



ALL INCLUSIVE SCHOOL



Erasmus+ project no# 2018-1-IT02-KA201-048385

Intellectual Output I **ALL-IN IDENTIKIT SUMMARY**



Co-funded by the
Erasmus+ Programme
of the European Union





Intellectual Output 1: ALL-IN IDENTIKIT

A research analysis for the development of the inclusive European teacher's identikit through the mapping of:

1. Skills, competences and practices based on the "Inclusive Teacher Profile" (EASNIE, 2012)
2. Specific digital skills to promote inclusion
3. Teacher training programs and in particular fundamental lessons to enable them to adapt to the technological needs of an inclusive learning environment
4. Teaching strategies, pedagogical guidelines and innovative teaching methods to promote inclusion in schools, with particular attention to cooperative approaches and technological support for the inclusion of students with disabilities.



Table of Contents

Introduction.....	4
Pedagogical Framework of the Research.....	5
Evidence-Based Teaching Strategies.....	6
Cooperative Group Teaching.....	7
Assistive Technology.....	8
Defining the Areas of Investigation.....	9
Pedagogy and Didactics.....	11
ICT, Digital Competence and New Technologies.....	12
Tools and Target Definition of the Research.....	13
DESK RESEARCH.....	13
Data Collection Criteria.....	13
TARGETED RESEARCH.....	14
Core Value: Supporting all learners.....	16
AREA OF COMPETENCE 1:.....	16
AREA OF COMPETENCE 2:.....	17
AIS Teacher Questionnaire.....	20
Summary of the Teacher Questionnaire Findings.....	20
Part I: Attitudes , knowledge, and skills.....	20
Part II: Teaching strategies/methods & Digital tools.....	29
Summary of Desk Research.....	58
Conclusion.....	66



Introduction

All-Inclusive School (AIS) aims at strengthening the methodological and digital skills of teachers and educators to favor the inclusion of light-intellectual disabled learners (DSM-5), between 12-19 years old, through the creation of innovative and technological outputs to be used by teachers/educators to manage diversity and promote inclusion of disabled learners in class.

The ALL-IN-IDENTIKIT is the first intellectual output of AIS. It is a research analysis for the development of the skills and practices defined in the 'Profile of Inclusive Teachers' (EASNIE, 2012)¹, with focus on digital skills and innovative methodologies.

The research analysis for the development of the inclusive European Teacher's Identikit is done through the mapping of:

- Skills, competences and practices based on the "Inclusive Teacher Profile" (EASNIE, 2012)
- Specific digital skills to promote inclusion
- Teacher training programs and in particular key programs enabling teachers to adapt to the technological needs of an inclusive learning environments
- Teaching strategies, pedagogical guidelines and innovative teaching methods to promote inclusion in schools, with particular attention to cooperative approaches and technological support for the inclusion of students with mild cognitive disabilities

This document is a summary version of the original document Intellectual Output 1. The original document contains detailed analysis concerning the IO. Including a detailed analysis of the two questionnaires that have been developed and used for the sake of data collection: 'Partner Desk Research' and 'Teacher Targeted Research'. This document includes a summary of the findings of the targeted research and a summary of the findings of selected questions from the desk research. This selection serves the purpose of the ALL-IN-IDENTIKIT.

¹ Profile Of Inclusive Teachers (EASNIE, 2012). European Agency for Development in Special Needs Education. www.european-agency.org



Pedagogical Framework of the Research

The pedagogical framework of ALL INCLUSIVE SCHOOL will be based on the ‘ Profile of Inclusive Teachers’ (EASNIE, 2012) and on Evidence-Based Teaching Strategies namely Cooperative Group Teaching and Assistive Technology.

The “Profile of Inclusive Teachers” identify the essential skills, knowledge and understanding, attitudes and values needed by everyone entering the teaching profession. It has been developed as a guide for the design and implementation of Initial Teacher Education (ITE) programs for all teachers. The use of the profile in this project has served its intention as it has been used as a stimulus material for identifying relevant content, planning methods and specifying desired learning outcomes for ITE and practicing teachers and not a script for such programs and target groups.

The profile has been developed around this framework of core values and areas of competence:

- Valuing Learner Diversity – learner difference is considered as a resource and an asset to education.
- **Supporting All Learners – teachers have high expectations for all learners’ achievements.**
- Working with Others – collaboration and teamwork are essential approaches for all teachers.
- Personal Professional Development – teaching is a learning activity and teachers take responsibility for their lifelong learning.

For the purpose of this research and this intellectual output in specific, the core value ‘Supporting All Learners’ and its areas of competence has been our guideline in collecting data from the direct target group of teachers² with a focus on their digital skills and innovative methodologies and cooperative learning approaches that they employ in their classrooms with our indirect target group of learners³.

² Direct target group of teachers: teachers, educators, teaching assistants and staff working with light-intellectual disabled learners (DSM-5).

³ Direct target group of learners: learners with light-intellectual disability (DSM-5) between the age of 12 and 19.



Evidence-Based Teaching Strategies

In most countries, children spend multiple hours in learning places that are defined as schools and classrooms. During this significant period, they interact with their peers, families and educators. As well as a wide range of learning materials and are exposed to various learning strategies.

For these experiences to lead to effective learning it is vital that the physical and psychological environments we create are safe, challenging and educative. It is crucial that they ensure that all children actually learn what is expected of them, that their education contributes to improving their quality of life, that they achieve a balance between independence and interdependence, and that they are prepared to lead full and satisfying lives as citizens and as members of their cultures. In this journey, they have a right to expect that educators who employ the best available, evidence-based teaching strategies guide their education.⁴

These challenges are no less important for those learners who, for several reasons, we consider to have special educational needs and who face significant barriers to their learning and development. These learners special needs range from major to minor, and they reflect physiological or environmental factors. The two strategies that we will define in our pedagogical framework of this research are evidence-based proved teaching strategies that are universally applicable especially to our target group of learners.

⁴ Mitchell, D. (2007). *What really works in special and inclusive education: Using evidence-based teaching strategies*. Routledge.



Cooperative Group Teaching

Cooperative group teaching, sometimes referred to as cooperative learning, involves learners working together in small learning groups, helping each other to carry out individual and group tasks. It is particularly effective strategy for teaching learners with special educational needs, especially in mixed-ability groups. This strategy is cost-effective and if you have large classes, it can be a major strategy for helping learners to learn. Cooperative group teaching is like creating small classes out of big ones and creating many teachers instead of one.⁵

According to professionals in cooperative learning, this strategy has four essential components:

- *Interdependence*: all group members seek to achieve a group goal and help each other's achievement;
- *Individual accountability*: each member of the group is held responsible for his or her own learning, which in turn contributes to the group goal;
- *Cooperation*: the learners discuss, problem-solve and collaborate with each other;
- *Evaluation*: members of the group review and evaluate how they worked together and make changes as needed.⁶

⁵ Idem.

⁶ Johnson, D.W. and Johnson, R.T. (1991). *Learning together and alone (3rd edition)*. Englewood Cliffs, NJ: Allyn and Bacon.



Assistive Technology

An assistive technology (AT) device is defined in US legislation as ‘any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of children with disabilities.’⁷ Despite the perceived benefits of AT, many barriers to its use have been identified. These include: limited availability of some AT devices, often because of the cost; a lack of information about such devices; professionals’ lack of knowledge about AT; and a lack of technical support to ensure sustainability.⁸

The use of AT has been with us only since the 1980s, when the first major developments of computer-assisted instruction began to be used. They are often promoted to schools and educators as tools to assist students with special needs by providing a compensatory value, to remediate learning problems and to promote personal independence. These technologies range from simple spellcheckers to more complex speech recognition systems and educational software.⁹ Many research projects have examined the effectiveness of these assistive technologies. This research will examine what the teachers use as AT in the five partner countries and what really works. This will be the base for developing the rest of the project outputs.

⁷ Individuals with Disabilities Education Act of 1990, 20 USC. 1 401 Definitions, (a) (25).

⁸ Alper, S. and Raharinirina, S. (2006). ‘Assistive technology for individuals with disabilities: A review and synthesis of the literature’. *Journal of Special Education Technology*, 21(2), 47-64.

⁹ Dorit Maor, Jan Currie & Rachel Drewry (2011) The effectiveness of assistive technologies for children with special needs: a review of research-based studies, *European Journal of Special Needs Education*, 26:3, 283-298, DOI: 10.1080/08856257.2011.593821



Defining the Areas of Investigation

Disability and special needs is one of the areas of investigation in this intellectual output. The target group of learners that we are addressing have mild to moderate cognitive disability. To be able to frame our area of investigation clearly, we would like to refer to the International Classification of Functioning (ICF). Specifically, mental retardation disorders range F70-F79.

According to the World Health Organization (WHO), mental retardation is a condition of arrested or incomplete development of the mind, which is especially characterized by impairment of skills manifested during the developmental period, skills which contribute to the overall level of intelligence, i.e. cognitive, language, motor, and social abilities. Retardation can occur with or without any other mental or physical condition. Furthermore and according to the WHO, degrees of mental retardation are conventionally estimated by standardized intelligence tests. These can be supplemented by scales assessing social adaptation in a given environment. These measures provide an approximate indication of the degree of mental retardation. The diagnosis will also depend on the overall assessment of intellectual functioning by a skilled diagnostician.¹⁰ The area of investigation in this research project and for this intellectual output in specific are mild mental retardation and moderate mental retardation. According to the WHO and to the International Classification of Functioning (ICF), the following fourth-character subdivisions are for use with categories F70-F79 to identify the extent of impairment of behaviour:

- .0 - With the statement of no, or minimal, impairment of behaviour
- .1 - Significant impairment of behaviour requiring attention or treatment
- .8 - Other impairments of behaviour
- .9 - Without mention of impairment of behaviour

Our focus areas of investigation is with learners suffering from mild to moderate mental retardation (F70 & F71). Other classifications in this category (F70-F79¹¹) in addition to

¹⁰ <http://apps.who.int/classifications/apps/icd/icd10online2004/fr-icd.htm?gf70.htm+>

¹¹ More information on this classification:

<http://apps.who.int/classifications/apps/icd/icd10online2004/fr-icd.htm?gf70.htm+>



the classification categories of disorders of psychological development (F80-F89¹²) and categories of behavioral and emotional disorders with onset usually occurring in childhood and adolescence (F90-F98¹³) are welcome, but the emphasis is on learners with mild and moderate retardation.

F70 Mild mental retardation: approximate IQ of 50 to 69 (in adults, mental age from 9 to under 12 years). Likely to result in some learning difficulties in school. Many adults will be able to work and maintain good social relationships and contribute to society. This category includes feeble-mindedness and mild mental subnormality.

F71 Moderate mental retardation: approximate IQ range of 35 to 49 (on adults, mental age from 6 to under 9 years). Likely to result in marked developmental delays in childhood but most can learn to develop some degree of independence in self-care and acquire adequate communication and academic skills. Adults will need varying degrees of support to live and work in the community. This includes moderate mental subnormality.

¹² More information on this classification:

<http://apps.who.int/classifications/apps/icd/icd10online2004/fr-icd.htm?gf70.htm+>

¹³ More information on this classification:

<http://apps.who.int/classifications/apps/icd/icd10online2004/fr-icd.htm?gf70.htm+>



Pedagogy and Didactics

In this research, and for this intellectual output, the understanding of these two concepts draws on European educational literature and not on sole English or American literature. 'Pedagogy includes an examination of the curriculum, in both broad and narrow forms, and the underlying systematic aims and objectives of education. It is a broad and inclusive concept that transcends subject boundaries but acknowledges general theories of teaching and learning. Pedagogy includes didactics, which comprise the strategies and warranted approaches to subject teaching and learning, which may vary from one subject to another, but would necessarily include consideration of the sequencing of ideas and the extent to which the sequence is intellectually coherent.¹⁴ Didactics also acknowledge theories of teaching and learning but from the subject-specific perspective. Didactics would include both the day-to-day and the in-the-moment decision making of teachers and the manner in which they are informed. In this intellectual output, we will be examining the different pedagogies that teachers in the partner countries employ in teaching our target group of learners. In addition to that we will be collecting, examining and evaluating the different didactics used by the teachers with our target group of learners.

¹⁴ <https://www.atm.org.uk/write/MediaUploads/Journals/MT204/Non-Member/ATM-MT204-22-22.pdf>



ICT, Digital Competence and New Technologies

According to the Joint Research Center¹⁵ (JRC) of the European Commission's science and knowledge service, digital competence is the ability to keep abreast with the rapid changes in the area of ICT. It comprises the related knowledge and skills that are needed to exploit ICT efficiently for one's own purpose, be it personal or professional. Hence, digital competence can comprise very different knowledge, skills and attitudes depending on each teacher, their needs and their willingness or intrinsic motivation to participate in the information society. Digital competence development is part of lifelong learning and a key competence for all teachers regardless if they practice in mainstream, inclusive, or special education.

Digital competence, ICT, and new technologies are another area of investigation in this research. For this intellectual output, we will be collecting information on how teachers use ICT with their learners, the purposes and their pedagogical use. In addition to investigating their ability to pass knowledge to their learners through new and different technologies.

¹⁵ <https://ec.europa.eu/jrc/en>



Tools and Target Definition of the Research

DESK RESEARCH

Goals	<ul style="list-style-type: none"> - To gather statistical data and information about national policies in relation to inclusive education. - To identify and describe relevant research studies carried out by universities or other institutions (including the 'Inclusive Teacher Profile') - To identify the skills of teachers in inclusive education settings
Tools we will use	One Google form to collect the information

Data Collection Criteria

Statistics and policies in inclusive education	<p>Functioning of the educational systems across the partner countries</p> <ul style="list-style-type: none"> - Official statistics/data - Statistics from national ministries (if it could be necessary, statistics from subnational in case of federal states), institutions and associations. - Legislation and policy, special education acts. - Integration and inclusion of inclusive education in mainstream schools - Policies on equal opportunities in education - Special education resources provided by the ministry of education - Inclusive legislation.
--	--



Relevant research in inclusive education	<ul style="list-style-type: none"> - Relevant research studies carried out by universities or other institutions - Pedagogical approaches that are used across the partner countries - Study materials including the 'Inclusive Teacher's Profile' - Recent literature and research on inclusive education
Professional profiles in inclusive education	<ul style="list-style-type: none"> - Teacher education for inclusive education across the partner countries - Initial teacher training - Content of initial teacher training - Teaching/training methods - Assessment and accreditation - Shortages and needs in mixed classes (technical skills, digital skills, soft skills)

TARGETED RESEARCH

Goals	<p>To map the practices related to the skills identified by the Inclusive Teacher Profile, additional skills, specific digital skills that can be useful to the construction of highly qualified training courses for aspiring teachers/educators and for those wishing to complete their professional training with a view to lifelong learning, with high emphasis on the identification and mapping of digital and cooperative competences of the inclusive teacher.</p> <ol style="list-style-type: none"> 1. Mapping of skills, competencies and practices based on the 'Inclusive Teacher Profile' (EASNIE, 2012). 2. Mapping of specific digital skills to promote inclusion.
-------	--



	<p>3. Mapping of teacher training programs and in particular fundamental lessons to enable them to adapt to the technological needs of an inclusive learning environment.</p> <p>4. Mapping of teaching strategies, pedagogical guidelines and innovative teaching methods to promote inclusion in schools, with particular attention to cooperative approaches and technological support for the inclusion of students with disabilities.</p>
Methodology	Qualitative and quantitative data will be collected from the sample target group of teachers across the five partner countries.
Sample	Forty teachers/educators per partner country (IT, BE, DE, ES, RO). Two hundred teachers in total.
Tools we will use	One Google form to collect the information

Mapping of skills, competences and practices based on the ‘Inclusive Teacher Profile’, specific digital skills to promote inclusion, training programs and teaching strategies (EASNIE, 2012).

The “Profile of Inclusive Teachers” (EASNIE2012) more specifically the competencies related to the attitudes, knowledge, and skills for supporting all learners in inclusive education will be consulted in preparing the data collection tool/s.

<https://www.european-agency.org/sites/default/files/Profile-of-Inclusive-Teachers.pdf>



Core Value: Supporting all learners

Teachers have high expectations for all learners' achievements.

AREA OF COMPETENCE 1:

Promoting the academic, social and emotional learning of all learners

Attitudes and beliefs underpinning this competence

Indicators¹⁶:

- Learning is primarily a social activity;
- Academic, practical, social and emotional learning are equally important for all learners;
- Teachers' expectations are a key determinant of learner success and therefore high expectations for all learners are critical;
- All learners should be active decision-makers in their learning and any assessment processes they are involved in;
- Parents and families are an essential resource for a learner's learning;
- Developing autonomy and self-determination in all learners is essential;
- The learning capacity and potential of each learner has to be discovered and stimulated.

Essential knowledge underpinning this area of competence

Indicators:

- Understanding the value of collaborative working with parents and families;
- Typical and atypical child development patterns and pathways, particularly in relation to social and communication skill development;
- Different models of learning and approaches to learning learners may take.

¹⁶ Indicators: are observable and measurable entity that serves to define a concept in a practical way.



Crucial skills to be developed within this area of competence

Indicators:

- Being an effective verbal and non-verbal communicator who can respond to the varied communication needs of learners, parents and other professionals;
- Supporting the development of learners' communication skills and possibilities;
- Assessing and then developing 'learning to learn skills' in learners;
- Developing independent and autonomous learners;
- Facilitating co-operative learning approaches; implementing positive behavior management approaches that support learner's social development and interactions;
- Facilitating learning situations where learners can 'take risks' and even fail in a safe environment;
- Using assessment for learning approaches that take account of social and emotional as well as academic learning.

AREA OF COMPETENCE 2:

Effective teaching approaches in heterogeneous classes

Attitudes and beliefs underpinning this area of competence

Indicators:

- Effective teachers are teachers of all learners;
- Teachers take responsibility for facilitating the learning of all learners in a class;
- Learners' abilities are not fixed, all learners have the capacity to learn and develop;
- Learning is a process and the goal for all learners is the development of 'learning to learn' skills, not just content/subject knowledge;
- The learning process is essentially the same for all learners – there are very few 'special techniques';



- On some occasions, particular learning difficulties require responses based upon adaptations to the curriculum and teaching approaches.

Essential knowledge and understanding underpinning this area of competence

Indicators:

- Theoretical knowledge on the way learners learn and models of teaching that support the learning process;
- Positive behavior and classroom management approaches;
- Managing the physical and social environment of the classroom to support learning;
- Ways of identifying and then addressing different barriers to learning and the implications of these for teaching approaches;
- The development of basic skills – in particular key competencies – along with associated teaching and assessment approaches;
- Assessment for learning methods focused upon identifying the strengths of a learner;
- Differentiation of curriculum content, learning process and learning materials to include learners and meet diverse needs;
- Personalized learning approaches for all learners that support learners to develop autonomy in their learning;
- The development, implementation and effective review of Individual Education Plans (IEP) or similar individualized learning programs when appropriate.

Crucial skills and abilities to be developed within this area of competence include

Indicators:

- Employing classroom leadership skills that involve systematic approaches to positive classroom management;
- Working with individual learners as well as heterogeneous groups;
- Using the curriculum as a tool for inclusion that supports access to learning;
- Addressing diversity issues in curriculum development processes;
- Differentiating methods, content and outcomes for learning;



- Working with learners and their families to personalize learning and target setting;
- Facilitating cooperative learning where learners help each other in different ways – including peer tutoring - within flexible learner groupings.



AIS Teacher Questionnaire

- To assess the core value Supporting All Learners with its two areas of competence and their indicators.
- To collect teaching strategies, teaching methods and specific digital tools that support the inclusion of learners with mild intellectual disorders.

The questionnaire consisted of 30 questions. Multiple choice, Likert scale, and open-ended questions. The questions have been formulated to cover almost all the indicators mentioned above under the two areas of competence of the core value 'Supporting All Learners' from the "Inclusive Teacher Profile (EASNIE, 2012)".

Summary of the Teacher Questionnaire Findings

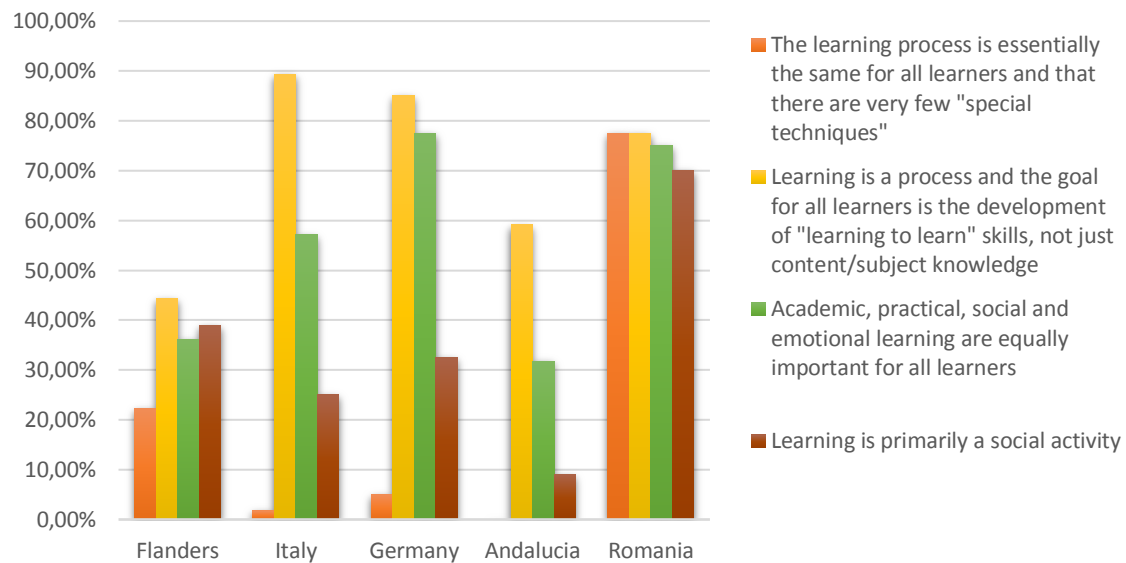
The findings of this questionnaire are categorized into two parts. The first part portrays the attitudes, knowledge, and skills for supporting all learners in inclusive education. The second part is a collection of the teaching strategies and methods, digital tools and technologies that the teachers use to support the inclusion of our target group of learners.

Part I: Attitudes , knowledge, and skills

- The majority of the teachers in the five partner countries believe that learning is a process and the goal for all learners is the development of "learning to learn" skills, not just content/subject knowledge. In addition to that the majority think that academic, practical, social and emotional learning are equally important for all learners. Interesting to find is that all partner countries do not believe that the learning process is essentially the same for all learners and that there are very few "special techniques", except for Romania.

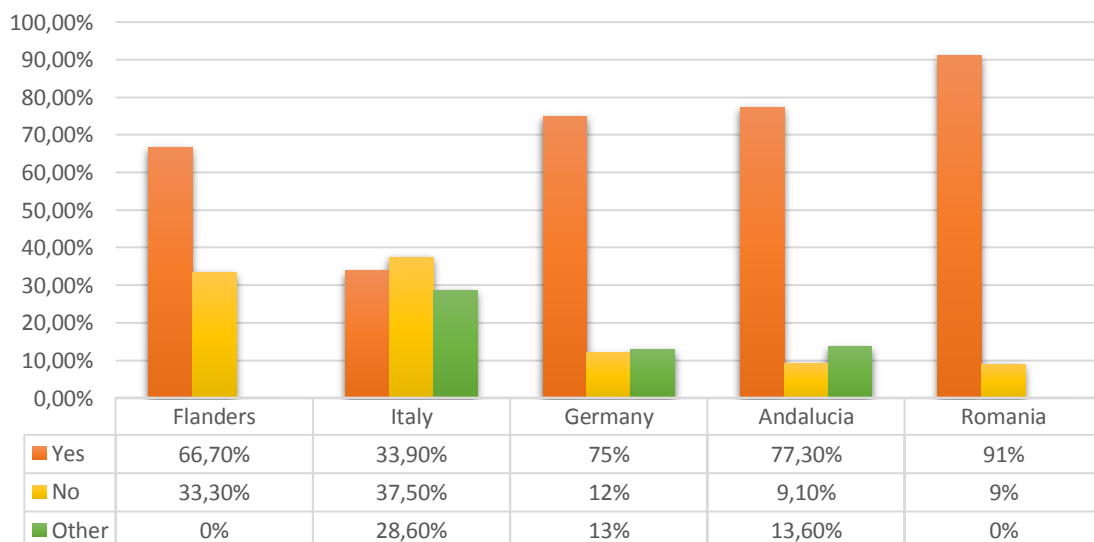


What are your beliefs about learning?
You can chose more than one item



- According to the data provided by the teachers. It appears that most of the teachers from the five partner countries have high expectations from their learners. The teachers from Romania reflect the highest percentage followed by Andaluc a and Germany.

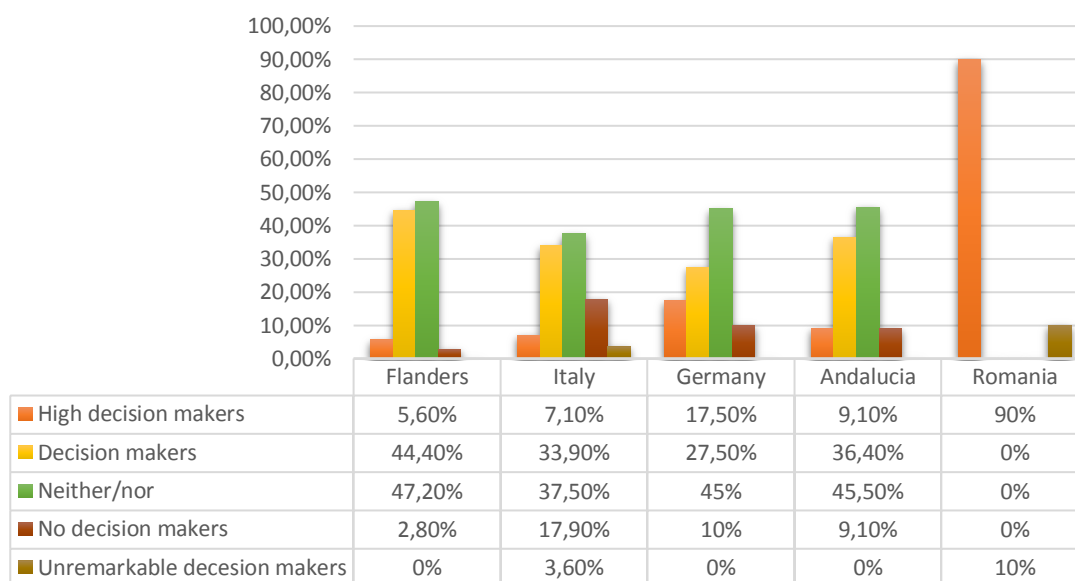
Do you have high expectations for all learners?



- The majority of the teachers believe that their learners are neither high decision-makers nor unremarkable decision-makers, they believe that they can make decisions but it's not their strongest asset. In contrast, for Romania, the majority of the teachers believe that their learners are high decision-makers.

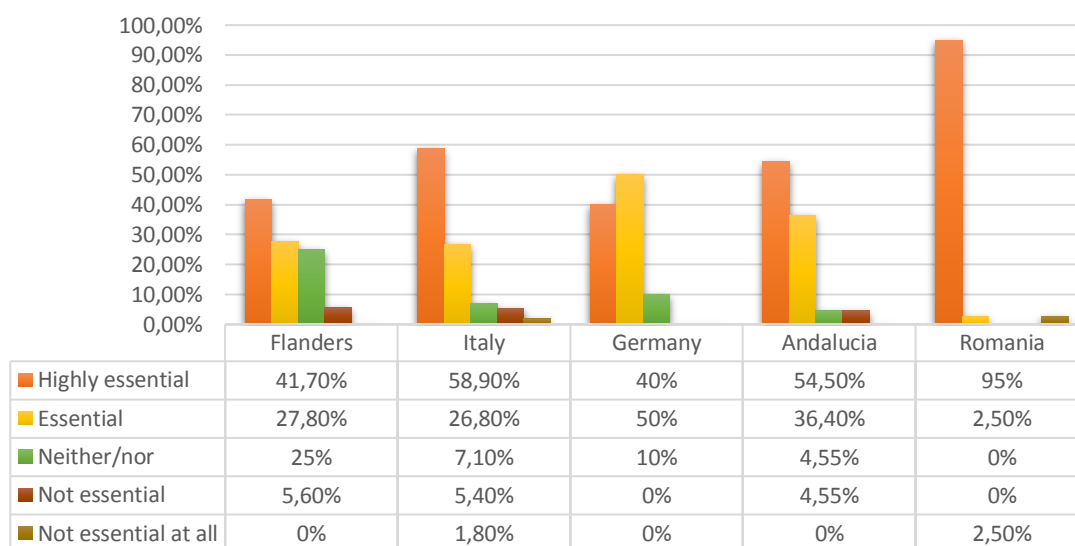


Are your learners active decision-makers in their learning and any assessment processes they are involved in?



- Teachers across the five partner countries consider families highly essential and essential for the learner's learning. A minority of teachers across two partner countries namely Italy and Romania, believe that the families are not essential at all.

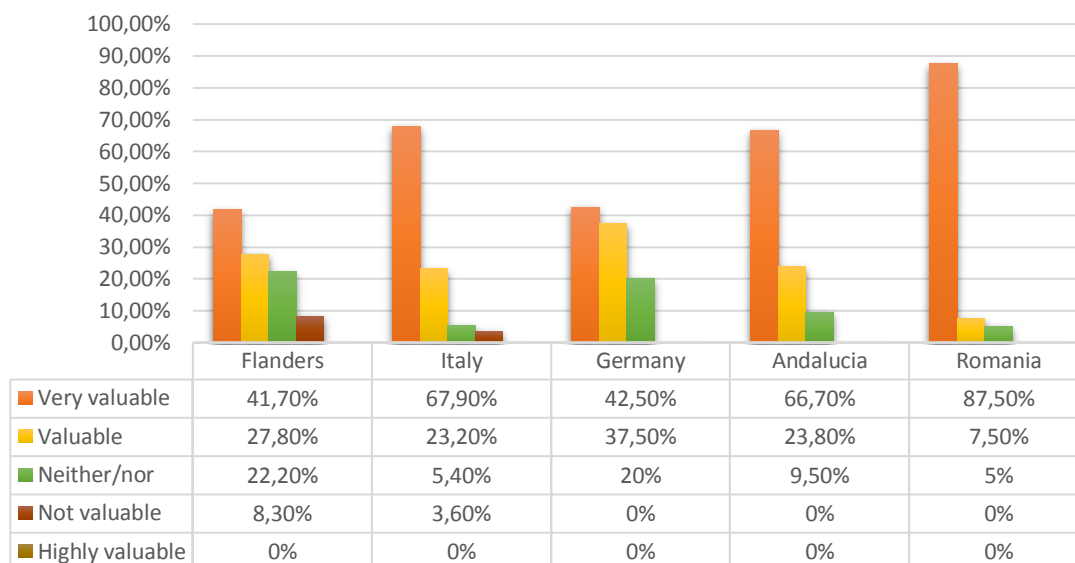
Do you consider parents and families as an essential resource for a learner's learning?



- The majority of the teachers across the five partner countries value the importance of working together with parents and families of learners with light intellectual disability. A minority of teachers in Flanders and Italy do not put much emphasis on this issue.

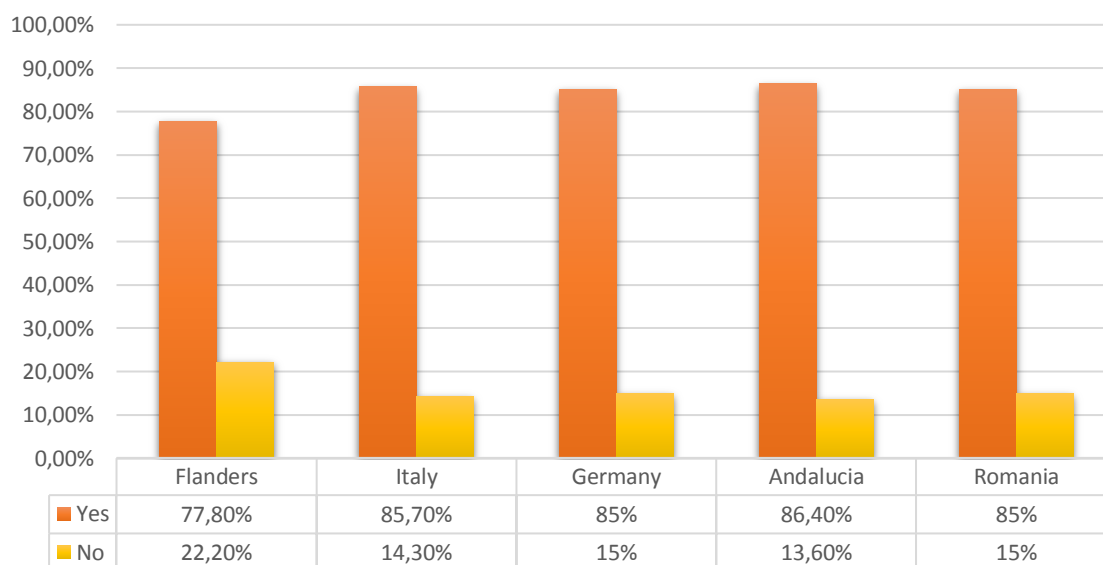


Do you consider it valuable to work with parents and families of learners with light intellectual disability?



- Most of the teachers from the five partner countries who took part in this questionnaire use cooperative learning approaches with their pupils within flexible learning groups.

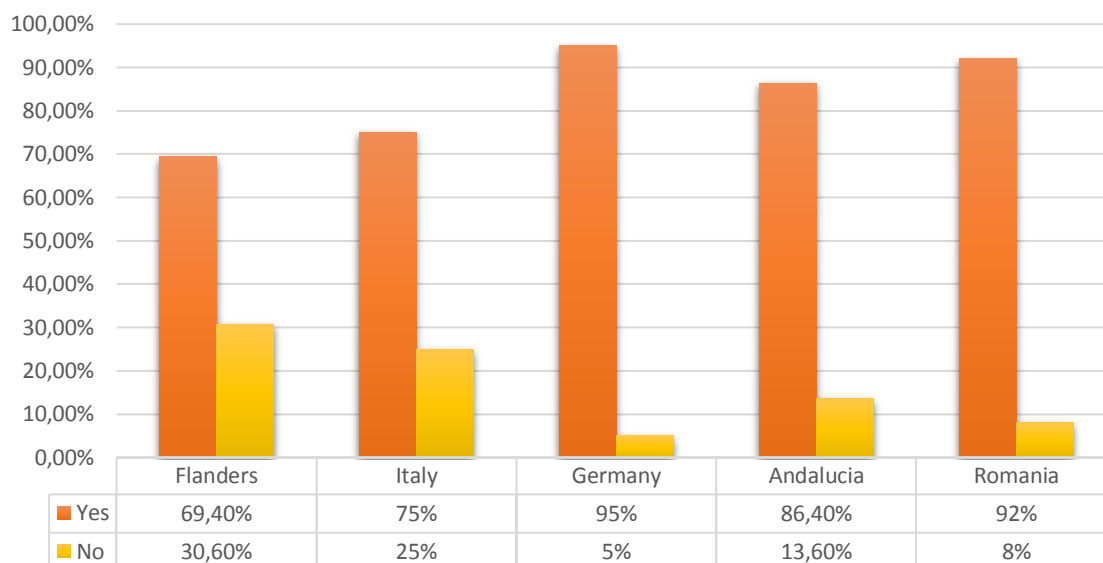
Do you use cooperative learning where learners help each other in different ways, including peer tutoring, within flexible learner groupings?



- The majority of the teachers across the five partner countries do implement positive behavior management approaches with their pupils.

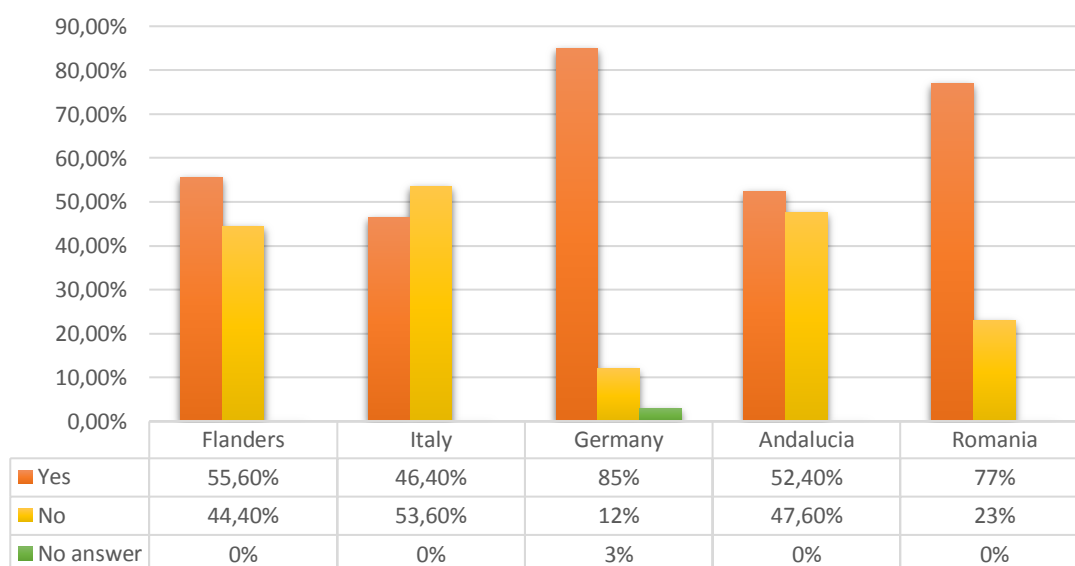


Do you implement positive behavior management approaches that support learner's social development and interactions?



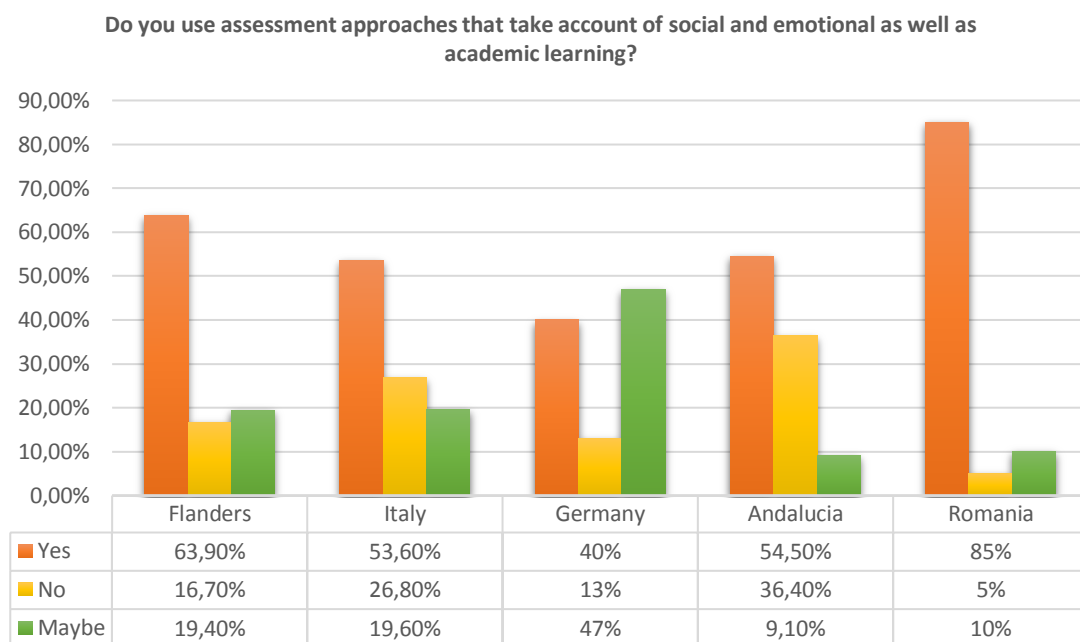
- Most of the teachers from the five partner countries employ classroom leadership skills and teaching methods that demonstrate positive behavior and classroom management. The percentages among some countries vary immensely. For example the % of teachers who do employ this in Germany are a little bit less than the double of those in Italy. We notice that the teachers in Romania and Germany employ such approaches more than the other teachers from the remaining partner countries.

Do you employ classroom leadership skills or other teaching methods that demonstrate positive behavior and classroom management approach?





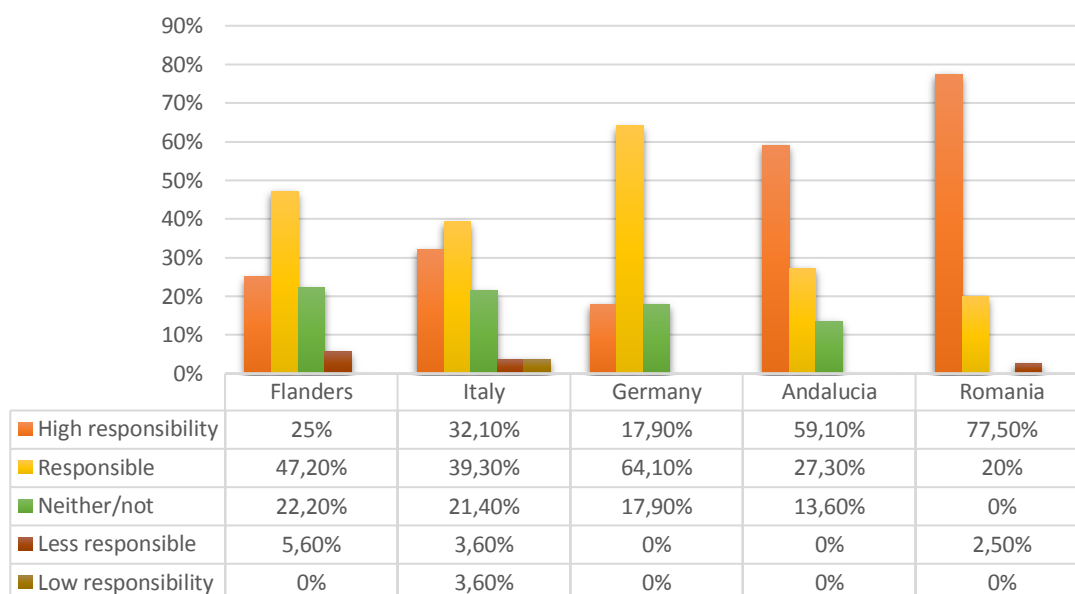
- The majority of teachers do use assessment approaches that take account of social and emotional as well as academic learning. In the case of Germany less than half of the teachers use such approaches and almost the half are not sure if they do use such approaches. For the case of Flanders, Italy and Andalucía, the % of the teachers using such approaches can be comparable. In the case of Romania, the teachers have the highest % of using such approaches.



- Most of the teachers across the five partner countries do take responsibility and some high responsibility for facilitating the learning of learners in class. Interesting in the findings is that Romania has the highest percentage (77.5%) of teachers who take high responsibility and Italy has the highest percentage (3.6%) of teachers who take low responsibility for facilitating learning to all learners in class.

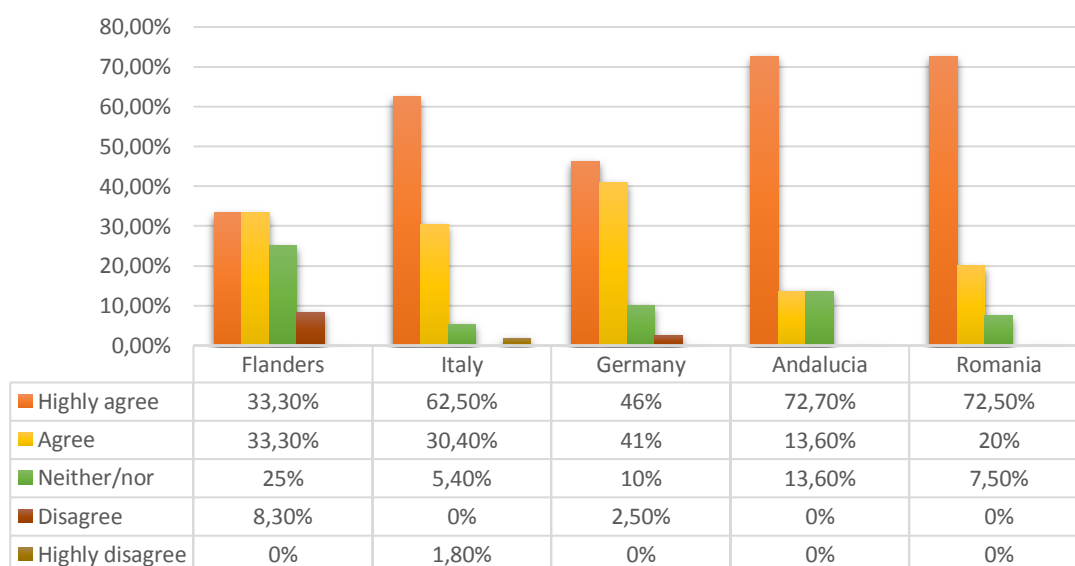


Do you take responsibility for facilitating the learning of all learners in class?



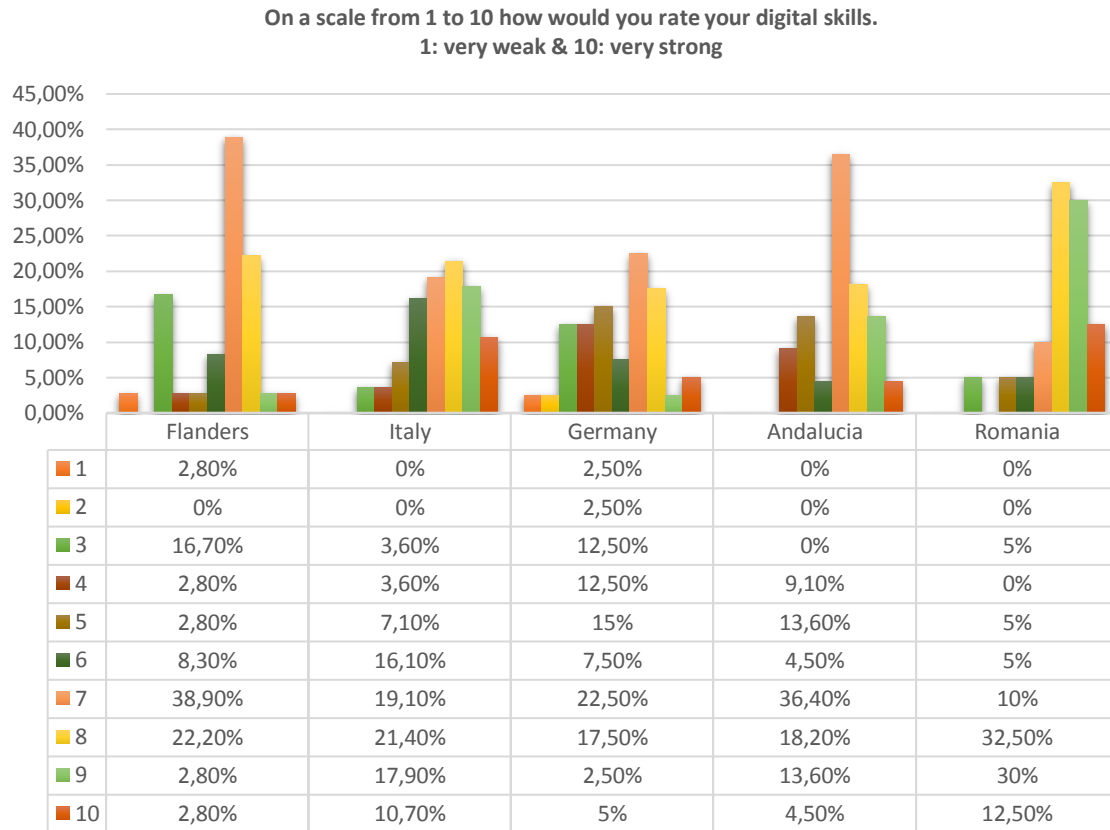
- Most of the teachers across the five partner countries do highly agree or agree that on some occasions particular learning difficulties require responses based upon adaptations to the curriculum and teaching approaches. Romania and Spain have the highest percentage of teachers that do agree and Italy is the only country who has 1.8% of the teachers who highly disagreeing on this.

On some occasions particular learning difficulties require responses based upon adaptations to the curriculum and teaching approaches.





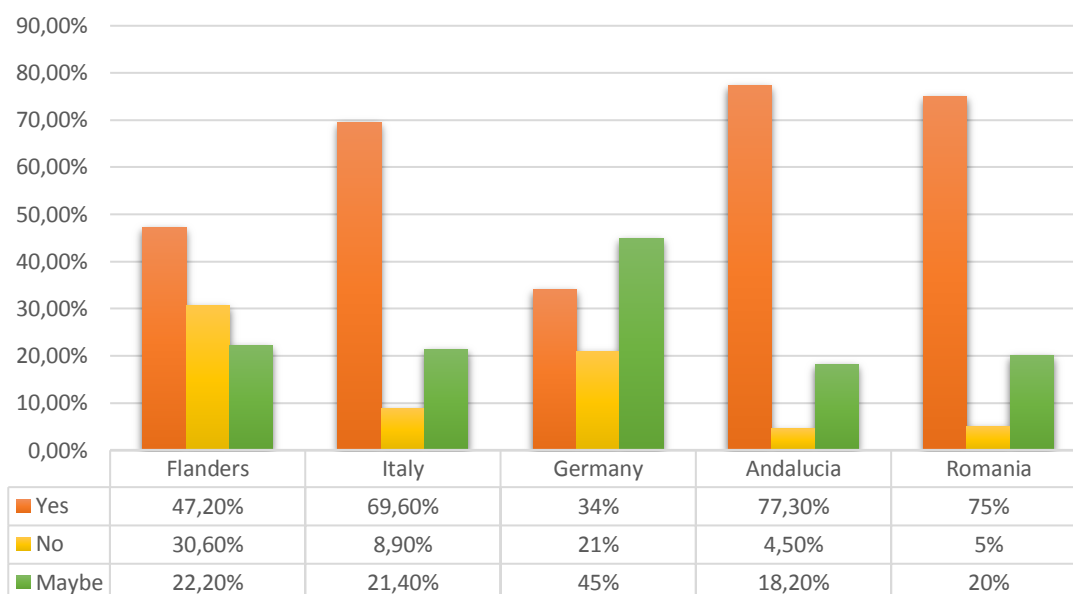
- We notice that the teachers who took part in this questionnaire across the five partner countries have digital skills that are slightly on the strong side. A minority of teachers in Flanders and Germany appear to have very weak digital skills.



- In the five partner countries, it appeared that the curriculum does support the use of digital tools in schools. With teachers from Andalusia and Romania having the highest percentages of this followed by Italy. Flanders has the highest percentage of teachers who consider the curriculum not supporting, 30.6% of teachers in Flanders believe that the curriculum does not support the use of digital tools. In addition to that, Germany has the highest percentage of teachers (45%) who are not sure if the curriculum in their country supports the use of digital tools.

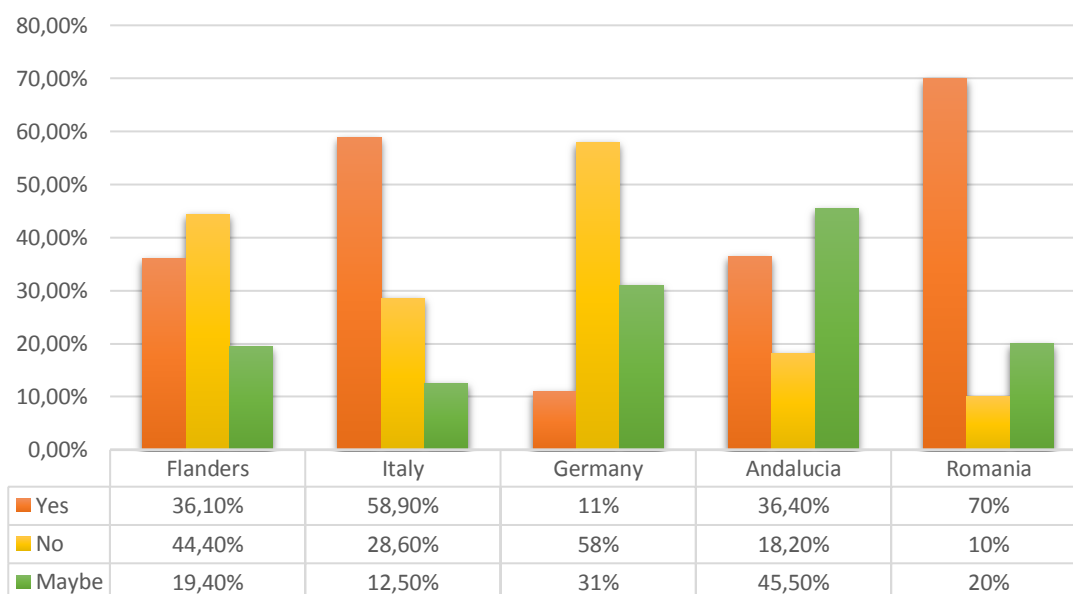


Does your curriculum support the use of digital tools?



- Across the five partner countries, teachers from Romania and Italy employ the most ICT and adaptive technology to support flexible approaches to learning. Teachers from Germany employ this the least with 58%. Teachers from Andalusia are not aware if they do employ or not this technology to support learning. Teachers in Flanders have the highest percentage of 44.40% of not employing this technology to support flexible approaches to learning.

Do you employ ICT and adaptive technology to support flexible approaches to learning?





Part II: Teaching strategies/methods & Digital tools

Almost all the teachers from the five partner countries do assess their learners before, during, and after the lessons in order to detect and provide support where needed depending on their different learning styles.

The answers of the teachers who do assess and help develop the 'learning to learn skills' of their learners could be categorized under several areas. These are summarized in the table below.

Some partners shared one or more assessment method/s or learning to learn skill/s.

Few interesting findings:

- 'Individual work' was mentioned by all partners except for Romania.
- 'Providing support' was mentioned by all partners except for Andalucía.
- 'Providing feedback' was mentioned by all partners except for Andalucía and Romania.
- 'Self-evaluation' was mentioned by all partners except for Germany and Romania.
- 'Providing tips' was mentioned by all partners except for Italy and Romania.
- 'Providing tools' was mentioned by all partners except for Flanders and Romania.

	Flanders	Italy	Germany	Andalucia	Romania
Self-articulation	✓				
Providing examples	✓				
Independent work	✓	✓	✓	✓	
Self-evaluation	✓	✓		✓	
Providing support	✓	✓	✓		✓
Providing feedback	✓	✓	✓		
Providing tips	✓		✓	✓	
Giving time	✓				
Structured tasks		✓	✓		
Group learning / group work		✓	✓		
Metacognition		✓			✓
Assessment rubrics		✓			
Games		✓			✓
Develop reasoning		✓			
Project based learning		✓	✓		✓



Providing tools		✓	✓	✓	
Individual evaluation			✓	✓	
Proposing challenges				✓	
Reflection			✓		
Process evaluation			✓		
Observation				✓	
Rubrics				✓	
Different learning styles					✓

- It appeared that most of the teachers across the five partner countries work on developing the autonomy and self-determination of their learners. Below you can find a summary of how the teachers do this per country. In addition to the digital tools that they use in order to assist in achieving this.

Flanders
<ul style="list-style-type: none"> ○ Evaluation and self-evaluation/self-assessment ○ Peer and group feedback ○ Preparatory tasks ○ Long-term planning tasks ○ Active work forms ○ Motivating learners to be in charge of their own learning ○ Providing support and guidance ○ Independent processing of the learning materials ○ Universal design for learning ○ Challenge the learners ○ Link the materials with real life ○ Self-experience ○ Different solution strategies ○ Depart from the learners environment and interests ○ Class conversations in groups and or in pairs
Digital Tools
<ul style="list-style-type: none"> ○ Smartschool (digital school platform Flanders)



- **Online exercises**
- **Digital portfolio**
- **Computer/tablet/calculator**
- **Visual materials**
- **Music**

Italy

- **Motivating learners to be in charge of their own learning**
- **Link materials with real life**
- **Independent processing of the learning materials**
- **Depart from the learners environment and interests**
- **Challenge the learners**
- **Group work**
- **Personalized teaching**
- **Providing support and guidance**
- **Active work forms**
- **Long-term planning tasks**
- **Providing feedback**

Digital Tools

- **Tablets**
- **Voice recorders**
- **Digital whiteboard**
- **PC**
- **Applications (Reverso , Kahoot , WhatsApp)**
- **Interactive multimedia**
- **Voice typing**
- **Taking images**
- **Microsoft office**
- **Super Map**
- **Vocal synthesizer**



- Voice to video scripture translator
- Expanded keyboard
- Reading and writing programs
- You Tube
- Compensative tools
- EBook
- Online platforms
- Virtual learning environments (VLE)
- Drive e Classroom

Germany

- Self-reflection
- Individual work
- Responsibility delegation
- Planning/leaning plans
- Differentiated exercises
- Free topic choice/free tasks
- Feedback system
- Evaluation
- Learning by teaching
- Learning democracy
- Individual learning materials

Digital Tools

- Applications
- Worldwide webs
- Learning platforms
- Softwares
- Laptops - PC
- Smart TV
- E-portfolio
- Moodle courses



- **Programs**

Andalucía

- Collaborative cooperative project work
- Providing autonomy and decision making powers
- Working in groups
- Empowering and stimulating curiosity
- Providing clear instructions
- Providing security
- Giving praise
- Providing time to learn

Digital Tools

- Learning platforms
- Digital techniques
- Kahoot
- YouTube
- Specialized programs
- Computers
- Digital screens

Romania

- Creating opportunities for success
- Skills identification
- Appropriate tasks
- Adopting several methods
- Encourage communication skills
- Train their problem solving skills
- Encouraging attitude towards learners and promoting empathy



- **Promoting tolerance and non-discriminatory conduct**

Digital Tools

- **Boards**
- **Interactive screens**
- **Video projectors**

- Concerning the digital tools that the teachers use in order to develop the learners autonomy and self-determination are varied across the partner countries. Some can be categorized under one group. For the sake of giving a transparent view towards the answers, the tools have been listed as they have been mentioned by the teachers and not compiled into categories. We can conclude that computers and online platforms are widely used across most of the partner countries. The variations among countries in the listing has to do with the level of funding that the schools get.

	Flanders	Italy	Germany	Andalucia	Romania
Digital school platform	✓				
Online exercises	✓				
Digital portfolio	✓		✓		
Computer	✓	✓	✓	✓	
Tablet	✓	✓			
Calculator	✓				
Visual materials	✓	✓			
Music	✓				
Voice recorders		✓			
Digital whiteboard		✓	✓		✓
Applications		✓		✓	
Interactive multimedia		✓			
Voice typing		✓			
Taking images		✓			
Microsoft office		✓			
Super Map		✓			
Vocal synthesizer		✓			
Voice to video scripture translator		✓			
Expanded keyboard		✓			
Reading and writing programs		✓			



Youtube		✓		✓	
Compensative tools		✓			
Ebooks		✓			
Online platforms		✓		✓	
Drive e classroom		✓			
Worldwide web					
Softwares					
Smart TV					
Moodle courses					
Programs				✓	
Digital techniques				✓	
Digital screens				✓	✓
Video projector					✓

- It appears that most of the teachers across the five partner countries do work on stimulating the learning capacity and potential of their learners. Below you can find a summary of how teachers do this per country. In addition to the digital tools that they use in order to assist in achieving this.

Flanders
<ul style="list-style-type: none"> ○ Attention to the learning styles of the learners ○ Through reflection (personal and teacher assisted) ○ Self-evaluation ○ Project work ○ Group work ○ Class discussions ○ Growth oriented feedback ○ Positive feedback ○ Differentiation ○ Sharing/rewarding successful experiences ○ Challenging pupils ○ Increasing pupil motivation ○ Self-study/research ○ Flipped learning



- **Focus on functional skills**

Digital Tools

- **E-mail**
- **Web links**
- **Online platforms**
- **Movies**
- **Educational websites**
- **Digital school platform**

Italy

- **Differentiation**
- **Peer learning**
- **Stimulate pupil creativity**
- **Class discussion (debate)**
- **Group work**
- **Increase pupil motivation**
- **Positive feedback**
- **Cooperative learning**
- **Flipped classroom**
- **Reflection (personal & teacher assisted)**
- **Attention to learning styles of the learners**
- **Challenging the pupils**

Digital Tools

- **Digital whiteboard**
- **PowerPoint**
- **Special softwares**
- **PC**
- **Applications**



- **Word editor**
- **Online exercises**
- **Microsoft Office**
- **Prezi**
- **AraWord (pictogram word processor)**
- **Videos**
- **Google Classroom**
- **eTwinning platform**
- **Whatsapp.**

Germany

- **Encouragement**
- **Motivating**
- **Visibility of performance and learning development**
- **Differentiation**
- **Provocative questions**
- **Learning agreements**
- **Self-efficacy experiences**
- **Individual learning plans**
- **Cooperative learning**
- **Positive personal relationships**
- **Interesting (Playful) tasks**

Digital Tools



- **Smartphones**
- **The web**
- **IPAD**
- **Films**
- **Applications**
- **Educational programs**

Andalucía

- **Posing realistic problems/situations**
- **Working with different fields**
- **Evaluating the needs of the learners**
- **Tailoring tasks according to learner interest**
- **Learners conducting self-evaluation**
- **Providing positive reinforcement**
- **Providing challenges**
- **Using different teaching methodologies**
- **Through games**

Digital Tools

- **Digital games**
- **ICT resources**
- **New technologies**

Romania

- **Encouragement**
- **Project work**
- **Group work**
- **Active participative methods**
- **Varied assessment methods**



- **Differentiation**
- **Encouraging autonomy**
- **Challenging pupils**

Digital Tools

No specific digital tools have been mentioned by the teachers.

- Concerning the digital tools that the teachers use in order to stimulate the learning capacity and potential of their learners across the partner countries. Some can be categorized under one group. For the sake of giving a transparent view towards the answers, the tools have been listed as they have been mentioned by the teachers and not compiled into categories. We can conclude that movies/films, web links, and applications are widely used across most of the partner countries except for Romania. The variation among countries in the listing has to do with the level of funding that the schools get.

	Flanders	Italy	Germany	Andalucia	Romania
e-mail	✓				
Weblinks	✓		✓		
Online platforms	✓				
Movies	✓	✓	✓		
Educational websites	✓				
School online platform	✓				
Digital whiteboard		✓			
PPT		✓			
Special softwares		✓			
PC		✓			
Applications		✓	✓		
Word editor		✓			
Online exercises		✓			
Microsoft office		✓			
Prezi		✓			
Araword		✓			
Google classroom		✓			



eTwinning platform		✓			
WhatsApp		✓			
Smartphones			✓		
iPads			✓		
Educational programs			✓		
Digital games				✓	
ICT resources				✓	
New technologies				✓	

- Almost all of the teachers across the five partner countries use personalized learning approaches to help develop the autonomy in the learning of their learners. These approaches belong to differentiated instruction strategies.

Differentiated Instruction Strategies

Teachers that use differentiated instruction tailor their teaching approach to match their learners' learning styles. All learners have the same learning goal. But the teaching approach varies depending on how learners prefer to learn. Instead of using one uniform approach, a teacher uses a variety of methods to teach. There are three areas or levels where the teachers can differentiate instruction:

- Content: figuring out what the learners needs to learn and which resources will help them do so;
- Process: activities that help learners make sense of what they learn;
- Product: a way for learners to show what they know.

Several differentiated instruction strategies were mentioned by the teachers.

	Flanders	Italy	Germany	Andalucia	Romania
Flexible pace learning	✓	✓	✓	✓	✓
Colaborative learning	✓	✓		✓	✓
Progressive tasks	✓	✓			
Digital resources	✓	✓	✓	✓	
Verbal support	✓	✓	✓		
Variables outcomes	✓	✓	✓		✓
Ongoing assestment	✓	✓	✓		
Reflection and goal setting	✓	✓	✓		✓



Flipped classroom	✓	✓			
Learning diary			✓		

Teachers across the five partner countries use the same differentiated instruction strategies. The most evident strategy was ‘flexible pace learning’, it was mentioned across the five partner countries. Furthermore, ‘collaborative learning’, ‘digital resources’, ‘variable outcomes’, and ‘reflection and goal setting’ were mentioned by most of the partners.

For the sake of clarity, each strategy will be explained below briefly:

1. **Flexible-pace learning:** Traditionally, tasks are completed in a set amount of time, which normally accommodates the slower-paced learners. This can mean faster learners are held up by the pace of their peers, and slower workers feel rushed and incapable of learning at the necessary pace. A flexible approach to time-based tasks, however, faster learners are given the facility to complete extension tasks, and it gives other pupils an opportunity to complete their exercise at a more comfortable speed.
2. **Collaborative learning:** Facilitating group work is excellent for empowering shy learners to participate more in class. Forming mixed ability groups of learners gives high achievers a platform to vocalize their ideas, and lower ability learners a way of collaborating with and learning from their peers. Allocating roles to each member of the group can also help learners organize themselves according to their different skills and capabilities. This gives less able learners a way to add value and generate more confidence.
3. **Progressive tasks:** It is possible for teachers to set separate work or exercises to different learners based on their abilities. However, this approach can pose a few problems. Not only does it highlight learner ability more publically with potentially negative social implications, it also requires considerably more administrative work for the teacher. A progressive worksheet, however, that gets more complex as the learner makes his or her way through is a more sensitive alternative. Allowing learners with a slower pace of learning to work



at their own speed, it also gives a vehicle for more academically able learners to progress to the more challenging questions more quickly.

4. **Digital resources:** By using interactive tools and digital applications, mixed-ability classes get the opportunity to approach a topic or subject from different angles. In some cases, the use of digital resources can also highlight a skill or passion in learners with less academic ability, while others might work more effectively with non-traditional resources and mediums. This method of differentiation allows different materials, platforms and tools to be used to bring about the same learning outcome, and give learners confidence in their digital skills.
5. **Verbal support:** Verbal dialogue is central to this method of differentiation. Teachers can identify different learning abilities and adapt their vocal explanations and support to different academic levels. Using targeted questioning can produce different responses in learners of different learning profiles. This technique relies on teacher-pupil interaction, and an ability in the educator to engage learners in both simple and complex dialogue according to their learning needs.
6. **Variable outcomes:** Rather than setting a task with a single outcome or 'right' answer, taking a more interpretive approach to an exercise gives learners the flexibility to arrive at a more personalized result. Learners of different abilities will arrive at outcomes that match their level of understanding and learning. If clear direction and a set of rules are formalized prior to setting the task, the risk of lower ability learners falling too low can be avoided.
7. **Ongoing assessment:** Regular assessment and feedback, allows teachers to adapt their teaching methods according to their various learners' needs and learning conditions. Assessment currently takes place both throughout the year and at the end, and is scope to entirely rethink the end of year reporting process. With an interactive front-of-class display like Kahoot¹⁷, teachers can perform anonymous or open polls, end-of-class assessments and pop quizzes.

¹⁷ Kahoot is a game-based learning platform, free for teachers. For more information: <https://kahoot.com/schools/>



Educators, therefore, can be informed in the moment about levels of understanding, interpretation and learning. This flexible method allows for all learning profiles to be catered for at the time it is most valuable, rather than retrospectively.

8. **Reflection and goal setting:** Have learners reflect on important lessons and set goals for further learning at pre-determined points of the year. During these points, ask learners to write about their favorite topics, as well as the most interesting concepts and information they've learned. They should also identify skills to improve and topics to explore. Based on the results, you can target lessons to help meet these goals. For example, if the bulk of learners discuss a certain aspect of the science curriculum, you can design more activities around it.
9. **Flipped classroom:** Is a pedagogical approach in which the conventional notion of classroom-based learning is inverted, so that the learners are introduced to the learning material before class, with classroom time then being used to deepen understanding through discussion with peers and problem-solving activities facilitated by the teachers.
10. **Learning Diary:** Is a tool for evaluating and implementing personal learning. The purpose is to keep record and reflect on what has been learned through class. You are expected to relate lectures to your own prior experiences, related readings, and knowledge.

It appears that most of the teachers across the five partner countries do support the development of their learners' communication skills. Below you can find a summary of how teachers do this per country. In addition to the digital tools that they use in order to assist in achieving this.

Flanders
<ul style="list-style-type: none"> ○ Group work ○ Class discussions ○ Peer tutoring



- Practicing a language
- Practicing in real life situations
- Class presentations
- Self-articulation

Digital Tools

- School digital platform Flanders
- E-mail
- Chat
- Forums
- Video
- Search engines
- Digital news resources

Italy

- Simulation interviews
- Real-life situations simulations
- Dialogue
- Debates
- Presentations
- Reading maps/schemes
- Meta-reflection
- Circle time
- Role-playing
- Theatre
- Peaceful environment

Digital Tools

- PC
- Tablets
- Digital whiteboard



- Shared folders (audio & non-audio)
- Free applications (Whatsapp, voice Tone, Prosody, Leggixme, SymWriter)
- Speech notes
- PowerPoint
- Prezi
- Videos
- Multi-media presentation

Germany

- Group work
- Class discussions
- Practicing a language
- Self-articulation
- Simulation of real life situations
- Dialogue
- Presentations
- Role-play
- Communication rules
- Feedback
- Interactive settings

Digital Tools

- Speech aid
- Microphones
- Digital media
- Headsets
- E-mail
- PowerPoint



Andalucía
<ul style="list-style-type: none">○ Dialogue○ Debates○ Presentations○ Group work○ Practicing a language○ Self-articulation○ Scaffolding techniques○ Visual materials
Digital Tools
<ul style="list-style-type: none">○ Video recording○ Educational applications (iDoceo)

Romania
<ul style="list-style-type: none">○ Role play○ Group work/activities○ Verbal and non-verbal communication○ Collective creative exercises○ Discussions○ Drawing○ Pair work for active listening○ Portfolio & projects
Digital Tools
<ul style="list-style-type: none">○ Educational softwares○ Other educational digital tools



- Teachers across the five partner countries use similar methods to support their learners' communication skills. we can deduce that: group work, presentations, class discussions, practicing a language, simulating real-life situations, self-articulation, role-play, and dialogue are among the top methods used by most of the teachers across the five partner countries. For a detailed view, check the table below.

	Flanders	Italy	Germany	Andalucia	Romania
Group work	✓		✓	✓	✓
Class discussion	✓		✓		✓
Peer tutoring	✓				
Practicing a language	✓	✓	✓	✓	
Practicing in real life / real life simulation	✓	✓	✓		
Presentations	✓		✓	✓	
self-articulation	✓	✓	✓	✓	
Role play			✓		✓
Verbal & non-verbal communication					✓
Collective creative exercises					✓
Drawing					✓
Pair work					✓
Portfolio & projects					✓
Debate		✓		✓	
Dialogue		✓	✓	✓	
Scaffolding				✓	
Visual materials				✓	
Communication rules			✓		
Feedback			✓		
Interactive settings			✓		
Simulation interviews		✓			
Reading maps / schemes		✓			
Meta-reflection		✓			
Circle time		✓			
Theatre		✓			
Peaceful environments		✓			

- Most of the teachers promote cooperative learning approaches. A comparison across the five partner countries showed that teachers use similar methods. For example: 'group work' is used by teachers from all five partner countries.



Furthermore, 'project work', 'assigning tasks & roles', 'mixed ability pupils', 'digital tools', 'teacher as moderator' have been mentioned by most partners.

For a detailed view, see the table below.

	Flanders	Italy	Germany	Andalucia	Romania
Group work	✓	✓	✓	✓	✓
Project work	✓	✓	✓	✓	
Assigned tasks & roles	✓		✓	✓	
Mixed ability pupils	✓	✓	✓		✓
Team sports	✓			✓	
Digital tools	✓	✓	✓	✓	
Flipped classroom		✓			
Theatre & cinema		✓			
Role play		✓			
Teacher as modetator		✓		✓	✓
Team presentations		✓		✓	
Cooperating with other teachers		✓			
eTwinning platform		✓			
Problem solving activities		✓			
Workshops		✓			
Peer tutoring		✓	✓		
Provide space			✓		✓
Games				✓	
Kagan approach				✓	

- Most of the teachers from the five partner countries use cooperative learning approaches with their pupils within flexible learning groups. Some examples have been provide by the teachers. See the table below. We notice that teachers use similar cooperative learning approaches.

	Flanders	Italy	Germany	Andalucia	Romania
Peer assestment	✓		✓	✓	
Peer tutoring & coachign	✓	✓	✓	✓	✓
Group work	✓	✓	✓	✓	✓
Project work	✓	✓	✓	✓	✓
Mind maps	✓				
Varied tasks in one assignment	✓	✓		✓	
Practical activities		✓	✓		
Assigning leaders		✓			
Debates / dialogues		✓	✓		
Peer revision			✓		



Voluntary work					✓
----------------	--	--	--	--	---

- The majority of the teachers across the five partner countries do implement positive behavior management approaches with their pupils. Examples of such approaches provided by the teachers are summarized below in table.

From the teacher examples, we notice that many teachers use similar approaches with their pupils. The most prominent approaches are: ‘reflection moments’, providing a ‘positive class atmosphere’, ‘encouragement’, setting ‘class agreements and rules’, working with a ‘reward system’, and providing and using several ‘communication techniques’.

	Flanders	Italy	Germany	Andalucia	Romania
Reflection moments	✓		✓	✓	✓
Positive classroom atmosphere	✓	✓		✓	✓
Encouragement	✓	✓	✓	✓	
Feedback	✓	✓	✓		
Class agreements / Rules	✓		✓	✓	✓
Reward system	✓		✓	✓	✓
Artistic techniques		✓			
Communication techniques		✓	✓		✓
Posing questions		✓			
Providing support		✓			
Graphic organizer		✓			
Team building activities		✓			
Development therapy / Development pedagogy			✓		
Extracurricular activities					✓

- Most of the teachers in the five partner countries employ classroom leadership skills and teaching methods that demonstrate positive behavior and classroom management. Examples provided by the teachers are summarized below.

From the teacher examples, we notice that sharing ‘equal leadership with pupils’ is a strong teaching method for positive behavior and classroom management across all five



countries. Furthermore, allowing for 'equal relationship with pupils', providing 'positive reinforcement' and 'equal approach to all pupils' are strong methods that are used by many teachers across the partner countries.

	Flanders	Italy	Germany	Andalucia	Romania
Classroom management	✓	✓	✓	✓	
Reduce incentives	✓				
Clarify social situations	✓				
Conflic resolution	✓	✓			
Sufficient authority	✓	✓	✓		
Equal approach to all pupils	✓	✓	✓	✓	
Equal leadership with pupils	✓	✓	✓	✓	✓
Equal relationship with pupils	✓		✓	✓	✓
Positive reinforcement		✓	✓	✓	✓
Providing opportunities					✓
Stimulating mutual learning					✓

- The majority of the teachers do use assessment approaches that take account of social and emotional as well as academic learning. Examples provided by the teachers on such approaches can be found below. The most prominent approaches among the teachers are: 'reflection moments', the use of different assessment methods especially 'verbal assessment', and providing 'feedback moments'.

	Flanders	Italy	Germany	Andalucia	Romania
Reflection moments	✓		✓		✓
Verbal assessment	✓		✓		✓
Dialogue	✓				
Feedback movements	✓		✓		✓
Project work	✓				✓
Assessment of the process	✓		✓		✓
Rubrics		✓		✓	
Transversal indicators		✓			
Personalized assessment forms		✓	✓		
Public speaking skills		✓			✓
Activities		✓			
Assessment charts		✓		✓	
Assessment grids		✓			
Self assessment			✓		✓



Transparency			✓		
Academic evaluation			✓		✓
Transversal skills					✓

- Almost all teachers did not elaborate on the teaching methods they chose to share. For further explanation about the methods, please check the individual country reports. Romania was the only partner of which some teachers have provided an explanation concerning two methods. You can refer to them in the individual partner data analysis report. Below you can find a summary of the methods mentioned by the teachers. Many teachers across the partner countries use the same methods with their learners. For example: methods related to 'inclusive education', 'peer tutoring', 'cooperative group teaching', the use of 'assistive technologies', and the use of 'formative assessment and feedback'.

	Flanders	Italy	Germany	Andalucia	Romania
Inclusive education	✓	✓	✓	✓	
Quality of the indoor physical environment	✓				
Peer tutoring & peer influences	✓	✓	✓	✓	
Cooperative group teaching	✓	✓	✓	✓	
Assistive technology	✓	✓		✓	
Self-regulated learning	✓		✓		
Review and practice	✓		✓		
Direct instruction	✓				
Functional behavioral assessment	✓				
Universal design for learning	✓	✓			
Formative assessment & feedback	✓	✓	✓		
Co-teaching	✓		✓		
The Mosaic					✓
Thinking hats					✓
Tour of the gallery					✓
I know, I want to know, I have learned					✓
GLC-think, work in pairs and communicate					✓
Method 4 corners					✓
The cube					✓
The clusters					✓

- Examples on ICT and adaptive technology that the teachers use in their classes to support flexible approaches to learning can be found below.



Flanders

- Presentations (PPT – Prezi)
- Creating videos
- IPad
- Mobile phones
- Digital learning platforms
- Web quest
- Spelling checker
- Wikipedia
- Kahoot
- Mentimeter
- Discussion forums
- Applications
- Online visual materials
- Digital portfolio
- PC – Laptop

Italy

- Presentations (PPT)
- Google Platform
- Didactic Applications (Moodle)
- Digital school texts
- Web search engines
- PC - Tablets
- Interactive & didactic softwares (Super Maps – speech synthesis)
- BBC Learning
- Digital Whiteboard
- WhatsApp
- IPad
- Apple TV
- Braille keyboard



Germany

- **Stop-motion applications**
- **Learning vocabulary applications**
- **Learning programs**
- **Moodle**
- **Mahara**
- **Microsoft office**

Andalucía

- **Search engines (Google)**
- **Digital Board**
- **IPads**
- **Prezi**
- **Kahoot**
- **Applications**
- **Videos**
- **Music**
- **Digital books**

Romania

- **Video projector**
- **Educational softwares**
- **PowerPoint presentations**
- **Educational websites**
- **Educational movies**



- The teachers listed effective inclusive technologies that they use with their learners. They did not explain or elaborate on these methods. For references on these methods, check the detailed partner individual data analysis reports.

Flanders

- **PC's**
- **Digital school platform**
- **Smartboard**
- **Online exercises**
- **E-mail**
- **Platform for quizzes**
- **Search engines**

Italy

- **Software (Concept Map – Digital Reader – Digital Vocabularies – Video Writing - Audacity)**
- **Tablets – PC - iPads**
- **G-Suite**
- **Virtual Classroom (Edmodo)**
- **PPT**
- **Digital Whiteboard**
- **Moodle Platform**
- **Smartphones**
- **Digital eBooks**
- **Augmentative Communication**
- **Kinaesthetic Learning**
- **Braille Keyboard**
- **Applications (Kahoot-Socrative-Quizziz-Desmos)**

Germany

- **Moodle**



- **Smartphone**
- **School platforms**
- **Learning platforms**
- **PC's – Notebook - Tablet**
- **PowerPoint**
- **Microsoft Office**
- **Whiteboard**

Andalucía

- **ClassDojo**
- **Quiz platforms (Kahoot)**
- **Videos**
- **Blogs**
- **Plickers**
- **Games**
- **Digital whiteboard**
- **PC + network connection**
- **Applications**
- **IPads**

Romania

- **Ael lessons (Advanced e Learning)**
- **TARA Educational software**

- The technological support/training that the teachers need to be able to promote inclusion in their classrooms are listed below per country.

Flanders

- **Workshops**



- **ICT training**
- **Infrastructure (more PC's & IPads for pupils and teachers)**
- **Training on the use of inclusive tools in the case of physical impairments (poor eyesight, poor hearing, poor motor skills)**

Italy

- **Training courses**
- **Courses on assistive technologies**
- **Internet connection**
- **Refresher courses**
- **ICT rooms**
- **Overhead projectors (beamers)**
- **Digital whiteboards**
- **Language lab**
- **Assistive technologies**
- **E-learning platforms**
- **Laptop and printer in class**
- **Cameras**

Germany

- **Fast internet connection**
- **Electronic boards – Smartboard - Beamers**
- **PC's – Tablets – Notebooks - IPads**
- **Cameras & digital cameras**
- **Educational programmes**
- **W-LAN**
- **Learning platforms**
- **Softwares**
- **Audio materials**



- **Luk box system**
- **Team-teaching**
- **Flipped classroom**

Andalucía

- **Availability of technological resources and devices**
- **Training in digital resources**
- **Examples on how to use techniques to promote inclusion**
- **Update on the available resources**

Romania

- **Training courses**
- **Promoting technology such as the use of audio and video**



Summary of Desk Research

Relevant questions that serves the aim of the IDENTIKIT are summarized below. The rest of the questions serve as a baseline to partner country situation and provide valuable information for understanding the educational system of each partner country. For more information check IO1 report.

- Pedagogical approaches that the teachers and educators use with our target group of learners in the five partner countries.

Flanders (BE)	<ul style="list-style-type: none"> • Cooperative Group Teaching • Universal Design for Learning (UDL)
Germany (DE)	<ul style="list-style-type: none"> • Individual Support (Binnendifferenzierung) • Adverse Balancing
Italy (IT)	<ul style="list-style-type: none"> • Constructive Learning • Cognitive-Behavioral Learning
Romania (RO)	<ul style="list-style-type: none"> • Cognitive Stimulation
Andalucía (ES)	<ul style="list-style-type: none"> • Project-Based Learning • Cooperative Learning

Cooperative Group Teaching: involves learners working together in small learning groups, helping each other to carry out individual and group tasks. It is particularly effective strategy in mixed-ability groups. The strategy has essential components: Interdependence, Individual accountability, Cooperation, Evaluation Cooperative group teaching is based on two main ideas about learning. First, it recognizes that when learners cooperate, or collaborate, it has a synergistic effect. Second, it recognizes that much of our knowledge is socially constructed; that is, we learn from others in our immediate environment - our families, our friendship groups and our workplaces.



Universal Design for Learning (UDL): is a multi-component strategy that involves planning and delivering programmes with the needs of all students in mind. A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited in languages.

Individual Support: this means that you use "Binnendifferenzierung" - a German word, that cannot be translated literally. It means, that the teacher uses different topics, different pedagogical methods and different learning tools for different parts of the class during one lesson to support the individual needs of the learners.

Adverse Balancing: could be combined with Binnendifferenzierung, is a prevention approach, that includes the parents, based on special support training courses.

Constructivist Learning: based on a constructivist learning theory, which shows the close relationship between the learner and the context. It emphasizes learning as effectively solicited by a teaching that supports and coordinates: the knowledge system, the techniques system and the learner system. It also emphasizes the importance of peer relationships for learners with disabilities to better define a positive self-image and to favor a cooperative construction of knowledge (cooperative learning and scaffolding).

Cognitive-Behavioral Learning: the goal is to teach more in less time, through the use of curriculum strategies that teach generalization whenever possible, individual learning, optimization of study time, and increasing motivation towards learning.

Cognitive Stimulation: consists of actions and compensatory programs that facilitate the understanding of things, phenomena, people and situations of life in their instrumental-integrative dimension. For learners with mild and moderate mental deficiency, cognitive stimulation involves structuring the complex external stimuli. Furthermore, the organization and formation of personal and social autonomy involves carrying out activities that lead to: 1) forming and developing social abilities that lead to a high degree of psychosocial maturity and 2) Forming and developing psychomotor skills that enhance personal autonomy.



Project-Based Learning: introduces the learners to research within their regular classes. Starting from an exploration of previous ideas in relation to a specific topic, a hypothesis is formulated that will have to be validated throughout a research process. Learners are organized in heterogeneous groups who carry out the research and perform the data analysis. The role of the teacher is to guide the learners in their group work and to provide support when needed.

Cooperative learning: this form of work provides the student with significant improvements on various levels. In conducting research, in deep understanding of abstract concepts, in adapting and applying knowledge to real life situations, in creative problem solving, in synthesizing and summarizing, in oral expression, in planning and management, and finally in their interpersonal skills.

- Study materials that are applied to and used with the target group of learners in the five partner countries.

Flanders (BE)	<ul style="list-style-type: none"> • Profile of Inclusive Teacher • Promoting Inclusive Teacher Education Materials
Germany (DE)	<ul style="list-style-type: none"> • Study Material certified by the Ministry of Education
Italy (IT)	<ul style="list-style-type: none"> • Based on the individual education plan
Romania (RO)	<ul style="list-style-type: none"> • Synthesis of Special Psychopedagogy • Special Psychopedagogy
Andalucía (ES)	<ul style="list-style-type: none"> • Significant Curricular Adaptation (ACS) • Non-Significant Curricular Adaptation (ACNS)

Profile of Inclusive Teacher: has been developed as part of the Teacher Education for Inclusion project (TE4I) that has explored how all teachers are prepared via their initial education to be 'inclusive'. The profile of inclusive teachers identify the essential skills, knowledge and understanding, attitudes and values needed by everyone entering the teaching profession. It has been developed as a guide for the design and implementation of Initial Teacher Education (ITE) programs for all teachers. The intention is that the



profile should be considered as stimulus material for identifying relevant content, planning methods and specifying desired learning outcomes for ITE and not a script for ITE program content.

Promoting Inclusive Teacher Education Materials: this guide focuses on challenges and barriers in the area of teaching and learning materials used in teacher education. It offers strategies and solutions for teacher education institutions, ministries of education and other key education stakeholders to advocate for and support the adaptation, development and implementation of inclusive teaching and learning materials.

Study Material certified by the Ministry of Education: every head of school is responsible for the study materials that they use. Each school has a special pedagogical concept that they follow and the study materials apply to the same concept. Furthermore, all study materials need to be certified by the Ministry of Education of each state in Germany. In Hessen there is a list of 69 pages of certified study materials that is updated every six months.

Individual Education Plan in Italy: the curriculum of school subjects can be developed to minimum or differentiated objectives. Teaching aids necessary for the participation of the learner in the activities are indicated in the individual education plan. They are tools available to the individual learners. Therefore, there is no uniformity with respect to the content of the study materials.

The teaching aids include:

- Digital content in textbooks (available in print or digital format), to be used with the interactive whiteboard. These are audio and video in-depth analysis or synthesis interactive activities that combine theory and practice.
- Construction of an "ecological" learning environment in which inserting materials that exploit an analogical language (images, photos, tables, cards, drawings). It is a laboratory of learning and training that involves the whole class and that ensures the participation of all. Learners are asked to perform exercises such as: the visual-spatial organization of the terms found in a brainstorm activities, the representation of a "word-cloud", the construction of some concept maps, the study and verification of graphs, tables and histograms, video editing, photomontages and presentations. Students are divided into



small groups and have to choose the most functional materials to perform a given exercise.

Synthesis of Special Psychopedagogy by Alois Ghergut

Special Psychopedagogy by Emil Verza

Significant Curricular Adaptation (ACS): corresponds to a modification of the learning objectives and evaluation criteria of the curriculum in the case of a significant gap in the learners' level with respect to the school level according to his/her age. The ACS must be completed by the support teacher with the advice of the Educational Guidance Unit (EOE) or the Orientation Department (DO), and with the help of the tutor or teacher responsible for each subject. They must comply with the psychopedagogical report of the EOE or the DO.

Non-Significant Curricular Adaptations (ACNS): this adaptation model does not modify learning objectives or evaluation criteria. It can affect methodological aspects and the prioritization of competencies and minimum requirements. The elaboration of the ACNS is coordinated by the tutor who is responsible for completing all the sections of the document, except for the curricular proposal, which is completed by the teacher of each subject / area that needs adaptation.

- Some literature review on inclusive education provided by the five partner countries.

Flanders (BE)	<ul style="list-style-type: none"> • Disability Mainstreaming in Flemish Policy <p>The Policy Areas of Education & Formation and Work & Social Economy</p> <p>University of Antwerp & Vrij University of Brussels (2014)</p> <p>retrieved on January 10, 2019</p> <p>File:///D:/u0086567/Downloads/131452.pdf</p> <ul style="list-style-type: none"> • Social participation of students with special educational needs in different educational systems <p>Retrieved on January 10, 2019</p> <p>https://www.tandfonline.com/doi/abs/10.1080/03323315.2015.1010703</p>
---------------	--



Germany (DE)	<ul style="list-style-type: none"> • Education Report Bertelsmann-Foundation 2018
Italy (IT)	<ul style="list-style-type: none"> • Universal Design for Learning, for the enhancement of differences: an exploratory survey on teachers E. Ghedin, S. Mazzocut, 2017 • Special Pedagogy and the principles of Evidence Based Education L. Cottini and A. Morganti (2015)
Romania (RO)	<ul style="list-style-type: none"> • Education for each and every one UNICEF, Institute of Education Sciences, RENINCO Romania Association, 2015 • Education – The misfortune to Integration of Disabled Children from Romania The Institute for Public Policy Bucharest and Speranta Foundation Timisoara.
Andalucía (ES)	<ul style="list-style-type: none"> • Ined21 research on the state of inclusive education in Spain Ined21, 2016

Disability Mainstreaming in Flemish Policy

Disability mainstreaming is a relatively new policy strategy and is the result of a paradigm shift in thinking about disability from a medical to a social model. This research focuses on the realization of policy and is complementary to parallel research on the experiences of people with disabilities with regard to the implementation of the UN Convention, which was carried out by a consortium of universities commissioned by the Inter federal Equal Opportunities Center (Hardonk et al. al., 2014).

***Social participation of students with special educational needs in different educational systems***

Yearly data are collected describing progress in inclusive education. Frequently used criteria are the percentages of students attending special schooling or percentages of students officially labelled as having special educational needs (SEN). However, both criteria have pitfalls. In this study, the social participation of students was used as a criterion. The social participation of students with SEN was compared to the social participation of typically developing students in three countries, i.e. Norway, the Netherlands and the Flemish region of Belgium.

Education Report

The "Paper for inclusion" covers the whole range of reports about inclusion. The main results are: that the Northern part of Germany has a higher percentage of inclusion than the Southern part and that high inclusion occurs for students with impairments in speaking and learning. The Bertelsmann-Report concludes that for all other target groups, Germany did not come close enough to the inclusion requirements of the UN Convention or moved further from the requirements.

Universal Design for Learning, for the enhancement of differences: an exploratory survey on teachers

In this study it is stated that "the purpose of the UDL is to create curricula that are sufficiently flexible to guarantee the participation of all through the adoption of 3 fundamental principles: providing multiple means of representation, multiple means of action and expression and offering better and more numerous means of involvement. UDL represents a modality of planning and management of the educational practice that reduces the barriers in education from the beginning, maintaining a high level of success for all students through the design of flexible and accessible curricula.

The research was conducted through a teacher questionnaire to analyze "how much the inclusive practices performed in different fields are shared in the working context of belonging". "The didactic practice implemented at school is investigated in order to



understand how UDL principles are already unintentionally taken into account in the Italian reality without knowing the model".

This not only demonstrates the commitment of the Italian school for the promotion of school inclusion, but also attests that the educational practices are innovative and sometimes unconsciously reflect the principles of the new concept of universal design.

Special Pedagogy and the principles of Evidence Based Education

In this study, the authors propose some reference principles to be used in scholastic inclusion research. The choice to consider different experimental procedures depends on the complexity of a theme related to inclusive education, which is "connected to situational variables (perceptions, attitudes, personal inclinations of the actors, logistic organization, etc.) difficult to check with classic experimental models. They identify 3 phases of the research work: planning, implementation, verification and enhancement. They underline that quality standards for each of the analyzed methodologies are guidelines to guide the internal debate on special pedagogy and inclusive education.

Education for each and every one

The access to and participation in education of children with disabilities and SEN from schools participating in UNICEF Campaign "Go to school!"

Education – The misfortune to Integration of Disabled Children from Romania

No further information was provided.

Ined21 research on the state of inclusive education in Spain

Ined is specialized in education and learning, founded by Víctor González and José Luis Coronado. The objective is to probe the state of inclusive pedagogy in Spain through the opinion of 110 teachers who perform, at the time of the study, functions of support for integration and have a professional profile of Therapeutic Pedagogy: Hearing and Language. The study has focused on the support of learners in ordinary classrooms to check the degree of educational inclusion within their reference groups, with their peers, and with didactic practices in the curricular areas of basic education.



Conclusion

The majority of the teachers taking part in the targeted research were between the ages of 25 and 44. They share the same beliefs about learning. Mostly that: 1) learning is a process and the goal for all learners is the development of “learning to learn” skills, not just content/subject knowledge and 2) academic, practical, social and emotional learning are equally important for all learners. Most of the teachers assess their learners before, during, and after the lessons. The assessment methods that they shared are very similar, for example: through independent work, self-evaluation, providing learners with support, tips, and tools, etc. The majority of the teachers have high expectations for all their learners and believe that they are not strong decision makers but can make decisions. The teachers across the five partner countries use varied methods to help determine their learners autonomy and self-determination. They share several methods too, such as evaluation and self-evaluation, motivating their learners, providing individual learning materials, etc. they use several digital tools to help them in achieving this such as the use of computers, applications, learning platforms, and softwares. The teachers provided several differentiated instruction strategies such as: flexible pace learning, collaborative learning, digital sources, and reflection and goal setting. The teachers consider families essential for the learner’s learning and consider it valuable to work together with parents and families. They support the communication skills through several methods and digital tools, such as, the use of group work and class discussions, presentations and dialogue sessions, the use of educational softwares, digital whiteboards, forums, and videos. In addition to that the teachers use cooperative learning in such a way that the learners help each other in several ways such as peer tutoring and flexible learner groups. Furthermore, the teachers implement positive behavior management approaches that support their learner’s social development and interactions, and employ classroom leadership skills to demonstrate positive behavior and classroom management approach such as the use of equal approach to all pupils and equal leadership and relationship with pupils. Their assessment approaches take account of social and emotional as well as academic learning such as making time for reflection moments, providing the learners with verbal assessment and feedback



moments, assessing the learning process of the learner and not only the outcome. All the teachers across the five partner countries do take responsibility for facilitating the learning of all the learners in their class, in cases of learning difficulties they do provide adaptations to the learning materials and their teaching approaches. Some of the effective inclusive teaching methods mentioned by the teachers are: 1) peer tutoring & peer influences, 2) cooperative group teaching, 3) the use of assistive technologies, 4) providing formative assessment & feedback.

The answers provided by the teachers comply with the indicators provided by the “Inclusive Teacher Profile (EASNIE, 2012)” under the two areas of competence mentioned earlier in this document:

1. Promoting the academic, social and emotional learning of all learners
2. Effective teaching approaches in heterogeneous classes

Concerning their digital skills, they are slightly on the strong side but the teachers can make use of these skills only to a certain extent although this is supported by the curriculum in most of the five countries. Teachers need technological support and training on several levels and in different areas to be able to promote inclusion in their classrooms.



This research was conducted within the framework of the project “All-Inclusive School” (2018-1-IT02-KA201-048385), co-funded by the Erasmus+ Programme of the European Union, by the project’s partnership.

Date of publication: November 2019

Output Coordinator:

University College Leuven-Limburg (BE), written by Dima Bou Mosleh

Partners:

Irecoop Emilia-Romagna Soc. Coop. (IT)

Archilabò Società Cooperativa Sociale (IT)

Istituto Tecnico Statale “Ignazio Calvi” (IT)

Inspectoratul Scolar Judetean Vaslui (RO)

Centrul Judetean De Resurse Si Asistenta Educationala Vaslui (RO)

Huerta Santa Ana S.Coop.And. (ES)

Landkreis Kassel (DE)

Disclaimer:

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Copyright message:

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

