

IO1: Design of a co-created curriculum and learning modules

Joint Co-creation session results

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Index

Introduction	3
1. Teachers and family members' results.....	5
1.1. Serbia results	5
1.2. Portugal results –Focus group	7
1.3. Spain results –Focus group.....	8
1.4. Results regarding the survey on transition conducted in Portugal and Spain	10
1.5. Teachers and family members' joint conclusions.....	18
2. ASD students' results	19
2.1. Serbia results	19
2.2. Portugal results	20
2.3. Spain results	23
2.4. Joint results	26
3. Final conclusions	27

Introduction

This deliverable is framed in the Intellectual Output (IO) 1 of the project “IPA2, Inclusion of People with Autism in Europe. Improving scholar transitions from primary to secondary school”, which title is “Design of a co-created curriculum and learning Modules”. The aim of this IO is to develop:

- Co-created curriculum based on the expertise of teachers working with people with ASD as well as pupils with ASD and their families
- Learning modules based on the co-created curriculum.

In particular, this document presents the results of the co-creation session carried out in each partner country, Portugal, Spain and Serbia. The idea behind is to collect teachers' needs and priorities when it comes to facilitating the transition from primary to secondary school of ASD students. To this end, family members, ASD students and teacher from primary and secondary school with and without experience in dealing with ASD students were involve.

The original idea was to organise two groups for the validation and co-creation sessions:

- Group 1: with 5 teachers and 2 family members collecting the information by using a focus group
- Group 2: with 3 ASD people by using personal interviews

However, due the covid-19 situation the methodology proposed has been adapted to each partner country situation as it is mentioned in the following sections and the final sample was the following one:

Co-creation sessions Sample				
Type of participant	Serbia	Portugal	Spain	TOTAL
ASD	3	9	3	15
Professionals and family	12	27	19	58
TOTAL	73			

This document is structured as follow: in the first section shows the results related to the group 1, family members and teachers, and the second section shows the results related to the group 2, ASD students, and finally, the last section presents the final conclusions.

1. Teachers and family members' results

1.1. Serbia results

In Serbia data the information was collected through an online questionnaire. The sample was made up of two parents of persons with autism and ten teachers. The online questionnaire collected quantitative and qualitative data. Quantitative data refer to the assessment of the significance of the proposed modules, the preferred training implementation techniques and the most appropriate sources of information.

The information gathered was related to the following topics:

- Teachers' needs, skills, and knowledge to deal ASD students
- Skills and knowledge to be developed in teachers during the transition from primary to secondary school-
- Needs and Skills to facilitate peer relations
- Skills and knowledge that ASD students need to face the transition from primary to secondary school from the point of view of teachers
- Potential contents for the training modules
- Methodology (types of activities)

According to the results obtained, the level of knowledge to deal with ASD students was low-intermediate. In particular, they missed more knowledge in the following areas:

- Autism: basic knowledge; the way people with autism think; emotional regulation.
- Teaching methods: Effective teaching methods and learning methods; How to make and use social stories; Developing and applying IEP, know the students' strengths & weaknesses, and tap into the strengths.
- How to adapt the environment: Classroom management (seating arrangements, group work, respect).
- Strategies to deal with ASD students: How to understand the causes and consequences of behaviour; How to react to crisis situations; How to use schedules; How to regulate resistance to change.

It was also stated that the most experienced teachers could help the less experienced teachers with transition-strategies such as mentoring; advisory work and transfer of experience from practice; meetings; videos prepared by teachers; recommendation of

appropriate literature and seminars. They might advise less experienced in topics such as strategies used to guide behaviour, and how to motivate a student with autism.

Moreover, the cooperation and coordination with family was highlighted. In this regard, regular meetings to coordinate the school performance of the student as well as more communication skills and open and wiliness to improve were considered to be necessary skills to successfully cooperate with the families of children with autism.

Peer relations were regarded as an important topic in which teachers should have more knowledge and strategies such as organize a Friends Club, Workshops and online support, practical training, the Good Friend technique and helping peers use elements of visual communication with students with autism.

As for the desired training modules, respondents rated according to their level of importance the following ones:

- Inappropriate Behaviours
- Peer Support
- Bullying
- Learning Techniques
- Time Management techniques
- Orientation in space
- Other suggestions: Regulation of sensory problems, Techniques for regulating anxiety, Sex education and work in groups.

Regarding the most appropriate methodology for the training, respondents selected by order the following ones:

- Mentoring and consultative work with an autism expert
- Good practice manuals, and videos as the most desirable data sources.
- Professional counselling and books
- Websites
- Courses, articles and workshops

1.2. Portugal results –Focus group

A focus group was organised in Portugal with 7 people, a moderator and 2 observers. The profile of the participants was made up of mothers of adults with autism, special Education Teachers with experience of teaching students with autism, and teachers without experience of autism.

The results were organised into four categories:

- **Teachers' needs**

In this regard two types of needs were identified: a) skills to deal with the needs of ASD students, such as *acquiring knowledge about autism, learning styles of ASD students, and learning how to adjust the level of demand to the ASD students' needs*, and b) promoting the relationship between pupils by doing activities such as work group and raising awareness activities. In order to develop the aforementioned skills, it was suggested to have initial and continuous training, exchange of experiences.

- **Exchange views among teachers with and without experience**

Exchanging views among teachers with and without experience was regarded as a way to acquire more knowledge about autism, promoting school community cooperation, including coordination with families, and improve teachers' strategies and resources. In order to achieve the aforementioned purposes, the following strategies were suggested:

- Work with families: to set common goals through, for example, parents' group; raising awareness activities; permanent support to families by a multidisciplinary group
 - School community cooperation: meetings, inclusive projects, raising awareness activities
 - Resources and strategies: more physical resources, such as different spaces, more human resources and better management and tutoring
- Skills such as autonomy, social skills, flexibility and adaptability, self-regulation and control, conflicts management, time and space organization, resilience, self-advocacy and motivation to learn were skills considered to be developed and promoted with students in the transition from primary to secondary school.

- **Suggestions for improvements in the transition from primary to secondary school**

With respect to suggestions for improvements in the transition from primary to secondary school, two level of improvements were mentioned:

- At school level: more coordination among the school community and parents, training and support and more pupils' involvement, more coordination with autism NGO's and trying to promote a positive and careful transition by keeping them in the same class and with the same peers and quieter and inclusive class.
- With the ASD students: visits to the future school so that they can know spaces, people and key persons; special resources, such as people or a space, in anxiety or stressful situations.

1.3. Spain results –Focus group

The Spanish focus group sample was made up of 12 people with the following profile: 3 Teacher in ordinary school without students with ASD; 2 Teachers in ordinary school with students with ASD; 3 Counsellor with students with ASD; 2 Mothers of a person with ASD/Asperger; 1 Moderator and 1 Observer.

In particular, several topics such as: 1) differences in classes when there is an ASD student; 2) Competencies that the teachers of students with ASD would have; 3) Aspects causing a student misses a class; 4) Indicators of risk of dropping out of school, of changing schools, of absenteeism or of general school failure; 5) The influence of bullying on absenteeism; 6) Reasons behind stopping going class; 7) Problems and solutions at the sensory level; 8) The role of the school to improve the situation; 9) Alternatives to absenteeism; 10) Available resources; 11) The role of parents; 12) Anti-bullying proposals; and 13) Desired Resources were addressed during the session.

On the whole results can be organised into two categories: a) issues related to ASD students that might affect their school transition and b) potential solutions to improve their situation and school transition.

With respect to the issues that affect the school performance and the transition of ASD students several factors related to the fact of dropping out of school and school failure were highlighted. In particular, several factors were underlined as a potential aspects causing dropping out of school and school failure such as:

- Emotional factors: feel appreciated, anxiety, stage changes.
- Lack of individual support from teachers

- Atmosphere in classroom and few social interactions
- Frustration, fear and lack of motivation: feeling of failure; fear of a negative evaluation; lack of motivation
- Family factors
- Disagreements between school centre and family on the interventions taken or absence of early intervention
- Disorder factors: awareness of their difficulties; lack of proper expression of emotions
- Rigid educational system: not take into account the individuality of each person (requirement level, the same absenteeism rules for everyone)
- Anxiety or stress: somatization as an indicator
- Stressful life circumstances
- Bullying

Regarding the potential solutions to deal with the dropping out of school and school failure in ASD students four groups of solutions were highlighted:

- Teachers' competences in awareness, acceptance of diversity, technical aspects.
- New school adaptations in terms of more coordination; having time out such as a calm space; having a reference person; more flexibility.
- New resources such as an online platform for the students: download notes, know the homework they have to do and continue classes in case of absenteeism; practical classes; continue monitoring: just like in primary, there is a closer follow-up of the students, be able to continue it in secondary; a reference person outside the school centre: who follow-up the ASD children along the whole school attendance.
- Better and closer relationship with parents, trying to promote its implication through extracurricular activities or open days.

In addition, some solutions to absenteeism and bullying were underlined as some of crucial factors affecting the school transition of ADS students. In particular, it was underlined the need for more creativity, support staff, close monitoring, calling the parents and best communication tools to deal with absenteeism. In the case of bullying, some proposals were mentioned to cope with problem:

- Regular training in prevention.
- Tutoring students: have a reference teacher.

- Create dialogue spaces.
- Improve relation between teachers and students: get to know the guys more in depth.
- Resources: prevention and intervention programs, student's assistant.

1.4. **Results regarding the survey on transition conducted in Portugal and Spain**

Sample in Portugal: 21 people have responded to the Survey on transition conducted in Portugal with the following profile: 6 family members of a person with autism; 6 people with ASD (4 males and 3 females between 23 to 31 years old); 3 psychologists; 2 psychomotricity; 2 special education teachers; 1 speech therapist; 1 other.

Sample in Spain: 9.

The following tables present the comparison of the two countries' results regarding the following topics:

1. Knowledge or skills that teachers working with ASD students should have
2. Things that teacher with ASD students should do
3. Teachers with ASD students' need to be
4. ASD students' and school failure
5. ASD students' and absenteeism
6. Suggestions to improve the educational environment and teachers' skills
7. Measures to prevent absenteeism and school failure
8. Competences to prevent absenteeism and school failure
9. How teacher with experience in the field of autism can help to others without experience
10. How teachers from primary and secondary school can improve peer relationships
11. Knowledge that teachers should have to successfully cooperate with ASD students' families

1. Knowledge or skills that teachers working with ASD students should have

As the following table presents the main skills that teachers working with ASD students should have in both countries are: 1) A basic understanding of autism and 2) Knowledge and skills in terms of emotional regulation and knowledge of effective teaching and learning methods. In addition to this in Spain was also important the way students with autism are taught and pressured and in Portugal how students with autism learn and think

SPAIN	PORTUGAL
<ul style="list-style-type: none"> • Autism • The way students with autism are taught and pressured • Knowledge and skills of emotional regulation • Knowledge of effective teaching and learning methods 	<ul style="list-style-type: none"> • A basic understanding of autism • Knowledge and skills in terms of emotional regulation • Knowledge of effective teaching and learning methods • How students with autism learn and think
COMMON AREAS	
<ul style="list-style-type: none"> • Autism • Teaching and learning methods • skills of emotional regulation 	

2. Things that teacher with ASD students should do

The following table shows the results in each country according to the importance given by the respondents. Considering the results, the most important actions that teachers working with ASD students should carry out are, first of all, those focused on creating an environment of respect and also according to ASD students' needs. Secondly, actions regarding how to react or manage emotional dysregulation and sensory stimuli. Finally, third group of common actions in both countries were those related to individualize teaching methods and understand more the causes and consequences of behaviour and the absences, somatic complaints, or runaways.

SPAIN	PORTUGAL
<ul style="list-style-type: none"> • Climate of respect; Active listening to their opinions • To react to situations of emotional dysregulation; how to adapt the environment, the classroom, management • How to individualize the teaching to each student • Kind, close and patient treatment with these students with respect to the other students; careful with sensory stimuli; understand more deeply the absences, somatic complaints, or runaways 	<ul style="list-style-type: none"> • Environment of respect • To use visual resources • To adapt the environment, the classroom and manage the group • Careful with sensory stimuli • Listen carefully to their opinions and needs • Make the most of their strengths • Understand the causes and consequences of behaviour • Be specially kind, close and patient • To know how to individualize teaching for each student
COMMON AREAS	
<ul style="list-style-type: none"> • Creation an environment of respect and ASD students' needs 	

- **Managing emotional regulation and sensorial stimuli**
- **Individualizing teaching methods**
- **More knowledge about their behaviour including absences, somatic complains, or runways**

3. Teachers with ASD students' need to be

In both countries the results have shown that teachers with ASD students' need to be more aware of situations of social exclusion, bullying or cyberbullying.

4. ASD students' and school failure

In Spain most of the respondents agreed that students with autism were more likely to fail in school and, because of that they should also have access to other semi-presential or online modalities. However, In Portugal there were a division of opinions among respondents¹.

In Portugal respondents saying yes stated that reasons behind could be:

- Current school system features such as classes too long, the school is designed to generalize teaching, the school environment is not always prepared to receive and guide these students,
- Personal factors: Poor concentration skills; their intellectual characteristics; their difficulties in learning
- Professionals' skills: there is a lack of training.
- Social relationships with peers: They cannot keep up with their classmates.

In other cases, respondents stated that their school failure might depend on the following factors:

- Individual factors: they are all different and have different periods of sensitivity, more or less likely to learn certain subjects; the degree of disability and cognitive deficits and the stimulation they have received since childhood
- Motivation and guidance

In those cases, in which respondents said NO, they stated as reasons:

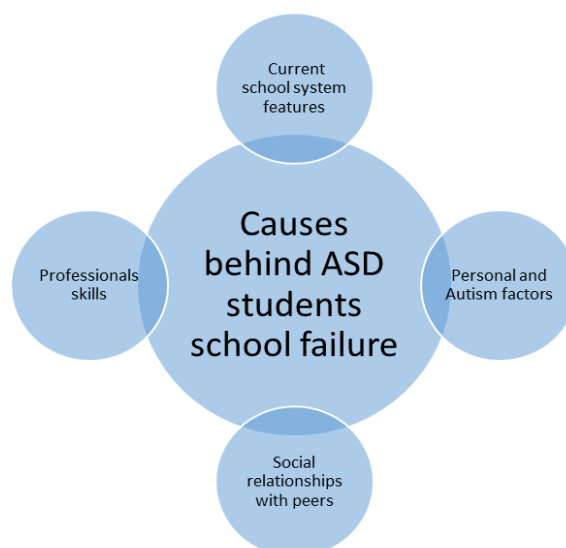
- An appropriate knowledge of the students' skills and a curriculum adaptation
- Individual factors since not all autistic people have learning problems,
- Empathy, help and a lot of understanding and properly cared for them

¹ 9 respondents said Yes; 7 said Possibly and 5 said No.

In the case of Spain, respondents stated that ASD students were more likely to fail in school, in particular, due to the following factors:

- Current school system features: lack of adaptability and resources and adaptation to their needs, there is no individualization
- Personal factors: Lack of motivation and difficulties in executive functions
- Social relationships with peers: Misunderstanding, isolation, lack of inclusion in their class
- Professionals skills: Lack of knowledge about interpreting stimuli and signals that block them

In conclusion, when it comes to identifying causes behind ASD students school failure, the results of both countries shown the following common factors:



5. ASD students' and absenteeism

With respect to absenteeism among ASD students, whereas in Spain most of the respondents considered that ASD students were more likely to absenteeism, in Portugal most of the respondents thought that ASD students were not more prone to absenteeism (9 out 21); 6 respondent thought that they had more possibilities and 5 respondents did not know. In Spain it also was stated that if ASD students are able to receive the right help they do not have to drop out of school.

In Spain, the reasons behind the absenteeism underlined by respondents were:

- Lack of social relationships with peers: sense of exclusion/lack of feeling of belonging to the group
- Current school system features that lead to frustration and the stressful situations/anxiety that they experience
- Personal factors such as lack of motivation

According to results in Portugal, ASD students were not more prone to absenteeism as the problem of absenteeism is structural to the school and the condition of being autistic does not interfere. Moreover, absenteeism might depend on personal and family factors, such as their motivation and family or caregiver.

Respondents saying that “students with autism might be more prone to absenteeism depending on:

- Personal and family factors: if there are conflicts not resolved or are unknown to the school community. It depends on each student's characteristic symptoms. For instance, if they have more difficulties in organizing themselves or they are not properly accompanied by the family.
- Current school system features: they do not adapt to the schedules
- Lack of social relationships with peers: if they are not understood and accepted.

With respect to causes behind real cases of absenteeism, in Portugal was stated the poor coordination between school and the student and his family. In Spain it was highlighted more factors such as:

- Social relationships with peers such as atmosphere in the academic classrooms, bullying
- Mixture of personal and school system features: poor perception of needs, ignorance of ASD by the school, teacher anxiety, sensory stimuli and somatization of stress and anxiety in front of the classes, especially in the exam.

6. Protocols to prevent both problems and reasons

Regarding the protocols to prevent school failure and absenteeism, in Spain the lack of good protocols was underlined whereas in Portugal respondents' opinions were divided since 10 respondents said that there were good protocols and 11 respondents said No. Moreover, in Spain the lack of teachers' skills to deal with ASD students was also highlighted.

In Portugal respondents thought that there were no good protocols due to the following reasons:

- School system: school is not prepared, there is still little information about autism in the school and not enough accommodations.
- Legal factors: In the new Decree-Law that exists in Portugal (Decree-Law 54/2018) there are no protocols made without gaps regarding students with autism and the Personal Development Plan is obsolete.
- Lack of dissemination: these protocols are not widely disseminated.

7. Suggestions to improve the educational environment and teachers' skills

Considering the aforementioned caused related to school failure and absenteeism in ASD students, a group of four types of suggestions to improve the educational environment and teachers' skills were mentioned in both countries:

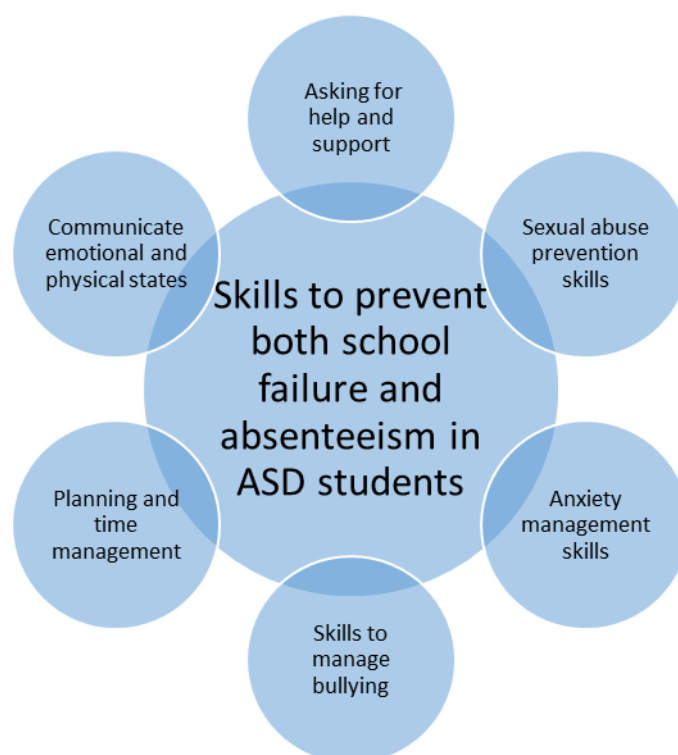
- School adaptations:
 - To have the possibility to disconnect between classes such as a room where they feel good and can turn to calm and recharge their energy
 - To modify the environment so that they can be more friendly for them
 - Balanced distribution of tasks
 - Adapted materials: visual aids, games
 - Adapted teaching to each student
 - More time to take their exams
 - To create a relationship of comfort and trust
- School community attitude:
 - To show interest and motivate them
 - Stability, empathy and understanding
- Better coordination with family:
 - Awareness towards parents
 - To work together towards a previously defined goal
- Teaching them strategies:
 - When asking for help
 - To be autonomous and organised
 - To improve socio-affective, emotional skills and behaviour management, specifically those related to language and spatial orientation

8. Current measures to prevent both school failure and absenteeism

As for the current measures to prevent both school failure and absenteeism in ASD students, in both countries there are curricular adaptations, personalised support and a work with a multidisciplinary team or the special education teacher.

9. Skills to prevent both school failure and absenteeism in ASD students

The results in both countries have shown several common skills that ASD students should have in order to prevent school failure and absenteeism situations:



In addition to the aforementioned skills, in Spain was also highlighted the capacity of sensory regulation and the assertive communication with colleagues.

9. How teachers with experience in the field of autism can help to others without experience

With respect to how other teachers with experience in the field of autism can provide help to others colleagues without experience in both countries it was underlined the idea of exchanging experiences and work together and having regular meetings to discuss the functional profile and discuss problems, considering both primary and secondary teachers, as well as developing protocols and a student transition program.

10. How teachers from primary and secondary school can improve peer relationships

Regarding how teachers can improve peer relationships, in Portugal it was mentioned the importance of creating an atmosphere of mutual help and acceptance through several ways or tools such as with games, making students aware of ASD students, activities to get to know each other. Similarly, in Spain it was stated the need to create a good atmosphere in class by encouraging activities and group work, fostering a respectful treatment and value the friendly treatment of students over school performance and trying to take care of students during breaks. Also in both countries raising awareness of autism was a key aspect.

Apart from these two issues, in Spain it was also highlighted the importance of providing the teacher with techniques and resources, organising workshops from associations and families of students with ASD and not to expose ASD students to situations they don't want to live in.

11. Knowledge that teachers should have to successfully cooperate with ASD students' families

Regarding the knowledge that teachers should have to successfully cooperate with ASD students' families in both countries were highlighted 5 common areas:

- More training and meetings with families to know more about how an autistic person behaves to understand the consequences and difficulties with the aim to support families
- Better coordination with families, working together and showing interest to the families, and promote meetings to providing strategies so that families can work at home with their children
- To provide a close attention and an empathy attitude which can include: motivation, close attention and active listening with respect and without prejudice
- To raise awareness

1.5. Teachers and family members' joint conclusions

According to the results obtained in each partner country through the several research methods, the following potential teaching needs so that teachers can improve the transition of ASD students from primary to secondary school:

- Knowledge about autism
 - Behavior, sensory problems, anxiety...etc.
- Learning methods for ASD students and how they students learn and think
- Factors affecting the school performance of ASD students:
 - Personal factors
 - Family factors
 - School system factors
 - Lack of school professionals' skills
 - Social relationship with peers
- Class atmosphere management and peer support. In particular, special attention should pay to bullying, cyber bullying and social exclusion.
- Skills that ASD students should develop to have a positive transition
 - Time and planning management; self-regulation; adaptability; orientation; conflict and bullying management; asking for help; sexual information; communication of emotional and physical states
- Strategies for teachers when it comes to dealing with the potential needs or problems of the ASD students in the transition from primary to secondary school
- Strategies to improve the transitions of ASD students from primary to secondary school at several levels:
 - School adaptations
 - Teaching strategies for ASD students
 - School community attitude

- Teachers tools: curricular adaptations, personal support and work with a multidisciplinary team
- Raise awareness
- Coordination
 - Family
 - School community
 - NGOs
 - ASD primary school students: visits to the future school to know spaces or key people
- Interesting resources
 - Human resources
 - Physical resources

2. ASD students' results

2.1. Serbia results

The results were obtained through semi-structured interviews conducted in Serbia with respect to main difficulties that ASD students face were the following ones:

Problems detected
Bullying – verbal threats
Cyberbullying - threats through a social group, making a fictional scenario in which a person with autism is told to act according to peer instructions, referring to sites with pornographic material
Orientation in space - navigation problems, orientation techniques, social skills for seeking help
Time organization - how to know how much time has passed, how to structure the rhythm of the day, how to organize time for learning and free time
Learning techniques - how to master the material from individual subjects, how family members and school staff can help with learning
Emotional regulation - control of anxiety, anger, relaxation techniques

2.2. Portugal results

In Portugal 9 people with ASD have responded to the questionnaire related to transition of primary to secondary school (See annex).

The results of the questionnaire have shown the following results:

- **Primary school**

In primary school most of the ASD students were to a big school (8 respondents) and all of them enjoyed due to several reasons such as: having the same classmates, good teachers, features of the school, teaching methods, and other personal reasons.

As for relationships, most of them had a good relationship with their primary school teacher (8 respondents) and only one person had a distant relationship with their tutors since it was a different person every year.

With respect to relationships with peers, most of them had a good relationship with their peers (6 respondents) and 1 student has no relationship because they did not allow them to play with them. In the last case at the beginning other peers made fun of them and it was needed the intervention of their mother in order to normalize the situation.

- **Change from primary to secondary school**

The change from primary to secondary school also implied in all the cases a change in the following aspects:

- Building (8 students)

In this process of adaptation, most of them received help from their teachers with respect to know the school and understand its rules, services and other facilities; find classrooms and to be introduced to the other students. One student also was helped by another student.

- Secondary school

Most of the students enjoyed secondary school (8 students) and only one of them felt bit a bit lost. According to the results, ASD students enjoyed secondary school because of the teachers, classmates, someone could help them with subjects, they liked learning and some school facilities such as the library. In the case of the student feeling a bit lost, it was due to they were alone and other students make fun of them; everything was new to them.

- **Challenges in secondary school and ways to overcome them**

According to the results in Portugal, ASD students faced three types of challenges as the following table shows:

Challenges	Ways to overcome them
<ul style="list-style-type: none"> • <u>School challenges</u>: many test, teachers, new subjects and large school and to • <u>Social challenges</u>: social exclusion and not to know any classmate • <u>Personal challenges</u>: to stay focused in class and to work and talk at the same time when doing an activity in group 	<p>Two students were able to overcome their situation of exclusion by:</p> <ul style="list-style-type: none"> • Succeeding in their school performance • Through the SEN teacher

- **Help from parents in secondary school**

ASD students' parents offered help in aspects related to their studies, such as exams, summarising topics, resolving doubts, and homework, and talking to teachers and classmates' parents.

When ASD students' parents talk to teachers, they did it in order to:

- Academic and school aspects: Talk about their academic performance, school attendance and school activities
- Personal aspects: Their behaviour and how to deal with them
- To raise awareness of their needs and ways to help them
- Bullying issues

- **Help from classmates' parents**

However, the help from classmates' parents was not as frequent as teachers help or other ASD students' help. In the case they provided help was to talking to them, issues related to exercises and to invite them to their children' birthday parties.

- **Academic performance in secondary school**

5 out 9 ASD students stated that learning academic subject in high school was more difficult than in primary due to there were more subjects and were more complex, the curriculum was also more complex and they have to study more.

When ASD students got help, parents, teachers and siblings were main source of help. They help them mostly with school and academic issues such as clarifying doubts, homework, summarising subjects and studying with him.

- **Anxiety in secondary school**

5 out of 9 ASD students stated that they felt more anxious in high school than in primary. The reasons behind were due to school reasons, such as tests, subjects and being late, and peers' relationships such as not knowing anyone and the behaviour of other students making fun of them. To overcome these situations, they mostly receive help from parents and teachers. The help provided was mostly related to academic issues, such as summarising, preparation for exams, providing advice on how to cooperate with classmates and teachers, being calm and behave.

In addition, all of them got help from other school community members such as the special education needs teacher (SEN), psychologist, speech therapist and therapist and support room for students with special needs. They had that support due to their educational needs, such as Individual education plan, problems to learn, help to speak, but also to meet other needs such as feeling at school and to develop my mind.

Most of the ASD students felt supported and respected by teachers. Although teachers were more demanding, they also kind and treated well.

In those cases, where there was a lack of support from teachers, it was because they could not understand them and understand their behaviour.

- **What teachers could have done so that ASD students felt more included**

The results have shown that teachers could have done:

- Teachers could have paid more attention to their sensorial needs
- Create a better class atmosphere in which they could get more help from peers and make friends
- Taking more time to explain subjects in more detail

- **Classmates and relationships**

All the ADS students had new classmates in secondary school but some of their last classmates were with them. Classmates provided help by solving doubts and doing exercises and being with them in the yard.

They also tried to make new friends and in most of the cases (6 out of 9) it was successful by introducing themselves and greeting them and doing other activities apart from school such as inviting them to come to my house and talking about our hobbies.

In some cases, (5 out of 9) new friends help them in academic issues, getting along with them and helping them to claim what they needed. However most of ASD students had a bad experience (6 out of 9) and suffered from bullying, physical aggression and social exclusion.

To solve the situation, teachers were crucial, talking to the other classmates. In addition, in order to include other students, ASD students would do:

- I would talk to him/her, support him/her and try to keep him/her company.
- I would explain to him/her where the cafeteria, the classrooms and the library are.
- I would introduce him/her to other classmates.
- I would ask a staff member to help you.
- I would take care of the new classmate and tell him/her to come see me if he/she has any questions or problems.
- I would talk to other classmates to explain that it is important to help.

On the whole, ASD students felt supported by other school staff (7 out of 9) by providing them advice, helping them with several doubts and stay calm. Moreover, ASD students would like that:

- Understand autistic people better.
- Help, talk, advise.
- Convene additional meetings between teachers and parents of students with autism to take steps that can support them.
- Adopt special strategies like those in Denmark.
- Treat us with love and care and without shouting.
- Be more attentive to interactions in the school yard.

2.3. Spain results

In Spain the interviews with ASD students have shown several aspects related to the following topics:

1. Difficulties in transition from Primary to Secondary school
2. Learning difficulties in secondary school subjects
3. Parental support
4. Support from teachers and specific staff
5. Classmates support
6. Support and improvements needed

The following tables present a summary of the results obtained in the case of ASD students related to each topic:

1. Difficulties in transition from Primary to Secondary school

Reason behind	Difficulties	Helping factors	Suggestions
To adapt to a new environment, with new classmates and the academic part.	Having to make new connections generated a lot of anxiety,	Having support classes and meeting some primary school teachers did not make it so difficult	Smaller classes and more individualized attention.
	To make new friends		More open and friendly classmates and clearer orders
	To change the school	Raise awareness of autism among peers	
	Secondary school is harder as they have to go earlier and it's more demanding		

2. Learning difficulties in secondary school subjects

Subjects and reasons behind	Difficulties	Helping factors	Suggestions
Spanish and English Physical Education: they had to work in groups, physical contact and sweating	Subject are more focused on studying and learning instead of homework	Visual arts because allows them to be more creative	More time to have a shower and change clothes

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3. Parental support

Type of support
Support from mother, only with psychiatrist to overcome the anxiety but not with school issues
Attending school meetings to know how they were doing at school
Regular communication with teachers

4. Support from teachers and specific staff

Type of support from teachers
Any curricular support because of anxiety problem
Effective communication between primary and secondary teachers
Support room for students
Support from the regular teaching staff
No support cases
Inappropriate behaviour
Abused by a teacher

5. Classmates support

According to the results, any of the interviewers had a real support from their classmates. On the contrary, they suffered from unpleasant situations. A neutral attitude or punctual help with notes in class were the kind of support got.

6. Support and improvements needed

Type of improvements needed
<ul style="list-style-type: none"> Personalised attention Close relationships with teachers and classmates. More attentive teachers, classmates and parents

- Classes with less people
- Quiet classrooms
- Raise awareness of autism in classmates and parents by autism associations
- Provide more time so that they can be able to do their tasks at their own pace

2.4. Joint results

Results have shown that ASD students have to deal with the following challenges in the transition from primary to secondary school:

- School challenges: many test, teachers, new subjects and large school, subjects are more difficult and they have to study more instead of just doing homework, teachers are more demanding, classes start earlier. In addition, some subjects such as physical education seems to be more difficult for them due to the features of the subject itself.
- Social challenges: social exclusion and not to know any classmate
- Personal challenges: to stay focused in class and to work and talk at the same time when doing an activity in group

The aforementioned difficulties might increase the anxiety in ASD students. In this situation, teachers need to know how to help them to overcome their difficulties.

According to ASD students, the resources or strategies to be applied to deal with the aforementioned difficulties:

- Meeting teachers: effective communication and coordination among school staff but also among primary and secondary teachers. Therefore, teachers' help should be coordinated since just one teacher having an inappropriate behaviour is enough to create discomfort.
- Raising awareness activities among peers of autism in coordination with some NGOs, since they rarely get support from their classmates apart from school matters
- a good atmosphere both with peers and teachers
- peers, teachers or family members support to help them to study and overcome new changes seems to be important. The help from parents' classmates is not very usual
- Multidisciplinary team working together

- Teachers could pay more attention to their sensorial, educational and social relationships' needs and tell them clear orders. Also teachers might provide them with more learning and methods' techniques. In order to avoid bullying situations, teachers are regarded to be crucial by ASD students.
- Being in smaller and quiet classes
- Provide more time so that they can understand the tasks and do their tasks

On the whole, according to ASD students, it is needed more empathy, knowledge and more attentive interactions with them during school breaks as well as more coordination between school professionals and family members and special strategies for them.

3. Final conclusions

One of the main objectives of the IPA 2 project is to developing and implement a training course for teachers from primary and secondary schools using a co-created methodology. To this end, the IO1 "Design of a co-created Curriculum and learning Modules" is aimed to draft a co-created curriculum based on the results of the co-creation session.

Bearing in mind the results obtained in both groups (group 1 and group 2) in all the partners country, together with the main objective of IPA 2 project, the results can be divided into potential topics that might be address during the training course.

General speaking, the needs identified by teachers, family members, and ASD students to improve their transition from primary to secondary school can be organised in big four potential main areas that might be divided into smaller sections in the future. In particular, the big areas are:

- Basic knowledge on autism
- ASD students" needs/problems
- Intervention strategies/ skills needed
- Coordination strategies/ aspects related to coordination

The aforementioned areas can also be divided into some subtopics as follow:

- **Basic knowledge on autism**
- **ASD students" needs/problems**

- Educational needs/problems
 - How they learn and think
 - School failure/ absenteeism
 - *Factors affecting/ Indicators*
- Social needs
 - Bullying
 - Misunderstanding/insolation
- Sensorial needs
- Emotional regulation
- Sexual education
- **Intervention strategies/ skills needed**
 - Educational area
 - Alternatives to absenteeism
 - Effective teaching methods
 - Social area
 - Anti-bullying proposals
 - Sensorial area
 - Proposals
- **Coordination strategies**
 - School community
 - Parents
 - Other associations or professionals