (aged 15-24), who are not employed or included in education or training is low by European standards (9.5% in 2015), but has been consistently rising since 2008.

Early School Leaving in Slovenia is a rare phenomenon, which in 2015 accounted only for 5 % of young people aged from 18 to 24. This percentage is the second lowest in the EU and represents less than half of the EU average (11 % in 2015). Data for children born abroad are less reliable, but suggest that early school leaving thereof is a much more extensive (16.5 %). As elsewhere in the EU early school leaving is more common among men (6, 4 %) than among women (3,4 %).

Slovenia has developed a two-stage action plan to facilitate the integration of refugees and migrants in education. In accordance with this plan, all children of migrants (before the start of training) take a course of Slovenian language. During the training they attend extra hours of Slovenian language, fully integrated into the regular school program.

In Slovenia, the employment rate for those who have recently finished high school education is 69.7 %, which is lower than the EU average (73.9 %).

Kuran (2013) confirmed Slovenia has the second lowest dropout rate in the EU and the degree of post-secondary education is above the EU average. Slovenia has ensured conditions in which almost all youngsters continue their education in secondary education after compulsory primary school education. There is also an increasing number continuing to the tertiary level. Regarding access to education, Slovenia when compared with other European countries shows relatively favourable picture in terms of both indicators: involvement and the impact of socio-economic situation in the educational opportunities of young people (Rakar, 2009).

Rakar (ibid) compares the movement of young people in various forms of education in European countries and the success of young people at different levels of study. Separate emphasis was placed on the analysis of the social dimension in education. The data showed that the involvement of people in education and educational attainment has been an important step.

Compared with other European countries, Slovenia appears to have allocated significant resources to education and the country has regularly been near the top of the list for the successful completion of secondary education (OECD, 2008) with 97% of the population in the age group 18-19 years finishing high school education in comparison with 86% for the corresponding European average.



SLOVENIA

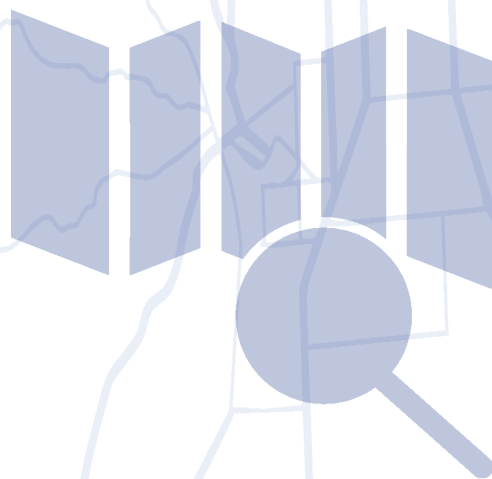


Kuran (2013) suggests the fact that many young people drop-out of school before obtaining their certificate in upper secondary education is evidence for an educational deficit that can have serious long-term consequences in terms of unemployment. Particular emphasis has been placed on applying non-formal education in Slovenia, especially in solving the problem with drop-outs. Resources from the European Social Fund (ESF) were allocated to stimulate the return of early school leavers into the school system or the labour market. Other projects were supported to prevent early drop-outs: PUPO (preventive action for preventing drop-out), ISM (Information and advice for young people), which established a counselling network aimed at young people who 'Stepped Out' of the school system. Additionally, those who do not successfully complete the training can obtain a certificate NVQ (National Vocational Qualification), which allows them to enter the labour market. A formal system (called Nefiks) was established for recording non-formal skills.

Bezjak (2014) undertook a qualitative survey of school leavers in Slovenia. The results showed that personal factors were as important as institutional factors, including the method of teaching in schools. This was similar to findings from extensive surveys among school leavers (Beltram et al., 2014), where young people gave as their main reasons for leaving secondary school as the lack of will and perseverance; the mismatch between school, work and family obligations; inadequate ways of teaching in school; and the lack of time for learning. Young people considered interesting pedagogical approaches were necessary that would be interactive, picturesque, practical and individualized, established according to their needs and interests. These are also approaches that engage and stimulate young people and encourage their desire to be actively involved in their own learning.

An early study by Marinšek (2001) confirmed that satisfaction with their work strengthened self-confidence and would create a sense of satisfaction with life. Hence a professional role was an important element in shaping an individual's identity. The work of the young people is therefore the basis for survival, material and spiritual existence, the exercise needs of professional maturity and assume full responsibility for oneself and society.


Dropouts can be justified because of the disparities between the student interest for a specific occupation or study and their real possibility to integrate in their desired program. Therefore, often students who enrol in other programs available to them have little motivation for the education that is provided. Education for unemployed young people should be based on creation of personality characteristics.



In Slovenia the “Youth 5000” project was set up in 1998. It included 6189 unemployed persons (61.9 % of women). The most represented group (58%) were those without vocational or professional education. The program sought to prevent long-term unemployment, so every unemployed person should make a fresh start in a job or training before the end of the year. This was related to a ‘Second Chance School’ programme, based on a local partnership with cooperation between the representatives of local authorities and partner companies, non-profit organizations / experts in the fields of health, social problems, school and young people as equal and responsible partners. In general, through high-quality and largely individualized education programs in schools and training in partner companies, school leavers seek to recover their self-confidence, strengthen communication and social skills. The program motivates them to learn, to recognize their true abilities and interests, and expand basic knowledge. Kotnic (2004) indicates more than 5000 young people were included in this Second Chance School Programme and only a small percentage didn’t complete it (6 %).

The ‘Project learning for young adults’ was designed to give young people (between 15 and 25 years of age), who for various reasons have dropped out of school and thus remained without a (professional) education, and in the labour market without suitable certificates and with inadequate experience, help to return to social life and the education arena. The results showed the majority of school leavers involved in the program engaged back to the educational process, while achieving excellent results in the field of general education and professional identity and in particular in their personality.

To summarize these findings, teachers said the biggest obstacles for successful education of unemployed young people were psychosocial and personality characteristics. The lack of education was not considered to be so important.



**Malta:** Policy developments involved cooperation between Maltese Ministry of Education and the country’s public employment service Jobsplus and other bodies. In 2016, vulnerable/low-achieving students were contacted in order to encourage them to post-secondary education or employment. In 2017/2018, tailor-made guidance programs to assist with ESL in state colleges in their educational path. Programmes to make education more relevant to employment.

**United Kingdom:** According to Ryan et al. (2014) the UK policy discourse on ESL interprets the role of education primarily from a labour market perspective and tends to define problematic, vulnerable youth predominantly in terms of their labour market needs and outcomes. Therefore, the youth policy agenda focuses on young people Not in Education, Employment or Training (NEETs).

Reducing ESL has not been an explicit aim of education reforms in the UK, and the term ESL is hardly mentioned in policy. However, this issue has mainly been addressed by raising the participation age to 17 in 2013, then to 18 in 2015. Participation does not have to be in full time education; alternative options include work-based learning, including apprenticeships, and part-time education for those employed, self-employed or volunteering.

The UK government has also introduced a new initiative to raise test results specifically in Mathematics and English, whereby students who fail to achieve a grade C in the GCSE will be required to continue studying these subjects until 18 years old, even after they progress on to the next stage of study. There also is a push to equip young people with in-demand skills through reform of the apprenticeship program. However, raising the importance of examination results appears to reinforce the importance of formal, academic rather than vocation and informal qualifications.

In 2010 the most severe cuts to the UK education budget in over fifty years were announced. The 16-19 age group was one of the most affected sectors in these reforms. For example the very successful Education Maintenance Allowance scheme was cancelled and spending on further education and youth services - including careers guidance - was reduced.

Ross and Leathwood (2013) suggest there is a 'blame the victims' mentality where austerity politics and cuts to welfare are justified by accusing anyone not in work as lazy, for not trying hard enough to get a job, for refusing to work for free, or for being ill or disabled. At the same time the myth of generations of family members without work is promoted as part of an attack on the poor (Shildrick et al. 2012) and demonstrates the results of an unequal education system that fails working-class people. For instance, the competitive culture that has been created between schools means that those who are anticipated not to succeed are discouraged from attempting to seek qualifications, or even shuffled off to other educational providers, so as not to lower the success rating of the institution. Such practices in the UK have had particularly damaging consequences for certain groups of young people.



Nevertheless, EU objectives and measures do shape these UK initiatives, but this has been mainly achieved through EU funding schemes like ESF projects and not by direct legislation. Both local and national policy makers often cite good practice examples from European countries.

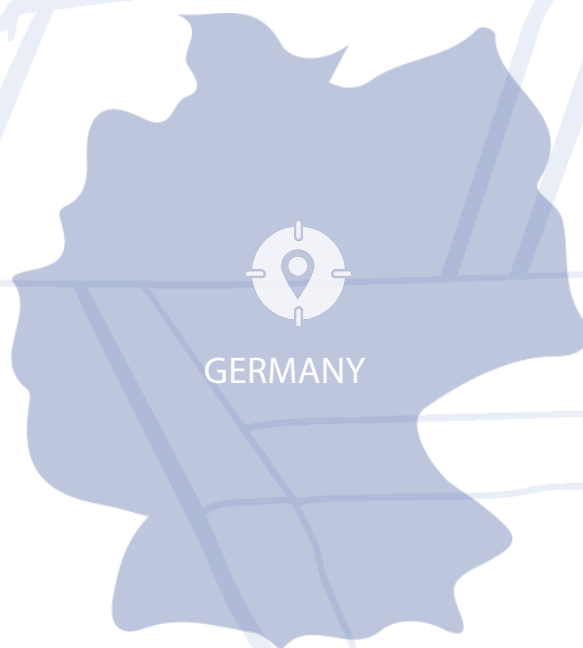
Howieson (2003) confirmed low attainment in the UK not only increases the chances of early leaving. It also influences early leavers' post-school prospects. Those with low attainment, about a third of the early leaver group, are the ones most likely to experience unemployment and to have unstable post-school careers.

They also had a poorer chance of adding to their qualifications and those in employment had poorer prospects of training. Although young women were less likely to be early leavers, those who did leave school early had poorer outcomes than their male counterparts despite their higher average attainment.

A reduction in ESL in some parts of Britain, such as Scotland, has coincided with the widespread implementation of the "Skillseekers initiative", where more than half of the early leavers increased their qualifications by the age of 19.



**Germany:** The policy focus has been on diverse, social inclusive schools; this concentrates on the improvement of the knowledge and skills of teachers, which helps tackling the pedagogical and psychological foundation of teaching and learning; training in order to analyse a student's competences, develop adapted forms of learning assessment and provide individually tailored learning support.



**Austria:** Second chance education is an integral part of the Austrian education policy and generally includes (i) opportunities for catching up on educational qualifications from basic education to lower secondary education up to continuing higher/tertiary education and (ii) the opening up of cross-over points/permeability in the secondary and tertiary sectors. In 2012, Austria adopted a national strategy against ESL “Nationale Strategie zur Verhinderung frühzeitigen (Aus-)Bildungsabbruchs” (BVB, 2012). It includes measures at the structural level (reforms and improvements within the school education system); measures at the level of the specific school (initiatives on school quality and improvements of teaching and learning environments); and measures to support students at risk (youth coaching as a new nationwide measure to support students at risk). Also the national labour market service is conducting a range of measures to support catching up sufficient qualification. As there are already a number of compensatory initiatives in place, the focus in Austria is currently on prevention and intervention.



Youth coaching is an instrument that has been rolled out by the Ministry for Social Affairs throughout Austria as a means to keep, or reintegrate, young people in the education and training system. The target group includes pupils who are at risk of not attaining any qualification at lower or upper secondary level, young people below the age of 19 who are currently not in education, employment or training (NEET) as well as young people up to the age of 25 who require special educational support. Youth Coaching aims to advise, support and assist young people and ensure their sustained integration into the (upper secondary) education and training system. Where this is not yet possible, young people should reach alternative objectives or sub-objectives. Youth coaching providers closely cooperate with schools (for identification of at risk pupils) and with different institutions (such as the Public Employment Service, training workshops, projects for young people with mental health impairments), which are suitable for the young people during or after their coaching period. (<http://www.neba.at/jugendcoaching/warum.html>)

Another means to include pupils at risk of early school leaving are “production schools”. Here, young people may gather practical experience of job-related processes and requirements as well as insights into ‘what professional life is about’. It combines school learning and practical work experience. The aim is to raise the motivation of young people to engage in learning and to provide them with the experience necessary to make informed decisions on their future careers. Production schools often offer workshops for learning by doing, vocational guidance, socio-pedagogic support, practical experience and assistance in improving basic education skills. (<http://www.neba.at/produktionsschule/warum.html>). Additionally the Austrian labour market service offers a range of additional second chance educational measures leading to formal qualifications (Austrian Ministry of Education (2017)).



However Gitschthaler and Nairz-Wirth (2015) suggest Austria has not been successful in reducing the impact of the socioeconomic factors on school performance or in reducing early school leaving away from compensation. Early School Leaving affects youth from migrant families and from socioeconomically disadvantaged milieux. They state that Austria does not invest sufficiently in early dropout prevention and while average educational outcomes have improved but students with low qualifications and young people with a migrant background have remained much the same. For instance, Austria focuses more on compensation and intervention than on prevention. There are very few policies aimed at adapting education and training organisations and authorities to the changes brought about by new technologies, globalisation and increased competition. Most were developed to prepare youngsters for entry into tertiary education.

In 2009 education policymakers introduced a new nationwide middle school initiative to reduce educational inequalities and improve school achievement. However it contributes little to promoting educational equity and does not mitigate the consequences of early segregation. The positive effects include a free-of-charge, obligatory kindergarten year and early childhood language promotion. This confirms that promoting educational equity should start as early as possible in the educational cycle and if Early School Leaving is to be tackled effectively, it is important to include parents in matters relating to school and education and build up networks with the community.

**Belgium (Flanders):** In Flanders, the regional government has competence over education policy including actions that were taken specifically to combat ESL and youth unemployment. These can be clustered into two main categories: (i) a focus on concrete actions that directly target students leaving education without an upper secondary education degree, and (ii) a focus on the structures and particular educational pathways that are more indirectly linked to tackling ESL.

As part of the «Reducing Early School Leaving in Europe» (RESL.eu) research project Clycq et al. (2015a) assessed the tensions between a social equity and an economic rationale underlying the debate on how to tackle early school leaving, answering these questions:

1. Is early school leaving an issue discussed by educational stakeholders in Flanders and to what extent does the EU policy context influence Flemish educational policy regarding ESL?

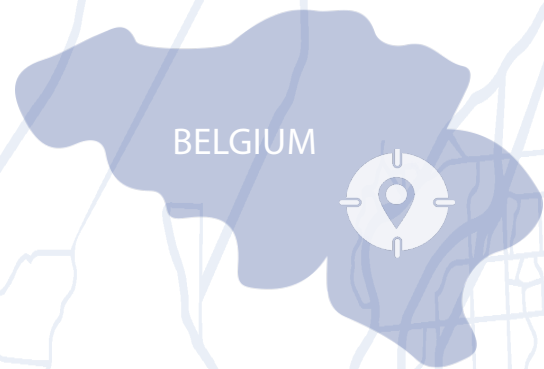
Flanders to a large extent adopts the EU policy initiatives by implementing its policy frameworks and vocabulary. The Flemish action plan for tackling ESL takes on the EU policy framework developed and disseminated by the EU Commission's thematic working group on tackling ESL by phrasing and classifying 50 concrete actions according to the main headings and concepts in the EU Commission's report: i.e., identification and monitoring, coordination of policies, prevention, intervention and compensation.

## 2. What are the main rationales underlying Flemish strategies to tackle ESL?

Although the first two years in secondary education are often presented as being comprehensive, students are already enrolled in an A-track or a B-track. The B-track is primarily for students that leave primary education without having attained specific developmental or curricular objectives and were advised to enter secondary education based on age difference with other pupils in primary education. Data shows that those students starting secondary education in the B-track will predominantly follow the vocational pathway and have a much lower probability to finish secondary education with an educational qualification, thus ESL.

There are specific structural risk factors of the Flemish hierarchical educational tracking system. Many students and their parents choose to start secondary education in the higher status track of general education, but they are reoriented to lower status tracks in vocational education. It is important to consider these structures and resulting educational practices are important in relation to the negative educational experiences of a large proportion of students (e.g., regarding grade retention and reorientation to different tracks), which have been shown to increase the risk of ESL.

Clycq et al. (2015b) comment that educational issues are often heavily politicised in Flanders, and in particular concerning the fundamental restructuring of secondary education. Research shows that strong social and ethnic inequalities persist (Nicaise et al., 2014). They confirm the structural characteristics of education are important in determining educational practices in relation to negative educational experiences of a large proportion of students, which have been shown to increase the risk of ESL (Lamote et al., 2014).



In Flanders, a work-based vocational track was partly designed as a policy strategy to prevent ESL and compensate for it by offering students an opportunity to acquire some work-experience starting from the age of 15. However, in practice for many students this track became the final stop before leaving education without an upper secondary qualification (European Commission, 2014) and especially for the main at risk groups such as boys, students with another home language than Dutch and/or with an immigration background and those from lower SES families.

Clycq et al. (2015b) discuss the main viewpoints of Flemish policy makers towards EU and regional policy initiatives in tackling ESL and the competing drivers underlying these initiatives on Early School Leaving. The Flemish Qualifications Structure (FQS) remains very rigid and non-transparent. It does not allow a clear translation of all different types and levels of professional qualifications within the secondary education structure. ESL is still conceived as a central problem for the future labour market prospects of youngsters in Flanders, in other words unemployment, rather than a result of social conditions or the quality of education.





As a result, in Flanders great emphasis has been placed upon the detection and monitoring of early signals of disengagement measured through the truancy behaviour of students. With this aim, the Minister of Education launched in 2006 a Truancy Action Plan to combat rising numbers of truants (Departement Onderwijs en Vorming (Department of Education and Training, 2008). The aim was to design a holistic and contextualised approach of the phenomenon of truancy. In 2012 the new Minister designed an updated Truancy plan with more detection and monitoring and with a stronger focus on raising awareness, prevention, supervision and repression. Local policy makers received more power on this issue and from September 2012 onwards all enrolments, school changes, presences and absences during the entire school year were monitored more closely. Although the underlying rationale is that truancy and school changes need to be approached from a holistic perspective, the focus on the individual pupil and his parents that need to be held accountable remains central in the policy discourses.

A more holistic approach is stressed in EU policy documents, arguing that only comprehensive plans can have long-term effects in tackling ESL. In Autumn 2013 the Flemish Government drafted a Flemish Action Plan on Early School Leaving. This plan strongly adopts the EU policy framework and concepts in tackling ESL and presents a Flemish plan that stresses the identification and monitoring of ESL and the development of different prevention, intervention and compensations measures. This resulted in 50 concrete actions, often subdivided in more specific actions, various stakeholders from the educational field, the labour market and civil society actors can, or sometimes are obliged to, adopt. More structural actions, for instance through apprenticeships focused on providing an alternative learning pathways for youngsters who do not fit in well with the general provision of school-based learning and/or are attracted by workplace learning. Current studies show that ESL is strongly concentrated in part-time vocational tracks, mainly due to hierarchical structure of the Flemish system. The main focus remains on opening up the workplace learning opportunities to more students in a vocationally oriented study track and to increase the quantity and quality of apprenticeship opportunities.

As a result, Flanders adopts many of the EU proposed education policy recommendations, in particular with respect to ESL. However, the topic of early tracking is one aspect Flanders has not been eager to adopt (European Commission, 2013a). Nor has the region adopted more holistic reform plans that provide more flexible educational pathways. According to Nouwen et al. (2014) the Flemish Government, is enthusiastic about broader EU education policy, but there is some discussion about Flanders being too eager to be an early adopter of EU education policy.



Sacco et al. (2016) examine the situation of youth in Brussels, a region of very high ESL compared with the rest of the country. They underline the high level of inequality in terms of access to education in the region. They suggest the strong presence of 'ghetto' schools as well as 'elitist schools', which contributes to the ethnic and social segregation in the school system. This is exacerbated by unequal access to employment as well as discrimination in recruitment.

Several indicators highlight the issues for young people, such as the proportion of students who are "behind" in their schooling. In Brussels, the figures are alarming, as 50% of students in the first year of secondary are already at least one year behind. There are social inequalities reinforced by the school system as demonstrated by the study conducted by Pitts and Porteous (2006) that showed Brussels youth from minority backgrounds experience many problems with respect to integration: a higher rate of early school leaving, poorer academic performance and a higher rate of unemployment.

**Spain:** In Spain, the state legislative framework for reducing early leaving is the 2006 Organic Act on Education and the newer Organic Act for the Improvement of the Quality of Education (LOMCE, 9 December 2013). In 2008, the Ministry of Education and the education administrations of the Autonomous Communities drafted the 'Plan to Reduce Early School Leaving', which established the general strategy for tackling the problem. A programme called 'Programme to Reduce Early School Leaving in Education and Training' followed. The measures carried out in the framework of this programme, and more recently within the framework of the LOMCE, are still in force. However, this programme does not cover all activities and all forms of collaboration between the Ministry and the Autonomous Communities in this area. Due to decentralisation, measures may be different in each Autonomous Community, although the measures that have proven effective are widely spread. Each Autonomous Community has emphasised measures to address the educational, social and economic circumstances that have the most influence on ELET rates within their territory.

Within the framework of the Spanish programme to reduce early leaving, the Autonomous Communities report on all on-going activities and, together with the Ministry of Education, Culture and Sport, carry out the monitoring and evaluation of the programme. The 'Sectoral Committee for Education' and the Spanish 'ET 2020' Working Group are in charge of monitoring actions related to early leaving.

From 2007 to 2012, the total budget for the Spanish strategy was more than €375 million. It was co-financed by the Ministry of Education, Culture and Sport and the Autonomous Communities until 2010, and in 2011 and 2012 the funding came 100% from the Ministry. The funding for 2012 covered all the actions carried out up until 31 December 2013.



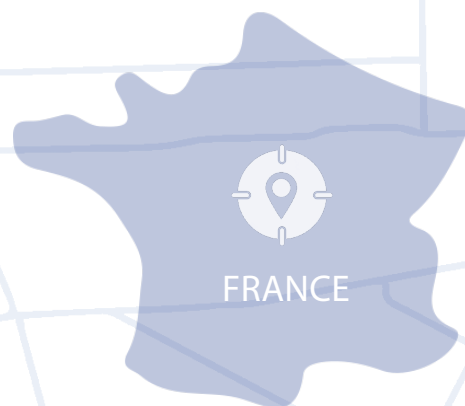
Government policies focus on lifelong learning as a core element for the development of a smart, sustainable and inclusive economy. Measures have been taken to prevent Early School Leaving by updating vocational education and training (VET) curricula in order to offer a better match between the needs of industry and of society in general. This has resulted in more VET learners. Early school leavers, both the unemployed wanting to increase their employment chances and workers looking for progression in their professional career, are returning to VET schools: in the school year 2013/14, 21.7% of a first-year learners in intermediate and 30% in higher VET were older than 24. Increasingly, young people see it as a convenient first learning choice to enter the labour market, enabling them to continue their development later in life.

However, Fernández-Macías et al. (2013) warn that Spain may be doomed to suffer the implications for economic and social development of having neglected the need to prepare its population for a knowledge society. They say dropping out from compulsory education is mainly due to family background, where the mother's educational level has the greatest impact on the probability of following post-compulsory education, together with gender and the employment conditions in the local region. Male migrants are more likely to leave school early and the absence of one of the parents from the household clearly reduces the probabilities of finishing secondary education.

**France:** In 2013 the unemployment rate of early-school leavers reached 50% (El-Mahdi and Moullet, 2016). Moulin et al. (2014) described how the concept of school dropout is different in France when compared with other countries. Dropouts include not only the young people leaving the educational system without a diploma, but also young people in difficult situations who need help and guidance, sometimes referred to as school failure, and difficult teenagers absent from school before the legal age, or school interruption.

In France a number of issues have been addressed, for instance reducing the 'repetition' of classes by implementing strategies based on individual support and catch-up opportunities; increasing the choice of courses, with the introduction of a new guidance system in all colleges and high schools since the beginning of 2009; providing more choices in selecting schools, but also ensuring well considered institutions take disadvantaged students and make their facilities available for low-income families.

According to the OECD (2012a), particular attention needs to be paid to pupils in disadvantaged situations in order to combat school failure and dropping out. They suggest educational policies should be used help to break the link between the socio-economic background and educational success.



The situation of early dropouts was taken into consideration rather later in France than other countries (Landès and Lefeuvre, 2014). The government only started to tackle this issue because of the difficulty of social and professional inclusion of young people without qualifications, school attendance became obligatory and the concern about public order and security. A French national plan was launched on November 21st 2014 by the French Prime Minister Manuel Valls and the Minister of Education Najat Vallaud-Belkacem. The purpose was to defeat dropping out from school (Weixler and Soudoplatoff, 2015). It included several initiatives including the mobilization of educational teams in institutions, the development of links with families, strengthening partnerships at all levels (national, regional, local) to foster collaboration between institutions, communities, associations, companies, etc. and the establishment of the right to return to training.

An Early School Leavers Taskforce was established, that acts in secondary schools. Where special coordinators (teachers) without any specific training are allocated responsibility in order to be able to help young people who are in the process of dropping out of school. This was based on a skills and competences framework based on the profile necessary for working with youngsters at risk of dropping out. The only tangible aspect of their work is the activities and practices they develop with the young. Their mission is to get the young people focused on their image and their involvement and not on their knowledge.

Boudesseul (2014) underlines the importance of the “innovation” and “experimentation” in the dropout field, stimulated by the Ministry of Education. The Ministry fosters innovation through calls for proposals, with a variety of partnerships, where not only schools are involved, but also public administration, NGOs and associations. A large number of topic areas have been supported, including orientation, health, professional inclusion, social and spatial inclusion in the city or rural area and judiciary protection.

New mechanisms have been created for the reception of dropouts throughout the country. The aim was to increase the downward trend in the number of dropouts. The National Education system is committed to increasing the possibility of carrying out initial training courses that give young people temporary alternative experiences, either through internships, civic service etc. while retaining their student status. There are also back-to-school structures, such as micro-lycées, second chance schools, and so on developed in complementarity with E2C and Epide (CGET, 2016), as well as voluntary military service and certain actions carried out by companies who would host dropout youngsters. The common objective is for the minors to keep their pupil status and develop a more inclusive educational care of the young person whether they are being educated or not.



Another measure put in place is to have a temporary reception to prepare the young person who is ready to resume a training course while focusing on a socialization goal. Another tool developed are online platforms for monitoring and supporting dropouts with the objective of ensuring that young drop-outs over 16 years of age are identified and offered the best supporting conditions for a return to school or the successful integration into society by benefitting from the fundamental right of access to knowledge and training.

NEETs in France are considered young people, 15-29 years old, who are not in education, employment or training (OECD, 2016). Their number has increased in recent years in France, from less than 14% in 2008 to 16,9% in 2012. NEET rates among migrant youth in France are more than 1.8 times higher for migrant youth and ESL is three-times more likely among migrants in France when compared with native-born youngsters.

Four education challenges have been identified for French policy makers:

1. make the educational system fairer, supporting disadvantaged people and schools, for instance they suggested teachers with experience should get incentives to work in disadvantaged schools.
2. fight against school failure from an early age, to help the pupils in reading and in getting the basics from the start of mandatory schooling. They recommend to keep starting school at 2 years old and to focus on teaching a common set of core skills, to limit to repeat a year while personalizing the teaching and encouraging differentiated learning.
3. improve the quality of teaching and the transmission of knowledge in primary and secondary schools, and reassert the values of the teacher. They suggest France should build capacity among teachers in teaching methodologies, to develop lifelong learning for teachers and establish a quality assurance system.
4. enhance the quality and the valorisation of vocational pathway in high schools, so it is not oriented to pupils with poor performance. Teaching in vocational education should be enhanced. The suggested France should strengthen the academic demand of vocational education, to make possible for the pupils to gain better skills and have access to tertiary education via a vocational route and to make sure teachers have a solid professional experience, with quality teaching methods. (OECD, 2015).



**Italy:** In Italy, the proportion of early school leavers has been high by European Union standards even though the rate of early leavers has decreased over recent years (from 19,2% in 2009 to 15% in 2014). As a result of Law no. 296 of December 27, 2006, both the school leaving age and the minimum age to access the labour market were raised to 16 years. Besides the Eurostat definition of early leavers, in Italy the concept of 'at-risk of drop-out' is also used for students who leave school education during the academic year without any official communication with an educational institution.

In 2013, 17% of the whole population aged 18-24 did not achieve any qualification beyond the 3C ISCED Level ("Scuola Secondaria Inferiore"), while the EU member countries average school drop-out rate was 13,5% and Italy was in fifth worst position in the EU. However, ESL is not uniformly distributed across the country: in Southern regions, it is almost double that of the Centre-Northern area. Dropping out is most severe in Sicily or Sardinia (25 and 25,1% respectively), while it is least in regions such as Umbria and Emilia-Romagna (11,6% and 13,9% respectively).

Looking at the Eurydice study (European Commission, 2014), dropping out is also a gendered phenomenon, affecting 20,2% of the male population aged 18-24 in Italy when compared with 13,7% of the female population (EU28 13,6% males, 10,2% females). Again this is not uniformly distributed across the country, as in Southern regions it is almost double that of the Centre-Northern area.







Among several determinants is the role played by family origin. According to Aina et al. (2015) youths born in the Centre-North with both parents from Southern Italy, in other words second generation internal migrants, behave similarly to those born and living in the South. For this reason, they are more likely to leave education earlier than comparable individuals born in the Centre-North with parents from the same area.

In Italy, 34,4% of students who do not get any school-leaving certificate were born abroad, while among native students this percentage decreases at 14,8%.

Across Europe, several countries have a national strategy in place that has as one objective to reduce early leaving from education or training, or they are in the process of adopting one, but in Italy there is no comprehensive strategy to tackle early leaving (Fondazione CR Firenze, 2015).



The Ministry of Education, University and Research (MIUR) is currently working on merging in a single framework, all the structural measures already implemented to tackle this issue. Following a series of initiatives already undertaken:

-  intervention and economic measures against drop-out, such as integrative teaching in compulsory education in the areas with higher risk of drop-out and the extension of school timetable for groups of students;
-  implementing extra-curricular activities in the afternoon (sportive, cultural, artistic and leisure activities);
-  increasing flexibility of the education system through the full integration and recognition of non-formal and informal pathways within the education system;
-  reorganising the adult education system: Former centres and evening classes will merge into the new Centres for Adult Education (CPIA) providing young people and adults with personalised learning paths for obtaining lower and upper secondary education qualifications. Centres will also offer literacy courses and Italian language courses to foreign adults;
-  integrating classes in institutes for the detention of minors and adults.
-  targeted measures for groups at risk (socially disadvantaged, migrants and Roma backgrounds and students with special educational needs).

Italy invests in education but must optimize its investments, according to De Carli (2016). The main error with regard to Early School Leaving in Italy is the lack of interventions aimed at creating the conditions to make the students autonomous at the end of their studies and favour their entry into society. The mistake has been not to test the reforms before undertaking national implementation, as schools have often not been equipped to handle these complex projects, it would take action to make schools competent in planning and in territorial co-planning, monitoring, evaluation and reporting. Between 2006 and 2015 only about 10% of education reforms were tested.

According to Batini and Bartolucci (2017), based on statistical evidence, education and social policy arguments some innovative actions particularly aimed at combating school drop-out have been implemented in Italy and especially in those regions which showed particularly high rates of early leaving. This was particularly the case in the south of Italy. European Structural Funds were used as forms of financing that have allowed regions to activate specific operational programs to combat this. Community funds, which do not burden national public finances. Of course, it is a form of funding for the most important intervention projects, but not an indicator of the centrality of the emergence of the phenomenon in terms of politics and financial attention at the national level.



With the National Operational Programs for Education additional funding is allocated, aimed at accelerating the convergence of some Southern Regions on common objectives of development and competitiveness, guaranteeing schools, located in the most critical areas of the national territory, the possibility to access funds specifically designed to overcome the conditions of context weakness, which strongly compromise the quality of service, preventing full achievement of the objectives of equity and cohesion defined at national and EU level. The PON for education offers the possibility to launch, through the definition of integrated intervention plans, multiple actions to improve the effectiveness of the educational offer and the quality of the school structures, depending on the increase in the levels of students' competence and reduction of the school drop-out rate.

The first PON which gives specific attention to the problem of early school leaving was "The School for Development", 2000/2006, in line with the aims and strategies of EU and national policies, oriented towards innovation and quality improvement, and achieving the objectives of social cohesion. The subsequent PONs were "Skills for development - ESF" and "Learning environments - ERDF", 2007/2013. And in succession, the action plan developed by action F Objective F3 "Development of networks against school dispersion and creation of innovative prototypes", among the different Actions envisaged in the Cohesion Action Plan. In particular, this action was aimed at preventing and combating early school leaving and early educational failure. It required schools and networks of selected schools to design and implement specific interventions within territorial contexts with a higher risk of school drop-out. To arrive today, with the PON "For the School: Skills and Learning Environments", 2014-2020. These operational programs, from 2000 to 2020, constantly and consistently aim at specific targets for reducing the rate of early leaving and raising students' skills, in line with the benchmarks provided for by European cooperation in education and training, and those for monitor the progress of national policies.





This is a summary of the calls in question.

1. National plan for the enhancement of orientation and contrast to early school leaving. 2 million euro to promote and enhance projects of excellence in the field of prevention and combating school dispersion and orientation for students, both in the choice of the school and university addresses.
2. Promotion of musical culture in the school. Further support for the dissemination of education and musical culture, with resources for 1 million euro for the best projects presented by schools of all levels, single or online.
3. Student participation in school. Resources for 2 million euro for the best projects aimed at promoting student participation in secondary schools. The funds will be allocated to the Regional Scholastic Offices that will issue successive calls.
4. Plan of actions and initiatives for the prevention of cyber-bullying phenomena. The call provides resources for €440,000 for projects aimed at raising awareness on the issue of online security and the integration of digital technologies in teaching in schools of all levels, for the contrast and prevention of cyber-bullying.
5. National plan for the implementation of the student's curriculum and coordination and expansion of the national initiative "Student Card - loStudio". Announcement of 1 million euro for secondary state secondary school projects, aimed at the development and strengthening of the "loStudio" Student Card, the expansion of the Student Portal and the implementation of the student curriculum.



**Portugal:** Sebastião and Álvares (2015) examined the Early School Leaving situation in Portugal. They describe how Portugal underwent changes in the education system in recent years, to address the relative low levels of schooling. Nevertheless, the level of early school leaving is still very high in Portugal, due to historical, economic and social reasons. They confirm school leaving depends on three characteristics, the attitudes of families regarding its relevance, the contradictory position of the political, economic and cultural elites on the need to democratize school knowledge and the financing of education.



The reduction of ESL rates in Portugal is based on policies seeking to improve the living conditions of the Portuguese population and social changes on the family unit, which made increased demands on education. Now Portugal tends to follow European standards, so there has been greater investment in terms of preventive policy measures, mainly focused on the support to students with social and disadvantaged family backgrounds, as the TEIP Program (special support to schools in disadvantaged areas), the enlargement of the ASE (socio-economic support to disadvantaged students) and the PLNM (special support to students with different mother tongue). In terms of preventive measures, two broad initiatives have been implemented with strong public investment and strategic change, the increase of compulsory education to 12 years in 2009 and the expansion of vocational education in public schools.

Magalhães et al. (2015) analyses the ESL-related policies, measures and instruments in Portugal. They show that the enactment of these policies is widely dependent on the actors at different policy making levels. The rationales and drivers orienting these policies – social inclusion, educational quality and effectiveness and qualifications for work and the labour market – set up at the European and national levels, were more or less successfully implemented at the local level depending on the how well embedded the instruments were in the specific contexts and whether they could be accessed and used by local actors. They found there was a consensus among the actors at different levels about the use of education as a tool for inserting young people into the labour market even if dissonances could be found in what concerns the practice and the potential exclusionary dimensions inherent in these processes.



**Other countries:** Szalai and Kende (2014) examine ESL in Hungary. In 2013, the ESL rate was around 11 per cent. During the past ten years the trend in the EU has shown continuous improvement, while in Hungary it has been fluctuating: the period between 2004 and 2006 was marked by stagnation, and then from 2006 to 2010 by decrease, and since 2010 by increase, i.e. the situation has become worse in recent years. They suggest the labour market participation rate of those having completed only elementary school is extremely low; their employment rate is 20 per cent behind the EU average.

Ivan and Rostas (2013) examine the participation of Roma in Romanian education. They confirm the results are extremely unequal, both in terms of school abandonment and school performance. The risk of school dropout was much higher among Roma students compared to the non-Roma ones. The study revealed that in 2011 the risk of dropping out of school in the next two years was six times higher for a Roma child enrolled in lower secondary school. The causes lie in the social barriers triggered by belonging to an ethnic group and there was a certain influence from peers and community regarding the level of school absenteeism. They also suggest there has been a very strong focus on the discrimination of Roma students in the Romanian school system confirming that school is not an equally friendly environment for all students, regardless of their ethnicity. They recommended a review of the National Strategy for tackling school dropout rate and increasing school attendance.

Cyprus carried out a reform of education, leading towards a more intercultural orientation. Hajisoteriou and Angelides (2013) examine the politics of the development of this policy and comment on the gap between policy rhetoric and practice as there is an absence of concrete impact of this reform on the integration of immigrant families. They show the different obstacles impeding the effectiveness of the objectives of this education reform, such as the historical links with Greece leading to a lack of appropriation to the local context and policy objectives that are different from the outcomes.



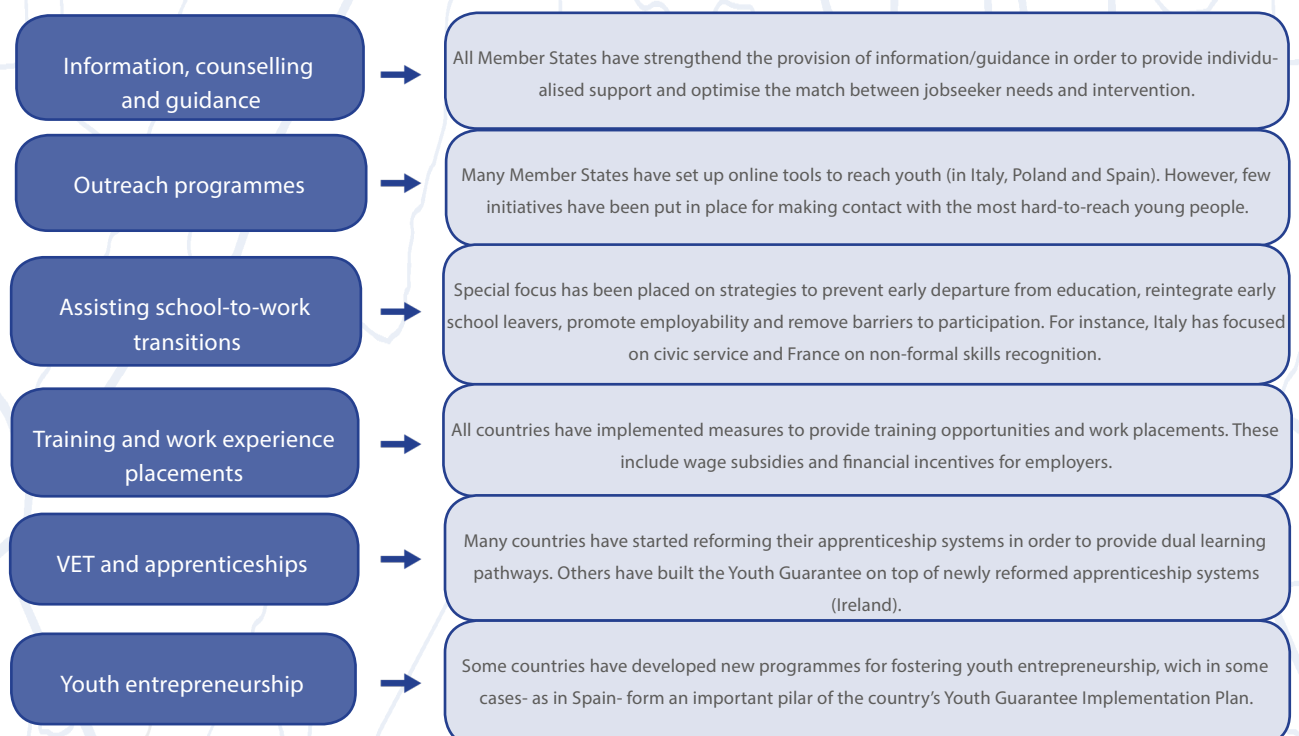
## The Youth Guarantee Policy

Conceived in 2013 and partially rolled out by 2014, the Youth Guarantee is a policy that has led to the creation and further development of activities intended to assist young people back into education, training or employment (Figure 15). The aim of this policy is to ensure that all young people under the age of 25 receive a good-quality offer of employment, continued education, an apprenticeship or a traineeship within four months of becoming unemployed or leaving formal education (Council of the European Union, 2013).

In many Member States, the Youth Guarantee implies a need for major reform of existing youth policies, while the main innovation and added value of the Youth Guarantee concept revolves around the following three dimensions:

- Early activation:** Early activation of young people within the four-month limit is intended to make sure young people are not stranded in inactivity and to help limit the potential scarring effect of long-term disengagement.
- Short- and long-term interventions:** Under the Youth Guarantee umbrella, immediate measures are combined with long-term reforms through partnerships among key stakeholders. This brings together educational providers, labour market actors, social partners and youth organisations to realign education, training (including VET) and PES provision to the long-term needs of young people, while also providing immediate solutions for fighting youth unemployment.
- Personalised and integrated support:** The approach is intended to offer personalised and integrated support for young people. Offers of a job, apprenticeship, traineeship or a place in further education, and any measures supporting young people on their pathway to re-entering employment, education or training, should be tailored to their individual needs.

Figure 15: Different types of Youth Guarantee policy



The study Reducing Early School Leaving in the European Union (GHK Consulting Ltd., 2011), classified into three categories the different groups of policy measures in school dropout situations. These were: i) prevention strategies, ii) reintegration strategies and iii) recovery strategies. The first seeks to frame and guide, the second, anticipates the incidence of the phenomenon, and the third reintegrates students in school dropout situations. However, successful educational strategies to lower rates of Early School Leaving that increase inclusion and social cohesion should be based on investing in evidence-based policies and practices.

Based on the work of the Thematic Working Group on Early School Leaving (European Commission, 2013b), the following key policy messages were identified for successful policies against ESL.

1. Ensure long-term political and financial commitment to reducing ESL and keep it high on the political agenda.
2. Ensure children and young people are at the centre of all policies aimed at reducing ESL. Ensure their voices are taken into account when developing and implementing such policies.
3. Develop and implement a sustainable national strategy to reduce ESL. This strategy should address all levels of education and training and encompass the right mixture of preventative, intervention and compensation measures.
4. Invest in the knowledge base of ESL, through regular and timely collection of accurate data and information. Ensure that data and information on ESL is accessible and used effectively in policy development. Ensure that the monitoring and evaluation of ESL measures steers policy development.
5. Ensure policy development and implementation is based on strong, long-term cooperation between national, regional/ local authorities and stakeholders, as well as between different policies, through for example establishing coordinating body.
6. Remove obstacles within the school education system that may hinder young people in completing upper secondary education. Ensure smooth transition between different levels of education. Ensure access to high quality education throughout life (including early childhood education and care), and the provision of high quality Vocational Education and Training (VET).
7. Support schools to develop conducive and supportive learning environments that focus on the needs of individual pupils. Promote a curriculum that is relevant and engaging.
8. Promote and support multi-professional teams in schools to address ESL.
9. Support cooperation between schools, local communities, parents and pupils in school development and in initiatives to reduce ESL. Promote strong commitment from all stakeholders in efforts to reduce ESL at local levels, including local businesses.
10. Promote a better understanding of ESL in initial education and continuous professional development for all school staff, especially teachers. Enable staff to provide differentiated learning support for pupils in an inclusive and individualised way.
11. Strengthen guidance to ensure young people are aware of the different study options and employment prospects available to them. Ensure counselling systems provide young people with both emotional and practical support.
12. Reinforce accessibility to second chance schemes for all young people. Make second chance schemes distinctive and ensure they provide a positive learning experience. Support teachers who work in second chance schemes in their specific role.



## 6. EARLY LEAVING ACTIONS

The EU research project INCLUD-ED, Strategies for Inclusion and Social Cohesion in Europe from Education (European Commission, FP6, 2006–2011) identified a series of Successful Educational Actions (SEAs) that have improved educational outcomes for many children and young people in Europe (Flecha and Soler, 2013). The SEAs were derived from a rigorous analysis of the educational systems, theories and practices, particularly, from the successful actions identified in 27 case studies across the European Union of schools serving families from low socio-economic status where children achieve excellent results (Valls and Padrós, 2011). Instead of segregating learners according to ability or by lowering down their educational opportunities, these actions were characterised by reorganising available school and community resources to support the academic achievements of all pupils.

Using a communicative approach, the results from the INCLUD-ED Project (<https://www.includ-ed.eu/>) have documented Successful Education Actions (SEAs) showed a huge efficiency in terms of absenteeism. These have since been reproduced in several European Commission ESL recommendations and resolutions. Their research found that family involvement in schools improves children's achievement and applying dialogue and participation in decision-making and interaction groups.

Halba (2014) presents the European strategy in the struggle against Early School Leaving as implemented by the European Commission and specifically its impact on the French education system. The purpose of the research was to enhance an approach focused on skills and competences, with volunteering suggested as an alternative pedagogical strategy amongst pupils who face difficulties at school or who have already dropped out. He describes the specific ESL perspectives volunteering may tackle, for instance in enhancing social inclusion and by taking into account informal and non-formal learning.

A pedagogical approach to volunteering is presented through the Success at School project (<http://www.successatschool.eu/>) in six EU countries (UK, France, Bulgaria, Italy, Portugal and Slovenia). The project identified and developed both learning strategies and methods that help students at risk of ESL, develop ways to support and motivate students with migrant or Roma background to fulfil their educational potential, develop strategies to tackle gender stereotypes and support the development of inclusive teaching and learning approaches that cater for the needs of all students.

Kotnik (2004) describes how youngsters withdraw from the system of formal education, sometimes finding their way into parallel channels. They are in a state of risk, losing their traditional bonds to the formal education system. These young people, to be competitive on the labour market and sufficiently equipped for everyday life in the future, must develop inventiveness, autonomy, self-confidence, critical thinking and motivation for learning. She suggests that for those young people who don't fit in the traditional school arena, who are continually unsuccessful and are staying in this system only to gain »certificate«, is undoubtedly better to withdraw from this system – temporarily – to supportive environment of non-formal and informal education.



According to Cedefop (2016a), research has shown that work-based learning can have positive effects on motivation and professional identity, and ultimate retention, so there is expectation that work-based learning tracks should retain young people better than school-based ones. Analysis of data sets in France and the Netherlands – where qualifications can be achieved through school- and work-based forms of training – showed the reverse as in France, 77% of students in school-based tracks qualified compared to 73% of students from work-based tracks; and in the Netherlands, 84% of students from school-based tracks qualify compared to 77% of students from work-based tracks. This difference in retention rates can be explained by work-based learning tracks attracting a greater share of disadvantage students, older students, who are likely to be those who repeated a class, or those facing other difficulties. The difference in retention rates could also be a matter of student selection rather than the actual programmes.

Flecha (2014) explains the concept of developing schools as learning communities. The research describes how there were more than 130 schools, public and private, located in wealthy and low-income areas, with different levels of diversity, and in different countries, that have completed this transformation and are implementing learning communities and achieving excellent academic and emotional results for their pupils. Community involvement becomes important not only for the school but also for the transformation of that community.

Many early leavers completed lower secondary education but do not make the transition to upper secondary education and never start an upper secondary programme. With the exception of Romania, dual education systems appear to reduce drop out rates, countries with high work-based learning tend to have lower numbers of early leavers. Many early leavers completed a short, often vocational, programme. Work-based learning has motivational potential because being engaged in real working processes enables young people to construct a meaningful vision of their learning and future. Positive working relationships and valorisation of their work by other employees can be motivating and contribute to positive self-perception. The outcomes of the Cedefop (ibid) study are presented in Table 2.



Table 2: Data for better understanding of ESL (Cedefop, 2016b)

	LEVEL 1 Information on factors often available in administrative data sets	LEVEL 2 Information on self-reported reasons for dropout	LEVEL 3 Detailed information on factors linked to early leaving
Factors related to the individual and his/her family background	<ul style="list-style-type: none"> <li>• Gender</li> <li>• Socioeconomic status of parents</li> <li>• Migrant or ethnic minority background (1)</li> </ul>	<ul style="list-style-type: none"> <li>• Health and well-being issues or conditions (2)</li> <li>• Family responsibilities (e.g. taking care of siblings)</li> </ul>	<ul style="list-style-type: none"> <li>• Family engagement and support</li> </ul>
Factors related to the organisation of (vocational) education and training	<ul style="list-style-type: none"> <li>• Absenteeism</li> <li>• Class repetition</li> <li>• Education achievement</li> </ul>	<ul style="list-style-type: none"> <li>• Non-availability of work-based learning opportunities or apprenticeship</li> <li>• Disliked programme, VET provider, staff, or, colleagues</li> </ul>	<ul style="list-style-type: none"> <li>• Student orientation (e.g. negative choice of VET programme)</li> <li>• Perception of the profession (mismatch of expectations on a profession and reality)</li> <li>• Negative self-perception of students linked to the negative image of VET</li> <li>• Programme content and organisation</li> <li>• Readiness to work</li> <li>• Relationships at workplace</li> </ul>
Factors related to the labour market		<ul style="list-style-type: none"> <li>• Attraction of the labour market (the learner found a job)</li> <li>• Overall economic context: financial problems in the family (the learner needed to earn money even if in a precarious job)</li> </ul>	<ul style="list-style-type: none"> <li>• working conditions</li> </ul>
Other reasons for dropping out from a programme (not necessarily leading to early leaving)		<ul style="list-style-type: none"> <li>• Change of country/region/city of residence</li> <li>• Change of education and training provider or programme</li> </ul>	

(1) In some countries there are restrictions on collecting data on migrant or ethnic minority background. In this case, there is a need for studies focused on certain populations.

(2) Data on health issues or conditions are sensitive and need to be handled in full respect of data protection legislation. Also, learners may not feel comfortable sharing some of the information.

Source: Cedefop.



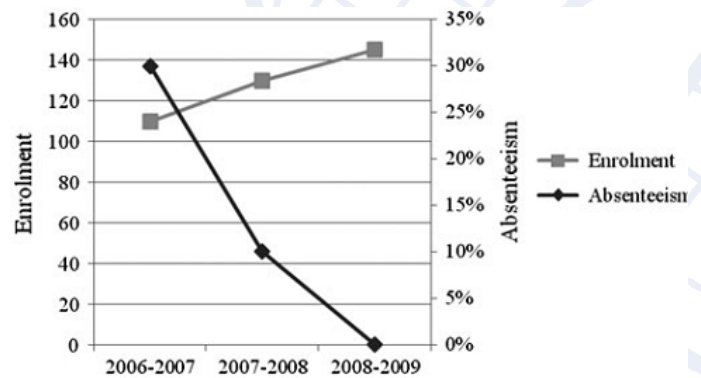


Not all countries have experienced the same positive outcomes with vocational pathways. The reform plan for Flemish secondary education was originally to restructure the early tracking of students and prevent ESL by providing more flexible educational pathways. Clycq et al. (2015a) showed that specific political discussions took over the design and implementation process and became an obstacle to the implementation of EU and OECD education policy recommendations regarding structural reforms that can reduce the regional rates of early school leaving.

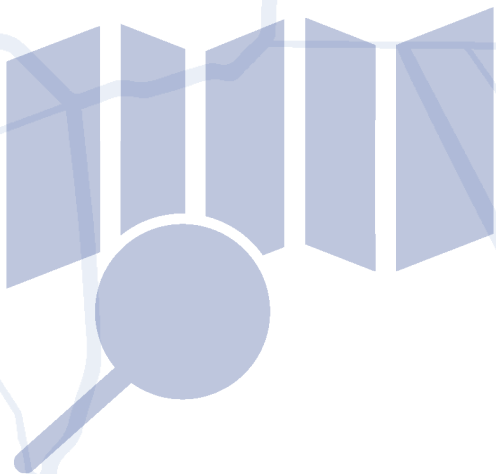
Dialogue and participation in decision-making has been shown to be a very successful tool to increase engagement in education. Watkins (2007) suggests learning outcomes can be improved by establishing schools as “learning communities” that promote a sense of belonging among their members, supports cohesion through commitment, and embrace diversity. These could be online education offered as an alternative to regular schooling. Interactive groups can be developed in classrooms in order to accelerate children’s learning, increase academic achievement, and improve social relations.

Dialogic learning between Parents-Teachers-Pupils is one of the documented Successful Education Actions (SEAs) used with Roma families and students. (Flecha and Soler, 2013). The interactions between teachers, learners, family members and community members in the school led to educational success and social cohesion in schools (Figure 16). From a communicative methodology approach, scientific knowledge is constructed through dialogue between the social actors.

Figure 16: The value of dialogic interaction in schools (Flecha and Soler, 2013)



Learning communities seemed to inspire both teachers and pupils to seek improvements and take ownership of their learning processes. It also created favourable conditions for reducing school dropout and for helping pupils at risk. More specifically they assessed the ways in which schools working as learning communities impacted on teachers, children and families’ beliefs and the ways in which this connects to children’s diverse out-of-school knowledge and activities.



It seems that these communities have a sense of agency; they can act, promote a sense of belonging among their members, support cohesion through commitment, and embrace diversity. The research recommends the transformation of schools as 'learning communities' to reduce early school leaving and improve learning outcomes. In schools that function as a learning community, teachers, families, pupils, and community members work in close collaboration to implement successful, evidence-based actions in their schools.

Downes (2014) suggested a holistic focus is needed that includes family support, bridging health and education domains to meet complex needs of those at risk. Professional development is required to improve teachers' conflict resolution skills, neutral mediating spaces are important for communicating with socio-economically marginalised families and commitment to emotional support for students at risk is essential. In ensuring the involvement of parents, their cooperation with the school is reinforced, creating school-parent partnerships can also increase learning motivation among pupils.

Learning communities may also be developed online. One of the earliest Internet-based virtual online communities to address ESL was Notschool.net (<http://www.notschool.net/>). It offered an alternative to conventional classroom-based education for young people who, for a variety of reasons, can no longer cope with school or with complementary provisions such as home tutoring or specialist units (Duckworth, 2005). Participants entered information about themselves on their own page, and then communicated with fellow participants, mentors, or buddies via email, sound files, video and online community conversations (Figure 17). Mentors devised an individual plan for each participant, according to personal interests, needs and abilities; these set out learning gains which can be achieved within a short period of time. The participants then compile and present their work as documents or on their own pages, which are accessible only to themselves, their mentor, the team leader and curriculum expert.

Figure 17: The notschool.net project home page (<http://www.notschool.net>)



Many of the participants who entered the project showed little evidence of literacy, but demonstrated substantial gains through increased self-confidence in expression, spelling and keyboard skills. Personal mentoring empowered vulnerable young people to engage socially with others. Digital skills were enhanced as participants must come to grips with e-mail and word processing, and many went on to experiment with complex multimedia tools. The nnotschool.net learner centred approach provides the learner with the skills, tools and confidence to proactively participate in their learning, shifting them out of a model of dependency and non-achievement.

According to Weixler and Soudoplatoff (2015), the French initiative “masecondchance” presents the opportunities for continuing or resuming studies. The Web portal by Onisep, a body under the supervision of the Ministry of Education. It provides a service that delivers information and allows dialogue to meet the concerns, demands and needs of users based on their location. It consists of a website and a mobile application whose objective is to provide users with benchmarks and advice in order to rapidly establish contact with the host organizations closest to their homes (Figure 18).

Non-formal learning methods are frequently cited as successful solutions for working with students at risk from leaving education and training. For instance, Bezjak (2014) explores the informal or alternative pedagogical approaches that proved to be efficient and effective in working with young dropouts, based on the findings of an international research project entitled Success at School, which between 2012 and 2014 in Slovenia. Caruso (2015) confirmed facilitating the recognition and validation of knowledge, skills and competences acquired through non-formal and informal learning and its permeability with formal education pathways was very important. An approach for the validation of non-formal learning scenarios for young students less than 16 year old located in a formal setting, i.e. in secondary schools, and at risk of becoming ESL was presented.

Figure 18: Masecondchance Web site (<http://masecondchance.onisep.fr/>)



In this context, Hung et al. (2012) suggested storytelling is an effective instructional strategy for promoting learning motivation and improving the learning performance of students (Schank, 1990). It can enhance memory by allowing learners to recall learning and help develop interaction among students (Zull, 2002) and with others.

Flecha (2014) focuses on the need to invest in evidence-based policies and practices, as a means of improving educational outcomes and reducing costs. The recommendations for educational policy development included:

Encourage inclusive successful actions that eliminate both streaming and mixture practices. Mixture is the traditional way of organizing heterogeneous classrooms and does not guarantee that each of the pupils' needs receive attention. Streaming or ability grouping widens the achievement gap in academic performance and legitimizes the low attainment of some pupils. There are inclusion actions that have already demonstrated their success for children.

Develop interactive groups in classrooms. Interactive groups accelerate children's learning, increase academic achievement, and improve social relations.

Encourage decisive, evaluative and educative types of family and community participation. Schools should develop mechanisms for the participation of family and community members.

Support the development of schools as learning communities. Schools as learning communities agree on a common vision and increase the commitment of pupils, parents, teachers and stakeholders to supporting school quality

Facilitate Integrative Successful Actions. The implementation of Successful Educational Actions in schools leads to social transformations in the same communities in other areas of society, such as employment, health, housing and political participation.

A wide range of prevention, intervention and compensation measures are recommended by Cedefop (2016b). But they suggest there is no single blueprint of an effective intervention to tackle early leaving as the detail of successful interventions differs by target group and setting. Their study analysed 44 successful measures to tackle early leaving through VET and derived from these lessons for policy design, implementation and evaluation.

OECD (2012a, b) recommended five responses that can contribute to prevent failure and promote completion of upper secondary education:

1. Eliminate grade repetition
2. Avoid early tracking and defer student selection to upper secondary
3. Manage school choice to avoid segregation and increased inequities
4. Make funding strategies responsive to students' and schools' needs
5. Design equivalent upper secondary education pathways to ensure completion



They also suggested five policy recommendations that have been effective in supporting the improvement of low performing disadvantaged schools:

- I. Strengthen and support school leadership
- II. Stimulate a supportive school climate and environment for learning
- III. Attract, support and retain high quality teachers
- IV. Ensure effective classroom learning strategies
- V. Prioritize linking schools with parents and communities

Kuran (2013) comments that key competences (DeSeCo, 2005) are becoming a very important issue in European education and particularly the European reference framework that the member states are expected to adapt according to cultural and educational specificities of their countries. The key competences for early leaving were assessed by examining the social integration program created under the “Project Learning for Young Adults” initiative (<http://ec.europa.eu/social/main.jsp?catId=1070>).

In dealing with prevention, intervention and compensation for early leaving Cedefop (2016b) identify a series of key features:

i) for successful prevention measures:

-  engage in a discussion with the young person to show interest in him/her and also to understand his/her challenges;
-  review the planning of education and training to ensure that young people can constantly make the link and the transfer between theory and practice, improving the perceived relevance of the more theoretical parts of training;
-  provide young-person-driven counselling, mentoring or coaching to help him/her develop a positive vision of his/her future which includes learning;
-  raise awareness among teachers about the importance of combating early leaving and their role in this context;
-  develop school-level commitment to prevention activities;
-  involve parents in discussions about their children's orientation. Make them better informed about the educational choices available and raise awareness of the importance of their commitment to their child's education pathway



ii) for successful intervention measures

- 📍 organisation of early remedial support to avoid them accumulating wide competence gaps compared to the curriculum
- 📍 possibilities for young people to try several professions to have a more concrete idea of the fit between personal profile and the work
- 📍 clarify aspirations and develop a positive learning project for oneself
- 📍 acquire the basic routines needed to integrate into a programme and succeed, including work-readiness to enrol in apprenticeships
- 📍 provide psycho-pedagogical support to help develop effective strategies to deal with learning difficulties and adjust the training programme and motivation and engagement measures to develop positive attitude to education and training; work-based learning and other forms of practice based training can be included
- 📍 identify health and well-being challenges and support the young person in overcoming these, including, if needed, by adjusting the education programme

iii) for successful compensation measures

- 📍 training that gives access to a qualification but which is sufficiently flexible to enable the target group to attend to existing obligations or which provides an alternative source of revenue
- 📍 tailor-made training to improve basic skills
- 📍 motivational activities to help build confidence and self-efficacy;
- 📍 support with non-education challenges such as health, housing, social benefits
- 📍 developing social competences to enable young people integrate into a group of students or a group of employees;
- 📍 acquiring basic habits which are needed for (re-) integration into education and training and/or employment, such as punctuality, planning, learning-to learn.



The European Commission/EACEA/Eurydice/Cedefop (2014) clarify the importance of education and career guidance to support students' choice of decision making in education and careers. This was identified based on their research in the large majority of European countries as one of the key measures needed to address early leaving. At an early phase they need to be informed about the choices open to them, the skills they need to make decisions about future their education which should be delivered through school-based guidance services, either taught as a separate subject or integrated in the curriculum. They suggested high quality guidance is lacking due mainly to the absence of appropriate professional training opportunities for staff, confirmed by findings from the OECD's TALIS survey (Scheerens, 2010). The importance of a coordinating body is highlighted that can strengthen the commitment to reducing early leaving and improve the process of monitoring and evaluation. Indeed Only four countries/regions have established a formal coordinating body as part of their comprehensive strategy for tackling early leaving (Belgium (Flemish Community), Spain, Malta and the Netherlands), the reported initial positive outcomes of their work could serve as an ex-

Nouwen et al. (2016), describes school-based prevention and intervention measures to reduce early leaving. They provide a cross-case analysis of prevention, intervention and compensatory measures for reducing early school leaving designed and implemented across 52 schools and alternative learning arenas in seven EU member states. They confirm innovative pedagogical approaches are the most successful in motivating students to engage in schooling and increase the level of inclusiveness for students. They suggest school-based prevention and intervention measures can be used such as academic support, career guidance support, as well as alternative learning pathways that offer holistic student care approaches with measures that are more flexible and individualised learning pathways.

Hugon (2010) assessed the implementation of 7 of the 34 projects funded in France about the prevention of early school, as an assessment of their implementation. Projects with a 'moderate' budget were usually developed after an opportunity that arose from a meeting. These projects usually expressed professional concerns that had come directly from the field. The study showed that these projects were oriented in three directions, (i) the training of the professionals; (ii) the development of individualized actions for young people and (iii) the involvement in cultural projects. The projects were mainly prevention projects, but without trying to understand the processes behind school leaving. The target group for these projects was usually students more than 16 years old in high school. Mobilities were an opportunity for the teenagers that helped the young people to raise their self-esteem.



The work of Debourle and Federini (2016) showed that the best results occurred when there was cooperation between the institutions and external actors, when citizen activists were working with the schools. Dropping out does not happen suddenly. Their difficulties build-up over the years as a result of personal, social, or family factors. They say dealing with early school leaving has to be shared between the schools and the school community in general, in partnership with external organisations to find innovative solutions.

Bruno et al (2016) describe different programmes in place to fight 'deschooling' in France. One of the programmes was created in 2009, the «internats d'excellence», «boarding schools of excellence». In 2004, individual files were created to follow and guide the students «at risk». There are also « external partnerships » with the families, education groups specialized on VET, and even with the Justice and Defense Ministries.

They report on policy that sees the integration of students at risk into 'adapted classes' as the optimal solution. The Ministry of Education always tries to keep the student in regular classes, but there are opportunities for students to do internships and have professional experiences. Programme implementation usually is a board initiative rather than from a teacher, though they can be created locally, such as the use of ICT, without following a specific Ministry decision (French Ministry of Education, 2018). This comes from the feeling that centralised policies are inefficient, as government suggestions are usually seen as difficult to apply.

Sharples et al. (2016) explore solutions using new forms of interactive teaching, learning and assessment to guide teachers and policy makers in productive innovation. Their report proposes ten innovations that are already in use but have not yet had a profound influence on education. These are :

1. Learning through social media: less formal approaches to engage in conversations, access expert advice, encounter challenges, defend opinions and amend ideas in the face of criticism. Examples include 'RealTimeWorldWarII', 'The Diary of Samuel Pepys' and NASA's 'MarsCuriosity'. The use of these requires skilled facilitators who are able to filter resources and engage youngsters.
2. Productive failure as a method that gives students complex problems to solve by forming their own solutions before receiving direct instruction. The pedagogy requires students to embrace challenge and uncertainty as they may struggle and sometimes fail to find a solution.
3. Teachback: learning by explaining to other people what we think we know. The learner attempts to explain, or teach back, what they have understood.
4. Design thinking: solving problems using the methods and thinking processes used by designers. These include creative processes such as experimenting, creating and prototyping models, soliciting feedback, and redesigning. Design thinking places learners in contexts that make them think like designers, creating innovative solutions that address specific needs. As a pedagogy, it can involve civic literacy, cultural awareness, critical and creative thinking, and technical skills. When implementing this approach in the classroom, the teacher and students may need to take risks and try new methods.





5. Learning from the crowd: appealing to the crowd gives access to valuable sources of knowledge and opinion. So non-experts and experts exchange ideas, generate and discuss content, solve problems, and vote for the best solutions.
6. Learning through video games: Struyven and De Meyst (2010) sat they can make learning fun, interactive, and stimulating. Game-based engines based on effective pedagogy, can employ learning analytics to adapt game experiences to players' educational needs and actions.
7. Formative analytics: learning analytics can be used to measure and predict the learning processes of students by tracing their behaviour and inferring their thinking processes. Formative analytics empower learners to reflect on what they have learned, what can be improved, which goals can be achieved, and how they should move forward. Providing analytics for learning empowers each learner through timely, personalised, and automated feedback.
8. Learning for the future: learners acquire skills and attitudes that will enable them to cope with uncertainty and complexity. It builds human capacity to learn, rather than mastering content.
9. Translanguaging: uses pedagogical strategies to allow learners to move flexibly and fluidly between languages. It can expand and deepen students' understanding and help them to gain broader perspectives.
10. Blockchain for learning: this stores digital events securely on every user's computer rather than in a central database. Achievements are recorded by participants, as a permanent shared portfolio record of intellectual achievement.



## 7. HOW IS STORYTELLING USED

### Storytelling and story-based learning

Storytelling is defined as the art of telling stories. Stories can make difficult and abstract subjects easier to understand. Storytelling is a tool for preserving memory, writing history, learning, entertaining, organizing and also healing (Raimist, 2010). It is in the telling of stories that communities build identities, construct meaning, and make connections with others and the world. Stories help capitalise on the power of narrative, help bring logic, and facilitate access to information. Storytelling is a social transaction that engages people in a communicative relationship. Through the act of listening to and sharing each other's stories a sense of belonging and community building can take place.

There are many different ways of telling stories, such as oral, written and digital storytelling. Bordeau (2008) suggests there has been a revival in the use of stories since the 1990's with both positive and negative effects. On the one hand people can understand and make sense of the world around them, on the other it is possible to use stories for manipulation.

Stories are generally written in the first person. Many of the storytelling processes follow the cognitive processes in Mezirow's ten transformational learning steps (Merriam, 2004) (Annex 3). The storytelling process involves exploring and collecting data, making a story by constructing the storyline or plot by ordering, establishing logical connections, developing flow, formulating a message, and materializing the plot. Then a presentation needs to be built and the results shared before finally receiving and handling feedback from the audience. The external factors involved include taking the target audience into account, the setting or way the story is presented and the medium the story material will be created in for instance video, images, text, narration.

Storytelling is described as a strong tool for community-building by Swerts (2015). It is one of the most ancient forms of education used by every culture to pass knowledge between individuals and generations. It is a powerful political tool for marginalized populations who seek to promote narrative in the social construction of life stories. These are normally collaborative productions that involve emotional transactions between the storyteller and the audience (Ewick and Silbey 2003).

Storytelling can be used as a didactical approach in education. Its main strengths are in their appeal, variety and accessibility. Stories are also engaging and easy to remember. Storytelling helps share experiences, explain events and phenomena and transfer knowledge. Different types of storytelling are described in Annex 4.



De Caril (2013) reports on the results of the pilot EU Dedalus project (<http://www.cittastudi.org/dedalus>) that used a storytelling method to reduce dropout rates from school. After one year, only 3% of 324 students at risk left, while the national average was 18%. These results suggested narrative and dialogue are good ways for engaging youngsters, helping them to reflect, organise and memorize information.

The idea was to use storytelling to deal with choices and career transitions in a different way. Rather than use standard tests, the pupils tell their own stories about the challenges they face, their friends and the obstacles they try to overcome. The project created a toolbox to be used with school guidance counsellors to identify possible routes. Through the act of listening to and sharing one another's stories, storytelling involves community building through the collectivisation of personal experiences and personalisation of collective experiences. A sense of belonging is enhanced as emotions play a key role in linking the "story of me" with the "story of us". However, according to Bordeau (2008), the relationship between stories and emotions is not the same in different countries and cultures.

Researchers like Hung et al. (2012) have shown that storytelling has been widely applied to learning, and has favourable effects on knowledge construction and motivation. Stacey and Hardy (2011) confirm digital storytelling is an effective approach for helping students collect information, create new ideas, and organize their knowledge, which can improve their comprehension of the learning content.

Narrative and dialogue are good ways for engaging people and helping them organize and memorize information. However, with the development of communication media, a rapidly increasing rate of new information being produced and the ease of duplication and transmission of data across the Internet generates considerable information overload. The curation of digital content responds to this issue. Content curation is a term linked to creating a better online experience and a more organized and accurate management of the online content. Si (2016) explains how narrative, storytelling and content curation techniques are used for better engaging an audience and helping the audience digest and remember content. He presents a narrative-based presentation tool for helping people explore large amounts of information by proactively constructing narratives. It takes information as a network of topics from a variety of sources, and performs narrative planning as it is interacting with the user. Si suggests this system could aid people in information exploration by providing the information in the form of an interactive visualization presenting topics in a meaningful and interesting sequence while illustrating the relationships among the topics introduced.

Story-based learning (SBL) creates space for story telling (MacKinnon and Young, 2014). Rather than just writing the stories can be recorded or guests can be invited to class to share their personal experiences. In addition, short video-clips or stories posted on the Internet and/or stories in books can be used with the SBL model. They describe a six-phase process used with trainee nurses (Figure 19), incorporating elements of narrative pedagogy, case method teaching and problem based learning.

Capuano et al. (2014) introduce a learning model based on storytelling that helps to build challenging and highly engaging training resources in the context of legal education for citizens with little or no background on the topics or concepts. They suggest this establishes the use of a storytelling paradigm in line with a tradition of narrative pedagogy.

Lugmayr et al. (2015) introduce the term serious storytelling as a new genre of media, defined as storytelling without an entertainment purpose. It is considered to be “thoughtful”, “impressive in quality”, and “relating to matters of importance”. Serious storytelling concerns the context: situation, space, place where the narrative is taking place, the course: the plot and events, the content expressed through various language and media elements and the channel or types of media (Annex 5).

Figure 19: Story-based learning – blending content and process to learn nursing (MacKinnon and Young, 2014)

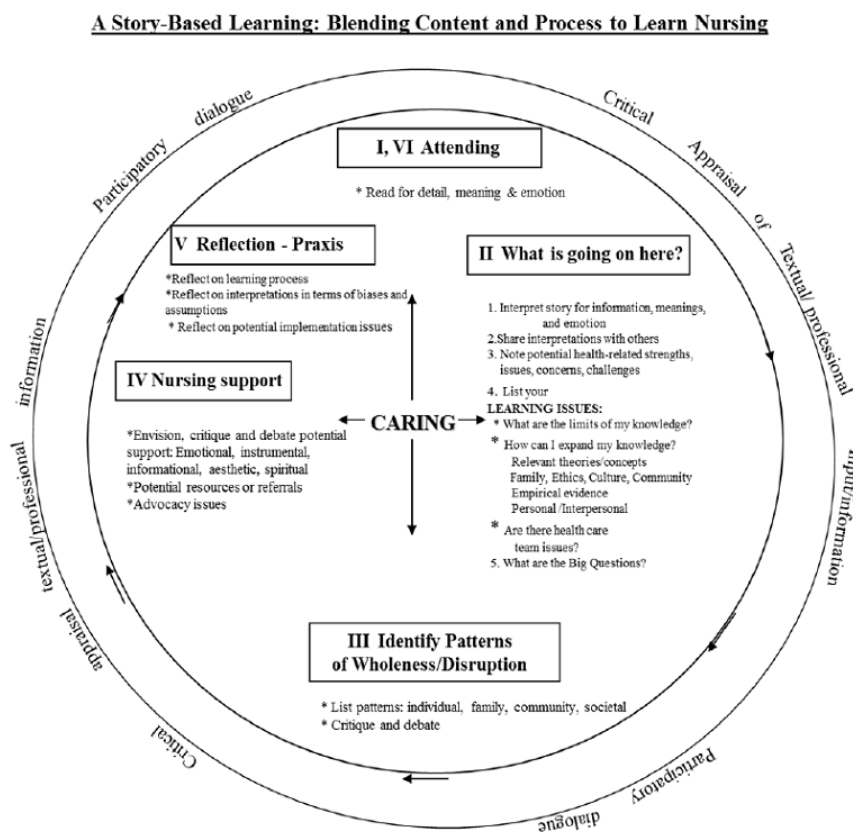


Figure 1

In general terms however, there has been little research done on storytelling in the educational field, because they have been seen more as a didactic medium than as a research question. Thus, many of the indications that are followed to put them into practice (Lambert, 2007) are the result of accumulated experience and reflection on it, but it still lacks a more systematic, linguistic and communicative, psychological and pedagogical analysis of the multiplicity of stories, their uses and their appropriations (Pazhouhesh and Ghabanchi, 2016), though there are some interesting examples, which come from some of these disciplines, such as the one already mentioned by Sadik (2008) or Lundby (2008).

### Digital storytelling

In today's world, education processes are inconceivable without the use of media of all kinds - nevertheless, the importance of digital technologies is often not recognized enough to integrate them effectively into learning processes. Their innovative potential in teaching is neither used systematically nor didactically coherently.

In order to tackle the core tasks of general education, such as promoting responsibility, ability to judge, creativity, self-determination, participation and empowerment in school life, the contents and competences of computer science and media education must be linked, anchored in the curricula of all types of school and continuously in as many objects as possible be integrated by a contemporary, innovative didactics.

These tasks can be summarised into three "big" topics:

- 📍 E-learning and innovative didactics
- 📍 Media Education
- 📍 Digital skills and basic computer literacy

These need to be combined in order to create digital stories. Digital storytelling has emerged in recent years as a powerful teaching-learning, pedagogical tool that involves both teachers and students (Perez, Martiney, and Pinñero, 2017). The new digital technologies have modified the modes and provide many new possibilities of building narratives and telling stories. On the Internet users are also the co-creators of information they can read and criticize, post and share. This opens different more fragmented forms of storytelling that are open to collaboration (Lits, 2012).

Digital storytelling is defined as an integrated application of multiple media and software that utilizes the art of storytelling and techniques of digital tools with new methods, contributing to helping learners become involved in the learning situation (Lowenthal and Dunlap, 2010). It is a branch of storytelling that uses digital media to tell a story (Heo, 2009). The stories are expressed through art, oral history, creative writing, speaking, photographs, music, news clippings, digital video, the Web, graphic design, sound engineering, or animation. The technique utilizes multimedia technology to foster higher order cognition and help students with various learning styles.

Herreros (2012) writes about digital storytelling as a construction of “self” from experiences accumulated over three years and relying on classical narrative theory, the filmic narrative, memory processes, cognitive processes and psychological processes. The personal digital storytelling is presented as a tool with which students reflect on their personal identity. This process of self-reflection is articulated around two moments, namely: the construction of the story by the student and the reception of it by the class. The creation process involves the structuring of ‘self’ around a narrative identity and not an essential identity. The reception of the others digital storytelling implies an experience that allows students to restructure their perspective and to live emotions in a empathetic way. Therefore, through the digital story the intention is that the student not only thinks about a behavioral dimension, but they also seek to express themselves via an intimate dimension. So, the narrative does not focus exclusively on actions or behaviours but also emotions, feelings and ideas. As a result it incorporates a reflective dimension that strengthens the value of the personal digital story as a tool for the student to explore, think and share.

Meadows (2003) considers digital stories as short, individual multimedia pieces beneficial for connecting with previous experiences (Malita and Martin, 2010). The use of multimedia in digital storytelling encourages participants to communicate meaning on multiple levels, for example sound, point, emotional content, tension and story arc. It allows them to take fresh perspective on their story. Robin (2008) identifies seven elements of digital storytelling (Annex 6).

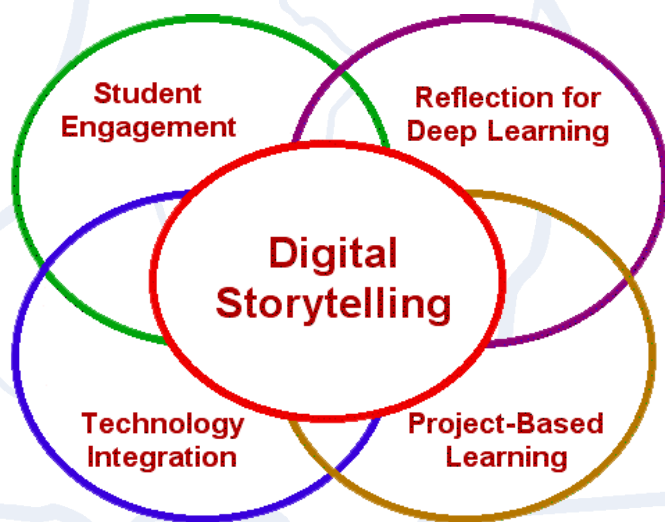
Digital storytelling has been treated as an effective approach to promoting cooperation and knowledge construction in classrooms. Lowenthal and Dunlap (2010) developed a Community of Inquiry framework based on the digital storytelling approach to provide a way for teachers and students to communicate and share knowledge on the Internet. Gyabak and Godina (2011) employed digital storytelling as an instructional intervention for bridging the digital divide between rural and urban elementary school students to help those who have never had the chance to experience computer technology.

The need to guide teacher training towards innovative proposals, including digital storytelling using digital tools, has been applied to Masters degree at the University of Oviedo (Villalustre and Del Moral, 2014). They report on how the design of digital storytelling has been introduced into the initial training of primary education teachers, as an interesting and motivating didactic strategy to jointly develop digital and creative skills. At the same time it has been revealed as a powerful practice to endow students with very diverse competences including linguistic and narrative skills. They comment that the resulting productions revealed high levels of creativity, articulating different resources and narrative artifices together with artistic components supported by images and iconic elements. The students used analogies, similes, visual metaphors, hyperboles and the association of ideas to elaborate stories capable of transmitting values and demonstrating competences of diverse nature.



Barrett (2006) states that digital storytelling can support four types of learning strategies: i) student participation, ii) reflecting iii) deep learning and iv) project-based learning. The important issue is to ensure the effective integration of technology in teaching and learning process. She presents digital storytelling as a deep learning tool, where students learn by designing and constructing actual solutions to real life problems (Figure 20).

Figure 20: Components of digital storytelling (Freidus and Hlubinka, 2002)



Hung et al. (2012) proposed a project-based digital storytelling approach applied to a science learning activity. The aim was to compare the performance of the approach with that of conventional project-based learning. The authors explored the effects of integrating digital storytelling and project-based learning on problem-solving competences and students' learning achievements. The experimental results showed that the project-based learning with digital storytelling engaged learners and effectively enhance the students' science learning motivation, problem-solving competences and learning (Stacey and Hardy, 2011). Through digital storytelling, students learn to tell a story, and in doing so, become more effective in collaborative working environments.

Freidus and Hlubinka (2002) propose the development of digital stories as important not just in its product but also in its process, in this case of reflective practice. They suggest digital storytelling for reflective practice can be a valuable, transformative tool for personal, professional, organisational, and community development. As stories are shared, the sense of community is strengthened. The stories mediate relationships in different circumstances and across different generations. Through reflective practice, individuals and groups give their work conscious attention, thereby examining and improving their positions as learners in their communities (Schön, 1983).

Raimist (2010) showed how a class on digital storytelling could be used to help students expand understandings of themselves and their roles in communities inside as well as outside the organization. For some students, digital storytelling was a process of synthesis, in which they made sense of their own stories through a deliberate sorting of multimodal content (Lambert, 2006). For others the process was one of self-definition whereby elements of narrative and visual expression encourage identity revision (Lundby, 2008). In both cases the process of storytelling was said to be one of "vernacular creativity" (Burgess, 2006) in which the students transformed their own everyday stories into a "shared public culture", a space for sorting through conflicting media messages while also forging new possibilities for seeing themselves and others.

Bran (2010) suggested that digital storytelling with a combination of images, sound, and texts could attract student interest and enhance their learning achievements. Through digital storytelling, individuals learn to tell a story, and in doing so, become more effective actors in collaborative environments. Digital storytelling encourages participants to communicate meaning on multiple levels. It offers a creative challenge to reflective practice and as such is a valuable, transformative tool for personal, professional, organisational and community development.

Del Moral Perez and Rey Lopez (2015) describe some innovative experiments developed where the children became the artists who told their own story while integrating new technologies in both the presentation and the design of their stories. They noted the large technological gap between the teachers and their students and commented on the need for training of teaching staff with respect to the use of new technologies. They note that digital story design activity can be perfectly extrapolated and transferable to different educational levels to encourage the development of various skills related to the design, assembly and publication of these stories.

Walters (2018) studied whether and how digital storytelling can contribute to learning through reflections on experiences. He found the students learned through the reflection of their experiences in the digital storytelling process. They highlighted the importance of creativity when sharing thoughts and reflections with peers. The stories provided powerful ways to aid reflection and give attention to feelings, thoughts, and emotions (McCorquodale and Kinsella, 2015). Such reflection is based on learner constructivism, where learning is an active process of constructing knowledge and meaning from personal experience (Heo, 2009). Through more experiences, individuals become able to construct deeper understanding and interpretation. They become able to make sense of their experiences and are able to transfer their knowledge to other areas, where relevant.

Rodríguez Illera and Londoño Monroy (2009) review the educational application of digital storytelling by placing it in the tradition of storytelling as a form of human knowledge. It provides recent interpretations of the concept and as well a set of elements for its classification. They suggest teacher training is an adjunct agent in the process of digital story production, especially when the stories are not produced in schools or institutes.

In many of these approaches the techniques developed by the Center for Digital Storytelling (CDS) of Berkeley have been used. These outline the key elements of digital stories of personal type (in English, Digital Storytelling) and the indications for their production. Bull and Kajder (2005) explain it in detail though there are different variations to the steps to be applied in the storytelling process.





According to Artique (1998), the main issue met when it comes to the use of ICT by teachers is that they are not prepared to use the different technologies. This is mainly for two reasons, (i) the 'educational legitimacy' of computer technologies and (ii) the underestimation of issues linked to the computer transposition of subject knowledge. They usually don't know the accuracy of such tools in the learning activities and therefore cannot see how useful they can be in the teaching process. Also, the introduction of ICT changes the relationships between students and professors, but the teachers need training as they are by and large not ready to deal with such changes (Peachey, 2016).

Chaachoua (2013) defends the idea that the integration of ICT but says this can only work if it is part of the training of teachers, even if the textbooks include ICT in practice they will only be used if the teachers are ready to use them. The other way to include them is to make the teachers want to use them. This means that they have to understand how useful they can be in the teaching process.

Abouhanifa (2016) tackles the topic of the professional development of teachers on probation in terms of their appropriate use of ICT and related to two sets of professionalization processes, internal professionalism and external professionalism. These involve the use of ICT in learning processes, to implement projects and updates their own knowledge and methods implemented with the pupils. Linard (1992) considered ICT provided very powerful tools that offer opportunities to integrate them in the teacher training. They can be used at different levels, whether instrumental, professional, experimental or reflexive. Their use can facilitate operational access to the general cognitive activities of representation, thinking and transformation of reality (McCorquodale and Kinsella, 2015). There is a need of mix between social interactions and the use of technology, so social contact is necessary when dealing with the problems of early school leaving.



Gallega Arrufat et al (2010) comment on how future teachers will need high levels of technological competences to be able to integrate ICT effectively into the curriculum at all levels of education. The key digital competence of future teachers was described as “to know how to use and properly incorporate information and communication technologies into teaching-learning activities”. So the training of teachers should not be reduced to the acquisition of digital skills or technological skills as such, but it must be based on its didactic application. In general, the teacher has to plan, teach, tutor and evaluate training actions, developing and using teaching resources and resources, promoting the quality of training and didactic updating (Tejada, 2009). Teachers’ attitudes are also a key element in training for ICT use and a key dimension for educational change.

In Austria, Brandhofer et al (2016) present a digital competence model (digicomp) for teachers, which has been developed on behalf of the Ministry of Education and coordinated by Virtual Pedagogical University. It is based on national and international models, serving as a tool for self-assessment and continuous professional development of educators. Six levels are recognized (Table 3)

Table 3: The digicomp digital competence model for teachers

A - Digital skills and informative education at a high school level and its ongoing updating
B - Digital life. Life, teaching and learning in the name of digitality, issues of technology ethics, media education and biography, accessibility
C - Design, Modify, and Publish Educational Material, Legal, and Related Rights and Duties, (Creative Commons, Use of Works, Copyright, OER)
D - digital teaching and learning: planning, conducting and evaluating teaching and learning processes using digital media and learning environments; formative and summative assessment; Feedback; Safe Internet
E - Digital Teaching and Learning in the Subject: Subject-specific learning-oriented use of content, software, media and tools
F - Digital Manage: Efficient and responsible use of student lists, digital classbook, student administration
G - Digital School Community: communication and collaboration in the school community and beyond the school community
H - Digital professional development: one’s own continuing education and training in the mode and in the field of the digital



## Digital storytelling through maps

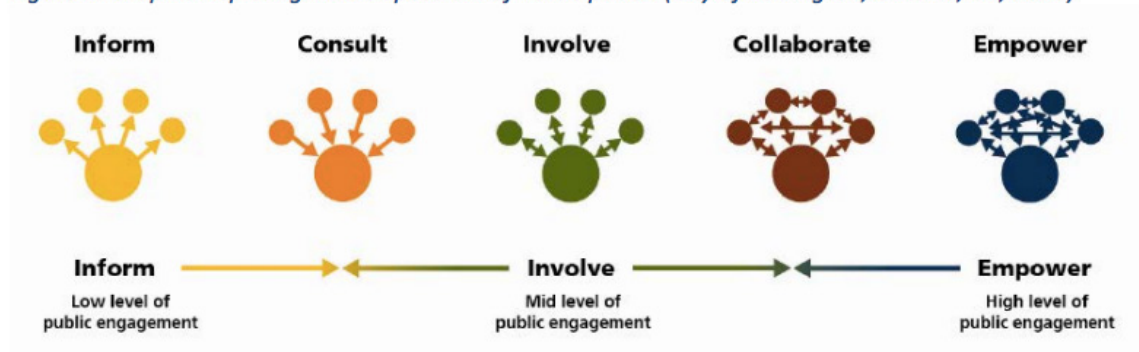
Introduced in 2012, GIS Story Maps are part of ArcGIS Online, a Cloud-based, state-of-the-art, mapping and GIS platform from the US company Esri. GIS Story Maps combine geospatial data with photos, video, audio, and text to visualize a theme or sequential events. User friendly and designed for non-technical audiences, GIS Story Maps have quickly become acclaimed as a storytelling medium and a social media outreach tool to engage the public. The mapping technology, once used by only by technically skilled practitioners, has become more visual, interactive, and accessible to non-skilled GIS users. "GIS applications have transformed into simpler, user-friendly tools with mass appeal and—most important—they live entirely on the web." (Scott et al., 2016).

According to Nguyen et al (2016), map-based storytelling offers a dynamic Web-based platform with which to offer transparency, accountability, and public engagement. Marta (2015) illustrates how it can be used in schools.

The International Association for Public Participation identifies and describes five levels of participation as part of their Spectrum of Participation approach (Hacklay, 2013). The spectrum shows how high levels of public participation can lead to increased public impact. It describes "inform and consult" actions as more passive activities, while "involve, collaborate, and empower" generate higher levels of active stakeholder engagement (Figure 21). Thus, storytelling with maps can be a deliberative process through which people come together to engage in thoughtful discussion, express their points of view, and discover common ground through processes of two-way communication (Kriz, 2013).

Figure 21: Spectrum of Participation

Figure 1: Graphic Depicting IAP2's Spectrum of Participation (City of Burlington, Ontario, CA, 2013)



Digital storytelling with maps has been considered a promising method to engage early school-leavers and motivate them to resume an educational path within the frame of lifelong learning. At the same time, this method can contribute to prevent school dropout. There has been so far no research about the potential impact that this might have on the engagement of the learners. However digital storytelling with maps offers high levels of active engagement as it allows people to personalise their contribution, it offers possibilities for creative collaboration, the potential for changing perceptions and opportunities for deep learning through discussion and sharing of the stories. The process contributes positively to the development of basic and transversal skills and key competencies such as communication in other languages, digital competence, cultural awareness and expression, mathematical competence and basic competences in science and technology.

Kerski (2015) suggests 'storytelling' is one of five converging global trends that increase the importance of geography and the use of maps for telling a story. Geographic tools, data, and multimedia on the web offer the ability and audience for storytelling through maps. Digital maps are a gateway to discovery about the world and local communities in which young people live. He stresses maps are useful to broad sectors of society as essential tools for understanding issues and for solving real problems, they can be a gateway to discovery about the physical and cultural world and local communities in which we live. Maps are tools to transmit spatially-related information, like oral or written stories they stimulate the imagination, while also providing orientation to known geography (Fox, 2016).

Today, Geo-ICT tools, open data, multimedia on the web and Web 2.0 expand the ability and audience for storytelling through maps. There are many different existing platforms that enable citizens to tell stories through maps, these include Esri Story Maps (<http://storymaps.arcgis.com>), Map Story (<http://mapstory.org>), and other tools. Eikenes (2015) links Storymaps to the research process as it helps to organize thoughts, evaluate the strengths and weaknesses of a situation, give a clear visual reference for exploring potential new directions and an instrument for understanding and addressing complex issues.

Strachan (2014) confirms that Story Maps are perceived by teachers to be user-friendly, interactive, and engaging. However several obstacles stand in the way of successful implementation, including inadequate technology resources at schools, a need for additional training, and a lack of curriculum time. Eikenes (2015) links Storymaps to the research process, as a visual model that helps to organise thoughts and to tell a clear, compelling story. A Storymap can help to evaluate the strengths and weaknesses of the project, provide a clear visual reference for exploring potential new directions and lets you identify any missing pieces of that need attention and for narrating the story in a clear and effective way. The Storymap highlights the questions and answers that anchor the presentation. In this way, the map becomes a tool that communicates, and moreover, encourages communication about aspects generally omitted because they are personal, even intimate (Martouzet et al., 2010).



Strachan (2014) researched teachers' perceptions of Esri Storymaps as effective teaching tools. As a relatively new web application they combine digitised, dynamic maps with other story elements i.e., title, text, legend, popups, and other multimedia visuals to help the storyteller effectively convey a message. Analysis revealed that Storymaps were perceived to be user-friendly, interactive, and engaging. Teachers felt their students would enjoy using the technology. Several obstacles to successful implementation were highlighted, including inadequate technology resources in schools, a need for additional training, and a lack of time. Nevertheless, the teachers agreed that their students possessed the aptitude and skills to be able to successfully develop Storymaps.

Storytelling with maps and multimedia encourages visualization as a storytelling medium to tell compelling data stories. Lee et al., (2015) confirm visualization research on storytelling has mainly centered on how data visualization components contribute to communication and the delivery or presentation of information. It should always contains components that form the story, like structures, elements, and concepts, and those that influence the "telling" part of storytelling such as people, tools, and channels. Thus visualization has both design elements that form a story and presentation methods that have been used to "tell" it.

Visual data stories include a set of story pieces or specific facts backed up by data and information, Most of the story pieces are visualized to support one or more intended messages. The visualization includes annotations as labels, pointers, text, or narration to clearly highlight and emphasize the message, and to avoid ambiguity. Story pieces can then be presented in a meaningful order or connections made between them to support high-level communication goals of the creator. This could range from educating or entertaining the viewer with an illustration of facts to convincing or persuading them with thought-provoking opinions.

Boy et al. (2015) present the results of web-based field experiments, in which they evaluate the impact of using narrative visualization techniques and storytelling on user-engagement with exploratory information visualizations. The Information visualization (Infovis) can be interactive and exploratory as users explore the potential of narrative visualization techniques and storytelling to trigger user-engagement.

Chavez et al. (2015) found that the use of Storymaps increased reading comprehension, on-task behaviour and positive attitudes towards reading. The display and arrangement of the story elements on a Storymap assists the students to visualize the story structure and to identify the key story components within a story passage (Boon et al, 2015).



## Digital storytelling pedagogies

Narratives and stories constitute an alternative approach to knowledge and learning. The narrative provides a cognitive organizational scheme through which the narrator can subjectively organise, shape, and structure experiences into a coherent whole. Bezjak (2014) reviews the Storymapping pedagogical approaches that young people have an affinity with. Four main characteristics of the approach are identified, interactive content, more dynamism in the ways of teaching, less traditional pedagogical approaches and challenges that provoke greater creativity and empowerment to participate in decisions on many aspects of their lives. Narratives and stories are powerful aids to understanding and reflection as they can give attention to feelings, thoughts, and emotions.

The pedagogy of Storymapping offers a sociocultural perspective on learning, implying that knowledge is constructed in a social and cultural environment. It relates closely with social pedagogy that considers the person as a whole, without separating knowledge, feelings, and actions (Úcar, 2013). It is characterised as a hybrid, complex interdisciplinary, inter-professional, open, dynamic, changing, alive and extraordinarily versatile subject. Each of these dimensions of the person are activated and developed by their relationships with others. So relationships that occur in people's everyday lives are, at the same time, vehicles, contexts, and contents of socio-pedagogical actions.

Studies have shown how stories affect the human mind and influence attitudes, fears, hopes and values. Storytelling is a valuable tool for taking the knowledge developed and transmitting it into mainstream society in ways that resonate and empower action. We want to explain how the world works by way of copious background information, overview of prior studies, detailed methods, results and discussion before getting to the take-away message. But people in education want the take-home message first. Telling stories is one way to meet this need. In the realm of digital data and information, a relatively new medium called the "story map" offers valuable assistance in telling a specific and compelling story. A story map allows scientists to share not only data, but also photos, videos and even sounds, all within the framework of a digital map. Story maps are created with Web map applications that provide the user with sophisticated cartographic functionality that does not require advanced training in cartography or geographic information systems, usually coupled with data needed to tell the story. Users can also leverage their own data (including workflows and use cases) in new ways to inform, educate and inspire others on the issues concerned.

Heo's (2009) research was based on learner constructivism, where learning is considered to be an active process of constructing knowledge and meaning from personal experience. Through more experiences, individuals become able to construct deeper understanding and interpretation. They become able to make sense of their learning and they will be able to transfer their knowledge to other areas, where relevant.



Calvard (2016) concentrates on 'sensemaking' as a key process for effective organizing and creating meaning through cycles of interpretation and action. The result is a more ordered environment from which further action and reflection can be drawn (Maitlis and Christianson, 2014). Sensemaking is thus retrospective but also ongoing, it is social and linked to identity and enactment (Weick et al., 2005). Sensemaking has thus been identified as a useful process during crises, periods of change, learning and cognition (Sandberg and Tsoukas, 2014).

Capuano et al. (2014) suggests narrative pedagogies have increased in importance. It has been effectively utilised in several disciplinary contexts and domains, it guarantees a high degree of learner involvement and of skills development. Holland (2017) suggests Design Thinking can be used to generate empathy with youngsters. It is a constructive approach that would help to engage in conversations. The approach helps to move away from assumptions and generalisations and starts on the path to ask the right questions that can address the challenges faced by ESL. The approach deepens empathy towards one another and fosters more innovative mindsets (Prud'homme van Reine, 2017).

Reinertsen (2014) considers the importance of teachers developing self-assessing recursive pedagogies and case / action research practices in schools. Teachers simultaneously producing and self-evaluate their own practices, developing self-reflexive and recursive practices in search of better quality.

Raimist (2010) describes the use of a 'Story Circle' as an important part of the digital composing process. This is an in-class workshop where students share their story ideas and get feedback from others in the class (Annex 7). After the Story Circle students can go through the process of building their digital stories with extensive feedback from the teachers and from each other. The students could then post their digital stories to a public space or blog, and offer comments on other students' digital stories. Comments can also come from other people like families and friends.

Timmerman et al. (2014) proposes there is a positive correlation between educational success and an individual's health status or psychological well-being. Deakin Crick and Goldspink (2014) confirm the relationship between the educator and the learner is inevitably and necessarily deeply relational - dealing with the learners' own sense of themselves. Ignoring the quality of relationships, or the emotional and experiential resources the learner brings is perhaps one of the shortcomings of pedagogy framed in the context of modernity where the focus is on the transmission of knowledge, with the purpose of achieving a narrow set of measurable outcomes.

Heo (2009) confirms that students today are not hesitant in using digital devices for communication, socializing, entertainment and information sharing via Web 2.0 / Cloud technologies. However they do not exhibit such high self-efficacy in using technology in a formal environment like in education, or in expressing their opinions. They are thus less confident about their own capabilities and performance capabilities in and as a result, their level of motivation and engagement will be reduced.



Heo's study (ibid) examined the effects of the digital storytelling experience on pre-service teachers' self-efficacy and engagement towards educational technology. The results indicated that participants' technology competency and openness to change towards educational technology improved with the experience of digital storytelling. Transferring technology knowledge and skills that they already possess into the learning environment by digital storytelling is important as it promotes authentic learning experiences, which allow students to take more ownership over what they learn and to integrate multiple content areas and multiple skills holistically (Maina, 2004). The authors suggest that digital storytelling is a potent technology that can help improve technology competencies and dispositions towards educational technology.

Roig-Vila et al (2015) analyse the attitudes of future teachers towards technological resources in the classroom. They consider three dimensions for analysis, classroom practice, student learning and the valuation that future teachers make of their own attitude. The results indicated that attitudes were positive, though they thought it was difficult for future teachers to conceive the teaching-learning process without the full integration of ICT into their jobs.

Design thinking may offer key cognitive and behavioural components necessary to reduce early leaving and engage those at risk. Schweitzer et al (2016) discuss the design thinking mindset, which is an integral capability for innovation and adaptation. Designers have a set of skills that can be applied to a wider range of challenges and used to solve complex social problems (Brown and Katz, 2011). The Design Thinking process is exploratory (Brown and Wyatt, 2010) that usually begins with an initial defining of the problem, followed by exploration of the user and design space, generating possibilities through brainstorming, building prototypes that are then tested, often a number of times, and the findings used to refine the problem resolution. Human-centeredness is at the heart of Design Thinking.

Wooff (2016) aligns design thinking with essential 21st century skills. Pedagogically design thinking is prevalent in classrooms through reflective practice and to focus on the competencies needed to engage with 21st Century learning experiences. Holland (2017) considers the use of design thinking to facilitate discussions with millennial. Using design thinking educators can start to build more effective environments as it starts with empathy and is a highly constructive approach that helps to engage in conversations by asking the right questions to address the challenges being faced. Vandecandelaere et al. (2016) propose a Universal Design for Learning (UDL) model. UDL states that education should be tailored as closely as possible to the different needs of each student.





Deakin Crick and Goldspink (2014) underline the importance of deep engagement with the students at risk and that learning is most engaging when it is placed, purposeful, pervasive, and principled.

- 📍 Placed learning reaches and has relevance to students in the space that they inhabit, connecting with the student's family/community and interests outside school.
- 📍 Purposeful learning absorbs the student in actions of practical or intellectual value, fosters a sense of value and agency – students have the chance to work like professionals;
- 📍 Pervasive learning: extends beyond school examinations, is supported by family, carers, and peers, and can be prolonged through independent and interdependent informal learning;
- 📍 Principled learning: appeals to the student's passions or moral purpose – it matters to the learner.

They concluded, “..... the relationship between the educator and the learner is inevitably and necessarily deeply relational - dealing with each learner's sense of themselves. Ignoring the quality of relationships, or the emotional and experiential resources the learner brings is perhaps one of the shortcomings of pedagogy framed in the context of modernity where the focus is on the transmission of knowledge, with the purpose of achieving a narrow set of measurable outcomes.”



## 8. TEACHER TRAINING

A key factor influencing responses to early school leaving is the training of teachers. According to the European Commission (2018), "The demands made on teachers, school leaders, and teacher educators are increasing and changing. They are called on to play a key role in modernising education. To do that, they need to develop their own competences. Initial education and continuous professional development of the highest quality, and access to support throughout their careers are both essential."

High quality teacher training is needed to address the complexity and multi-faceted dimension of early leaving from education and training and the necessity of a multi-dimensional approach to adequately address its diverse causes.

France is known for having a very centralised education system. Thus educational policy is fixed at the national level; curricula and content are designed by the Ministry of Education. Teachers in France are civil servants. They are recruited and paid by the State, and are appointed to schools.

A report by Bancel (1989) provided the core principles on which the reform was based: to give future teachers not only a subject competency, but also strong professional preparation. The report says there are three main domains of competencies necessary for a future teacher: knowledge about the subject identity (knowledge to be taught, history and epistemology of the discipline, social role of the discipline), knowledge about learning and teaching (didactics and pedagogy), and knowledge about the education system (national educational policy, the educational institution etc.).

According to Cornu (2015), the main components of the reform were:

- 📍 secondary teachers should be provided with professional and pedagogical preparation, not only with a disciplinary background;
- 📍 primary teachers should be trained in a university context, not in separate institutions. They should be given preparation of the same quality (and duration) as secondary teachers (this led to an increase in the preparation by one year). And, as a consequence, secondary and primary teachers would then receive the same salaries.

All future teachers (primary and secondary) should be trained in the same university institution. IUFMs will be created in each académie and be in charge of teacher preparation. They will be independent institutions, not part of the university, but have a status very close to universities, and be strongly linked with universities. IUFMs should also contribute to both in-service teachers' training and educational research.



Arias Gómez et al (2017) suggest education professionals must work in teaching the present generation with skills, aptitudes and attitudes that will solve future needs, must not focus on the transmission of scientific and technical knowledge, but must concentrate on a comprehensive education with the purpose of forming human beings.

In Spain, the diplomas required to teach at non-university level are specified in the 1990 Organic Law on the General Organisation of the Education System (LOGSE) and the 2002 Organic Law on the Quality of Education (LOCE, 2015). The Maestro certificate, needed for teaching at pre-primary education (educación infantil – 0 to 6 years) and primary education (6 to 12 years) levels, is regulated by a Royal Decree adopted in 1991, which likewise lists the specialities and general guidelines for the studies leading up to this degree. Recently, after the last general elections held in March 2004, the new government established, through the Royal Decree 1318/2004, a partial adjustment of the implementation calendar of the LOCE, stating that it would be progressively implemented by 2007/08 (González Roldán, 2013).

In Spain, initial training of pre-primary teachers is given in Escuelas Universitarias de Profesorado and in teacher training colleges attached to the education faculties. Initial training consists of a three-year first cycle of university-level studies. The major characteristics of the study arrangements nationwide are that the overall course load ranges from 20 to 30 hours per week including practical and theoretical training. At the end of these studies, the Maestro diploma can be obtained in different specialities: pre-primary education, primary education, foreign language, physical education, music, special education and hearing and speech. In order to teach at pre-primary level, Maestros must have specialised in infant education (Eurydice, 2014).

During the first cycle, pre-primary schools may employ other teaching staff, such as senior technical specialists in infant education (técnicos superiores en educación infantil) or its equivalents.

There are two groups of teachers in pre-primary education and in primary and secondary education, (i) those who teach in public schools, who usually have civil servant status, and (ii) those who teach in private schools, subsidised or otherwise, who are employed by a company. Those who wish to teach in the public sector must pass a competitive examination set for the relevant official public teaching corps. Teachers in private schools are subject to the normal rules governing employment contracts.

In-service training is a right and an obligation for teachers at all levels. The education authorities must plan the necessary activities to make such cost-free courses possible. Teachers must attend periodic scientific, didactic and professional activities in the education centres, in specific training institutions and in universities. Attendance certificates are issued for refresher courses. Certificates may be considered as giving merit for competitive examinations or as a requisite, in the case of some public official teachers to be eligible for sexenios, or 'six-year periods' (specifically designed to supplement teachers' salaries) (Eurydice, 2014)

## Secondary education

The academic qualifications required to teach at non-university levels are set by the 1990 Organic Law on the General Organisation of the Education System (LOGSE). The legislative framework regulating the studies leading to such qualifications is the 2001 Organic Law on Universities (LOU), and subsequent associated legislation. Some aspects of the 1970 General Law on Education (LGE) are still provisionally in effect as regards secondary education teacher training. The 2002 Organic Law on the Quality of Education (LOCE, 2015) sets down possible changes as regards the qualifications required to teach at non-university levels. This Act establishes the Corps of Catedráticos of Secondary Education and public officials with a principal teacher status belonging to the Corps of Secondary Education teachers will be attributed to it. A 1995 Royal Decree, subsequently modified by a 2003 Royal Decree, regulates the professional certificate of pedagogical specialisation, establishes the nature and effects of such title, and the conditions for awarding it. The aforementioned Royal Decree also defines the characteristics, duration and contents of the teaching qualification and the schedule for the organisation of the corresponding studies. Likewise, it stipulates that education authorities establish the maximum number of places for each specialisation, as well as the procedures and criteria to gain access to them (González Roldán, 2013).

In compulsory primary education, the teacher is responsible for teaching most subjects. There are specialists teachers for physical education, foreign languages and all other subjects for which these arrangements are made. A form teacher is assigned to each group of pupils. The team of teachers in each cycle organises the teaching, learning and assessment activities. Initial and in-service training and conditions of service for primary teachers are similar to those of pre-primary teachers (Eurydice, 2014).

In order to teach at secondary level, prospective teachers must hold the degree of licenciado, ingeniero (engineer), arquitecto (architect) or an equivalent (Eurydice, *ibid*). The establishments where they receive their initial training are the escuelas técnicas superiores or escuelas politécnicas superiores. These are first or second-cycle courses that last for four, five or six years. In-service training for secondary school teachers is similar to that of primary school teachers. There is a specific teacher for each subject area.

The legislative framework for university teaching staff is to be found in the 2001 Organic Law on Universities (LOU). Recently, two Royal Decrees promulgated on 21 January 2005 established the structure of university education and regulated official graduate and postgraduate university studies, respectively, which will have a bearing on the adaptation of initial teacher training (González Roldán, 2013).



Concerning adult education and continuing training, on-the-job vocational training is provided by vocational trainers, and there are also guidance and non-teaching staff. Vocational trainers are trained directly by INEM, the administration of the Autonomous Communities and by participating recognized and accredited establishments. This training can take two forms: initial training and technical updating and upgrading. The range of types of trainer is very varied: teachers who have civil servant status or who work under contract, contracted experts and teachers from participating establishments and companies. Royal Decree 1646/97 of 31 October regulates the certificates of vocational aptitude of on-the-job vocational trainers and lays down the qualifications range from the basic certificate of education to the qualification of Bachiller (Eurydice, 2014).

Teacher training in ICT is dealt with by the Real Decreto 665/2015 for teacher training. This provides a curriculum structure with obligatory subjects related to Technology (Tecnología & Tecnologías de la Información y la Comunicación ; in translation: Technology and Technology of the information and communication”) in all autonomous communities. (LOCE, 2015).

At present, universities face the challenge of using information and communication technologies to provide their students with the tools and knowledge that are required in today’s society. However, to achieve the integration of ICT in the classroom, teachers must adapt their class to the new digital culture. The incorporation of ICT in the classroom requires modifying the way of teaching, since the student can obtain the information in any space, what has to be achieved is that the information becomes knowledge and provides the competence that will be useful in his professional and personal life (Gómez Trigueros, 2017). Therefore, teachers face the challenge of teaching in the classroom and in the virtual space and involving students in the learning process, attracting their attention and encouraging them to search for new knowledge, for their application in the solution of their tasks. Therefore, if the use of ICT is present in the classroom and the development of digital competence in the curriculum, it is important that the training of teachers prepares them for that nowadays challenges.



In Spain, the principle of university autonomy, established in the Constitution and developed by the 'Law on University Reform' (LRU) and the 'Organic Law of Universities' (LOU), has provided universities with legal personality and management capacity. By virtue of this principle, public universities have the power to elaborate their respective statutes, and private universities have their own rules of organization and functioning, which contain the internal regulations related to the administrative and economic functioning, participation and relationships of each university, with other universities, with the State and public administrations, and with society in general. Therefore, universities can develop autonomously in terms of governance, academia, personnel, management and the administration of their resources. In teaching and training, universities have the capacity to organize and establish their teaching offers, as well as to prepare and propose the study plans leading to different university degrees. Their study plans are subject to common general guidelines established by the Government.

With regard to in-service training, in 2000 the Higher Institute for Teacher Training was created as a component of the Ministry of Education, Culture and Sports, with the aim of organizing programs and qualification activities for teachers throughout the State. Likewise, the autonomous communities and the universities themselves elaborate permanent training plans.

The program of studies for obtaining the title of teacher is divided into seven specialties: Early Childhood Education, Primary Education, Foreign Language (English and French), Physical Education, Music Education, Special Education and Hearing and Language.

According to the general guidelines of teacher education curricula, common to all universities, they cannot have an overall teaching load of less than 180 credits; Teaching time can range between 20 and 30 hours per week including practices, and in no case can the theoretical teaching load exceed 15 hours per week. According to these guidelines, training given in the university teaching staff must also consist of a series of subjects related to the areas of education in early childhood and primary education, and with subjects of psycho-pedagogical content that meets the differential needs of these students in each of the specialties. This training also includes a period of teaching practice in early childhood education centers or primary education. The subjects that constitute the basic nucleus of the programs of study, without prejudice to the autonomy of the universities, are:

- 📍 Psychopedagogical bases of special education,
- 📍 General didactics,
- 📍 School center organization,
- 📍 Psychology of education and development at school age,
- 📍 Sociology of Education,
- 📍 Contemporary theories and institutions of education,
- 📍 New technologies applied to education.

In Spain teachers have been trained to acquire digital skills, have learned to use cyberspace with the intention of improving educational quality, modernize teaching, reinforce learning and update study programs in digital skills, according to with the present and future times, so that graduates are competitive and competent in the labour market. However it has been difficult to adapt to the new lifestyle, because the disciples are reluctant to change from traditional ways.



Education in a technological age also poses a set of challenges that have been difficult for both the university and teachers to solve. The problem is how to teach students who do not really want to learn? Has the relationship between teachers and students changed? Is it up to the educational authorities and teachers to adapt to the changes and take advantage of the benefits that the Internet, tablets, smartphones and other technological tools provide? Consequently, teachers need to change their teaching practice, modify their profile and skills, use innovative teaching strategies and accept that students have information at their fingertips. Students today have different needs when learning.

According to Gomez Trigueros (2017) the development of the Information Society and Communication needs to be reflected in the adaptation of both curricula and teacher training in higher education to meet these new needs. European Higher Education initiatives advocate for training in skills as well as the implementation of active methodologies with technology. His study proposes the use of an active methodology, cooperative and with technologies for the construction of projects of educational innovation as a resource for the development of good training practices. The results showed an absence in the implementation of active methodologies and the incorrect inclusion of the technologies in the classroom practices. He concludes that it is necessary to rethink the models and strategies for initial teacher training as there are practically no studies on the perception and qualifications of the teachers being trained, or on teaching innovation, or the analysis of technologies or the digital training of students for the appropriate inclusion of ICT. His results confirm the urgent need to promote substantial changes in teacher training curricula that emphasise the didactic implementation of technological tools.

ICT should become pedagogical tools at the service of the teacher in order to achieve quality education. Based on this, Pino Justo and Soto Carballo (2010) have carried out a study on the ICT competences of third year teacher training students at the University of Vigo. They examined the acquired knowledge, the frequency in the use of certain tools, level of proficiency in four fields of knowledge: technological literacy, instruments of intellectual work, treatment and dissemination of information and use of communication tools. They assessed the motivations, interests and obstacles found in the development of these students in order to establish proposals for initial teacher training. They concluded that, in general, the students did not have specific training on the operation of computers. They knew the most basic operations and usually used email as a work tool, while Messaging and social networks were used in leisure time. Their attitudes towards ICT were very positive and their motivations focused fundamentally in that technologies are useful to improve their learning and lead to future work opportunities.

Following reform in France, according to Cornu (2015) the students who want to become teachers or professors need to graduate in a Master's Degree called MEEF (métiers de l'enseignement, de l'éducation et de la formation). There are four features : the first degree, second degree, engineering of training and education supervision. There are 32 schools (IUFMs) in France where students can enroll these masters level courses. With IUFMs, the process to become a teacher became the same for all teachers (primary and secondary): take 3 years at university (and obtain the 'licence' – Bachelor degree); and. then take 2 years at IUFM, with the recruitment competition at the end of the 1st year.

The major reforms of teacher education in France have increased the role of universities, courses now are based on the acquisition of professional competencies, as well as the articulation between academic courses and practice in schools. These reforms have led to lots of debates and controversy, particularly about the role of universities and schools and about the balance between subject knowledge and pedagogy.

After the French presidential election of 2012, the new government decided to initiate a new reform of teacher training, and to make teacher training a real priority. France had received quite poor PISA results and many questions were raised about the quality of the French education system (OECD, 2015). One of the main responses was that improving the education system needed good and well-prepared teachers, that the teaching profession should be reinforced, and that it should gain better recognition among the wider population. On 1 September 2013, IUFMs were replaced by new institutions, called ESPEs (Ecoles Supérieures du Professorat et de l'Education). ESPEs are internal schools within universities, and there is one ESPE in each académie, which makes 32 ESPEs in France.

The main ambition of ESPEs is to offer professional training for 2 years, after acquiring the Bachelor degree, leading to a national Master's degree: MEEF (Métiers de l'enseignement, de l'éducation et de la formation – Professions of teaching, education and training). The training is based on the 'sandwich training' concept, combining academic courses and practice periods in schools.

After 3 years at university, students enter an ESPE and undergo 2 years of training. The recruitment competition is taken at the end of the first year. The first year is devoted to preparation of the 'MEEF 1' degree, including preparation for the recruitment competition, and the second year leads to the MEEF degree. During the second year, students are paid as trainee teachers (and they have to teach half-time in a school).





The Ministry of Education published a 'reference table' of professional competencies for the profession of teaching education, stating the objectives and common culture for all education professionals to be acquired during the initial training and throughout life-long training. A list of 14 competencies was designed by the Ministry (Ministerial Order, 1 July 2013). The approach through competencies was new. Curricula were previously based on knowledge, now, the ESPEs have a certain autonomy in designing the content of the training, and must prepare future teachers leading to professional competencies.

A 'national framework' for the curriculum of the MEEF Master's degree courses to be followed by universities and ESPEs was published in order to gain national accreditation for delivering the MEEF Master's degree. The content and methods of teacher education are changing and are now more professionally oriented. A National Committee has been appointed in order to follow up implementation of the reform.

This reform has in general been well accepted by all stakeholders since it showed a new interest in teachers' training, and again started to attract numerous candidates for the teaching profession. But implementation of the reform, which is still underway, is difficult as new content and curricula had to be rapidly designed. This generated a huge workload for ESPE staff and a heavy programme for students.

The huge changes in society and their consequences for schools will change the teaching profession. Teacher training institutions must not only train for tomorrow the teacher of yesterday; they must anticipate the main evolutions in society and foreshadow the teacher of tomorrow (Cornu, 2015).



In 2006 in Flanders, a new decree on teacher education was passed. The Decree reflects the movement from a profession-oriented to a market-oriented form of teaching and teacher education. Simons and Kelchermans (2008) present the new Decree on teacher education in Flanders as a case study to critically examine the changes in the conception of teacher professionalism in education policy. They conclude that 'profession-oriented virtues' (expertise, responsibility and autonomy) are being replaced by 'entrepreneurial' or 'market-oriented' virtues (competency/effectiveness, responsiveness and flexibility).

There are three types of initial teacher training in Flanders, all of which are provided by different institutions, each of which having a particular role and addressing particular populations of teacher candidates. The university-based training programme is the first type. University students attend this programme in the last years of their main study in a particular discipline (e.g. mathematics or physics). The programme results in an additional degree, offering students a qualification for teaching in upper secondary and higher education.

The second type of programme is offered by Higher Education Colleges (Hogescholen). These are polytechnic institutes situated outside universities. Their three-year training programme includes subject knowledge, didactical/pedagogical knowledge and practical training (internship). Students become a teacher for nursery, primary or lower secondary schools.

The third type of teacher education is provided by Centres for Adult Education (Centra voor Volwassenenonderwijs). These mostly offer part-time programmes that are flexibly organised and mainly aim at training teachers for the practical training components in the curriculum of vocational and technical secondary education. Students who already obtained a degree and who want to enter the teaching profession (mostly after having been working in another job) can take this programme and thus can become a qualified teacher for primary or secondary education.

Through the Decree and the new regulations, Flemish educational policy-makers claimed that a decisive step had been taken to reform and reorganise teacher education in Flanders. The new policy strategies seek to provide both a sufficient and effective teaching force. The Decree establishes a single teacher certificate based on the idea that the 'goals and basic competencies' are the same for all teachers. It acknowledges the importance of competency-oriented learning. In a context based on 'what works in the market of teaching', academic subject knowledge or didactical/pedagogical principles were not prioritised. Instead, pre-service training and the reflection on one's practice became the building stone for learning trajectories.

According to Stryven et al. (2012), Flemish education is facing a shortage of teachers. This is partly attributed to either graduating teachers who decide not to go into education, or to leave education after only a few years teaching. Struyven et al. (ibid) undertook a study of 235 Flemish teachers who were no longer employed in education five years after their graduation. The main reasons for not being (or no longer) working in education was the lack of future prospects, such as lack of job security and pay and limited career opportunities, the lack of support by management and colleagues, high workloads and difficult relationships with parents.



In Austria, initial and continuing in-service teacher training reflects the needs of different types of post-secondary schools, as well as the relative vocational, technical, and academic emphases they pursue. In addition, teacher-education training includes preparation of pre-primary educators and noninstructional educational staff. Admission to teacher education programs requires the Reifeprüfung, or its equivalent, and special aptitude tests in some cases.

Teachers in primary, lower secondary, special-needs schools, and the pre-vocational year are trained in Teacher Training Colleges. The teacher-training colleges are also centers for educational research and hence prepare non-instructional educational staff. Student teaching is supervised in schools that are affiliated with the colleges. Vocational teachers at the secondary and postsecondary level combine a high degree of pedagogical, subject-specific, and vocational expertise in their field. They are prepared in Vocational Teacher-Training Colleges.

Teachers in academic secondary schools are university-trained. The minimum course of study is nine semesters, which includes practice teaching. Candidates are required to earn a second diploma in a subject area and to complete a probationary teaching period. The qualifications for university teaching staff vary considerably, but generally require a minimum qualification of a first degree (Diplom) for instructors. Advancement to the rank of professor requires an earned doctorate and requires a further, advanced documentation of significant scholarly, scientific, or creative accomplishment (Habilitation). Austria recognizes tenure. Austrian teachers are civil servants. Salary and benefits issues are therefore negotiated between the government and the trade union that represents most teachers, the Public Service Union (Schwab et al, 2015).

In 2015 Austria introduced a new scheme for teacher training that standardises educational requirements and reorganises and standardises the teacher training programmes offered. New curricula have been developed for teacher training for all levels of education, and training programmes for upper secondary teachers will now benefit from greater cooperation between teacher training providers and universities. The new training schemes started in 2015/16 for primary school teachers and in 2016/17 for secondary school teachers. The changes have been made with the aim of encouraging young people to become teachers, Austria having one of the oldest teacher populations in Europe, according to Eurostat figures. In 2015, Austria introduced a centralised assessment (Zentralmatura) for the upper secondary leaving certificate. This measure makes certificates from this level of education more comparable across the country (European Commission, 2015).



A university degree and a period of specialization and training in schools are requirements for obtaining teacher qualification at the secondary level. Tirocinio Formativo Attivo (TFA), an active training internship was first implemented in 2010, as an alternative route to obtaining teacher qualification at the secondary level. TFA programs are managed by universities in collaboration with local authorities at the regional level, and identify host schools where student teachers may complete their internship under the guidance of a school supervisor or tutor. TFA course topics are defined at the national level and include pedagogical competencies, disciplinary contents, and active training and observation in a school under the guidance of an expert teacher tutor for approximately 400 hours. TFA students must pass a final examination and submit a final written report on their training in order to obtain teacher qualification.

Italy has put in place a new system for recruiting and training secondary school teachers, as part of the 2015 school education reform (European Commission, 2017d). The aim is to put an end to the long waiting lists for entering the teaching profession (*graduatorie ad esaurimento*) by introducing a form of tenure track for aspiring teachers and to ensure that they receive high-quality initial education. From now on graduates in possession of a *laurea magistrale* who want to become teachers will participate in a public competition to be admitted to a three-year initial teacher education managed jointly by universities and schools (*Percorso triennale di formazione, inserimento e tirocinio – FIT*). The course combines formal learning with two years' teaching apprenticeship, which is remunerated. Upon successful completion of the third year, teachers will be offered a permanent contract.

This significant reform of the Italian educational system was approved in July 2015 (legge 107/15); the law redefines the entry requirements for the teaching profession and the elements of preservice training for secondary school teachers. Based on the results of a compulsory national competitive examination taken after graduation, the top tier of teaching graduates will be awarded apprenticeship contracts that last three years. The first year of the apprenticeship will comprise academic courses culminating in a teaching degree for the secondary level. The following two years will comprise paid internships for the new teachers in schools. A positive internship evaluation is required for new teachers to become secondary school teachers with the award of a national contract.

Newly employed teachers are required to complete 50 hours of compulsory training, 20 hours of which will be conducted through an online platform that was implemented in February 2016. In addition to offering training courses, the online platform aims to create a digital environment to facilitate communication, discussion, and exchange of materials among teachers during their first year of service.

The teacher selection procedure is held every two years starting in 2018. The number of places available will depend on turnover in the profession and student enrolment. In order to be eligible for the selection process, aspiring teachers must have obtained 24 university credits in relevant fields (psychological, anthropological, pedagogical) or teaching methods as part of their degree or education.



## 9. RECOMMENDATIONS

In order to combat Early School Leaving, the recommendations from this extensive review of literature are:

- 📍 Despite decreasing school dropout rates, new approaches to support those at risk are still needed
- 📍 European teachers need training to help them manage and support young people at risk of early leaving.
- 📍 Future actions / new projects should focus on countries that still have high dropout rates, like Spain, Portugal, Malta, Iceland as well as on males, and specific groups that traditionally have little formal schooling, such as Roma and migrants.
- 📍 Qualitative research leading to evidence-based policies and practices is needed to more fully understand the successful implementation of prevention strategies, reintegration strategies and recovery strategies (GHK Consulting Ltd., 2011).
- 📍 Storymapping is an innovative tool yet to be implemented in education in European countries
- 📍 Storymapping can be used as a self-efficacy enhancing tool if teacher training tools and learning pathways are developed

With respect to Storymapping, the My Story Map Project should use storytelling to:

- 📍 better understand Early School Leaving and the issues faced by the leavers and those at risk
- 📍 demonstrate storytelling can be meaningful to supporting marginalised young people
- 📍 consider the roles that teachers should play in supporting those at risk
- 📍 develop a transformative communications environment for individuals that can
  - 📍 be used as part of comprehensive mitigation and intervention ESL strategies
  - 📍 help those at risk understand obstacles they have to staying in school
  - 📍 provide flexible, project-based opportunities for young people to express themselves and identify their needs
  - 📍 enable a 'learning community' to develop around the stories that are told.
- 📍 ensure a creative storytelling process is used, that will:
  - 📍 use innovative, interactive storytelling pedagogies
  - 📍 ensure the technologies are integrated in the activities, rather than the focus of the actions, to make them invisible, both in terms of telling the story and sharing the story
  - 📍 allow 'sensemaking' to take place (Maitlis and Christianson, 2014)
  - 📍 make sure that all students and young people involved are treated respectfully
- 📍 produce relevant, well designed training resources for Storytelling with maps, that allow teachers to implement a My Story Maps approach.

## 10. CONCLUSIONS

Policymakers and education stakeholders recognise the role of ICT as a key enabler of innovation and change in Education and Training and for learning in general. This implies that Storytelling with Maps ought to be trailed for use with young people at risk of early leaving. However if it is to be successfully implement, innovation in education needs to be encouraged.

Innovation can be described as an intentional activity where new ideas are implemented to address specific problems. It is about change as innovation is a dynamic and unpredictable process involving complex interactions. In education it normally requires de-centralisation of decision making (Ellison, 2009) allowing new ideas and practices to emerge.

Bezjak (2014) comments on the four characteristics of pedagogical approaches in connection with the use of ICT that youngsters have an affinity with:

- I. they want more interactive content, more dynamism in the ways of teaching and as less traditional approaches
- II. they want to be stimulated by different visual and audio stimuli and related to interactive and participatory teaching approaches that encourage inclusion and engagement
- III. they need approaches that challenge them, for example through didactic games, where young people can stay active for longer and they can see a direct benefit from the approaches and content
- IV. they want approaches that can empower them individually to monitor and manage their lives.

The most successful pedagogical approaches for the reintegration of early school leavers in education are therefore flexible, inclusive and participatory, tailored to the needs of young people, aimed at the development of their careers, and include a variety of possible approaches, such as mentoring or individual learning plan.

Bocconi et al. (2013) propose that ESL initiatives should focus on the non-formal and informal learning rather than the relevance of the use of technology. Indeed, over recent years, Early School Leaving (ESL) has been transformed in policy terms into Early Leaving from Education and Training (ELET) incorporating vocational education and non-formal approaches outside the classroom. This is now understood at EU level as a failure to complete upper secondary education or a failure to gain qualifications or school leaving certificates.



## 11. REFERENCES

- Abouhanifa S (2016), TICE et Développement professionnel des professeurs stagiaires, MathémaTICE, n°49, mars 2016, <http://revue.sesamath.net/spip.php?article833>
- Ali, M. and Farrugia, J. (2013), Why do students opt not to sit for SEC examinations at the end of their compulsory education? Malta Review of Educational Research, 7, 90-115.
- Aina C., Casalone G., and Ghinetti P. (2015), Family Origin and Early School Leaving in Italy: The Long-Term Effects of Internal Migration. Chapter of Geographical Labor Market Imbalances Part of the series AIEL Series in Labour Economics pp 237-259.
- Ambrosini MT and De Simone G (2016), Un Modello di Successo per il Contrasto Della Dispersione Scolastica, Fondazione Giovanni Agnelli, Italy <https://www.savethechildren.it/sites/default/files/files/uploads/pubblicazioni/fuori-classe-un-modello-di-successo-il-contrasto-alla-dispersione-scolastica.pdf>
- Arias Gómez M de L, Arias Gómez E, Arias Gómez J, Ortiz Molina M and Isabel Segura Zaleta J (2017), Efectos de la educación tecnología en la docencia, tutorial y orientación educativa Revista: Atlante. Cuadernos de Educación y Desarrollo
- Artique M. (1998), Teacher training as a key issue for the integration of computer technologies, In D. Tinsley and D. C. Johnson (ed.) Information and communications technologies in school mathematics. IFIP 98 Chapman and Hall. 121-129.
- Austrian Ministry of Education (2017), Education in Austria 2016/17, [https://bildung.bmbwf.gv.at/enfr/school/bw\\_en/bildungswege2016\\_eng.pdf?61ec3r](https://bildung.bmbwf.gv.at/enfr/school/bw_en/bildungswege2016_eng.pdf?61ec3r)
- Bancel D. (1989) Créer une nouvelle dynamique de la formation des maîtres, Rapport au Ministre de l'éducation nationale, Paris: Ministère de l'éducation nationale. La Documentation française
- Barrett, H., (2006). Researching and evaluating digital storytelling as a deep learning tool. Technology and teacher education annual, 1, p.647-654.
- Batini, F. and Bartolucci, M., (2017). Dispersione scolastica. Ascoltare i protagonisti per comprenderla e prevenirla. FrancoAngeli.
- Bautier, É., Bonnery, S., Terrail, J.P., Bebi, A., Branca-Rosoff, S. and Lesort, B., (2012). Décrochage scolaire Genèse et logique des parcours. Diversité, (14), pp.122-137.
- Beltram, P., Žalec, N., Mirčeva, J. and Turk, A. (2014). Formalno izobraževanje odraslih v Sloveniji: odrasli v srednješolskem izobraževanju – položaj, kakovost, bodočnost. Ljubljana: Andragoški center Slovenije, [http://arhiv.acs.si/publikacije/Formalno\\_izobrazevanje\\_odraslih\\_v\\_Sloveniji.pdf](http://arhiv.acs.si/publikacije/Formalno_izobrazevanje_odraslih_v_Sloveniji.pdf)
- Berthet, T. and Zaffran, J., (2014). Le décrochage scolaire. Enjeux, acteurs et politiques de lutte contre la déscolarisation. Presses universitaires de Rennes.
- Bezjak, S. (2014). Ponovno vključevanje zgodnjih osipnikov za uspeh v šoli: zadovoljevanje potreb mladih z alternativnimi pedagoškimi pristopi Šolsko polje, volume 25, issue 1/2, str. 107-125, 212-213.
- Bianco S (2016), Décrocheurs – raccrocheurs : qui sont-ils ? [http://www.cafepedagogique.net/Documents/102\\_SBianco.htm](http://www.cafepedagogique.net/Documents/102_SBianco.htm)

- 📍 Bocconi, S., Kampylis, P. and Punie, Y., (2013). Framing ICT-enabled Innovation for Learning: the case of one-to-one learning initiatives in Europe. *European Journal of Education*, 48(1), pp.113-130.
- 📍 Boon, R.T., Paal, M., Hintz, A.M. and Cornelius-Freyre, M., (2015). A Review of Story Mapping Instruction for Secondary Students with LD. *Learning Disabilities--A Contemporary Journal*, 13(2).
- 📍 Bordeau J (2008), La véritable histoire du storytelling, *L'Expansion Management Review*, 2008/2 (N° 129), 93-99
- 📍 Boudesseul G, (2014). De l'administration éducative du décrochage scolaire à la coopération intersectorielle. Vers un nouveau cadre de référence?, *Formation emploi (en ligne)*, 126, avril-juin 2014
- 📍 Boy, J., Detienne, F. and Fekete, J.D., (2015), Storytelling in Information Visualizations: Does it Engage Users to Explore Data?. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 1449-1458). ACM.
- 📍 Brandhofer G, Kohl A, Miglbauer M, Nárosy T, Buchner J, Großböck P, Lechner I, Prinz J, Prohaska J, Zaynard N, Fikisz W (2016), The digicomp competence model, <http://www.virtuelle-ph.at/wp-content/uploads/2016/09/digi.kompP-Grafik-und-Deskriptoren-1.pdf>
- 📍 Broccolichi, S., 2000. Désagrégation des liens pédagogiques et situations de rupture. *VEI enjeux*, 122, pp.36-47.
- 📍 Brown, T. and Katz, B. (2011). Change by design. *Journal of Product Innovation Management*, 28, 381-383.
- 📍 Brown, T. and Wyatt, J., (2010). Design thinking for social innovation. *Development Outreach*, 12(1), pp.29-43.
- 📍 Bruno F, Méard J and Walter E (2016), Les dispositifs français de lutte contre le décrochage scolaire en collège : ce qui est prescrit et ce qui est mis en œuvre », *L'orientation scolaire et professionnelle*, <http://osp.revues.org/4183> ; DOI : [10.4000/osp.4183](https://doi.org/10.4000/osp.4183)
- 📍 Bull, G. and Kajder, S., (2005). Digital storytelling in the language arts classroom. *Learning & Leading with Technology*, 32(4), pp.46-49.
- 📍 BVB (2012), Nationale Strategie zur Verhinderung frühzeitigen (Aus-)Bildungsabbruchs", [https://bildung.bmbwf.gv.at/schulen/unterricht/ba/NationaleStrategieSchulabbruch2016\\_final\\_Webversion.pdf?61edvp](https://bildung.bmbwf.gv.at/schulen/unterricht/ba/NationaleStrategieSchulabbruch2016_final_Webversion.pdf?61edvp)
- 📍 Burgess, J. (2006). Hearing ordinary voices: Cultural studies, vernacular creativity, and digital storytelling. *Continuum: Journal of Media & Cultural Studies*, 20(2), 201-214.
- 📍 Burman, G., Lamote, C., Hannes, K., and Damme, J., (2013). Waarom verlaten jongeren vroegtijdig het secundair onderwijs, <http://www.krasjeugdwerk.be/wp-content/uploads/2013/04/Artikel-Impuls1.pdf>
- 📍 Calvard, T.S., (2016). Big data, organizational learning, and sensemaking: Theorizing interpretive challenges under conditions of dynamic complexity. *Management learning*, 47(1), 65-82.
- 📍 Capuano, N., De Maio, C., Gaeta, A., Mangione, G.R., Salerno, S. and Fratesi, E., 2014. A Storytelling Learning Model for Legal Education. *International Conference e-learning 2014, Association for Development of the Information Society*, <https://pdfs.semanticscholar.org/5cd4/083cc4943819573a3ec6fea595970f348c3e.pdf>



- Caruso, G., (2015). NON-FOR-LESL: Non Formal Learning Can Prevent Early School Leaving. In Conference proceedings. ICT for language learning, pp 484-8. libreriauniversitaria. it Edizioni.
- Cedefop, (2016a). Leaving education early: putting vocational education and training centre stage. Volume I: investigating causes and extent. Luxembourg: Publications Office. Cedefop research paper; No 57. <http://dx.doi.org/10.2801/893397>
- Cedefop, (2016b). Leaving education early: putting vocational education and training centre stage. Volume II: evaluating policy impact. Luxembourg: Publications Office. Cedefop research paper; No 58. <http://dx.doi.org/10.2801/967263>
- Cedefop (2016c), Spain - decreasing trend in early school leaving. ReferNet Spain, <http://www.cedefop.europa.eu/en/news-and-press/news/spain-decreasing-trend-early-school-leaving>
- CGET (2016), EPIDE et E2C : accompagner les jeunes décrocheurs des quartiers prioritaires vers la formation et l'emploi, <http://www.cget.gouv.fr/ressources/publications/en-bref-23-epide-et-e2c-accompagner-les-jeunes-decrocheurs-des-quartiers-prioritaires-vers-la-formation-et-l-emploi>
- Chaachoua H (2013), Formation des enseignants et nouvelles technologies. In: Bessot; C. Comiti; C. Le Thi Hoai; H. Vu Nhu Thu; T. Le Thai Bao Thien Trung. 4° Colloque International Franco-Vietnamien en didactique des mathématiques, Jan 2013, Ho Chi Minh Ville, Viêt Nam. Quelques avancées significatives dans la recherche en didactique des mathématiques.
- Chavez, J.N., Martinez, J. and Pienta, R.S., (2015). Effects of story mapping on third-grade students with Attention Deficit Hyperactivity Disorder. *Journal of Pedagogy*, 6(1), 95-121.
- Checchi, D. ed., (2014). *Lost: dispersione scolastica: il costo per la collettività e il ruolo di scuole e terzo settore*. Ediesse.
- Clycq, N., Nouwen, W., Van Caudenberg, R. and Timmerman, C., (2015a). Education in Flanders: Balancing social and economic rationales while tackling early school leaving, <http://www.fpce.up.pt/ciie/sites/default/files/ESC45Clycq.pdf>
- Clycq, N., Nouwen, W., Van Caudenberg, R. and Timmerman, C., (2015b). Education in Flanders: balancing social and economic rationales while tackling early school leaving. *Educação, Sociedade & Culturas*, 45, pp.13-32.
- Cornu B (2015), Teacher Education in France: Universitisation and professionalisation – from IUFMs to ESPEs, *Education Inquiry* 6(3), <https://www.tandfonline.com/doi/full/10.3402/edui.v6.28649>
- Council of the European Union (2013), Council Recommendation of 22 April 2013 on establishing a Youth Guarantee, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32013H0426%2801%29>
- De Carli S (2016), *Contrasto alla dispersione scolastica: dove stiamo sbagliando?* Viva, <http://www.vita.it/it/article/2016/11/04/contrasto-alla-dispersione-scolastica-dove-stiamo-sbagliando/141455/>
- De Carli, S. (2013), *Orientamento con lo storytelling, la dispersione scende al 3%* Educational guidance with storytelling, early school leaving decreases by 3%, <http://www.vita.it/it/article/2013/12/11/orientamento-con-lo-storytelling-la-dispersione-scende-al-3/125569/>
- Deakin Crick R. and Goldspink, C., (2014). Learner dispositions, self-theories and student engagement. *British Journal of Educational Studies*, 62(1), 19-35.

- 
- Debourle L and Federini F (2016), Lutter contre la déscolarisation, étude et analyse de parcours de lycéens décrocheurs en Seine-Saint-Denis (2004-2006), Report of the Inspection Académique Seine-Saint-Denis, Ministère de l'éducation nationale, [http://cache.media.education.gouv.fr/file/novembre2016/60/1/rapport-descolarisation-complet\\_672601.pdf](http://cache.media.education.gouv.fr/file/novembre2016/60/1/rapport-descolarisation-complet_672601.pdf)
  - Del Moral Pérez, M.E. and López, B.R., 2015. Experiencia innovadora: realización de relatos digitales en el aula de educación infantil. DIM: Didáctica, Innovación y Multimedia, (32) 1-16.
  - Departement Onderwijs en Vorming (Department of Education and Training) (2008), Education in Flanders, <https://www.eui.eu/Documents/MWP/AcademicCareers/Countries/Belgium/BelgiumFlemishHigherEducation.pdf>
  - DeSeCo, (2005). The Definition and Selection of Key Competencies. Executive Summary. 2005. Available at: <http://www.oecd.org/dataoecd/>
  - Downes, P., (2014). Towards a differentiated, holistic and systemic approach to parental involvement in Europe for early school leaving prevention. PREVENT, Urbact: Paris, [http://urbact.eu/sites/default/files/policyrecommendationsreport\\_01.pdf](http://urbact.eu/sites/default/files/policyrecommendationsreport_01.pdf)
  - Duckworth, J. 2005. Notschool.net Evaluation report. Inclusion Trust, [http://www.inclusiontrust.org/wp-content/uploads/2015/09/NS\\_Eval2005.pdf](http://www.inclusiontrust.org/wp-content/uploads/2015/09/NS_Eval2005.pdf)
  - Eikenes, Å., 2015. Visual maps bring research to life. Nature, 521(7550), pp.115-115.
  - El-Mahdi K and Moullet S, (2016). Le rôle des caractéristiques des établissements dans le décrochage scolaire, Formation emploi, 2, 7-26.
  - Ellison, S. (2009), Hard-wired for innovation? Comparing two policy paths toward innovative schooling, International Education, 39, pp. 30-48. <http://trace.tennessee.edu/internationaleducation/vol39/iss1/2>
  - Esemcias Fundación BBVA (2018), Diferencias Regionales en la Situación Laboral y Educativa de los Jóvenes Españoles, Ivie N.º 23 /2018, [https://www.fbbva.es/wp-content/uploads/2018/01/FBBVA\\_Esenciales\\_23.pdf](https://www.fbbva.es/wp-content/uploads/2018/01/FBBVA_Esenciales_23.pdf)
  - Esterle-Hedibel M (2006), Absentéisme, déscolarisation, décrochage scolaire, les apports des recherches récentes, Médecine et Hygiène, "Déviance et société", 1 (30), 41-65
  - Eurofound (2013), NEETs, <https://www.eurofound.europa.eu/topic/neets>
  - European Commission (2018), The teaching professions, [http://ec.europa.eu/education/policy/school/teaching-professions\\_en](http://ec.europa.eu/education/policy/school/teaching-professions_en)
  - European Commission (2017a), Tackling early school leaving, <https://publications.europa.eu/en/publication-detail/-/publication/f540a7e3-297f-11e7-ab65-01aa75ed71a1/language-en>
  - European Commission (2017b), Education and Training Monitor 2017 – Spain, DG EAC, [https://ec.europa.eu/education/sites/education/files/monitor2017-es\\_en.pdf](https://ec.europa.eu/education/sites/education/files/monitor2017-es_en.pdf)
  - European Commission (2017c), Education and Training Monitor 2017, Luxembourg: Publications Office of the European Union, [http://ec.europa.eu/education/sites/education/files/monitor2017\\_en.pdf](http://ec.europa.eu/education/sites/education/files/monitor2017_en.pdf)

-  European Commission (2017d), Education and Training Monitor 2017 – Italy, DG EAC, [https://ec.europa.eu/education/sites/education/files/monitor2017-it\\_en.pdf](https://ec.europa.eu/education/sites/education/files/monitor2017-it_en.pdf)
-  European Commission, (2016). A review of education and training 2016 (Slovenia), Brussels, European Commission, <http://www.studentska-org.si/dokumenti/monitor2016sis1.pdf>
-  European Commission (2015), Education and Training Monitor 2015 – Austria, DG EAC, [http://ec.europa.eu/dgs/education\\_culture/repository/education/tools/docs/2015/monitor2015-austria\\_en.pdf](http://ec.europa.eu/dgs/education_culture/repository/education/tools/docs/2015/monitor2015-austria_en.pdf)
-  European Commission, (2014). Tackling early leaving from education and training in Europe: Strategies, policies and measures. Luxembourg: Publications Office of the European Union
-  European Commission (2013a), Preventing early school leaving in Europe – lessons learned from second chance education, <http://www.youthreach.ie/wp-content/uploads/Finalreport.pdf>
-  European Commission, (2013b). Reducing early school leaving: Key messages and policy support, Final report of the Thematic Working Group on Early School Leaving. Brussels: European Commission, [http://ec.europa.eu/dgs/education\\_culture/repository/education/policy/strategic-framework/doc/esl-group-report\\_en.pdf](http://ec.europa.eu/dgs/education_culture/repository/education/policy/strategic-framework/doc/esl-group-report_en.pdf)
-  European Commission, (2011a). Reducing early school leaving. Commission Staff Working Paper. Accompanying document to the Proposal for a Council Recommendation on policies to reduce early school leaving. [SEC(2011)96], 26 January 2011,
-  European Commission, (2011b). Reducing Early School Leaving in the EU, Directorate General for Internal Policies, European Parliament, <http://ec.europa.eu/social/BlobServlet?docId=9591&langId=en>
-  European Commission, (2010). Europe 2020: A Strategy for smart, sustainable and inclusive growth. Working paper {COM (2010) 2020}.
-  European Commission/EACEA/Eurydice/ Cedefop (2014) “Tackling Early Leaving from Education and Training in Europe: Strategies, Policies and Measures” Eurydice and Cedefop Report. Luxembourg: Publications Office of the European Union.
-  European Union (2016), Education and Training Monitor Austria 2016, European Union, [https://ec.europa.eu/education/sites/education/files/monitor2016-at\\_en.pdf](https://ec.europa.eu/education/sites/education/files/monitor2016-at_en.pdf)
-  EUROSTAT (2018), Statistics on young people neither in employment nor in education or training, [http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics\\_on\\_young\\_people\\_neither\\_in\\_employment\\_nor\\_in\\_education\\_or\\_training](http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_young_people_neither_in_employment_nor_in_education_or_training)
-  EUROSTAT (2017), Statistics on young people neither in employment nor in education or training, [http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics\\_on\\_young\\_people\\_neither\\_in\\_employment\\_nor\\_in\\_education\\_or\\_training](http://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_young_people_neither_in_employment_nor_in_education_or_training)
-  EUROSTAT (2015a), Early leavers from education and training, [http://ec.europa.eu/eurostat/statistics-explained/index.php/Early\\_leavers\\_from\\_education\\_and\\_training](http://ec.europa.eu/eurostat/statistics-explained/index.php/Early_leavers_from_education_and_training)
-  EUROSTAT (2015b), Decrease in ‘early school leavers’ in the EU continues, <http://ec.europa.eu/eurostat/web/products-eurostat-news/-/EDN-20170908-1>

-  EUROSTAT (2013), Glossary:Young people neither in employment nor in education and training (NEET), [http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Young\\_people\\_neither\\_in\\_employment\\_nor\\_in\\_education\\_and\\_training\\_\(NEET\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Young_people_neither_in_employment_nor_in_education_and_training_(NEET))
-  Eurydice (2014) The Structure of the European Education Systems 2014/15, [http://eacea.ec.europa.eu/education/eurydice/documents/facts\\_and\\_figures/education\\_structures\\_EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/facts_and_figures/education_structures_EN.pdf)
-  Ewick, P. and Silbey, S., (2003). Narrating social structure: Stories of resistance to legal authority. *American Journal of Sociology*, 108(6), pp.1328-1372.
-  Federal Ministry of Education Austria (2016): National Action Plan for the Prevention of ESL, <https://www.wu.ac.at/fileadmin/wu/d/i/bildungswissenschaft/Forschung/Publikationen/EducationPoliciesConcerningEarlySchoolLeavingInAustria.pdf>
-  Fernández-Macías, E., Antón, J.I., Braña, F.J. and Bustillo, R.M., (2013). Early School-leaving in Spain: evolution, intensity and determinants. *European Journal of Education*, 48(1), pp.150-164.
-  Fernández, F.J.A., (2010). Fracaso y abandono escolar en España. *Profesorado, Revista de Currículum y Formación del Profesorado*, 14(3), pp.319-321.
-  Ferraro S and Burba G (2017) Per una strategia globale e integrata contro la dispersione scolastica", *Ricercazione*, 9(1) 35-64, [https://www.ufficiostampa.provincia.tn.it/content/download/62590/963366/file/Ricercazione\\_9-1\\_web.pdf](https://www.ufficiostampa.provincia.tn.it/content/download/62590/963366/file/Ricercazione_9-1_web.pdf)
-  Flecha, R. and Soler, M., (2013). Turning difficulties into possibilities: Engaging Roma families and students in school through dialogic learning. *Cambridge Journal of Education*, 43(4), pp.451-465.
-  Flecha, R., (2014). *Successful educational actions for inclusion and social cohesion in Europe*. Springer.
-  Fondazione CR Firenze, (2015), Lo storytelling siamo noi! 5/o Convegno biennale sull'orientamento narrativo, Fondazione Cassa di Risparmio di Firenze, <https://www.fondazionecrfirenze.it/lo-storytelling-siamo-noi/>
-  Fortin, L.; Marcotte, D.; Potvin, P.; Royer, E. and Joly, J. (2006). Typology of students at risk of dropping out of school: description by personal, family, and school factors. *European Journal of Psychology of Education*, Vol. 21, No 4, pp. 363-383.
-  Fox, C., 2016. The Value of Story Mapping for Coastal Managers, Doctoral dissertation, University of Rhode Island, [http://www.edc.uri.edu/mesm/Docs/MajorPapers/Fox\\_2016.pdf](http://www.edc.uri.edu/mesm/Docs/MajorPapers/Fox_2016.pdf).
-  Freidus, N. and Hlubinka, M., (2002). Digital storytelling for reflective practice in communities of learners. *ACM SIGGROUP Bulletin*, 23(2), 24-26.
-  French Ministry of Education (2018), L'utilisation du numerique a l'ecole, <http://www.education.gouv.fr/cid208/l-utilisation-du-numerique-a-l-ecole.html>
-  Gallega Arrufat, M.J, Gamiz Sanchez and M. Gutierrez Santiuste, E. (2010). El Futuro Docente Ante Las Competencias En El Uso De Las Tecnologias De Las Informacion y Comunicacion Para Enseñar, *EDUTEc: Revista Electronica de Tecnologia Educativa*. Num.43.
-  Geay B (2013), Categorization of school trajectories and institutional lack of comprehension. Social construction about "dropouts", *Cahiers de la recherche sur l'éducation et les savoirs*, 2, 21-42



- Geay, B. and Meunier, A., (2003). Enjeux et usages de la “déscolarisation”. Cahiers de la recherche sur l'éducation et les savoirs, (2), pp.7-19.
- GHK Consulting Ltd (2011), Reducing Early School Leaving in the European Union, [http://www.europarl.europa.eu/Reg-Data/etudes/etudes/join/2011/460048/IPOL-CULT\\_ET%282011%29460048%28SUM01%29\\_EN.pdf](http://www.europarl.europa.eu/Reg-Data/etudes/etudes/join/2011/460048/IPOL-CULT_ET%282011%29460048%28SUM01%29_EN.pdf)
- Gitschthaler M and Nairz-Wirth E (2015), Education Policies concerning early school leaving in Austria, Educação, Sociedade & Culturas, 45, 55-74
- Gomez Trigueros, M. (2017). Los proyectos de innovación como recurso formativo en el Máster del Profesorado. tic. revista d'innovació educativa. Número19. Otoño (Julio- Diciembre), 22-29
- González Roldán G (2013), Structures and Standards of Initial Training for History Teachers in Europe: Spain country report, [http://www.univie.ac.at/fdz-geschichte/itt/uploads/media/Spain\\_country\\_report.pdf](http://www.univie.ac.at/fdz-geschichte/itt/uploads/media/Spain_country_report.pdf)
- Gyabak, K. and Godina, H. (2011). Digital Storytelling in Bhutan: A Qualitative Examination of New Media Tools Used to Bridge the Digital Divide in a Rural Community School. Computers & Education, 57(4), 2236-2243
- Haklay, M., (2013). Citizen science and volunteered geographic information: Overview and typology of participation. In Crowdsourcing geographic knowledge (pp. 105-122). Springer, Dordrecht.
- Hajisoteriou, C. and Angelides, P., (2013). The politics of intercultural education in Cyprus: Policy-making and challenges. Education Inquiry, 4(1), pp.103-123.
- Halba, B., (2014). Volunteering-an alternative pedagogical strategy to combat Early School Leaving and to enhance Success at School. Solsko Polje, 25(1/2), p.127.
- Heo, M. (2009). Digital storytelling: An empirical study of the impact of digital storytelling on pre-service teachers' self-efficacy and dispositions towards educational technology. Educational Multimedia and Hypermedia, 18(4), 405-428.
- Herreros, M. (2012) El uso educativo de los relatos digitales personales como herramienta para pensar el Yo. In: Digital Education Review, 22, 68-79.
- Holland, B., (2017). A Design Thinking Approach to Working with Millennials, Education Week, [http://blogs.edweek.org/edweek/edtechresearcher/2016/05/a\\_design\\_thinking\\_approach\\_to\\_working\\_with\\_millennials.html](http://blogs.edweek.org/edweek/edtechresearcher/2016/05/a_design_thinking_approach_to_working_with_millennials.html)
- Howieson, C., 2003. The destination of Early School Leavers, Centre for Educational Sociology, <http://www.ces.ed.ac.uk/PDF%20Files/Brief028.pdf>
- Hugon, M.A., (2010). Lutter contre le décrochage scolaire: quelques pistes pédagogiques. Informations sociales, (5), 36-45
- Hung, C. M., Hwang, G. J., and Huang, I. (2012). A project-based digital storytelling approach for improving students' learning motivation, problem-solving competence and learning achievement. Educational Technology & Society, 15(4), 368-379.
- Indire (2016), “La lotta all'abbandono precoce dei percorsi di istruzione e formazione in Europa” Strategie, politiche e misure [http://ec.europa.eu/education/tools/et-monitor\\_it.htm](http://ec.europa.eu/education/tools/et-monitor_it.htm)

-  Ivan, C. and Rostas, I., (2013). Early School Leaving: causes and consequences. Roma Education Fund Romania, [http://www.romaeducationfund.org/sites/default/files/publications/early\\_school\\_leaving\\_causes\\_and\\_effects\\_2013.pdf](http://www.romaeducationfund.org/sites/default/files/publications/early_school_leaving_causes_and_effects_2013.pdf)
-  Kerski, J.J., (2015). Geo-awareness, Geo-enablement, Geotechnologies, Citizen Science, and Storytelling: Geography on the World Stage. *Geography Compass*, 9(1), pp.14-26.
-  Kotnik, M. (2004). Začasni umik iz formalnega sistema izobraževanja – odklon od »pričakovanega in načrtanega« ali druga priložnost? *Socialna pedagogika*, vol. 8, št. 1, str. 65-78.
-  Kriz, K., (2013). Maps and design–influence of depiction, space and aesthetics on geocommunication. In *Understanding Different Geographies* (pp. 9-23). Springer, Berlin, Heidelberg.
-  Lambert, J., (2007). Digital storytelling. *The futurist*, 41(2), p.25.
-  Lamote, C, Pinxten, M, Van Den Noortgate, W, and Van Damme, J. (2014). Is the cure worse than the disease? A longitudinal study on the effect of grade retention in secondary education on achievement and academic self-concept. *Educational Studies*, 40(5), 496-514
-  Landès L and Lefevre G, (2014). Les pratiques d'accompagnement individualisé des jeunes au sein des Missions de Lutte contre le Décrochage Scolaire, *Les Sciences de l'éducation - Pour l'Ere nouvelle*, 2014/2 (47), 95-126
-  Lee, B., Riche, N.H., Isenberg, P. and Carpendale, S., (2015). More than Telling a Story: A Closer Look at the Process of Transforming Data into Visually Shared Stories. *IEEE computer graphics and applications*, 35(5), pp.84-90.
-  Linard M. (1992), *Les nouvelles technologies, moyen de repenser la formation des enseignants*, actes du colloque des 28-29-30 janvier 1992 au CREPS de Châtenay-Malabry, Baron G-L and Baudé J (eds.); coédition INRP-EPI, 26-44.
-  Lits M (2012), "Quel futur pour le récit médiatique ?" *Questions de communication (en ligne)*, 21
-  Litschel, V. and Löffler, R. (2015): Meta-Analyse zu rezenten Studien im Bereich „AMP-Maßnahmen für Jugendliche“. *Betrachtungen mit dem Schwerpunkt „Berufsausbildung“*. AMS Österreich (editor). AMS report 109: [http://www.forschungsnetzwerk.at/downloadpub/AMS\\_report\\_109.pdf](http://www.forschungsnetzwerk.at/downloadpub/AMS_report_109.pdf)
-  Lowenthal, P. R., and Dunlap, J. C. (2010). From pixel on a screen to real person in your students' lives: Establishing social presence using digital storytelling. *The Internet and Higher Education*, 13(1-2), 70-72.
-  LOCE (2015). Gobierno de España. Ministerio de Educacion, Cultura y deporte: [http://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2015-8043](http://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-8043)
-  Lugmayr, A., Suhonen, J. and Sutinen, E., (2015). Serious Storytelling-Serious Digital Storytelling. *International Series on Information Systems and Management in Creative eMedia*, (1), pp.29-33.
-  Lundby, K. (2008). *Digital storytelling, mediatized stories: Self-representations in new media*. New York: Peter Lang.
-  MacKinnon, K. and Young, L.E., (2014). Story Based Learning: A Student Centred Practice-Oriented Learning Strategy. *Quality Advancement in Nursing Education-Avancées en formation infirmière*, 1(1), p.3.
-  Magalhães, A.M., Araújo, H.C., Macedo, E. and Rocha, C., 2015. Early School Leaving in Portugal, Policies and actors' interpretations. <http://www.fpce.up.pt/ciie/sites/default/files/ESC45Magalhaes.pdf>

- 📍 Maina, F. (2004). Authentic Learning: Perspectives from Contemporary Educators. *Journal of Authentic Learning*, 1(1), <http://hdl.handle.net/1951/389>
- 📍 Maitlis, S. and Christianson, M. (2014). Sensemaking in organizations: Taking stock and moving forward. *Academy of Management Annals* 8(1): 57–125.
- 📍 Malita, L. and Martin, C. (2010). Digital Storytelling as web passport to success in the 21st Century. *Procedia - Social and Behavioral Sciences*, 2(2), 3060-3064.
- 📍 Marinšek, A., (2001). Brezposelnost mlajših odraslih - Pomen izobraževanja, namenjenega tej ciljni skupini.
- 📍 Marta, M. (2015). Story Maps at school: Teaching and learning stories with maps. *Journal of Research and Didactics in Geography*, 2(4), 61-68
- 📍 Martinelli V (2016), Weak English Language Literacy and Early School Leaving in a Maltese Context, Education Provision to Every One: Comparing Perspectives from Around the World BCES Conference Books, 2016, Volume 14, Number 2
- 📍 Martouzet, D., Bailleul, H., Feildel, B. & Gaignard, L. (2010). La carte : fonctionnalité transitionnelle et dépassement du récit de vie. *Natures Sciences Sociétés*, vol. 18,(2), 158-170. <http://www.cairn.info/revue-natures-sciences-societes-2010-2-page-158.htm>
- 📍 Mascherini M and Ledermaier S, (2016) Exploring the diversity of NEETs, European Foundation for the Improvement of Living and Working Conditions, EUROFOUND, <https://www.eurofound.europa.eu/publications/report/2016/labour-market-social-policies/exploring-the-diversity-of-neets>
- 📍 McCorquodale, L. and Kinsella, E.A., (2015). Critical reflexivity in client-centred therapeutic relationships. *Scandinavian journal of occupational therapy*, 22(4), pp.311-317.
- 📍 Meadows, D. (2003). Digital Storytelling-Research-based Practice in New Media. *Visual Communication*, 2(2), 189-193.
- 📍 Merriam, S.B., (2004). The role of cognitive development in Mezirow's transformational learning theory. *Adult education quarterly*, 55(1), pp.60-68.
- 📍 Mínguez, A.M., (2013). The Early School Leaving in Europe: Approaching the Explanatory Factors. *New Horizons in Education*, 61(2). <http://www.hkta1934.org.hk/NewHorizon/abstract/2013May/4.pdf>
- 📍 Moulin S, Doray P, Prévost J-P and Delavictoire Q. (2014), La propagation internationale d'une représentation. Le cas du décrochage scolaire, *Histoire & mesure*, 29(1), pp.139-166.
- 📍 Nguyen, T., Edwards, S., Rahall, N.J., Scott, M. and Cragle, J., (2016), GIS Story Maps: A Tool to Empower and Engage Stakeholders in Planning Sustainable Places, <http://dspace.udel.edu/bitstream/handle/19716/21597/gis-story-maps-2016.pdf>
- 📍 Nicaise, I, Kavadias, D, Spruyt, B. and Van Houtte, M. (Eds.). (2014). *Het onderwijsdebat: Waarom de hervorming van het secundair broodnodig is*. Berchem: EPO.
- 📍 Nouwen, W., Clycq, N., Braspenningx, M. and Timmerman, C., (2014). Flemish policies on early school leaving: A field description and policy analysis. <http://www.fpce.up.pt/ciie/sites/default/files/investigations/attachment/Working%20Paper%20%20-%20Flemish%20Policies%20on%20Early%20School%20Leaving.pdf>

- 
 Nouwen, W., Van Praag, L., Van Caudenberg, R., Clycq, N. and Timmerman, C., (2016). School-based prevention and intervention measures and alternative learning approaches to reduce early school leaving. Centre for Migration and Intercultural Studies, University of Antwerp
- 
 OECD, (2016), Panorama de la société civile 2016 - Un éclairage sur les jeunes, La situation de la France, Paris France, OECD Publishing, <https://www.oecd.org/france/sag2016-france.pdf>
- 
 OECD, (2015). PISA: Les défis du système éducatif français et les bonnes pratiques internationales, <https://www.oecd.org/pisa/PISA-2015-Brochure-France.pdf>
- 
 OECD (2012a), Équité et qualité dans l'éducation - Comment soutenir les élèves et les établissements défavorisés, Coup de projecteur sur la France, Paris, France, OECD Publishing, <https://www.oecd.org/fr/france/49623513.pdf>
- 
 OECD (2012b), PISA, Les élèves en difficulté : Pourquoi décrochent-ils et comment les aider à réussir ?, <https://www.oecd.org/pisa/keyfindings/PISA-2012-Les-eleves-en-difficulte-France-FRA.pdf>
- 
 OECD (2008): Education at a Glance 2008. OECD Indicators.
- 
 Pazhouhesh, M. and Ghabanchi, Z., (2016) Scaffolding EFL Oral Performance through Story Maps and Podcasts and Students' Attitudes toward it, The Journal of Applied Linguistics, 7.
- 
 Peachey N (2016), 11 Reasons why teachers don't use technology, <https://www.linkedin.com/pulse/11-reasons-why-teachers-dont-use-technology-nik-peachey>
- 
 Perez, Martiney, Pinñero (2017) Competencias comunicativas y digitales impulsadas en escuelas rurales elaborando digital storytelling. Aula abierta 45, 15-24.
- 
 Pino Justo, M. and Soto Carballo, J. (2010). Identificación del dominio de competencias digitales en el alumnado del grado de magisterio, Teoría de la Educación. Educación y Cultura en la Sociedad de la Información, 11 (3), 336-362
- 
 Pitts, J., and Porteous, D., (2006). Averting ghettoisation: the role of educational services in reducing crime and victimisation in the ethnic minority community in Anderlecht, Brussels. Safer Communities, 5(3), 7-13
- 
 Prud'homme van Reine, P., (2017). The culture of design thinking for innovation. Journal of Innovation Management, 5(2), 56.
- 
 Raimist, R (2010), The pedagogy of digital storytelling in the college classroom", Seminar.net, 6(2), <http://seminar.net/index.php/volume-6-issue-2-2010/145-the-pedagogy-of-digital-storytelling-in-the-college-classroom>
- 
 Rakar, T., (2009). Med otroštvo in odraslostjo : analiza položaja mladih v Sloveniji – Izobraževanje in izobraženost mladih. urednika, Tatjana Rakar, Urban Boljka. - Ljubljana : Ministrstvo za šolstvo in šport, Urad Republike Slovenije za mladino : Inštitut Republike, Slovenije za socialno varstvo.
- 
 ReferNet Spain and Blasco RE (2013) Early School Leaving in Spain, ReferNet's Working Plan 2013. CEDEFOP, <http://www.sepe.es/LegislativaWeb/verFichero.do?fichero=09017edb801510a0>
- 
 Reinertsen, A.B., (2014). Becoming with data: Developing self-assessing recursive pedagogies in schools and using second-order cybernetics as a thinking tool. Policy Futures in Education, 12(2), 310-322.



- Robin, B. R. (2008). Digital Storytelling: a powerful technology tool for the 21st Century classroom. *Theory into practice*, 47 (3), 220-4.
- Rodriíguez Illera JL and Londoño Monroy G, (2009) Los relatos digitales y su interés educativo. *Educação, Formação & Tecnologias*, 2 (1), 5-18
- Roig-Vila, R., Mengual-Andrés, S., Sterrantino Asmussen, C., & Quinto Medrano, P. (2015), Attitudes toward technological resources in the classroom of the future teachers. @ tic. revista d'innovació educativa, (15), 12-19.
- Ross, A. and Leathwood, C., (2013). Problematising early school leaving. *European Journal of Education*, 48(3), 405-418.
- Ryan, L., Lorinc, M., D'Angelo, A., Kaye, N., Araujo, H.C., Magalhaes, A., Rocha, C., Macedo, E., Szalai, J. and Kende, A., (2014). Policies on Early School Leaving in Nine European Countries: A Comparative Analysis, [http://ec.europa.eu/research/social-sciences/pdf/policies\\_early\\_school\\_leaving.pdf](http://ec.europa.eu/research/social-sciences/pdf/policies_early_school_leaving.pdf)
- Sacco, M., Smits, W., Spruyt, B., Kavadias, D. and d'Andrimont, C., 2016. Brussels youth: between diversity and lack of security. BSI synopsis. *Brussels Studies*. La revue scientifique électronique pour les recherches sur Bruxelles/Het elektronisch wetenschappelijk tijdschrift voor onderzoek over Brussel/The e-journal for academic research on Brussels.
- Sadik, A., (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational technology research and development*, 56(4), pp.487-506.
- Sandberg J and Tsoukas H (2014). Making sense of the sensemaking perspective: Its constituents, limitations, and opportunities for further development. *Journal of Organizational Behavior* 36(S1): S6–S32.
- Schank, R. (1990). *Tell me a story: Narrative and intelligence*. Evanston, IL: Northwestern University Press.
- Scheerens, J., (2010). *Teachers' professional development: Europe in international comparison*. Luxembourg: Office for Official Publications of the European Union.
- Scholiers B and Herremans W (2015): NEET-jongeren in Vlaanderen: aandacht voor kansengroepen, Steunpunt Werk, <http://www.steunpuntwerk.be/node/3521>
- Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- Schwab, S., Holzinger, A., Krammer, M., Gebhardt, M. and Hessels, M.G., (2015). Teaching practices and beliefs about inclusion of general and special needs teachers in Austria. *Learning Disabilities--A Contemporary Journal*, 13(2).
- Schweitzer, J., Groeger, L. and Sobel, L., (2016). The design thinking mindset: An assessment of what we know and what we see in practice. *Journal of Design, Business & Society*, 2(1), 71-94.
- Scott, M.S., Edwards, S., Dayan, S., Nguyen, T., Cragle, J. and Rahall, N.J., (2016). GIS Story Maps: A Tool to Empower and Engage Stakeholders in Planning Sustainable Places.
- Sebastião, J. and Álvares, M., 2015. Wavering between hope and disenchantment. The case of early school leaving in Portugal. *Scuola democratica*, 6(2), pp.439-454.

- 📍 Serrano L, Soler,Á. and Hernández L (2013): El abandono educativo temprano: Análisis del caso español. IVIE Instituto Valenciano Investigaciones Económicas, [http://web2016.ivie.es/wp-content/uploads/2017/06/Informe\\_Abandono\\_Educativo\\_Temprano.pdf](http://web2016.ivie.es/wp-content/uploads/2017/06/Informe_Abandono_Educativo_Temprano.pdf)
- 📍 Sharples, M., de Roock, R., Ferguson, R., Gaved, M., Herodotou, C., Koh, E., Kukulska-Hulme, A., Looi, C.K., McAndrew, P., Rienties, B. and Weller, M., (2016). Innovating Pedagogy 2016: Open University Innovation Report 5. Institute of Educational Technology, The Open University. [https://repository.nie.edu.sg/bitstream/10497/18319/3/IP\\_2016\\_OUIR5.pdf](https://repository.nie.edu.sg/bitstream/10497/18319/3/IP_2016_OUIR5.pdf)
- 📍 Shildrick, T., MacDonald, R., Furlong, A., Roden, J. and Crow, R. (2012). Are 'cultures of worklessness' passed down the generations? York: Joseph Rowntree Foundation, <https://core.ac.uk/download/pdf/16389945.pdf>
- 📍 Si, M., (2016). Facilitate Knowledge Exploration with Storytelling. Procedia Computer Science, 88, 224-231.
- 📍 Simons, M. and Kelchtermans, G., (2008). Teacher professionalism in Flemish policy on teacher education: A critical analysis of the Decree on teacher education (2006) in Flanders, Belgium. Teachers and Teaching: theory and practice, 14(4), 283-294.
- 📍 Stacey, G., and Hardy, P. (2011). Challenging the shock of reality through digital storytelling. Nurse Education in Practice, 11(2), 159-164.
- 📍 Statistics Belgium, 2017, Early school leavers in Belgium, [http://statbel.fgov.be/nl/statistieken/cijfers/arbeid\\_leven/opleiding/vroegtijdig/](http://statbel.fgov.be/nl/statistieken/cijfers/arbeid_leven/opleiding/vroegtijdig/)
- 📍 Steiner, K., (2012). Praxishandbuch Methoden in der Berufs- und Arbeitsmarktorientierung für Bildungsferne. ABIF-Analyse, Beratung und interdisziplinäre Forschung, [http://www.forschungsnetzwerk.at/downloadpub/ams\\_ph\\_bildungsferne\\_2012.pdf](http://www.forschungsnetzwerk.at/downloadpub/ams_ph_bildungsferne_2012.pdf)
- 📍 Steiner, M. and Lassnigg, L., (2009), Early school leaving and VET in comparative perspective incidence and policies. In European Conference on Educational Research, Vienna, Austria, Vol. 2830.
- 📍 Strachan, C., (2014). Teachers' Perceptions of Esri Storymaps as Effective Teaching Tools, Master's thesis, University of South Carolina, <http://scholarcommons.sc.edu/etd/2907>.
- 📍 Struyven K., Vrancken S., Brepoels K., Engels N. and Lombaerts K. (2012), Leerkracht zijn met mijn lerarendiploma? Neen, dank u. Een onderzoek naar de redenen van gekwalificeerde leraren om niet te starten in het onderwijs na afstuderen of na korte tijd eruit te stappen Pedagogische Studiën (89), 3-19
- 📍 Swerts, T. 2015. Gaining a Voice: Storytelling and Undocumented Youth Activism in Chicago\*. Mobilization: An International Quarterly, 20(3), 345-360.
- 📍 Szalai, J. and Kende, A., (2014). Early School Leaving in the Context of Policy-making in Hungary. CEU CPS, Working Paper Series, [http://pdc.ceu.hu/archive/00007220/01/cps-working-paper-early\\_school\\_leaving-2014.pdf](http://pdc.ceu.hu/archive/00007220/01/cps-working-paper-early_school_leaving-2014.pdf)
- 📍 Tanon, F. and Cordier, A., (2000). Jeunes en rupture scolaire. Paris, L'Harmattan.
- 📍 Tejada, J. (2009). Profesionalización docente en el escenario de la Europa del 2010. Una Mirada desde la formación. Revista de Educación. 349, 463-477.

- 📍 Teleprensa (2018), La Comisión Europea destaca el descenso “significativo” del abandono temprano de la Educación y la formación en España, <https://www.teleprensa.com/nacional/la-comision-europea-destaca-el-descenso-significativo-del-abandono-temprano-de-la-educacion-y-la-formacion-en-espana.html>
- 📍 Timmerman, N.C., Macedo, E., Rocha, C. and Araújo, H.C., (2015). Early school leaving and beyond. Foreward, Educacao, Sociedade et Culturas, <http://www.fpce.up.pt/ciie/sites/default/files/ESC45Foreword.pdf>
- 📍 Tomiță, M. and Panzaru, C., 2013. Parent involvement and early school leaving. Revista de Cercetare și Intervenție Socială, (40), pp.21-36.
- 📍 Tumino, A. and Taylor, M.P., 2015. The impact of local labour market conditions on school leaving decisions (No. 2015-14). ISER Working Paper Series.
- 📍 Úcar, X., (2013). Exploring different perspectives of Social Pedagogy: towards a complex and integrated approach. Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas, 21.
- 📍 Valls, R., and Padrós, M. (2011). Using dialogic research to overcome poverty: From principles to action. European Journal of Education, 46,173–183.
- 📍 Vandecandelaere, M., Van den Branden, N., Vandenbroeck, M., De Fraine, B., (2016). Flexibele leerwegen in Vlaanderen . Onderzoeksrapport
- 📍 Villalustre, L. and Del Moral, M. E. (2014). Digital storytelling: una nueva estrategia para narrar historias y adquirir competencias por parte de los futuros maestros. Revista Complutense de Educación, 25(1), 115- 132.
- 📍 Walters, J., (2018). Healing journeys: Digital storytelling with service user educators. In Cultivating Compassion, pp. 199-211. Palgrave Macmillan, Cham.
- 📍 Watkins, K. (2007). Classrooms as learning communities: What’s in it for Schools. Oxford: Routledge
- 📍 Weick, K.E., Sutcliffe, K.M. and Obstfeld, D., (2005). Organizing and the process of sensemaking. Organization science, 16(4), pp.409-421.
- 📍 Weixler, F. and Soudoplatoff, A-S., (2015). Nouveau plan de lutte contre le décrochage scolaire, Les Cahiers Dynamiques, 2015/1 (n°63), p. 16-25
- 📍 Wooff, D., (2016). Design Thinking for Education; Conceptions and Applications in Teaching and Learning, A Review in” Design and Technology Education: an International Journal” Vol 21 (3) pp 74-76.
- 📍 Zull, J. (2002). The art of changing the brain: Enriching the practice of teaching by exploring the biology of learning. Sterling, VA: Stylus Publishing

## 12. EDUCATION SYSTEMS

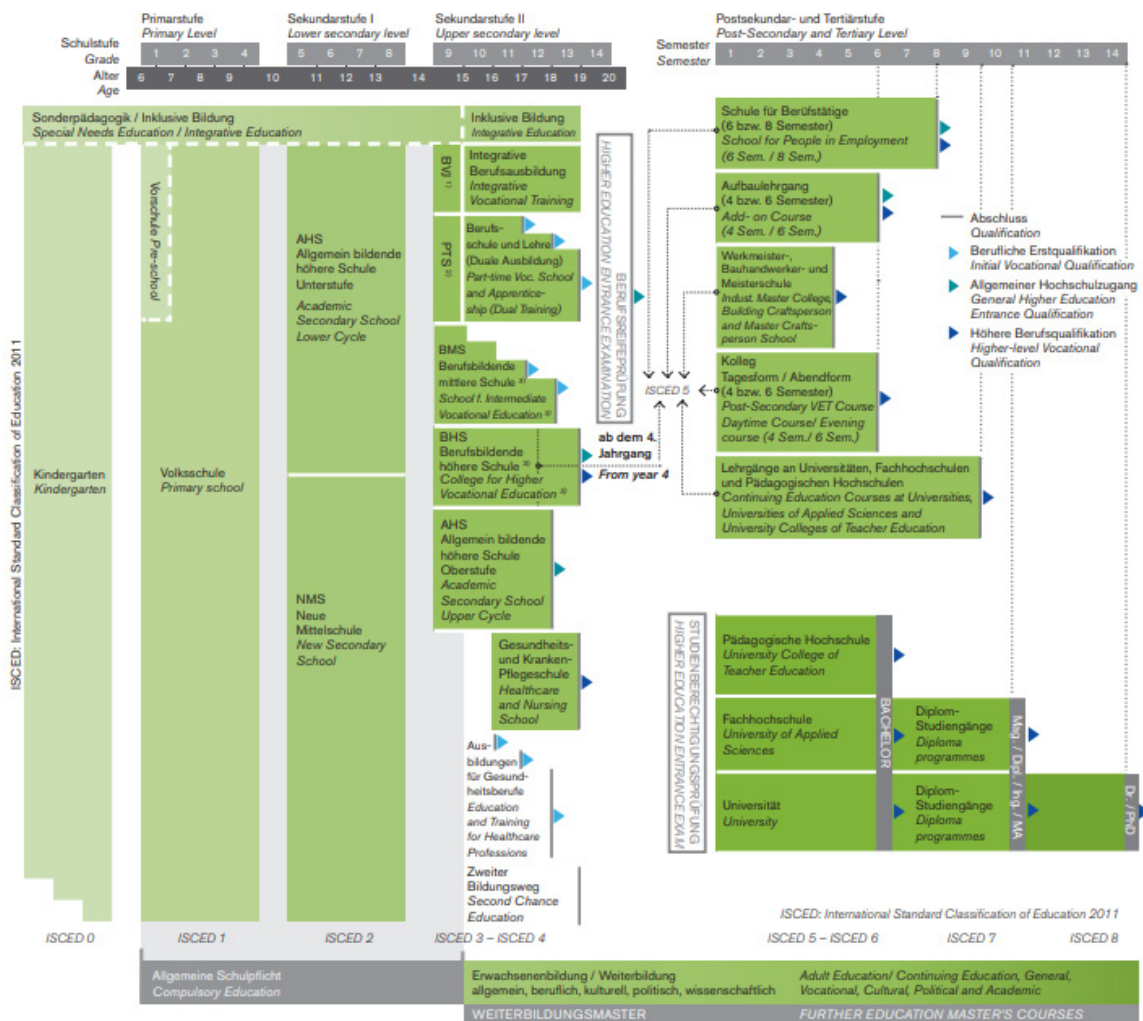
Certain features of the education and training systems can exacerbate educational disadvantage, create additional barriers for learners who are struggling and hinder their educational pathways. The education systems are therefore summarised here for the partner countries.

### Austria

The Republic of Austria enjoys a free and public school system. Nine years of education are mandatory. Schools offer a series of vocational-technical and university tracks that involve one to four additional years of education beyond the minimum mandatory level. The legal basis for primary and secondary education in Austria is the School Act of 1962.

The Austrian government program 2013 – 2018 explicitly contains the revaluation (upgrading) of apprenticeship trainings and the importance of the compulsory training for young people up to 18 years. (Litschel, V./ Löffler, R. 2015)

### Das österreichische Bildungssystem The Austrian Education System



<sup>1)</sup>Berufsvorbereitungsjahr Preparation Year for Work <sup>2)</sup>Polytechnische Schule Pre-vocational School <sup>3)</sup> ab dem 10. Schulstufe: Semestergliederung from age 15: no grades, but semester structure

Quelle: BMB, Sektion II, 07/2017, vereinfachte Darstellung

## Belgium (Flanders)

The education in the Flemish Community covers the Dutch-speaking part of Belgium and consists of three networks (netten): government-provided education (gemeenschapsonderwijs), subsidized public schools (by provinces and municipalities) and subsidized free schools (mainly affiliated to the Catholic church).

Due to the federalization of Belgium, education is organised by the three communities since 1989. Since then, the Flemish Government organises education in the Flemish Region as well as in the bilingual Brussels-Capital Region where the Government of the French Community is also responsible. The Flemish Community organises the Dutch-language education but has to provide French-language schools in the 12 municipalities with language facilities within the Flemish Region.

The federal level only regulates a few general matters: the start and end of compulsory education (which is between the ages of 6 and 18), the minimal conditions for issuing diplomas, and the pension scheme. Article 24 of the Belgian Constitution furthermore guarantees free education, the right of parents to choose their school and the (philosophical, ideological and religious) neutrality of government-provided schools. These state schools have to provide the choice between the teaching of one of the recognized religions and non-denominational moral teaching.

There are two levels of school education, Basic Education and Secondary Education.

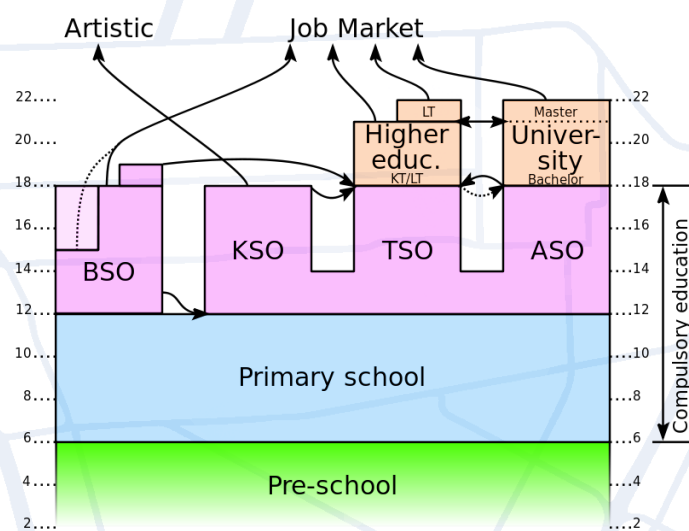
Basic education (basisonderwijs) consists of optional pre-school (kleuteronderwijs) and six years of mandatory primary education (lager onderwijs). The mandatory education starts on 1 September of the year in which the child has its sixth birthday.

Secondary education (secundair onderwijs) also consists of six years starting from the age of 12. Secondary school is divided into four general types. Each type consists of a set of different directions that may vary from school to school. The general types are as follows: General Secondary Education (Dutch: Algemeen Secundair Onderwijs; ASO. About 40% of all pupils[5]): A very broad, general education, preparing for higher education.

Technical Secondary Education (Dutch: Technisch Secundair Onderwijs; TSO. About 30% of all pupils): The TSO is divided into two groups of education again: TTK and STK. The TTK courses focus more on technical aspects, the STK courses focus more on practical matters.

Vocational Secondary Education (Dutch: Beroepssecundair Onderwijs; BSO. About 30% of all pupils): Very practical and very job-specific education. Afterwards, several directions offer seventh, sometimes eighth, specialisation years.

Art Secondary Education (Dutch: Kunstsecundair onderwijs; KSO. About 2% of all pupils): These schools link general and broad secondary education development with active art practice, ranging from performance arts to display arts.






Education in Flanders (Source Tijmen Stam, 2018)

## France

Although French education is compulsory for children resident in France between the ages of six and 16, many children enter preschool at the age of three. Approximately 64 per cent of students complete their secondary education by taking the baccalauréat (le bac) or the baccalauréat professionnel (le bac prof) examinations.

Most French schools follow a national curriculum set by the Ministry of Education but the French government published reforms in May 2015 that would allow schools to set 20 percent of the curriculum themselves.

After nursery school or kindergarten (école maternelle), which is optional, the French compulsory education system is divided into three stages or 'cycles':

-  primary school (école)
-  middle school (collège)
-  high school (lycée)

Preschool/nursery (école maternelle) provide care for children from two and three years old until they are six. While children are not obliged to attend, state facilities are free and are an excellent way for young children of expat parents to learn French quickly and easily. The curriculum aims to prepare children for primary school, and includes reading, writing, numeracy and sometimes even a foreign language. For more information on maternelles and other preschool nurseries and daycare options, see Expatica's guide to preschool options in France, French daycare and child-care options in France.

Primary school (école primaire): children in France attend primary school from the age of six to 11 years old. There are five levels: i) Cours préparatoire (CP) or 11ème – age 6 to 7 years old, ii) Cours élémentaire (CE1) or 10ème – age 7 to 8 years old, iii) Cours élémentaire (CE2) or 9ème – age 8 to 9 years old, iv) Cours moyen 1 (CM1) or 8ème – 9 to 10 years old and v) Cours moyen 2 (CM2) or 7ème – 10 to 11 years old.

Middle school (collège): between the ages of 11 and 15, students in France attend a middle school or collège. There are four levels: 6ème – 11 to 12 years old, 5ème – 12 to 13 years old, 4ème – 13 to 14 years old, 3ème – 14 to 15 years old.

The syllabus aims to give all pupils a general education and consists of French, mathematics, history/geography, civics, biology, physics, technology, art, music, and physical education. Over the four years in the college, the more academic students tend to choose to take more general classes while the less academic tend to take more vocational classes.

In collège, marks (notes) become an important aspect in a child's schooling, with tests (contrôles) becoming commonplace. During the year students are tested every week and at the end of the year have to pass with an average of 12 marks out of 20. Scoring under 10 may mean repeating the year.

At the end of the four years, at the age of 15, all students must sit the brevet, the Diplôme National du Brevet (or Brevet des Collèges). Students are tested on French, mathematics and history/geography (choosing which one they want to answer on the day) but they must also have passed their B2i (computer/internet skills) during the year and have reached a level A2 in a foreign language.

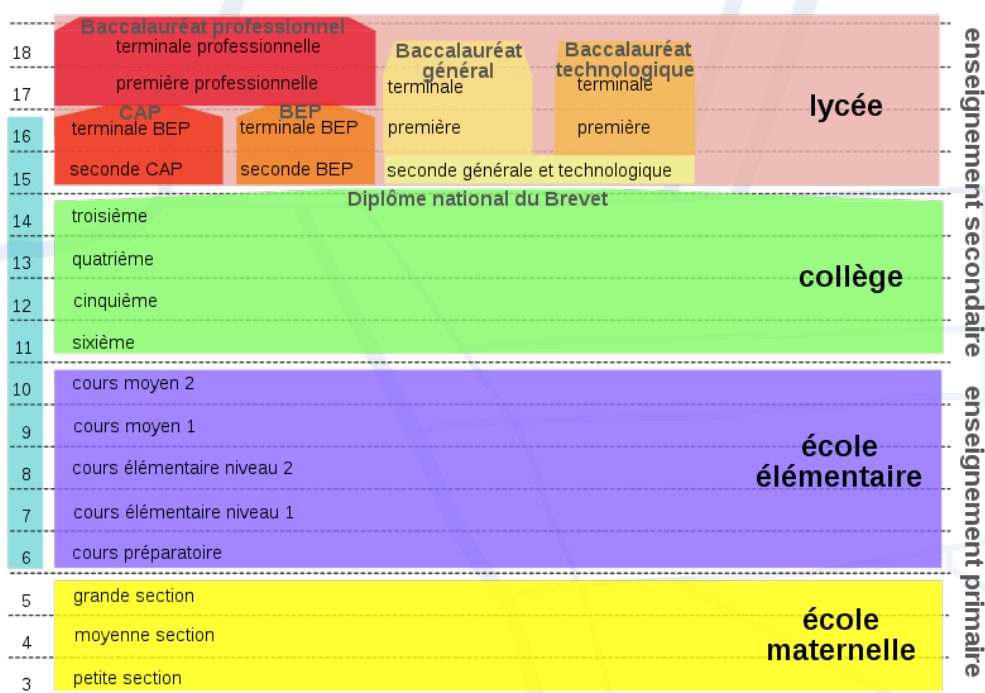
After the brevet, students may leave the education system altogether if they are 16 (though most do not), or continue their education in a lycée. Academic pupils will move onto a lycée général or lycée technique, while less academic may go to a lycée professionnel.

High school or lycée: the last three years of secondary education – from 15 to 18 years old – are spent at a lycée general, a lycée technique or a lycée professionnel. Students take the same core curriculum of some eight or nine subjects but are offered three electives and an artistic workshop. At the end of this year, the key decision is made as to which baccalaureat the student will pursue. Contact the individual school for enrolment requirements and procedures.

The levels are: Seconde (CAP, BEP) – 15 to 16 years old, Première (CAP, BEP) – 16 to 17 years old, Terminale (BAC) – 17 to 18 years old.

Lycée general and lycée technique: students start to specialise with the aim of sitting the Baccalauréat (le bac), which is the qualification to enter university at 18 years old. Students choose different 'series'. The general bac consists of the L series (literary studies), ES series (economic and social studies) or S series (sciences). The S bac is considered the toughest. Students have to pass all subjects in the series (getting 10/20 in the exam) to pass; those getting 8/20 or under have to retake the year and sit again. Those who pass can get a place at one of France's universities.

Lycée professionnel: at a lycée professionnel (lycées pro), students work towards qualifications to help them get a manual or clerical job or pursue further vocational studies. These qualifications are the baccalauréat professionnel (bac pro), CAP (certificat d'aptitude professionnel) and BEP (Brevet d'enseignement professionnel), which focus on one of four fields: social/health, driving/transport, catering/hotels, and optics. Lycées du bâtiment and lycées agricoles specialise in building trades and agriculture. The professional baccalaureate requires three years of study and certifies the student to work in a qualified professional activity.



Timeline of the french educational/school system (source: Thomas Steiner)

## Italy

School education in Italy is compulsory from 6 to 16 years of age, and is divided into four stages: i) kindergarten (scuola dell'infanzia), ii) primary school (scuola primaria or scuola elementare), iii) lower secondary school (scuola secondaria di primo grado or scuola media inferiore) and iv) upper secondary school (scuola secondaria di secondo grado or scuola media superiore). Education is free in Italy and free education is available to children of all nationalities who are residents in Italy.

Primary schools (scuola primaria or scuola elementare), is commonly preceded by three years of non-compulsory nursery school (or kindergarten, "asilo"). Scuola elementare lasts five years. Until middle school, the educational curriculum is the same for all pupils; the subjects studied are the same (with the exception of special schools for the blind or the hearing-impaired). The students are given a basic education in Italian, English, mathematics, natural sciences, history, geography, social studies, and physical education. Some schools also have Spanish or French, musical arts and visual arts.

Secondary education in Italy lasts 8 years and is divided in two stages: Scuola secondaria di primo grado (Lower secondary school), which corresponds to the Middle School grades, and Scuola secondaria di secondo grado (Upper secondary school), also broadly known as Scuola superiore, which corresponds to the high-school level.

The Scuola secondaria di primo grado lasts three years (roughly from age 11 to 14). Scuola secondaria di secondo grado lasts five years (roughly from age 14 to 19). Every school level involves an exam at the end of the final year, called esame di maturità, required to gain a degree and have access to university education.

For historical reasons, there are three types of Scuola secondaria di secondo grado, divided into further specializations. Currently all secondary schools in Italy have most of the structure and subjects in common for the first two years (such as Italian grammar, history and mathematics), in the final three years (Secondo biennio e quinto anno, or triennio) most subjects are peculiar to a particular type of course (i.e. ancient Greek in the Liceo Classico, business economics in the Istituto tecnico economico or scenography in the Liceo Artistico) but subjects like Italian, English and mathematics are still taught.

Liceo (lyceum), the education received in a Liceo is mostly theoretical, with a specialization in a specific field of studies (humanities, science, or art).

Istituto tecnico (technical institute), the education given in an Istituto tecnico offers both a wide theoretical education and a specialization in a specific field of studies (e.g.: economy, humanities, administration, law, technology, tourism), often integrated with a three/six months internship in a company, association or university, from the third to the fifth and last year of study.

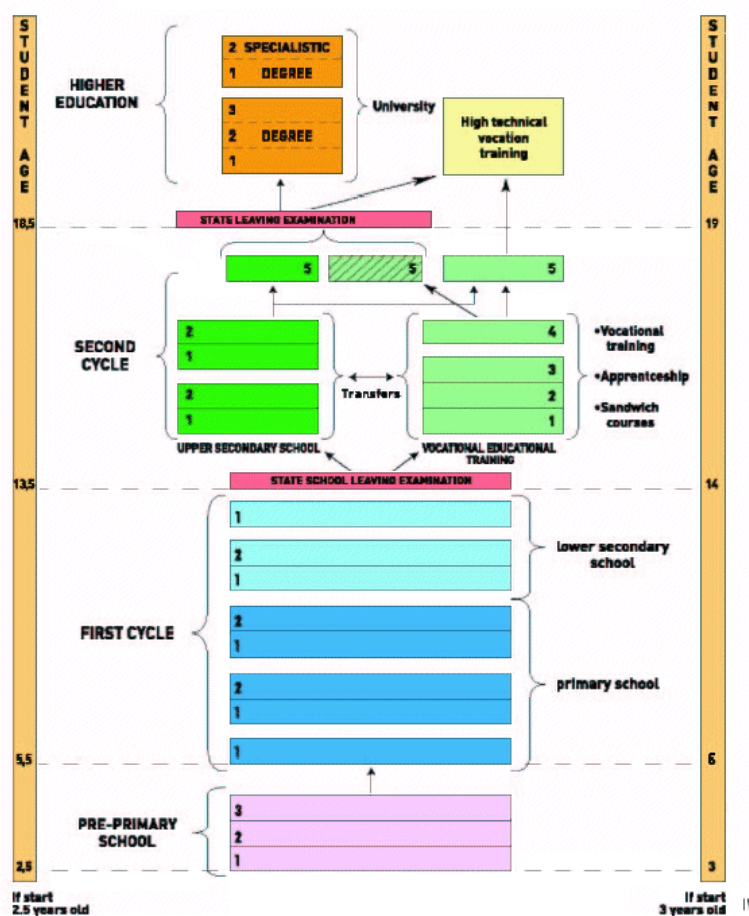




Istituto professionale (professional institute), this type of school offers a form of secondary education oriented towards practical subjects (engineering, agriculture, gastronomy, technical assistance, handicrafts), and enables the students to start searching for a job as soon as they have completed their studies, sometimes sooner, as some schools offer a diploma after three years instead of five, although it is considered a lower level of school compared to the others.

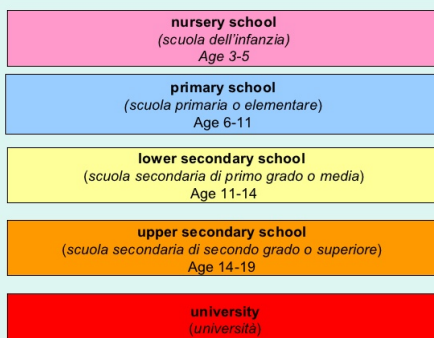
Secondary schools that last 5 years grants access to the final exam, called esame di maturità or esame di stato; this exam takes place every year between June and July and grants access to university.

The new system of education and training in Italy (Act no. 53 of 28 march 2003)



Timeline of the french educational/school system (source: Thomas Steiner)

### ITALIAN SCHOOL STRUCTURE



## Spain

Education in Spain is regulated by the Ley General de Educación (LGE, General Law of Education) that expands upon Article 27 of the Spanish Constitution of 1978. Education is compulsory and free for all children aged between 6 and 16 years and is supported by the national government together with the governments of each of the country's 17 autonomous communities.

In Spain, elementary school and middle school are considered basic education, or EGB (Educación General Básica). However, there is a traditional distinction between the two to avoid mixing children with great differences in age. Thus, most schools divide EGB into Primaria (kindergarten or first grade through fifth grade), which is the Spanish equivalent of elementary school, and Secundaria (sixth grade through eighth grade), the Spanish equivalent of middle school.

After the eighth grade, students start el instituto (Spanish for "high school"), which lasts for four years, grouped into two cycles: three years of BUP (Spanish initials for "Unified Baccalaureate") and one year of COU (Spanish initials for "Pre-university year").

The Spanish education system is divided into four stages, two of which are compulsory:

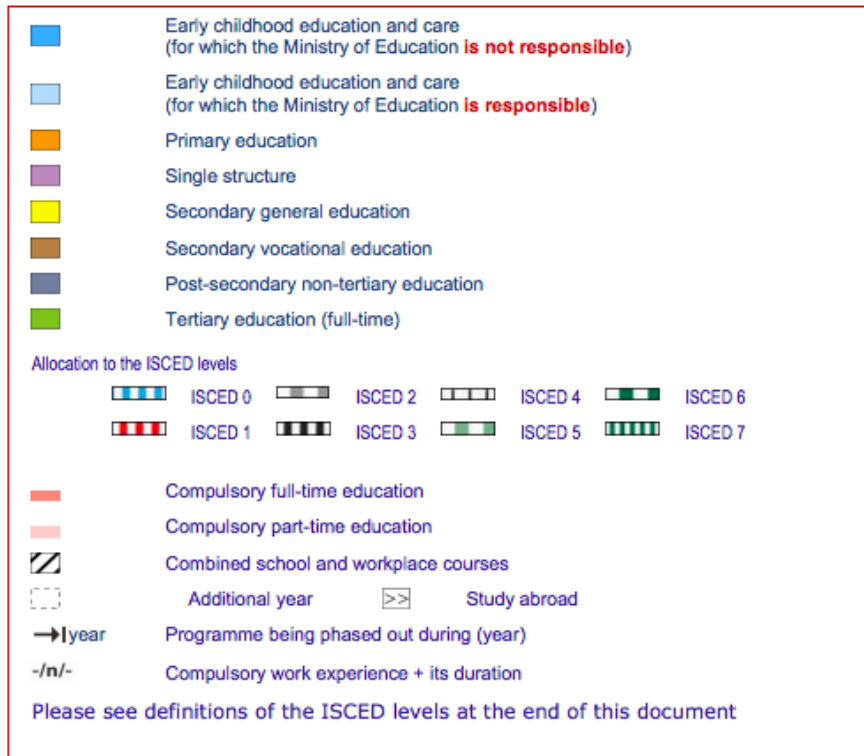
1. Nursery and preschool (educación infantil) – optional
2. Primary (educación or escuela primaria) – compulsory
3. Compulsory secondary education (educación secundaria obligatoria)
4. Upper secondary education (bachillerato) – optional (Expatica, 2015)

<b>Kindergarten</b>	<b>(0 – 3 yrs)</b>
<b>Pre-Scholar/Infantil</b>	<b>(3 – 6 yrs)</b>
<b>Primary</b>	<b>(6 – 12 yrs) Compulsory</b>
<b>E.S.O.</b>	<b>(12 – 16 yrs) Compulsory</b>
<b>Bachillerato/ Ciclos Formativos de Grado Medio</b>	<b>(16 – 18 yrs)</b>
<b>University (Diplomatura 3 yrs) Ciclos Formativos de Grado Superior</b>	<b>(18 – 21+ yrs)</b>
<b>University (Licenciatura 2 yrs) University Post Degree (2 yrs)</b>	<b>(18 – 22+ yrs)</b>

1. Spanish educational system divided by cycles and years

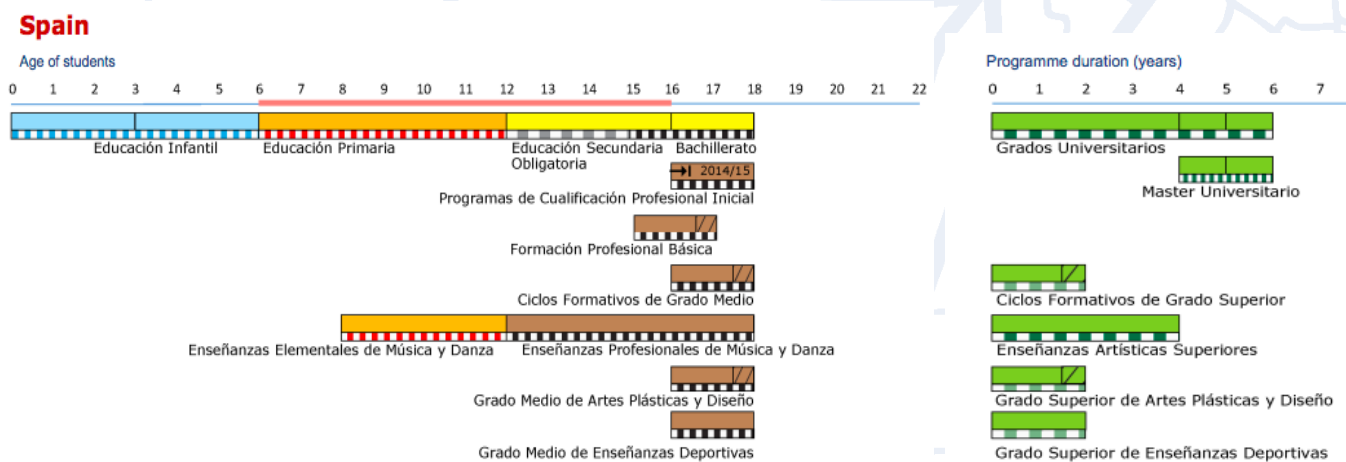


Eurydice (2014) provides a graphical representation of the structure and composition of education in Spain.



2. Source: Eurydice (2014) Explanation of meaning of the symbols and colours used in diagram below.

Diagram below shows the mainstream educational programmes considered to be the most representative for Spain.



2. Source: Eurydice (2014) Explanation of meaning of the symbols and colours used in diagram below.



## 13. ANNEXES

### Annex 1: Statistics on young people neither in employment nor in education or training – EUROSTAT, 2017

One of the most important decisions in life concerns the choice of when to make the move from education to the world of work. Given that the vast majority (90.2 %) of young people in the EU-28 between the ages of 15 and 19 continued to participate in some form of education and training (either formal or non-formal), the following analysis mainly focuses on the population aged 20 to 34.

In 2016: There were almost 17 million young people aged 20–34 who were neither in employment nor in education and training

- The share of young people neither in employment nor in education and training rose during the financial and economic crisis . . .
- . . . while an increasing proportion of young people remained within education or training
- Young women are more likely to be neither in employment nor in education and training

There are a range of factors that may explain this gender gap, among which:

- social conventions or pressures, which tend to place a higher importance on women's role within the family and on men's role in the workplace;
- careers advice, which may reinforce gender segregation and direct women into a relatively narrow range of occupations;
- labour market issues, such as: employers preferring to hire young men over young women; young women facing assimilation difficulties when returning to work after childbirth; young women being more likely to

have low-paid jobs or precarious employment

- As young women become older they are more often neither in employment nor in education and training
- Young female NEETs were more likely to be inactive, while young male NEETs were more likely to be unemployed
- Young male NEETs aged 20-24 were more likely to be unemployed than young female NEETs . . .
- ... while young female NEETs aged 30–34 were more likely to be inactive
- Young people in the EU living in cities were less likely to be out of employment or education and training . . .
- . . . although the share of young people neither in employment nor in education and training was more mixed when analysed by degree of urbanisation in EU Member States which recorded relatively low overall NEET rates

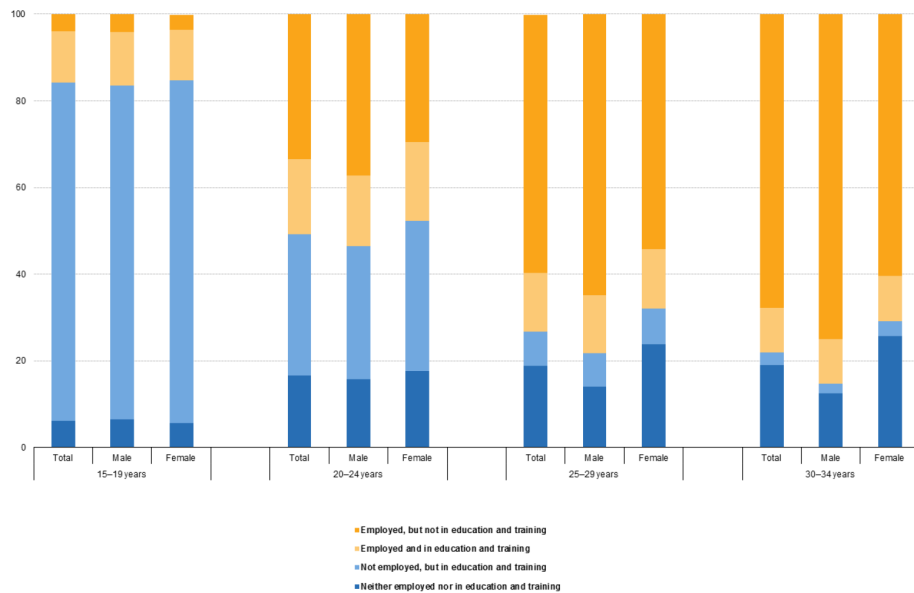
Traditionally, most young people only started work once they had completed their highest

level of education or training, and they rarely combined education with a job. The transition has, in recent years, become more prolonged and increasingly unpredictable, with young people switching jobs more frequently and taking longer to become established in the labour market, either by choice or necessity.

It has also become increasingly common to find tertiary education students taking part-time or seasonal work to supplement their income, or for young people already in employment to seek a return to education and training in order to improve their qualifications (for example, through evening classes or distance learning).

As a result, the transition between education and work has become less clear, with a growing share of students also working and a rising proportion of people in employment also studying (for example, apprentices are generally considered to be employed and in formal education).





Note: the shares do not quite add up to 100 % due to the category of young people for which the employment and/or education and training status is not known.

Figure 1: Employment, education and training status of young people, by age and sex, EU-28, 2016(%)Source: Eurostat (edatlfse18)

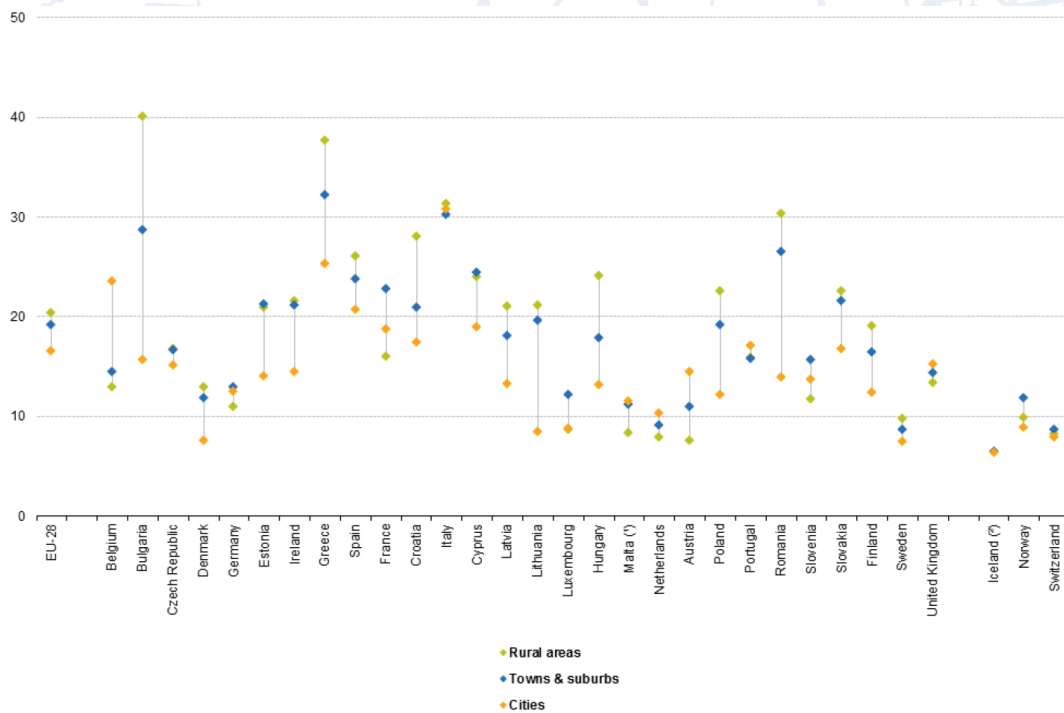
	Total				Male			Female				
	20-34 years	20-24 years	25-29 years	30-34 years	20-34 years	20-24 years	25-29 years	30-34 years	20-34 years	20-24 years	25-29 years	30-34 years
EU-28	18.3	16.7	18.8	19.1	14.0	15.7	14.0	12.5	22.7	17.7	23.8	25.8
Belgium	17.2	15.3	18.5	17.6	14.9	15.8	15.5	13.5	19.5	14.9	21.5	21.7
Bulgaria	25.1	22.7	28.3	23.7	20.6	21.2	21.9	18.9	29.8	24.2	35.0	28.9
Czech Republic	16.2	10.6	17.2	19.6	6.4	7.9	5.8	5.8	26.4	13.4	29.0	34.2
Denmark	10.0	8.5	10.6	11.2	8.7	9.4	8.5	8.0	11.5	7.5	12.8	14.6
Germany	12.4	9.7	12.3	14.7	8.6	8.6	8.5	8.6	16.4	10.9	16.4	21.0
Estonia	17.3	13.3	20.0	17.6	9.6	10.1	10.9	8.0	25.4	16.5	29.8	27.9
Ireland	18.5	17.0	19.4	18.6	15.6	17.2	16.8	13.5	21.2	16.9	21.9	23.2
Greece	30.5	23.0	33.5	33.4	24.3	22.6	26.1	23.8	36.9	23.4	42.0	42.5
Spain	22.8	21.2	24.2	22.9	20.4	21.7	21.8	18.3	25.3	20.7	26.7	27.5
France	18.9	18.2	19.2	19.4	15.4	17.5	15.4	13.4	22.4	18.9	22.9	24.9
Croatia	22.5	19.6	24.3	23.4	20.4	22.0	20.4	18.9	24.7	17.2	28.2	28.1
Italy	30.7	29.1	32.4	30.4	25.7	29.0	26.8	21.6	35.8	29.1	38.3	39.3
Cyprus	21.3	22.7	20.6	20.8	18.3	21.1	18.1	16.2	24.0	24.1	23.1	24.9
Latvia	17.0	18.1	16.1	17.1	14.8	20.2	13.2	12.1	19.3	15.9	19.1	22.2
Lithuania	14.7	15.3	13.4	15.3	14.3	16.3	12.3	14.1	15.2	14.3	14.7	16.4
Luxembourg	9.9	9.0	9.2	11.3	7.0	8.0	6.0	7.1	12.9	10.0	12.5	15.4
Hungary	18.5	15.4	19.5	20.5	10.5	11.7	10.9	9.0	26.8	19.3	28.6	32.3
Malta	11.1	8.1	9.2	15.8	5.2	6.2	5.2	4.2	17.5	10.1	13.4	28.3
Netherlands	9.7	6.9	9.6	12.8	7.5	6.8	7.7	8.1	12.0	7.0	11.7	17.5
Austria	11.0	9.8	11.0	12.2	9.4	10.0	9.2	9.1	12.7	9.7	12.8	15.4
Poland	18.0	16.8	18.9	18.2	12.5	15.4	11.8	10.9	23.8	18.3	26.4	25.7
Portugal	16.2	17.2	17.2	14.3	15.2	17.3	15.7	12.9	17.1	17.0	18.8	15.7
Romania	23.5	23.6	24.7	22.3	15.8	17.6	16.9	13.2	31.8	30.0	33.1	31.9
Slovenia	13.4	11.8	15.7	12.7	11.7	13.4	12.9	9.4	15.2	10.2	18.8	16.0
Slovakia	21.0	16.8	21.7	23.8	12.6	13.7	11.5	12.7	29.8	19.9	32.3	35.5
Finland	15.0	14.6	14.9	15.4	12.3	15.7	12.0	9.5	17.8	13.5	17.9	21.7
Sweden	8.3	9.3	8.0	7.5	7.5	9.7	6.6	6.1	9.1	8.8	9.4	9.1
United Kingdom	14.8	14.8	14.7	15.0	9.7	13.1	8.8	7.3	20.0	16.6	20.5	22.5
Iceland	6.1	5.4	5.5	7.6	4.4	5.5	-	-	8.0	5.2	7.3	11.6
Norway	10.1	8.4	10.2	11.6	9.4	9.0	9.3	10.0	10.8	7.9	11.2	13.3
Switzerland	8.4	8.4	7.8	8.8	6.1	8.9	6.1	3.7	10.7	8.0	9.7	13.8
Former Yugoslav Republic of Macedonia	37.7	34.7	43.1	35.2	32.1	32.4	37.4	26.7	43.6	37.1	49.1	44.1
Turkey	34.0	32.5	35.3	34.0	14.8	18.0	15.4	11.4	53.1	46.4	55.2	57.1

Table 1: Share of young people neither in employment nor in education and training, by sex and age, 2016(%)Source: Eurostat (edatlfse20)

	20–24 years						30–34 years					
	Total	Unemployed		Inactive		Total	Unemployed		Inactive			
		Male (%)	Female (%)	Total	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total	Male (%)	Female
EU-28	49.1	58.9	40.1	50.9	41.1	59.9	34.9	54.8	25.2	65.1	45.2	74.8
Belgium	51.6	58.9	44.3	48.4	41.1	55.7	38.6	54.8	29.0	61.4	45.2	71.0
Bulgaria	24.2	31.6	17.8	75.8	68.4	82.2	25.3	36.2	17.6	74.7	63.8	82.4
Czech Republic	38.7	62.0	23.9	61.3	38.0	76.1	17.3	52.5	11.1	82.7	47.5	88.9
Denmark	35.3	36.2	34.7	64.7	63.8	65.3	34.8	43.8	29.7	65.2	56.3	70.3
Germany	36.1	49.4	23.9	63.9	50.6	76.1	24.5	48.3	14.8	75.5	51.7	85.2
Estonia	41.4	.	23.2	58.6	.	76.8	26.0	50.6	18.3	74.0	49.4	81.7
Ireland	50.0	62.0	36.7	50.0	38.0	63.3	30.1	54.1	17.2	69.9	45.9	82.8
Greece	72.7	76.5	69.2	27.3	23.5	30.8	68.3	84.0	60.0	31.7	16.0	40.0
Spain	71.2	76.9	65.5	28.8	23.1	34.5	65.1	79.8	55.3	34.9	20.2	44.7
France	58.8	67.4	50.5	41.2	32.6	49.5	39.7	58.5	30.0	60.3	41.5	70.0
Croatia	68.9	70.8	66.9	31.1	29.2	33.1	47.4	60.8	38.1	52.6	39.2	61.9
Italy	49.1	53.4	44.3	50.9	46.6	55.7	33.4	50.2	23.9	66.6	49.8	76.1
Cyprus	58.0	54.0	61.2	42.0	46.0	38.8	50.0	63.6	41.8	50.0	36.4	58.2
Latvia	51.4	61.4	38.4	48.6	38.6	61.6	35.9	47.9	28.8	64.1	52.1	71.2
Lithuania	45.1	54.6	34.3	54.9	45.4	65.7	35.3	48.6	.	64.7	51.4	.
Luxembourg	56.2	61.3	51.5	43.8	38.8	48.5	43.8	60.0	36.4	56.3	40.0	63.6
Hungary	36.4	54.7	24.9	63.6	45.3	75.1	18.5	47.3	10.2	81.5	52.7	89.8
Malta	50.8	.	42.6	49.4	.	57.4	14.6	.	.	85.4	.	.
Netherlands	39.1	43.3	34.8	60.9	56.7	65.2	23.4	35.4	18.3	76.6	64.6	81.7
Austria	48.5	57.0	39.2	51.5	43.0	60.8	36.9	53.8	27.3	63.1	46.2	72.7
Poland	46.2	59.7	33.9	53.8	40.3	66.1	25.8	44.0	17.8	74.2	56.0	82.2
Portugal	65.1	67.8	62.1	34.9	32.2	37.9	56.6	57.7	56.1	43.4	42.3	43.9
Romania	31.6	49.4	20.6	68.4	50.6	79.4	20.6	44.7	10.0	79.4	55.3	90.0
Slovenia	56.8	59.7	52.0	43.2	40.3	48.0	59.5	70.2	53.4	40.5	29.8	46.6
Slovakia	59.3	77.4	46.0	40.7	22.6	54.0	31.9	60.3	21.2	68.1	39.7	78.8
Finland	42.5	51.0	31.3	57.5	49.0	68.7	27.3	44.2	19.0	72.7	55.8	81.0
Sweden	40.9	50.0	30.7	59.1	50.0	69.3	38.7	52.5	29.7	61.3	47.5	70.3
United Kingdom	39.9	52.7	29.1	60.1	47.3	70.9	20.0	38.4	13.8	80.0	61.6	86.2
Iceland	.	.	.	.	.	.	36.8	.	.	63.2	.	.
Norway	35.7	45.6	24.1	64.3	54.4	75.9	35.3	45.0	27.1	64.7	55.0	72.9
Switzerland	45.9	42.7	48.8	54.1	57.3	51.3	29.5	54.1	23.2	70.5	45.9	76.8
Former Yugoslav Republic of Macedonia	60.8	78.7	43.9	39.2	21.3	56.1	52.0	83.1	32.3	48.0	16.9	67.7
Turkey	25.5	50.3	16.2	74.5	49.7	83.8	18.2	61.4	9.5	81.8	38.6	90.5

- (\*) Luxembourg and Malta: low reliability
- (\*) Bulgaria, Estonia, Lithuania, Luxembourg, Malta and Slovenia: low reliability.
- (\*) Croatia, Lithuania, Luxembourg and Slovenia: low reliability.
- (\*) Croatia, Luxembourg, Malta and Slovenia: low reliability.
- (\*) Malta: low reliability.
- (\*) Estonia, Lithuania, Luxembourg and Malta: low reliability.
- (\*) Estonia: low reliability.
- (\*) Estonia, Lithuania, Luxembourg, Slovenia and Switzerland: low reliability.

**Table 2: Activity status of young people neither in employment nor in education and training, by age and sex, 2016(%)**Source: Eurostat (edatlfse20)

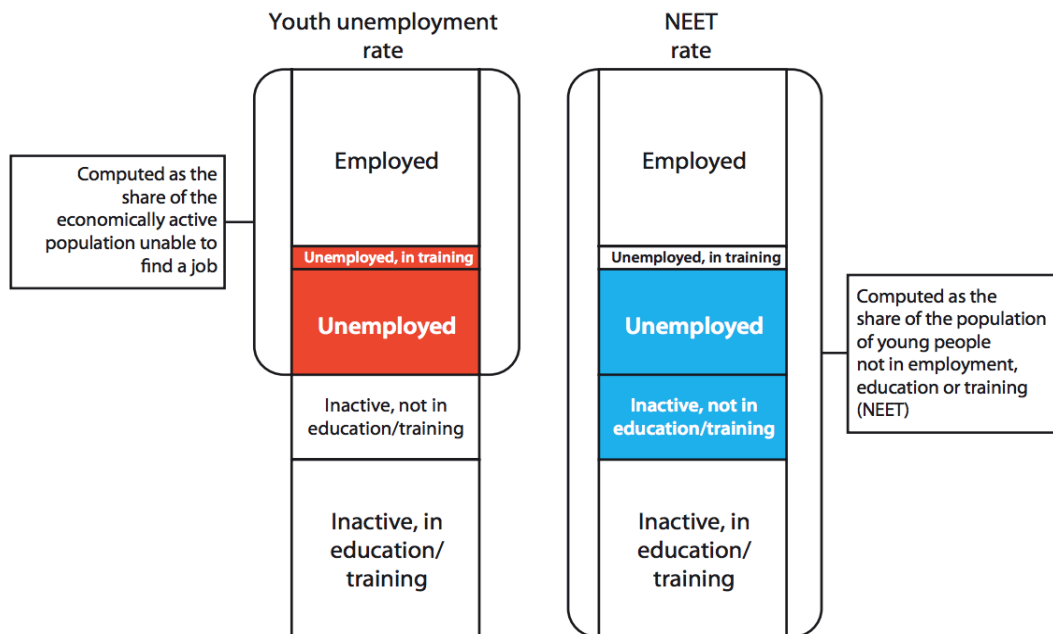


- (\*) Rural areas: low reliability.
- (\*) Rural areas: not available due to a very low reliability.

Share of young people aged 20-34 neither in employment nor in education and training, by degree of urbanisation (2016), source EUROSTAT

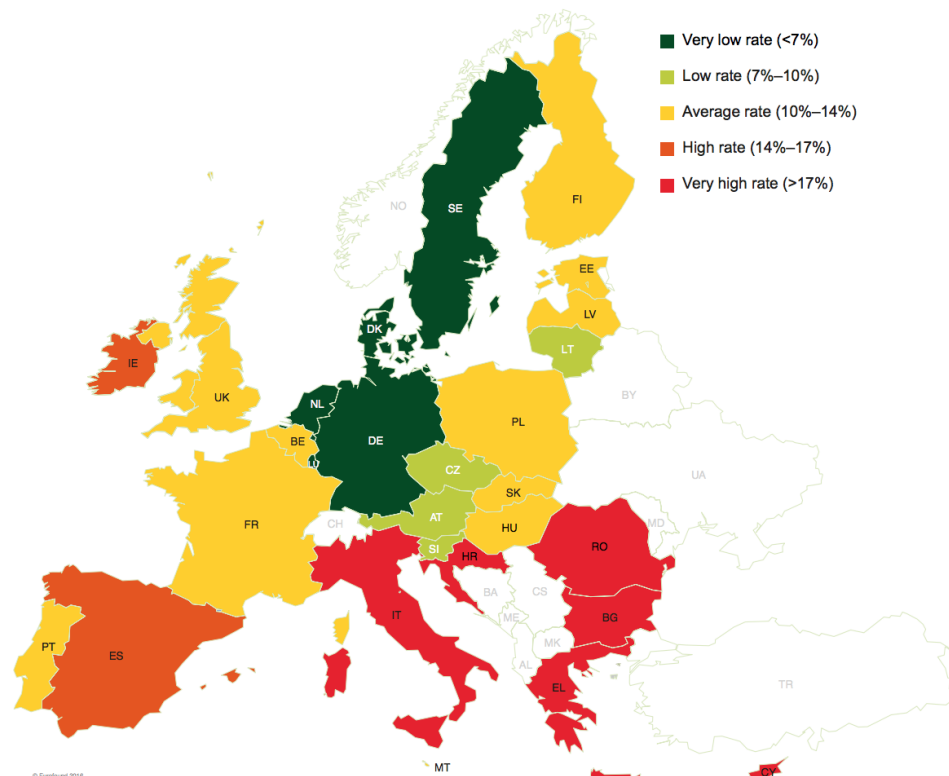
## Annex 2: Conceptual differences between youth unemployment rate and NEET rate

**Figure 1: Conceptual differences between youth unemployment rate and NEET rate**



Source: Eurofound 2012.

**Figure 2: NEET rate, 15–24 years, EU28, 2015 (%)**



Source: Eurostat.

Percentage NEET rate, ages 15-24, by country

### Annex 3: Mezirow's ten steps to transformational learning

(from <https://www.linkedin.com/pulse/fire-crackers-learning-hans-van-den-berg>)

Clusters (Kathleen King)	Jack Mezirow's ten steps	Some pointers
Fear and uncertainty	1. A disorienting dilemma	Kaisu Malkki suggests to use a less confrontational dilemma as the starting point: an 'edge emotion'
	2. Self-examination	
Testing and Exploring	3. A critical assessment of epistemic, socio-cultural or psychic assumptions	She also proposes to up-front explain the theory to learners And she points out that learners need guidance while doing self-reflection, to prevent falling back into their comfort zone
	4. Recognition that one's discontent and the process of transformation are shared	
	5. Exploration of options for new roles, relationships, and actions	
Affirming and connecting	6. Planning of a course of action	Kathleen King (2009) has developed the <i>Learning Activities Survey for Transformative Learning</i>
	7. Acquisition of knowledge and skills for implementing one's plan	
	8. Provisional trying of new roles	
	9. Building of competence and self-competence in new roles and relationships	
New perspectives	10. Reintegration of a new perspective into one's life	Papers on application of TLT are not abundant – but there are some.

Adults learn differently than children and adolescents
A learner can change perspective by her/himself, with a coach, in a course ...
Creating a safe atmosphere, trust and anxiety reduction is vital
Self-examination in the light of a new perspective may have a learner fall back to the comfort zone
Transformative Learning Theory is in need of transformation





## Annex 4: Different types of storytelling

(after Bordeau, 2008)

Different types of storytelling:

- **Storytelling management** The storytelling originated in the USA around the turn of the twentieth century, as a strategy of Management and Marketing. It was also widely used in the field of policy, for example during his presidential campaign Barack Obama made extensive use of storytelling techniques.
- **Digital storytelling** that employs digital technologies to create hypermedia narratives
- **Monomyth**, also called the hero's journey, a story structure that is found in many folk tales, myths and religious writings from around the world
- **The mountain structure**, a way of mapping the tension and drama in a story. It's similar to the monomyth because it helps us to plot when certain events occur in a story
- **Nested loops** a storytelling technique where you layer three or more narratives within each other
- **Sparklines** a way of mapping presentation structures. Graphic designer Nancy Duarte uses sparklines to analyse famous speeches graphically in her book Resonate
- **In medias res storytelling** when you begin your narrative in the heat of the action, before starting over at the beginning to explain how you got there.
- **Converging ideas** a speech structure that shows the audience how different strands of thinking came together to form one product or idea
- **A 'false start' story** is when you begin to tell a seemingly predictable story, before unexpectedly disrupting it and beginning it over again
- **The petal structure**, a way of organising multiple speakers or stories around one central concept.
- **The Storymapping** is a form of storytelling that uses geographic maps or images to include in them a series of links to web resources related to a specific topic in order to get a navigable route. Mass media and journals make extensive use of this form of storytelling for their investigation and dossier.
- **Visual Storytelling**, stories told by images. The possibilities of how an image can be used are varied:
  - a) images in a series of presentation or slideshow with links, texts, the recorded voice of a narrator;
  - b) accompanied by links to multimedia resources and/or the recorded voice of a narrator;
  - c) interactive image by clicking on it, you open resources on the web.
- **Video storytelling** by using Web Browser Based Services or in which the story takes place through the ability to manipulate the video by inserting text, links, annotations, images, questions, etc.



## Annex 5: The components of a serious story

(after Lugmayr, Suhonen and Sutinen,, 2015)

- **Context:** situation, space, place, application context, and particular context related modalities are where the narrative is taking place (e.g. TV, advertising, sports, household, festivals, learning, urban environments, learning etc.);
- **Course:** sum of plot (explicit, and non-diegetic events), in addition audience interpreted and inferred events of D. Bordwell's model of narrative – how content is evolving in a cause-effect relationship as part of the application context, and content; as well as how the audience interacts with content.
- **Content:** the actual content of the narrative, thus the human perceptive components of the plot of the narration expressed through various elements from media genres, as e.g. film language, natural language, literature, or ubiquitous media objects;
- **Channel:** in difference to other type of media (however, not all types of media), media channels gain importance, as serious storytelling can happen across various distribution channels, or channels where media objects can be perceived.

Serious storytelling is also about the three components of narration, interaction, and content and their relation to each other in time and space.



## Annex 6: Elements of digital storytelling

(after Robin, 2008)

1. Point of view: What is the thread of the story and what the perspective of the author?
2. Dramatic question (complication): Key question that keeps the viewer's attention, which will be answered by the end of the story.
3. Emotional content: The story deals with important issues that come to life in a personal and meaningful way and connects the story with the audience.
4. The power of the voice that narrates: Adaptation of the story in a way that viewers understand the content.
5. Power of sound: Music or other sounds that support the story and give the story an emotional component.
6. Efficiency: Using just the right amount of components to tell the story (less is more)
7. The rhythm of the story: How quickly things happen?



## Annex 7: Story Circle Ground Rules

(after Raimist, 2010)

The ground rules of the Story Circle are:

- (1) let each person present to the end without interruption;
- (2) give an affirming comment as the first response to a participant;
- (3) frame critical feedback with the construction, "If it were my story, I would..."; and
- (4) assertive participants should try to let the more shy ones speak first.

We added a fifth ground rule when we used the Story Circle technique in our "Digital Storytelling in and with Communities of Color" class:

- (5) while some stories may appear to be more "serious" than others, they all reflect the speakers' truths, so don't judge them against one another.

In adding this fifth rule, they intended to create a space for students to begin resolving the various tensions involved in the conflicted cultural and identity-based work of digital storytelling.



## Annex 8: Online tools and Web sites

Several online tools can be used to tell stories through three main steps—import data, select the visualization type, and configure the visual attributes (e.g., color palettes)

For interactions and animations: D3 ([www.d3.org](http://www.d3.org)), Ellipsis, Story Points - Most of the existing tools are meant to help people create material that can be shared on the web asynchronously.

Story Points | Tableau Software, <http://www.tableausoftware.com/about/blog/2014/5/82preview-tell-story-your-data-story-points-30761>.

Digital Storymaking Tools <https://digitalstory.tools/>

Highly recommended Web site with links to very useful multimedia tools. A presentation of an impressive amount of useful tools/apps for making digital stories, divided into the following areas:

- **Multimedia: Use all kinds of content forms, such as audio, video, photo and animation, to create an online story**
  - Qzr - Make simple and easy quizzes with Qzr. You can use different question forms, add pictures and edit templates. Share or embed your quiz and download your stats.
  - Adobe Spark - Use all kinds of content forms, such as audio, video, photo and animation, to create an online story
  - Duckling - Make micro stories with social media files. Turn those in a collective narrative. It's all about sharing stories and making them together.
  - Steller - An app you can use to tell a story on social media through photo's, videos and text. Put them together and post your story.
  - Thinglink - Make interactive pictures, video's or VR productions. In every production you can add different 'call-to-action' buttons to make it interactive.
  - Racontr, like Klynt, allows storytellers to create interactive stories. But unlike Klynt, Racontr is a cloud-based application
  - Sway - Very easy to use for building a one-pager. Upload video, text, audio, tweets, etc. It's easy to embed in several (mobile) websites
- **Infographic: Make infographics and charts to tell your data-driven story.**
  - Fourish studio - Turn your spreadsheets into stunning online charts and maps or combine them into one interactive story
  - Pictochart - Pictochart has more possibilities than any other infographic tool on our list. You can customise a ton. For example, you want an infographic in the shape of your logo? Easy peasy
  - Canva - Make design graphics by dragging and dropping photo's into a lay out. Design professional presentations, social media graphics and more
  - Infogr.am - Make charts and infographics by uploading data, customise it and share or embed it. Choose from all kinds of chart types.
  - LocalFocus - Make a data driven story. Just upload your data and it generates a graphic, which you can adapt in a lay-out.
  - Venngage - Make simple and quick infographics with this tool. Choose a template (graphic, poster, social), add charts and visuals with a simple drag and drop system and customise your design.



- **Mapping: Find the best tools to make a story with geographical locations and timelines**
  - StorylineJS - open-source tool that enables anyone to build an interactive line chart. Duckling - Make micro stories with social media files. Turn those in a collective narrative. It's all about sharing stories and making them together.
  - Google My Maps - Make a map and add places to tell your story. You can add text, photos, lines and change the design. Very easy to make a quick digital story
  - Tiki-Toki - Add text, photo and video with this interactive timeline tool. It's also possible to make a 3D timeline.
  - Timescape - Make a digital story based on geographical info (map based). On the 360 degree globe you can add locations that tell your story.
  - Timeline.JS - Timeline tool in which you can process dates and happenings from spreadsheets. Easy to share and embed in your own websites or other mediums
  - Storymap.JS - Navigational storymapping around the globe. This tool helps telling chronological geographical stories with photo, text and video.
  - Mapbox - Make a map where you can show the link between places. You can add a marker, line or polygon. Very easy to use for a quick digital story
- **Video: Dare to experiment with video. These tools will help you innovate your videostory by adding interactivity for example.**
  - Velapp - Cut videos simply in minutes instead of hours with the intelligent Velapp. Press harder on the screen when the best moments occur.
  - Eko - Trough a simple tree easily make interactive videos or news games. There are no templates to help you, but luckily it's quite easy.
  - Wirewax - Just upload a video and Wirewax will recognise tags. You decide if you want to activate them or ignore them. Engage your users directly.
  - Hyperlapse - An app from the makers of Instagram to make timelapse movies. It's very easy to use.
  - Filmic Pro - Professional film camera app for iOS and Android. Contains professional features and settings. You can make the most beautiful films with your mobile
  - Kynt - Klynt is an interactive editing & publishing application. Make interactive stories and games in a tree branched structure.
- **Photo: Make your story more visual. Edit, make and design photos to add to your narrative**
  - JamSnap - Snap a photo and add sound with JamSnap. Add voice-overs, surroundsound or soundtracks. This app is only for Apple users, but they are working on an app for Android users
  - Adobe Capture CC - Turn photos into vector pictures, create color themes and capture patterns in a design. Use these in all your other Adobe apps.
  - Juxtapose.JS - Compare two pictures interactively: between then and now or two version of things. You only need two pieces of similar media.
  - Pixlr - Pixlr is a very easy to use online photo editor. Choose photos from you device or from the internet and edit them the way you want.
  - Exposure - Create photo narratives in a very easy way. Add photo's and text to your story. Also really easy to embed in your website



- **Audio: Want to add audio to your story? These tools will help you create, add and transcribe audio.**
  - Anchor – Turn your audio into a podcast with one simple tap. Call someone, let people call in, and capture the conversation.
  - Cogi – Easy recording tool that will make transcribing easy. This tool saves the interesting moments you highlighted during recording.
  - IZI.Travel – Make your own audio guide, combine audio with text and pictures to make a smooth tour guide. Add a quiz to make your guide interactive
  - SoundCiteJS - Place audio into your webtext without any code. With just some coding you can change the audio lay-out. Only works with Soundcloud and mp3
  - Transcribe - An online tool to make transcribing your audio and video less of a hassle. Splitscreen your audio and type-field. No more switching screens.
- **Mojo: These tools offer you everything you need to make a story with only using your mobile.**
  - Snapseed – Snapseed is the most complete photo editor for mobile phones. Easily edit your photo with effects and filters, change the size or combine two pictures.
  - Ferrite – With Ferrite you can record and edit your audio on the spot. Also handy: you can make a podcast with it.
  - Evrybit – Create and edit multimedia stories with Evrybit. Collaborate, distribute through website or social media and engage with consumers
  - Tout – Tout is a video reporter app that supports teamwork. Record, upload, distribute and match your video to relevant articles.
  - Kinemaster – Kinemaster allows you to easily edit your footage and even add several layers of video. When it's finished share it from the app on to your socials. (Free for Android, paid for iOS).
  - Pinnacle Studio - With Pinnacle it's very easy to edit your footage. Add effects, soundtracks and so on. (For Apple only)
- **Data: Wanna tell a data-driven story? We suggest these tools to scrape, find and convert data.**
  - Chrome Scraper – This chrome plug-in is a very easy data mining extension. Scrape data online and get it into a spreadsheet quickly.
  - Dataproofer – Find out if your data is reliable. DataProofer is built to automate the process of checking a dataset for errors or potential mistakes
  - Data Portals – Data Portals is a library with websites that will provide you with open source datasets from all over the world.
  - Tabula – Tabula extracts the data from your PDF and converts it into a CSV or Excel so you can edit the data
  - Mr. Dataconverter – This converter will turn your dataset into a different filetype so you can upload it to make any graphic you want.
  - Statista - Find open source datasets from all over the world. Just type in a keyword and the tool will find datasets according to your subject.
- **Verification: If you want to tell a story you have to make sure you got the facts right. Verification is about fact checking, but also about verifying where your content came from. Is your source reliable?**
  - Bellingcat's Digital Forensics Tools - This is an up-to-date list of open source verification and investigation tools and methods from Bellingcat.
  - Trust or Trash - A guide to help you think critically about information. The tool leads you through the process in three simple steps. You can dig deeper if you want.



- Wolfram Alpha - Find out everything about a subject with this tool. Enter a keyword or select a category and check all the facts.
- B.S. Detector - The B.S. Detector is a browser extension that searches all links on a webpage for references to unreliable sources. Through warnings it tells you if the source is reliable and if not why that is.
- Visual Virification Guide - Found a photo on the internet? This infographic will help you find out through questions and rates if your photo is safe to use.
- Pipl - Search a person on the deep web with Pipl. You'll find photo's, websites, socials and so on. Everything there is to find about a person on the internet.
- TinEye - TinEye is a reverse image search engine that will tell you where the photo came from originally.
- BotOrNot - With this tool you can check if the Twitter account is a bot or not.
- **Social media: Find everything that has to do with social media. Manage, make, create and tell stories through social media.**
  - Everypost – Create your social media content for several platforms in one place, while collaborating with your team. Customize, plan and analyse your social media content.
  - TwXplorer – Enter a search word into TwXplorer and it will break down the most common terms, hashtags, and links. This means easy filtering and deep searching
  - Hootsuite – Manage your social media. With this tool you get more insight on how you are doing on social media.
  - Coveritlive – Design and publish your live experience on your website. Make a liveblog, livestream and so on.
  - Landscape - Very easy to use tool if your photo is not the right size for social media. Upload the photo and the tool will resize it.
- **Virtual Reality: Virtual Reality is relatively new and can be very complicated. With these tools you can experiment with Virtual and Augmented Reality. Create 3D videos, 360 degrees content and VR experiences and start with building your own VR story.**
  - SceneVR – SceneVR (Beta) turns your collection of panoramic and VR-ready photos into a series of navigable scenes.
  - Story Spheres – Add audio to 360-degree photos to create an interactive experience. Lead your user to the next video to create a multimedia story.
  - Wonda VR – Add audio to 360-degree photos to create an interactive experience. Lead your user to the next video to create a multimedia story.
  - Aurasma – Focus on Augmented Reality than on Virtual Reality. A drag and drop system makes it easy to make your personal AR to engage your users/readers.
  - Cardboard Camera – Take a VR photo and add audio with this Google App. Make moments come to life with 3D visuals.
  - Unity - App for 3D models, 3D games, VR-experiences and many other options. Not for starters, but when you get the hang of it the sky seems the limit.
- **Plugins: Use one of the WordPress plugins to make your online story**
  - Storytelling Tools – INN Labs collected the storytelling tools from the Knight Lab in one WordPress plugin. The Storytelling Tools plugin seamlessly integrates your creations from Timeline.js, Storymap.js, Juxtapose.js and Soundcite.js in WordPress.
  - Simple Long Form – Simple Long Form helps you to build scrollies without knowing anything about coding. It's a simple interface with the most necessary points. The plugin also gives you the opportunity to play with Bootstrap.js.
  - Aesop Story Engine – With the Aesop Story Engine plug-in, you can make interactive stories or articles in any WordPress theme. Add one of the 13 components to your blog such as audio, chapter, quote content and parallax or combine them in a long read.





- Snowball - Create immersive articles with Snowball, a WordPress plugin. It supports many different types of content like text, images, videos and data visualizations. Add a block to your article and customize it in the user-friendly interface. Advanced users can use HTML and CSS.
- **Animation: Animating your story doesn't have to be difficult. With these tools animating becomes easy for everyone.**
  - Plotograph – Animating your story doesn't have to be difficult. With these tools animating becomes easy for everyone.
  - Powtoon – Easy to make whiteboard animation. With a few adaptable templates you can easily create animated videos. You can also start from scratch and don't use the templates.
  - Animaker – Easy to make whiteboard animation. With a few adaptable templates you can easily create animated videos. You can also start from scratch and don't use the templates.
  - Biteable – Easy to make whiteboard animation. With a few adaptable templates you can easily create animated videos. You can also start from scratch and don't use the templates.
  - Explee – Easy to make whiteboard animation. With a few adaptable templates you can easily create animated videos. You can also start from scratch and don't use the templates.
  - Animatron - Make video's in a simple drag and drop system. Use your own media or choose from thousands of pre-animated characters.
- **Library: Find the best libraries for licensed free audio, video and photos.**
  - SoundCloud – Find more different styles and numbers that are not licensed. Not only electronical music tunes, like most free to use audio.
  - The Noun Project – Download free icon-families in all sorts or sizes. Great tool for designers.
  - Makerbook – Library with mainly techy and start up themes. Focussed on creatives. This library has free resources of all kind.
  - Pixabay – Over 700.000 free to use (also for commercial purpose) high quality stock photo's and video's
  - Vimeo - Many people are familiar with Vimeo as an video streaming service. But they also provide free stock video's from and for Vimeo members.
- **Design: Telling a story is one thing, but you also have to shape it visually. Create lay-outs and add visuals with these tools.**
  - AutoDraw – Telling a story is one thing, but you also have to shape it visually. Create lay-outs and add visuals with these tools.
  - Snappa – Telling a story is one thing, but you also have to shape it visually. Create lay-outs and add visuals with these tools.
  - Joomag – Easy to use website where you can upload or design your own magazine, embed video and audio and distribute it to your network
  - Mozilla Webmaker – Simple storytelling tool for mobile, by using different layouts, pictures and navigation.
  - Colors – Simple storytelling tool for mobile, by using different layouts, pictures and navigation.
  - Antetype - Easy website building by selecting device formats and fill them with given buttons and widgets. Responsive websites in no time.
- **Inspiration:**
  - Best digital stories - The 40 best digital stories of 2017, from interactives to newsgames, are listed. With the favorites of the Hackastory Team, Daan Louter and Jerry Vermanen
  - Tools used by newsmedia – Curious how news organisations apply tools in their work? We made a list with examples
  - Newsletters about journalism – The Lenfest Institute for journalism made a list with newsletters about journalism. It contains more than 70 different newsletters.



- Niemanlab – Helps journalist figure out their future in the internet age. Learn more about innovation in journalism in a daily newsletter.
- MIT Docubase – An interactive curated database of the people, projects, and technologies transforming documentary in the digital age.
- Hackastory – Self promotion alert. We believe in learning by making. Journalists, coders and designers make digital story prototypes at our hackathons.
- Guardian Mobile Lab – The innovation team of The Guardian explores storytelling and news on small screens. They share their learnings with everyone.
- Storybench - Storybench reinvigorated and reimagined digital journalism. They give you a look at the latest and most inventive examples of digital creativity.
- **Brainstorm: An interactive curated database of the people, projects, and technologies transforming documentary in the digital age.**
  - Mattermap – Online mindmapping. Add your research source with a direct link to get everything in one overview. Great for organising your story.
  - GoMoodBoard – Very easy to make moodboard. You can choose to start from scratch, but also choose a template. Add comments to your pictures.
  - Fast Idea Generator – This is a toolkit on how to invent, adopt or adapt ideas to deliver better results. It's quick to use, simple to apply.
  - MindNode - Visual representation of your ideas. Allows you to brainstorm and organise your thoughts in an intuitive way, so you can focus on the idea itself.
- **Prototype:**
  - Balsamiq - Comprehensive software tool to digitally sketch out user interfaces for websites and web / desktop / mobile applications.
  - Moqups - Thought through HTML5 App, drag 'n drop, to create wireframes, mockups or UI concepts ready for you to test.
  - Marvel – Easy to make test-versions for mobile and web, without using any code. Design, prototype and collaborate.
  - Invision – Prototyping in under five minutes. Upload your design file, add animations and transitions and make it a clickable, interactive prototypes.
  - VR Paper Prototype - Wondering how your idea would look in VR? Draw your first story idea on paper, take a picture and put your VR glasses on.
- **Organise:**
  - Realtime Board – An online whiteboard. A simple visual collaboration platform for agile teams. You can make a calendar, chart, story map and much more.
  - Trello – Project management tool that makes collaboration easy. Organise and manage projects. If you like Kanban (to-do, doing, done), this is your tool.
  - Germ.io – Ideas to action. Capture your idea in words and pictures, brainstorm about it with the people you invite and set several call to action steps.
  - Slack – Management-tool to make team-communication easier. Share files, communicate through private and shared channels and integrate several applications.
- **PresentersWall - Live interactive presentation tool, including e-voting + Q&A which will be processed in a chart on the spot.**



Esri Story Maps (<http://storymaps.arcgis.com>)

Map Story (<http://mapstory.org>)

Example Storymap about Rhode Island <http://arcg.is/1TdHSjZ>

Center for Digital Storytelling ([www.storycenter.org](http://www.storycenter.org)), whose purpose is to support individuals in creating and sharing personal stories about their lives. An example of a digital story:

<http://www.patientvoices.org.uk/flv/0566pv384.htm>

software used: Moviemaker, iMovie

#### Other Online Media References

“The Pedagogy of Digital Storytelling in the College Classroom” digital story: <http://tinyurl.com/DSPedagogy/>

“Digital Storytelling in and with Communities of Color” blog: <http://blog.lib.umn.edu/afroam/storytelling/>

“Digital Storytelling in and with Communities of Color” digital stories: <http://tinyurl.com/UMStories/>

“Letter to my Mother” digital story: <http://tinyurl.com/JacobsDS>

Caruso 2015, <http://www.non4lesl.eu>

Learning Emergence <http://LearningEmergence.net>

RESLeu project: <https://www.uantwerpen.be/en/projects/resl-eu/>

#### E-books for storytelling

Sigarchian et al. 2015 suggests an e-book has a static and a dynamic component:

- static component: a digital object with textual and/or other types of content.
- dynamic component: it can have technology-dependent features that make it more interactive and dynamic than its paper counterpart.

EPUB3 is a powerful format for eBooks, based on HTML5, Javascript and CSS.

In the case of digital storytelling, enhanced e-books can connect story entities and emotions to real-world elements. In this paper is presented the novel concept of a Hybrid Book, a generic Interactive Digital Narrative (IDN) artefact that requires seamless collaboration between content and smart devices.

A Hybrid Book makes it possible to provide human sensible feedback while flipping pages, enabling a more enjoyable reading experience.

Five aspects are important:

- narrative analysis
- interoperability between different implementations: the use of technical standards e.g. for data exchange
- sustainability of digital artefacts
- author-centered view
- user-focuses perspective

Reference: Sigarchian, H., De Meester, B., Salliau, F., De Neve, W., Logghe, S., Verborgh, R., Mannens, R., Van de Walle, R., Schuurman, D., 2015. Hybrid books for interactive digital storytelling: connecting story entities and emotions to smart environments



## Šerbec 2014 looks at software for digital storytelling:

Live Movie Maker, Domo Animate, ZooBurst, StoryJumper, ToonDoo, StoryBird, Little Bird Tales, Bookbuilder.

For the assembly of story: iMovie, Windows Live Movie Maker, Final Cut Express can be used

Visual software tools for creating interactive stories: Scratch, Kodu, StoryTellingAlice, Alice

StoryA Project (2018), Story Abroad: validating and connecting experiences of working and studying abroad through digital storytelling,

<http://arts.brighton.ac.uk/projects/storya> is a three-year Erasmus Plus Key Action 2 project based on cooperation for innovation and the exchange of good practices in the field of youth. The project booklet is available at:

[http://arts.brighton.ac.uk/data/assets/pdf\\_file/0009/198423/SW\\_KF24\\_storyabroad\\_FINAL.pdf](http://arts.brighton.ac.uk/data/assets/pdf_file/0009/198423/SW_KF24_storyabroad_FINAL.pdf)

Section I offers an overview of the issues related to digital storytelling methodology. The section opens with an article by the fore-runner of the movement, Joe Lambert, founder of the "Story-Center" in California with a brief description of the process-centred participatory media education model enabling transformative reflection and learning. Lambert relates to Mezirow's Transformational Learning steps:

- a disorientating dilemma;
- self-examination with feelings of fear, anger, guilt or shame;
- a critical assessment of assumptions;
- recognition that one's discontent and the process of transformation are shared;
- exploration of options for new roles, relationships and action;
- planning a course of action;
- acquiring knowledge and skills for implementing one's plans;
- provisional trying of new roles;
- building competence and self-confidence in new roles and relationships;
- a re-integration into one's life on the basis of conditions dictated by one's new perspective

Section II is a collection of best practices, gathering the experience gained in nine countries through the delivery of digital storytelling workshops.

Section III focuses on the stories behind the creation of a single digital story. One digital story per workshop was selected as a sample of the full experience made in one single country.

Section IV is a compendium of prompts used by facilitators during the workshops. It is a handy guideline to start thinking about the stories to tell.

EPICT – European Pedagogical ICT License, PH – Teacher training University

Review of findings / main outcomes, <http://epict.virtuelle-ph.at/course/view.php?id=92>

EPICT is a collection of resources for further education of school teachers in digital story telling – rather not fitting for MSM, the only info that could be useful for MSM:

Storytelling elements: If Seven Elements are Good, then Ten Elements Must be Better

The specific requirements of an educational digital story vary a little from the original Seven Elements for Digital Stories. Working with the Seven Elements that CDS developed a few new items to make them more applicable to the types of digital storytelling students create. The modified elements list is:

1. The Overall Purpose of the Story
6. Pacing of the Narrative
2. The Narrator's Point of View
7. Use of a Meaningful Audio Soundtrack
3. A Dramatic Question or Questions
8. Quality of the Images, Video & other Multimedia Elements
4. The Choice of Content
9. Economy of the Story Detail
5. Clarity of Voice
10. Good Grammar and Language Usage

The seven elements in 4 minutes: [https://www.youtube.com/watch?v=NipDAd3\\_7Do](https://www.youtube.com/watch?v=NipDAd3_7Do)

Video for All <http://videoforall.eu/de/>

An EU educational project (Lifelong Learning Programme) Video for ALL combines modern video ideas with innovative practice for teaching and learning languages (German, English, French, Spanish, Italian, Bulgarian).



**Narrative Threads**; are a suite of tools to support multimodal interactive storytelling (writing a computer game)

Participants are 11 – 15 years old, it gives a detailed description of the tools used for developing the game and offers a visual presentation of the game. This is a very technical description of the development process of the system

Narrative Threads is a suite of tools designed to encourage **young game designers** to approach the game creation activity as a storytelling exercise, and by doing so to improve their multimodal, interactive writing skills

Reference: Howland. K., Good. J., du Boulay. B. 2016 Narrative Threads: A Tool to Support Young People in Interactive Digital Storytelling. University of Brighton <http://users.sussex.ac.uk/~bend/papers/toe12.pdf>

Web Sites Reviewed		
7 Best Story Mapping Tools for Distributed Agile Teams	<a href="http://blog.venturepact.com/7-best-story-mapping-tools-for-distributed-agile-teams/">http://blog.venturepact.com/7-best-story-mapping-tools-for-distributed-agile-teams/</a>	how to make your own story
Arts work with socially excluded young people	<a href="http://www.nya.org.uk/resource/arts-work-socially-excluded-young-people/">http://www.nya.org.uk/resource/arts-work-socially-excluded-young-people/</a>	5 case studies of arts projects with young people
Centre for Digital Storytelling (CDS)	<a href="http://www.storycenter.org/">http://www.storycenter.org/</a>	Training, health through storytelling
Digital Storytelling	<a href="http://courseweb.ischool.illinois.edu/~jevo-gel2/lis506/howto.html">http://courseweb.ischool.illinois.edu/~jevo-gel2/lis506/howto.html</a>	how to create/ evaluate a digital story
Empower: Digital Storytelling and Youth	<a href="http://www.empoweryouth.info/wp-content/uploads/2012/03/Empower-Digital-Storytelling-and-Youth.pdf">http://www.empoweryouth.info/wp-content/uploads/2012/03/Empower-Digital-Storytelling-and-Youth.pdf</a>	Canadian project. Basic guidelines on delivering a digital storytelling project
Fully Focused	<a href="http://www.fullyfocusedproductions.com/">http://www.fullyfocusedproductions.com/</a>	Using film to change mindsets
How To: Hoe een Story-map bouwen	<a href="http://practicalgeo.be/nl/how-to-s/details/8/17/how-to-s-hoe-een-story-map-bouwen">http://practicalgeo.be/nl/how-to-s/details/8/17/how-to-s-hoe-een-story-map-bouwen</a>	how to make your own story
INCLUD-ED	<a href="http://creaub.info/included/">http://creaub.info/included/</a>	Strategies for inclusion and social cohesion in Europe from Education
NON-FOR-LESL	<a href="https://www.non4lesl.eu">https://www.non4lesl.eu</a>	non-formal learning
RESL.eu	<a href="https://www.uantwerpen.be/en/projects/resl-eu/">https://www.uantwerpen.be/en/projects/resl-eu/</a>	Early school leaving project
Seven Ways to Create a Storymap	<a href="http://schoolofdata.org/2014/08/25/seven-ways-to-create-a-storymap/">http://schoolofdata.org/2014/08/25/seven-ways-to-create-a-storymap/</a>	how to make your own storymap
Story A /Story abroad	<a href="http://digi-tales.org.uk/storyastory-abroad/">http://digi-tales.org.uk/storyastory-abroad/</a>	Erasmus Plus project: digital storytelling with young people in different countries
Story map JS	<a href="https://storymap.knightlab.com">https://storymap.knightlab.com</a>	telling stories with maps
Story maps	<a href="https://storymaps.arcgis.com/en/">https://storymaps.arcgis.com/en/</a>	how to make your own story
Success at School project	<a href="http://www.successatschool.eu/">http://www.successatschool.eu/</a>	Strategies for reducing early school leaving
T-Story	<a href="http://www.tstory.eu/project">http://www.tstory.eu/project</a>	promotes use of storytelling in education and training
Talent Match London	<a href="http://www.talentmatchlondon.org">http://www.talentmatchlondon.org</a>	Part of UK-wide alternative approach to tackling youth exclusion - focus on employment outcomes
Tales	<a href="http://www.storiesforlearning.eu/">http://www.storiesforlearning.eu/</a>	A project to investigate the impact of oral and digital storytelling in formal education
Tell a meaningful story with Google	<a href="https://www.thinkwithgoogle.com/articles/tell-meaningful-stories-with-data.html">https://www.thinkwithgoogle.com/articles/tell-meaningful-stories-with-data.html</a>	For business but some good ideas
Tenantspin	<a href="http://alandunn67.co.uk/incompletearchive.html">http://alandunn67.co.uk/incompletearchive.html</a>	20 years of a community broadcasting project in Liverpool



Other web sites		
Title	URL	Comments
Early School leavers	<a href="http://ec.europa.eu/education/policy/school/early-school-leavers_en">http://ec.europa.eu/education/policy/school/early-school-leavers_en</a>	European Commission initiatives
Policy reports	Early School Leaving in 9 EU countries, <a href="http://ec.europa.eu/research/social-sciences/pdf/policies_early_school_leaving.pdf">http://ec.europa.eu/research/social-sciences/pdf/policies_early_school_leaving.pdf</a>	Project report 2016
Reducing early school leaving	Key messages and policy support, <a href="http://ec.europa.eu/dgs/education_culture/repository/education/policy/strategic-framework/doc/esl-group-report_en.pdf">http://ec.europa.eu/dgs/education_culture/repository/education/policy/strategic-framework/doc/esl-group-report_en.pdf</a>	Policy recommendations 2013
Tool for journalists	Create interactives with Story Maps <a href="https://www.journalism.co.uk/news/tool-for-journalists-story-maps-from-esri-for-interactive-storytelling/s2/a563581/">https://www.journalism.co.uk/news/tool-for-journalists-story-maps-from-esri-for-interactive-storytelling/s2/a563581/</a>	newspaper article on journalists storytelling with maps
6 examples of telling stories with maps	<a href="http://www.jellyfish.co.uk/news-and-views/6-examples-of-story-telling-with-maps">http://www.jellyfish.co.uk/news-and-views/6-examples-of-story-telling-with-maps</a>	Canadian project. Basic guidelines on delivering a digital storytelling project
How to craft stories with mind maps	<a href="http://www.mindmeister.com/blog/2016/09/13/how-to-craft-better-stories-with-mind-maps/">http://www.mindmeister.com/blog/2016/09/13/how-to-craft-better-stories-with-mind-maps/</a>	approaches to mind mapping
Story map exercises	<a href="http://www.josephkerski.com/data/storytelling_with_esri_story_maps_kerski_workshop.pdf">http://www.josephkerski.com/data/storytelling_with_esri_story_maps_kerski_workshop.pdf</a>	How to make story maps with ESRI ArcGIS Online
Narratives in space and time	Storytelling with maps <a href="http://hippasus.com/rrpweblog/archives/2015/04/NarrativesInSpaceAndTime.pdf">http://hippasus.com/rrpweblog/archives/2015/04/NarrativesInSpaceAndTime.pdf</a>	spatial thinking ideas
Find a Story... Map a Story... Tell a Story...	<a href="http://www.rebooting.ca/place/">http://www.rebooting.ca/place/</a>	creating a story map web site and teacher resources
Interactive maps	Storytelling tools, <a href="http://www.pearltrees.com/apressense/interactive-storytelling-tools/id12660202">http://www.pearltrees.com/apressense/interactive-storytelling-tools/id12660202</a>	links to tools and examples
Seven Ways to Create a Storymap	<a href="http://schoolofdata.org/2014/08/25/seven-ways-to-create-a-storymap/">http://schoolofdata.org/2014/08/25/seven-ways-to-create-a-storymap/</a>	tools, examples
Maps: A creative way to tell your stories	<a href="http://www.mobilisationlab.org/maps-a-creative-way-to-tell-your-stories/#.WI436jmlR0s">http://www.mobilisationlab.org/maps-a-creative-way-to-tell-your-stories/#.WI436jmlR0s</a>	advice
Innovation report	Sharples, M., de Roock, R., Ferguson, R., Gaved, M., Herodotou, C., Koh, E., Kukulka-Hulme, A., Looi, C.K., McAndrew, P., Rienties, B. and Weller, M., 2016. Innovating Pedagogy 2016: Open University Innovation Report 5. Institute of Educational Technology, The Open University.  <a href="https://storymap.knightlab.com">https://storymap.knightlab.com</a>	innovative pedagogy
Early School leavers	Preventing early school leaving by the use of ICT in Education, <a href="https://storymaps.arcgis.com/en/">https://storymaps.arcgis.com/en/</a>	Guideline



#### Other useful links

<http://it.masternewmedia.org/content-curation-come-perche-utilizzarla/>

<https://www.brainpickings.org/2011/08/01/networked-knowledge-combinatorial-creativity/>

<https://storytellingpolitico.wordpress.com/>

<http://www.sparkol.com/engage/8-classic-storytelling-techniques-for-engaging-presentations/>

<http://gianfranmarini.blogspot.it/2011/10/generatori-di-timeline-1-parte.html>

<https://it.pinterest.com/robingood/storytelling-plots-and-structures-for-writing-grea/>

<http://www.psych.rochester.edu/SDT/>

<http://schlechtycenter.org>

<http://www.qca.org.uk/afl/> (outdated)

<http://www.bie.org/pbl/index.php>

<http://www.edutopia.org/php/keyword.php?id=037>

<http://rubistar.4teachers.org>

<http://www.storycenter.org>





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map 