



CARMA

Non-formal learning for student motivation

WP2.3 Needs assessment report with summary of findings

Coordinator of WP2: University of Murcia (Spain)



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CARMA

RMA and other non formal learning methods for student motivation

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WP2. Research Study and Needs Analysis

The CARMA project has been designed in the form of 8 Work Packages and 4 main project phases which have been structured to improve and assess project implementation and to give to partners milestones and performance indicators to ensure good overall management of the project and each WP from start to finish.

This report summarizes the task 2 developed in the **Phase 1 Preparation: Needs Analysis** to identify target needs and relevance of expected results to address key challenges and policy delivery

Task 2: Need analysis survey about collaborative learning for of all stakeholders around the school: teaching staff and professionals within school education, parents, school service providers, civil society organizations and policy-makers in school education. These questionnaires aim to explore the real needs and to quantify these needs in order to have a deeper knowledge on how to adapt the non-formal learning methods (to be introduced in the next phase) to each community and respective school system.

Content

Needs Analysis	8
Introduction	9
Results of the needs analysis	13
Teachers	13
Students	21
Parents	25
Stakeholders	35
Conclusions	44

Figures

Figure 1. Teachers Questionnaire.....	10
Figure 2. Students Questionnaire.....	10
Figure 3. Parents Questionnaires.....	11
Figure 4. Stakeholders Questionnaire	11
Figure 5. Teachers participants per country.	13
Figure 6. Year of teaching experience at secondary level.	14
Figure 7. Experience implementing collaborative learning in the classroom.....	14
Figure 8. Experience implementing collaborative learning in the classroom by country.	15
Figure 9. Do you think that educational policies (in your country or region) help to develop collaborative learning in secondary school?	16
Figure 10. Is the curriculum enough flexible to organize collaborative learning in your subjects?.....	17
Figure 11. Do you need any people (teacher assistant or technical staff) to help you when you are implementing collaborative learning and do you need any special equipment (computer, board, videoprojector,..) or furniture in your classroom to organize collaboration.....	18

Figure 12. Have you received any specific training in collaborative learning?.....	19
Figure 13. Do your students have enough abilities to work cooperatively?	20
Figure 14. Do you think that your students learn better with collaborative learning methods?	21
Figure 15. Students' country.	22
Figure 16. Students' opinion about organization of the subjects in secondary schools for group work.	23
Figure 17. 1. Students' perception about teachers' competencies/ 2. Students' perception about theirs own competencies/3. Students' perception about classmates' competencies.....	23
Figure 18. Students' opinion about if they learn better working in groups.	24
Figure 19. Key players to promote group work in secondary school.	25
Figure 20. Parents participants by country.	26
Figure 21. Distribution of the general sample by gender.	26
Figure 22. Distribution of countries samples by gender.	27
Figure 23. Distribution of the sample by age.	27
Figure 24. Distribution of the sample by country and age.	28
Figure 25. Children by family.	28
Figure 26. Children by family distributed by country.	29
Figure 27. "Have your children worked in collaborative groups at secondary school?"	29
Figure 28. "Have your children worked in collaborative groups at secondary school?". Distribution by Country.	30
Figure 29. "Do you think that educational policies (in your country or region) help to develop collaborative learning in secondary school?"	30
Figure 30. "Do you think that educational policies (in your country or region) help to develop collaborative learning in secondary school?". Distribution by Country.	31
Figure 31. Q.17, Q.18 and Q.19 Percentages.	32
Figure 32. Q. 8, Q.10 and Q. 11. Percentages.	32
Figure 33. Q.9, Q.12, Q.13, Q.14, Q.15 and Q.16. Percentages.	33
Figure 34. Q.7. Who are the key players to promote and support the adoption of collaborative learning in secondary schools?	34
Figure 35. Sample of stakeholders by country (left) and gender (right).	35
Figure 36. Professional profile.	36
Figure 37. Relation with collaborative experiences in secondary schools.....	36
Figure 38. Opinion about educational policies.	37
Figure 39. Structure of curriculum as aid to promote collaboration.	37
Figure 40. In general, is equipment/furniture adequate?	38
Figure 41. In general, is the building adequate?	38
Figure 42. Key players to implement collaboration at secondary schools.....	38
Figure 43. Assistance to teachers as relevant aid.....	39
Figure 44. Opinion about teachers' skills.....	39

Figure 45. Opinion about students' skills.....	39
Figure 46. Influence of stakeholders in the success of collaborative learning.....	40
Figure 47. Do teachers see stakeholders as relevant?	40
Figure 48. Relevance of parents' support.....	41
Figure 49. Do students learn better?.....	41
Figure 50. Relevance to reduce ESL improving motivation.....	41
Figure 51. Prevention from dropping out.....	42
Figure 52. Factors to improve collaboration.....	42
Figure 53. Factors to hinder collaboration.....	43
Figure 54. Factors to promote/hinder CL.....	44

Needs Analysis

TASK 2:

Explore the real needs and quantify these needs to have a deeper knowledge on how to adapt the non-formal learning methods (to be introduced in the next phase) to each community and respective school system.

Introduction

This part of the Research Report corresponds to Need Analysis survey report.

The main objective of this section of the data collection is to explore the real needs and to quantify these needs to have a deeper knowledge on how to adapt the non-formal learning methods (to be introduced in the next phase) to each community and respective school system.

Data Collection Instrument Design.

To achieving the objective, four questionnaires were designed to collect information about how from the four principal agents that, from the project point of view where the most important: Teachers, Students, Parents and Stakeholders, perceive Collaborative Learning (CL).

Apart from the socio-demographic questions, the items included in the four questionnaires (depending on the agent) were principally related to:

- Experience with C.L. (from them or their relatives)
- Educational Policies (national, regional or local)
- Organisational conditions in the school (support from headmaster, school policies, flexible timetable, special classrooms,...)
- Curriculum (structure, flexibility, objectives, subjects, methodologies, assessment,...)
- Human Resources (teacher assistant, technical staff,...)
- Material Resources (any equipment in the school or in the class)
- Training of teachers (in general or about collaborative methods)
- Profile of the students (competences, age, skills,...)
- External agents (support from another educational agent, parents, stakeholders,...)
- General perceptions about who are the crucial agents

The questionnaires were designed by a group of educationalists and validated by an expert panel, composed of Collaborative Learning specialists and Non-formal learning practitioners.

Questionnaires were validated in English and uploaded to Google Forms (an application from the Google Drive Suite¹).

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Questionnaire for Secondary Teachers

This questionnaire is to know your opinion about some aspects of the work with collaborative methods in Secondary schools. It's very short and anonymous so please, answer it sincerely.

Collaborative learning can be understood as activities to be done in groups of students who have to interact among them and realize their individual responsibility on the work of the group. Furthermore teachers have to plan and to supervise the processes.

THANK YOU VERY MUCH!!

**Obligatorio*

1. Country *

- Spain
- Italy
- Belgium
- Austria
- France
- Turkey
- Portugal

2. Gender *

Figure 1. Teachers Questionnaire.

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Non-formal learning

Questionnaire for Students

This questionnaire is to know your opinion about some aspects of the work with collaborative groups in Secondary schools. It's very short and anonymous so please, answer it sincerely. THANK YOU VERY MUCH!!

**Obligatorio*

1. Country *

- Spain
- Italy
- Belgium
- Austria
- France
- Turkey
- Portugal

2. Gender *

- Male
- Female

Figure 2. Students Questionnaire.

¹ Google Drive is an office suite of collaborative online software. More information about Google Drive at https://www.google.com/intl/es_es/drive/

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Non-formal learning

Questionnaire for Parents with children in Secondary School

This questionnaire is to know your opinion about some aspects of the work at your children's school. It's very short and anonymous so please, answer it sincerely. Collaborative learning can be understood as activities to be done in groups of students who have to interact among them and realize their individual responsibility on the work of the group. Furthermore teachers have to plan and to supervise the processes.

THANK YOU VERY MUCH!!

**Obligatorio*

1. Country *

- Spain
- Italy
- Belgium
- Austria
- France
- Turkey
- Portugal

2. Gender *

- Male
- Female

Figure 3. Parents Questionnaires.

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Questionnaire for Stakeholders

This questionnaire is to know your opinion about some aspects of the work with collaborative methods in Secondary schools. It's very short and anonymous so please, answer it sincerely. Collaborative learning can be understood as activities to be done in groups of students who have to interact among them and realize their individual responsibility on the work of the group. Furthermore teachers have to plan and to supervise the processes.

THANK YOU VERY MUCH!!

**Obligatorio*

1. Country *

- Spain
- Italy
- Belgium
- Austria
- France
- Turkey
- Portugal

2. Gender *

- Male
- Female

Figure 4. Stakeholders Questionnaire.

Data Collection Process

Once the questionnaires in English were ready, each partner proceeded with the translation of the questionnaires to the local languages. After this, each partner decided the process to move to the data collection in the most convenient way for each context (taking into account the differences among timetables, school schedules, and so on).

Partners consensus two minimum conditions for completing the process. First, each partner had to guarantee a minimum number of surveys for each kind of questionnaire (Teachers: 50, Students: 30, Parents: 20 and 10 Stakeholders). Second, each partner would change the collection data in the way they prefer, BUT the final data had to be

included in the English form by each partner in order to guarantee the similarity of data to analyse.

The data were collected between June and October of 2016.

- Final Sample.

The final sample collected were composed of 1225 people (774 females and 451 males) from the seven countries, distributed by questionnaires as it follows:

- Teachers: 465
- Students: 531
- Parents: 162
- Stakeholders: 67

After that process, the group of Stakeholders was revealed as the hardest team to collect information, in part due to it is the most undefined of the four.

The consortium has collected an interesting sample that is providing us, interesting information that would guide the process of testing in the CARMA process.

Following we present the results of every questionnaire.

Results of the needs analysis

Teachers

Teachers are a key actor in the implementation of collaborative methods. This questionnaire was created to ask teachers about their experience and opinion regarding collaborative methods in Secondary schools. Before starting the questionnaire, collaborative learning was defined to help teachers to understand specifically some questions. From this perspective, collaborative learning can be understood as activities to be done in groups of students who have to interact among them and realize their individual responsibility on the work of the group. Furthermore, teachers have to plan and to supervise the processes.

465 teachers participant are distributed in different percentages depending on the country:

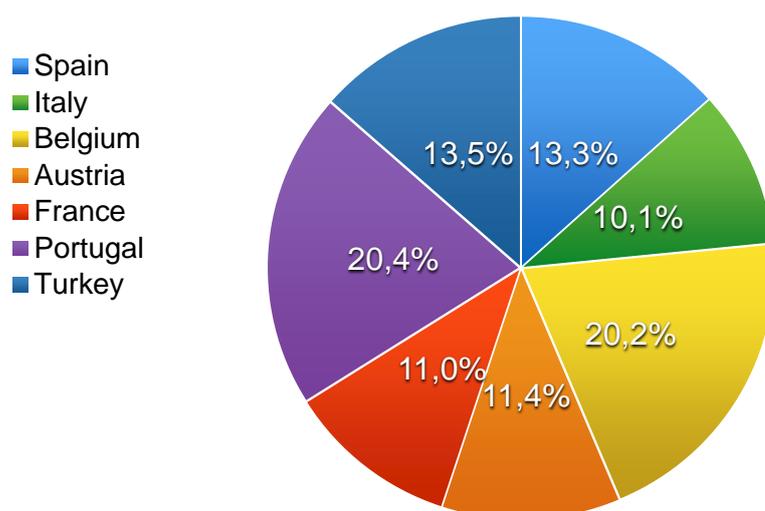


Figure 5. Teachers participants per country.

In general, the majority of the participants are women (70.3%) in comparison to 29.7% of men. This trend remains in all countries, around 70% of the majority of women, except in Spain, where the majority are men with 59.7% over 40.3% of women.

Regarding how many years of teaching they have, we found that the sample is composed of experienced teachers, since most of them have 15 or more years of teaching experience.

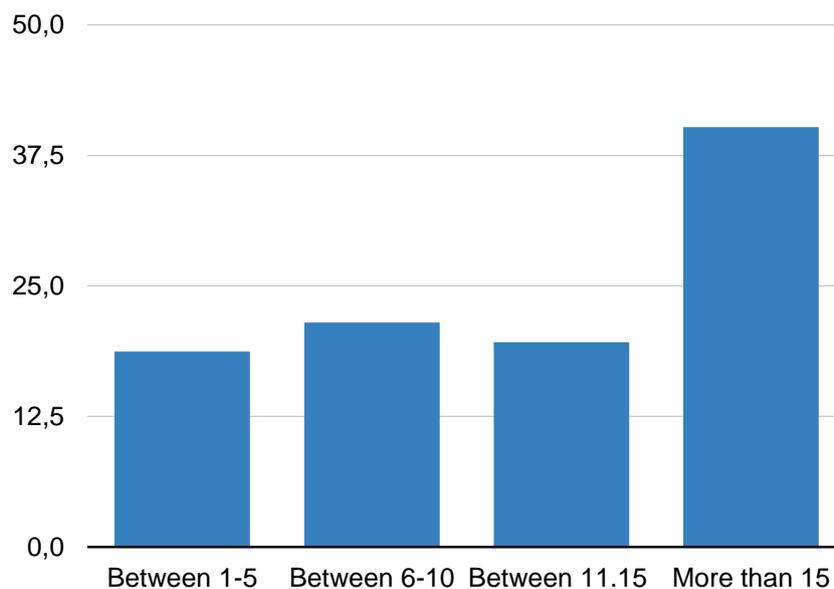


Figure 6. Year of teaching experience at secondary level.

When we asked about the field of teaching, we can find two main groups: Languages (31.3%) and Science and Technology (28%). Social Science is the third one with 16.3% of frequency, the rest of the fields (Philosophy, Arts, Physical Education and other fields) have less than 10%.

Regarding their experience implementing collaborative learning in their classrooms, teachers say they have had good or very good (51.6% in total) practical experience using collaborative learning.

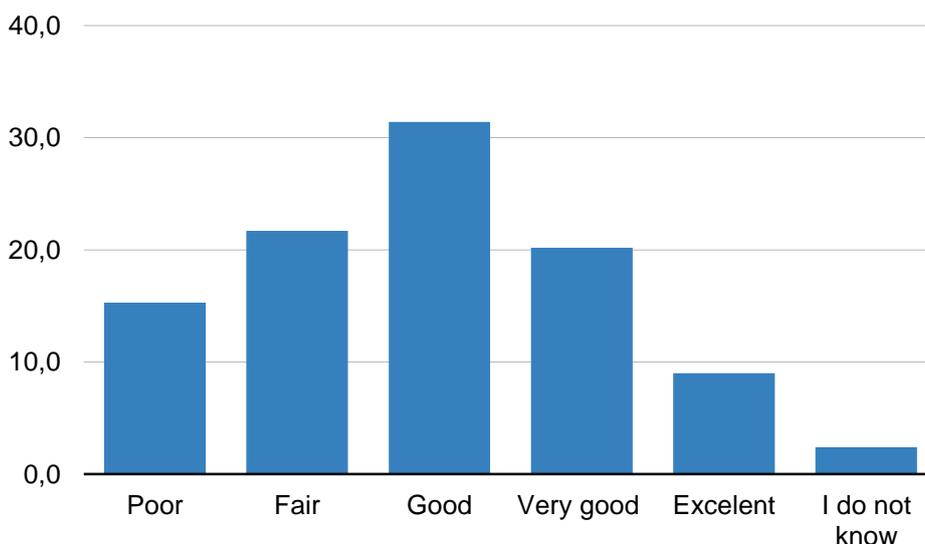


Figure 7. Experience implementing collaborative learning in the classroom.

If we analyse the data taking into account each country we find some differences:

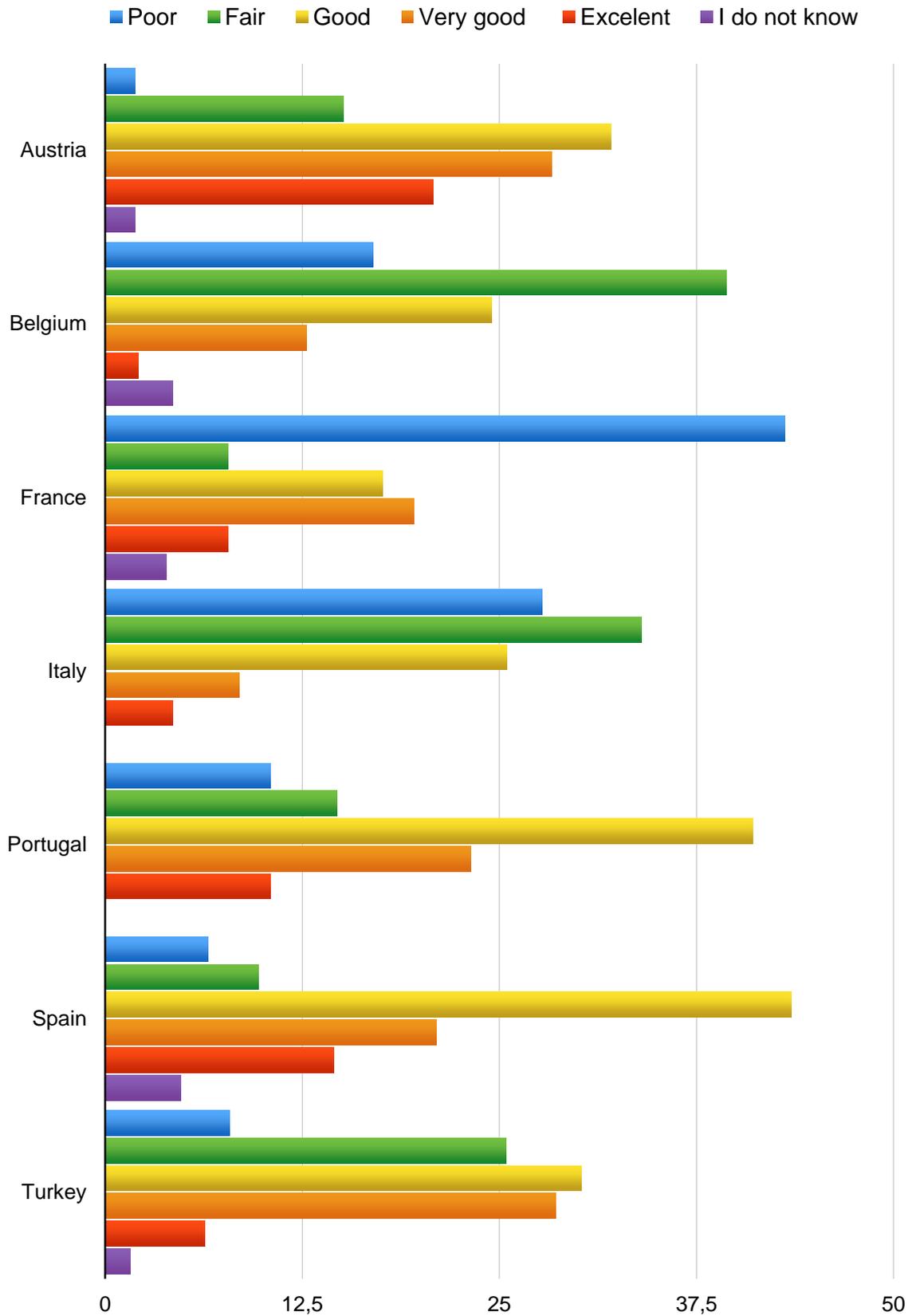


Figure 8. Experience implementing collaborative learning in the classroom by country.

As we can see, there are significant differences related to each country, highlighting the case of French teachers, who consider that their experience is poor, with respect to the Spanish and Portuguese teachers, who are those who indicate having more experience in implementing collaborative learning in the classroom.

Focusing on educational policies, teachers could decide if they think that educational policies (in the country or region) help to develop collaborative learning in secondary school. In this regard, “sometimes” is the option most selected by teachers, but being followed by “almost never” with no significant difference.

In general, all countries select “sometimes” like the first option, except Portugal that have chosen “almost never” (but being followed by “sometimes”) and Spain, where “almost never” and “never” were the most common answers.

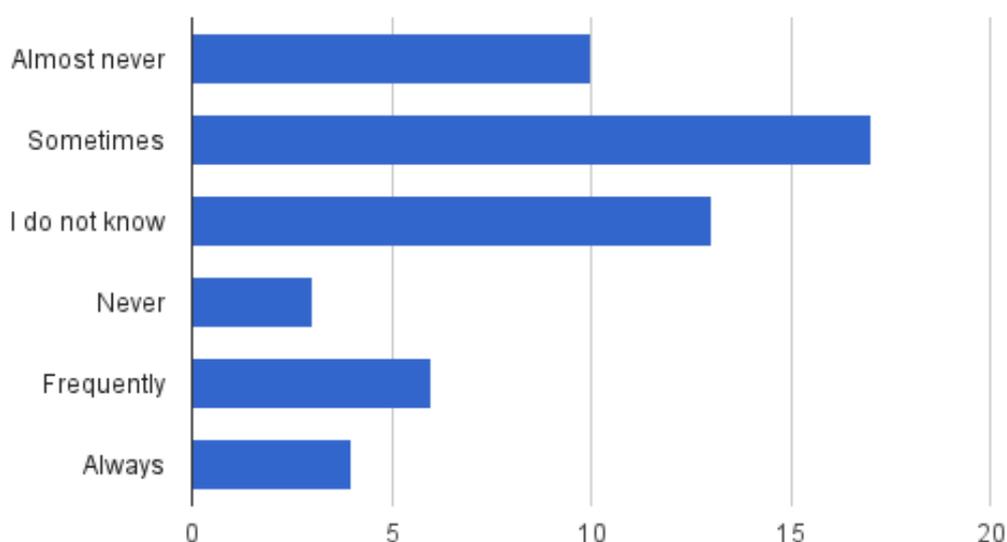


Figure 9. Do you think that educational policies (in your country or region) help to develop collaborative learning in secondary school?

Another key aspect to integrate collaborative learning is the one related to the curriculum and the flexibility that represents (or not) to implement collaborative experiences. Generally, teachers say that sometimes (36.3%) the curriculum helps to organize these experiences. The second option is frequently (27.1%).

Austria, Belgium, France, Spain and Turkey have chosen “sometimes”, “frequently” or “always” like the most common option. And we can highlight the fact that Italy and Portugal have chosen “almost never” like one of the most common options by the teachers.

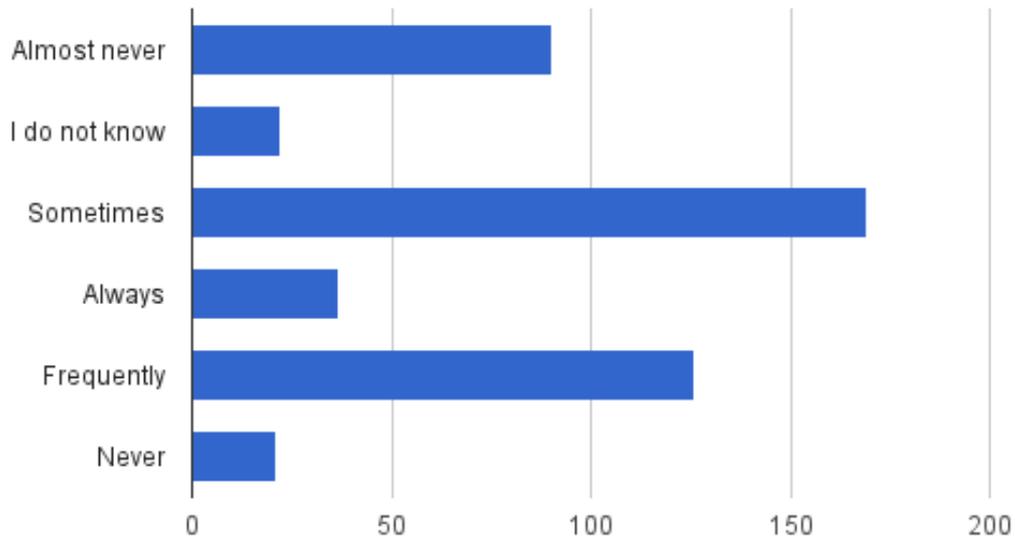


Figure 10. Is the curriculum enough flexible to organize collaborative learning in your subjects?

Regarding the needs that teachers have to implement collaborative learning, we can highlight that teachers say they need sometimes (37.4%) or almost never (20.9%) help from people, and sometimes (28.6%), frequently (31.2%) and always (21.7%) need special equipment (computer, board, video projector) or furniture in the classroom to organize collaborative activities.

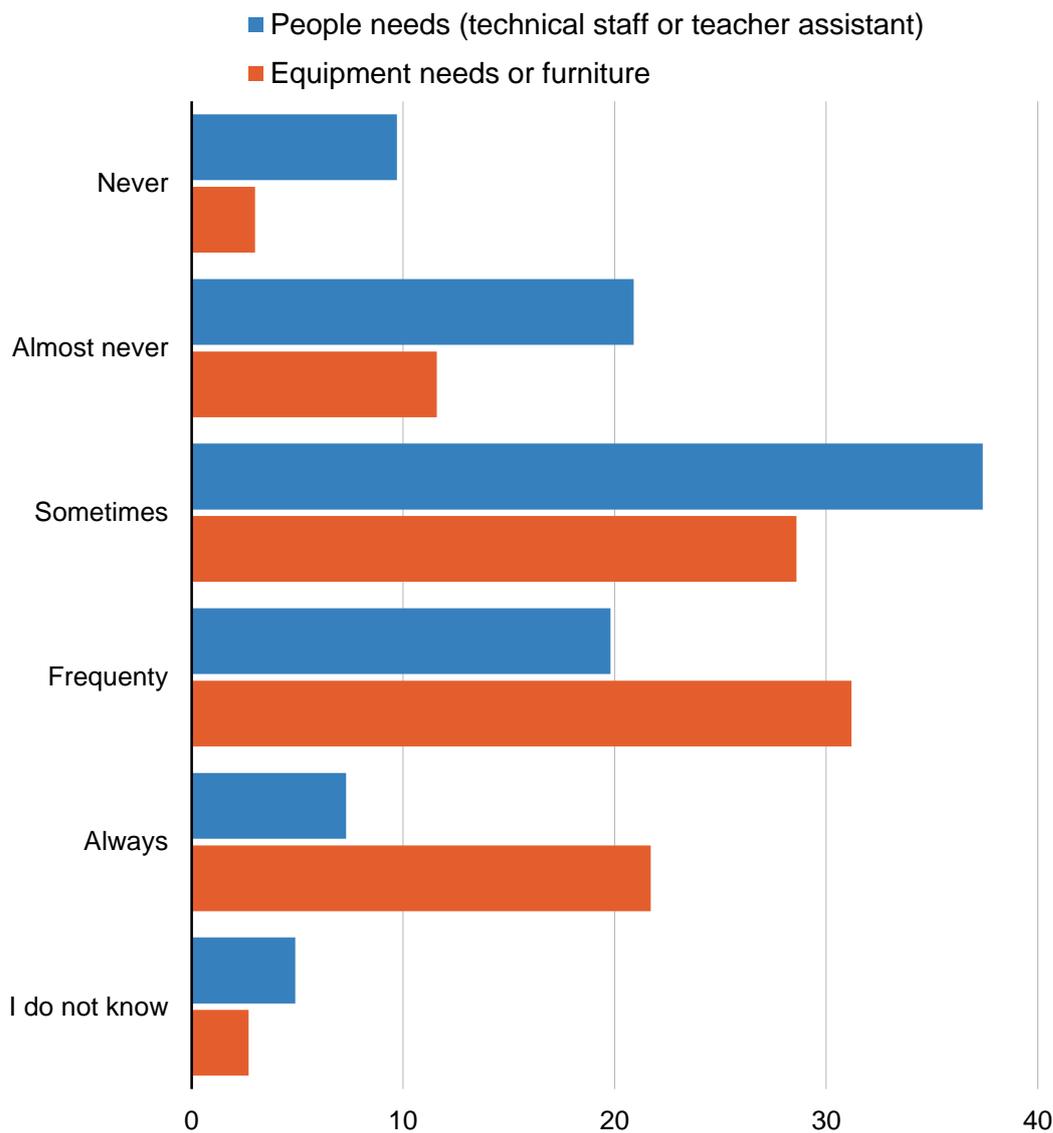


Figure 11. Do you need any people (teacher assistant or technical staff) to help you when you are implementing collaborative learning and do you need any special equipment (computer, board, videoprojector,..) or furniture in your classroom to organize collaboration.

Regarding needs related to infrastructure, we ask if the school building was adequate to promote good practices in collaborative learning. In general teachers say that school building was good (32.3%) or fair (20.9%). There are some differences among countries, being significant Turkey teachers that have chosen poor like the most common option (41.3%).

In general teachers say they do not have received any specific training in collaborative learning, and this fact happen in all countries.

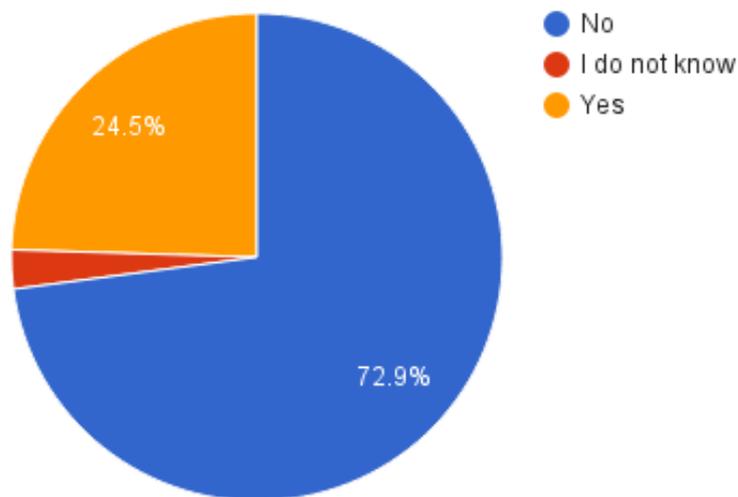


Figure 12. Have you received any specific training in collaborative learning?

Regarding if they think they have enough skills to promote and lead the implementation of collaborative learning experiences, participants say they have good (32%), very good (23.9%) or fair (18.9%) skills to develop these activities in the teaching activity.

Taking into account students, in general, teachers think that their students have very good (20.9%), good (34.2%) or fair (21.7%) skills to work cooperatively. Same tendency shows results related to know if they think their students are old enough to work cooperatively (yes option has been chosen by 84.9%).

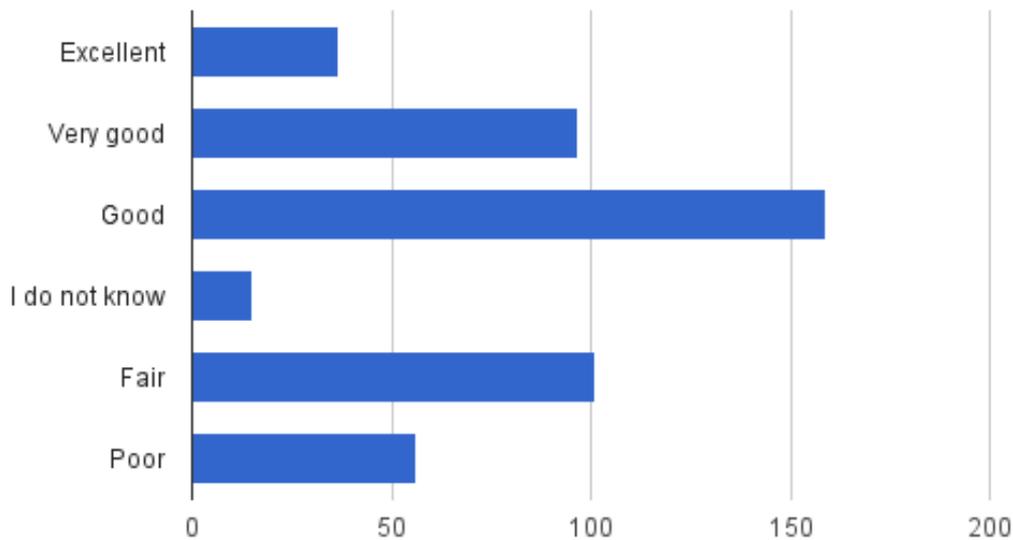


Figure 13. Do your students have enough abilities to work cooperatively?

Parents are also important for the success of collaborative learning experiences. Specifically teachers have say they are always (16.1%), frequently (32.3%) and sometimes (27.7%) a key factor.

One of the most key factor for teachers to be able to implement collaborative experiences is the support from educational stakeholders. Teachers say that always (24.9%) and frequently (29%) institutions have a key role to develop collaborative learning. Focusing on the key players for them, principals from high schools have been chosen like the most important players, being followed in the second option by teachers in general.

Talking about the learning to regard collaborative methodologies, teachers say students learn better with collaborative learning (72%). It is significant that 29.3% of the participants have selected “I do not know”, so that show a significant percentage of teacher that are not sure about the learning developed with this kind of learning strategies. “I do not know” has been selected with significant percentage by teachers from Spain, Portugal, France, Belgium. On the contrary, in Austria this option has not representative results.

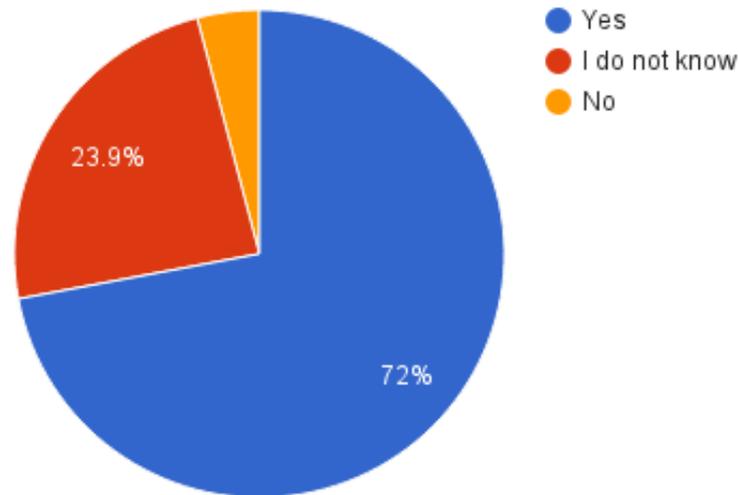


Figure 14. Do you think that your students learn better with collaborative learning methods?

If they have to choose three factors that may hinder the implementation of collaborative learning in the context of secondary education, “teacher training or teachers skills” and “curriculum and policies” have been selected (in this order) like the most important aspects.

Finally, some open questions were included to know, firstly, other elements they think guarantee the development of good collaborative practices. Teachers say different things but there is a tendency to talk about the importance to collaborate with others and the relationship with policies and stakeholders. They also talk about the importance of having resources (materials), less students in class and more time to plan this kind of collaborative activities.

Students

The questionnaire for students was composed of 3 sociodemographic questions and 15 closed questions concerning the opinion of students about collaborative learning (preferences, needs founded, organizational issues, relevant aspects for them, etc.).

531 students from the 7 partners’ countries filled in this first questionnaire.

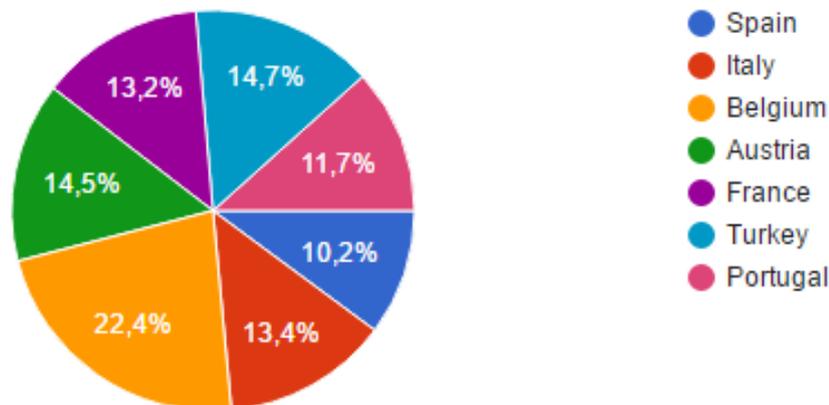


Figure 15. Students' country.

In the figure 25 we can see the representation of different countries is similar (around 10-14%) except in the case of Belgium where we can find the major representation of students with 22,4% of them.

Concerning to the gender of students we found 56% are male and 44% female. The majority of the students are between 14-16 years old (81%). Concretely 25% of students are 14 years old, 24% 15 years old and 32% are 16 years old or more. The rest of students are 13 years old (12.5%), 12 years old (4%) and 11 years old (2.5%).

The first question was about if they have worked in group with other students in their secondary school. 88.5% answer this question affirmatively (8% always, 33% frequently and 47.5% sometimes). For the other hand there are a 11% of student that do not work in group whit others never (3%) or almost never (8%).

When we asked about their preferences about where work in group we found that 40% of students prefer work at school, 8% of them prefer work at home, 43% prefer both options (school and home) and 9% of students prefer do not work in groups.

The opinion of the students about the organization of the subjects in secondary school in order to promote group work shows us that the majority of them (43.7%) thinks that this organization is accurate to promote this kind of work. Meanwhile, 26.7% of students think that this organization are not accurate for group work and 29.6% are not sure about that.

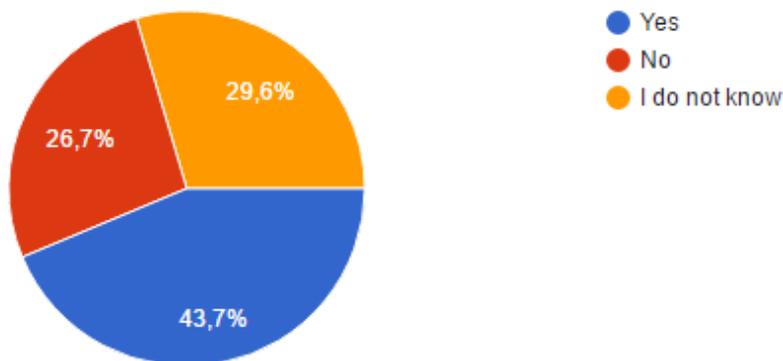


Figure 16. Students' opinion about organization of the subjects in secondary schools for group work.

Moreover, we asked students if they consider that their teachers need some help (teacher assistant or technical staff) in order to implement group work. 43% of students believe that this help is needed, 36% do not think in the need of this help and 22% of students are not sure about this question.

The following two questions were related to the school building, furniture and class organization as a way to improve group work. Related to the furniture/equipment most part of student participants believe that it is suitable (52.5%), 36% of them do not agree with the accuracy of their class' equipment and 11.5% are not sure about that. Also, students' opinion about school's building is very similar to the previous question. In the opinion of 61% of students school building are accurate to promote group work, 28% of students do not agree with that affirmation and 11% are not sure about that.

For the other hand, students were asked about the teachers', classmates' and students' competences needed to implement group work. In the students' opinion they think that they have more competences (80%) than their teachers (61%) and than their classmates (. In the following graphics we show these opinions.

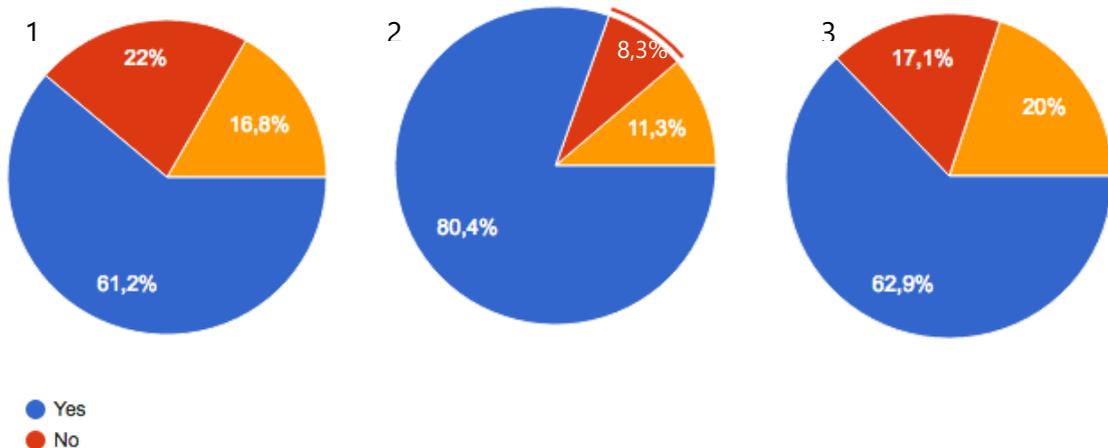


Figure 17. 1. Students' perception about teachers' competencies/ 2. Students' perception about their own competencies/3. Students' perception about classmates' competencies.

It is important to highlight these data. Only 8% of students think that they do not have enough competencies meanwhile the 22% of them finds in their teachers and in their classmates (20%) the lack of competencies. Self-perception about competencies to work in group properly is better than the perception of the teachers' and classmates' competencies.

Other important role in the educative process is the role of the students' parents. Related to the need of parents' support to implement group work 52% of students think that it is not needed, 30% of them think that this support is important for group work and 18% are not sure about that.

In general (figure 29), the most part of students (67%) believes that they learn better working in group although there are an important number of students that do not think that they learn better through group work (19%) and 14% are not sure about that.

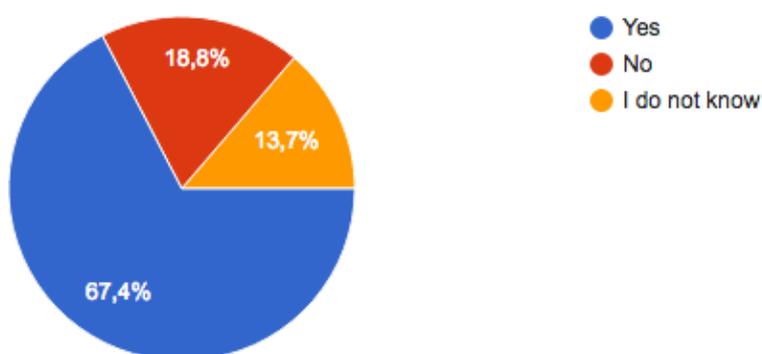


Figure 18. Students' opinion about if they learn better working in groups.

As we are explained before, more than a half of students agree with the importance of group work. Opinions change when the question is if they think that group work prevent students from dropping out. It is the question with the most number of students that are not sure about that (30%), 45% thinks that group work is a good way to prevent from dropping out and 25% do not agree with this idea.

In the following question students were asked about who are the key players (up to three) to promote the method of group work in secondary school. The following graphic shows us that the most important actor in the students' opinion is the teacher (88%). The second one are their selves (43.5%) and the third is the principal (33.2%). The key players in the students' opinion are the actors more related with the instructional process. Other players have been taken into account by students but not with the same percentage of importance. Parents are the fourth key player by students (18%) following by other school agents (12.5%, stakeholders (8.5%) and other agents (6.4%).

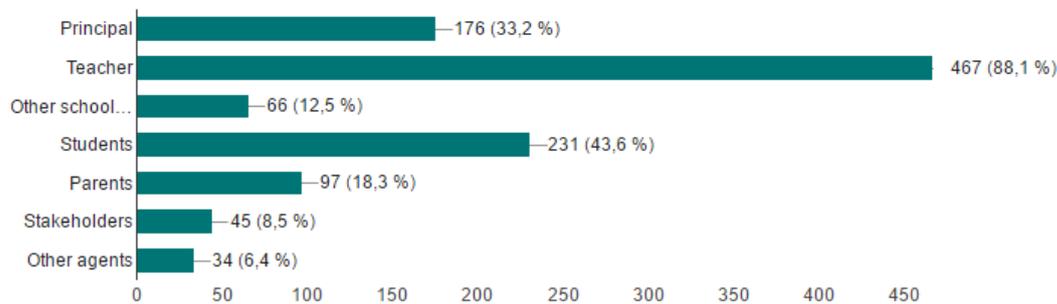


Figure 19. Key players to promote group work in secondary school.

In the last two questions students were asked about different factors in order to promote or hinder the implementation of group work activities in secondary schools. Students had to choose a maximum of three factors in every question.

According to the students' answers students' skills (56.5%), teacher training (52.7%), school equipment and furniture (41.1%) and the curriculum and policies (39%) are the main factors to implement group work activities. Other factors taken into account by students are school organization (28.4%) and human resources (15.8%). The three factors less important to promote group work activities in the students' opinion are: support of external agents (6.8%), parents' support (6.4%) and lack of time (4.5%).

On the other hand the most important factors in the students' opinion -which may hinder the implementation of group work activities in the context of secondary education- are the lack of time (56.7%), curriculum and policies (40%) and school organization (39%). Other factors taken into account have been: teacher training (30%), students' skills (29%) and school equipment and furniture (28%). The support of external agents like parents (6.5%) and other external agents (7%) is less important to the students (like in the previous question).

Parents

The complete sample we used for this report is composed of 162 parents from the seven countries of the CARMA project consortium.

Once agreed on the condition of the data collection, at every country, the possibilities of spreading the survey have been very different and depend on many different contextual factors that have made difficult the homogeneity in the collection.

Nonetheless, with the intention of doing the data more legible, following we include the distribution of the collected sample of parents done by country:

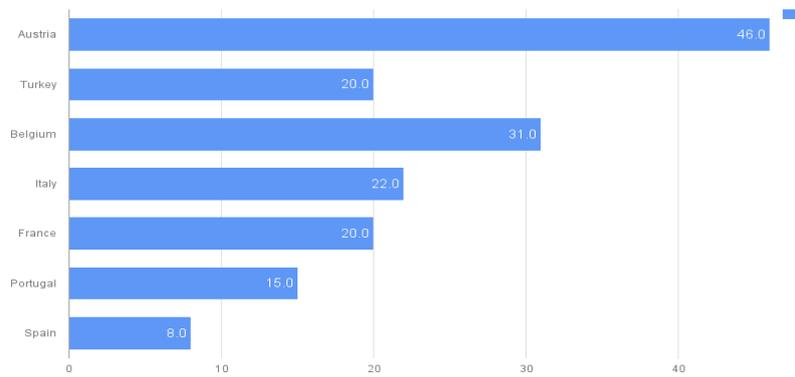


Figure 20. Parents participants by country.

Parents who answer this survey were principally mothers (females). In the general data, women were the 69,8% (113) of the sample and the 30.2% (49) were males.

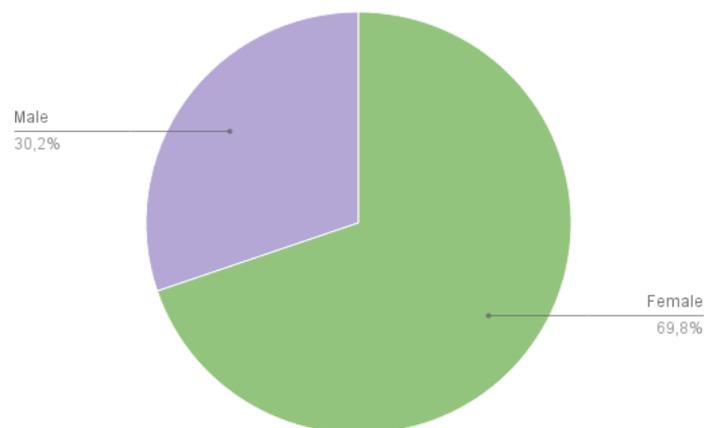


Figure 21. Distribution of the general sample by gender.

Therefore the situation is very similar when we contrast the data by country, where in every case the majority (more than 60% of the entire sample) of participants are females as would be seen in the next table.

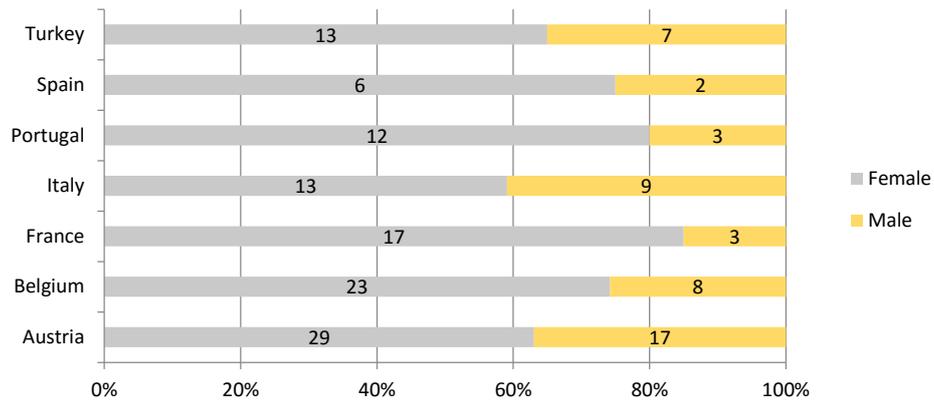


Figure 22. Distribution of countries samples by gender.

Regarding age, half of the sample is composed of parents between 41-50 years old. In general, the broad majority of them are parents between 30 and 50 years (33% between 31-40 and 51% between 41-50), only a 13% of the parents are beyond 51 to 60 years, and just a 3% are older than 60 or younger than 30 (1% and 2% respectively).

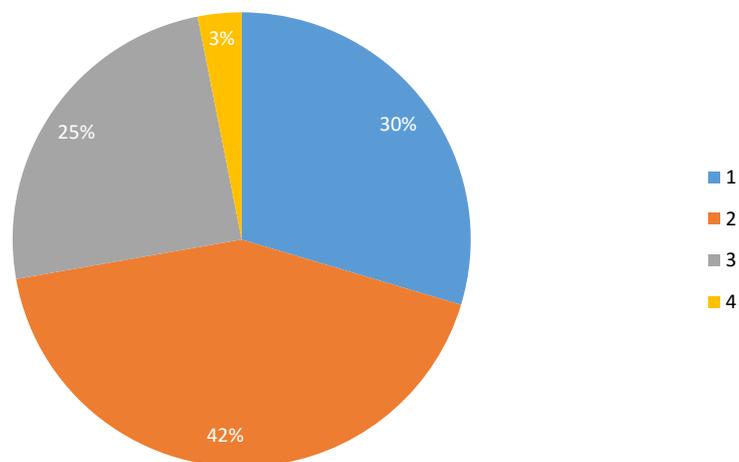


Figure 23. Distribution of the sample by age.

This distribution is much more general when we could see the data by country, where the cases younger than 30 or beyond 60 years old are localised by countries.

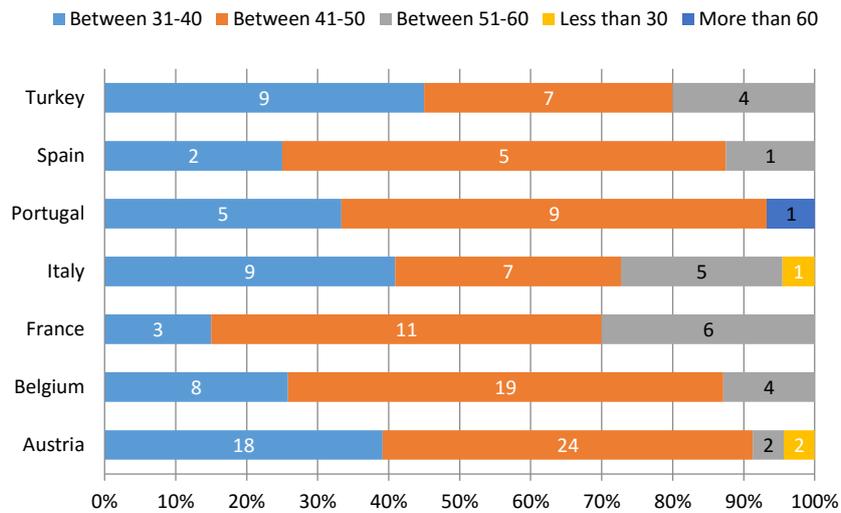


Figure 24. Distribution of the sample by country and age.

The parents who answer the survey come from families with two children by families 42% (69) or only-child, the 30% (48). Also, almost a third of the sample is composed of parents of families with three children 25% (40), and just a 3% have four children on their families.

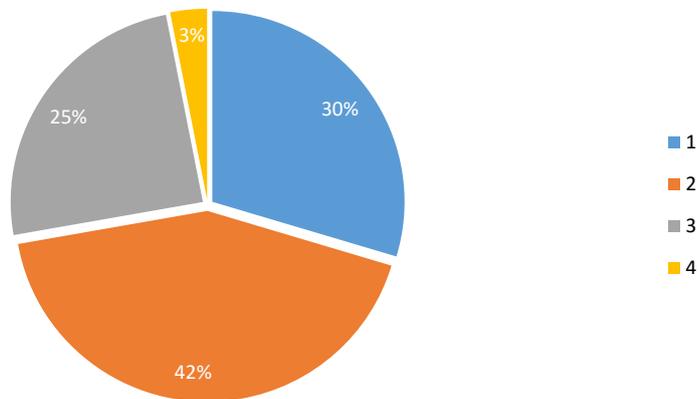


Figure 25. Children by family.

If we compare the situation by country, the data are very similar. Only in the case of Belgium where, by percentage, the amount of only child on each family is much lower than in the rest of the consortium context and, as in Spain, the majority of respondents to the survey are in families with three children.

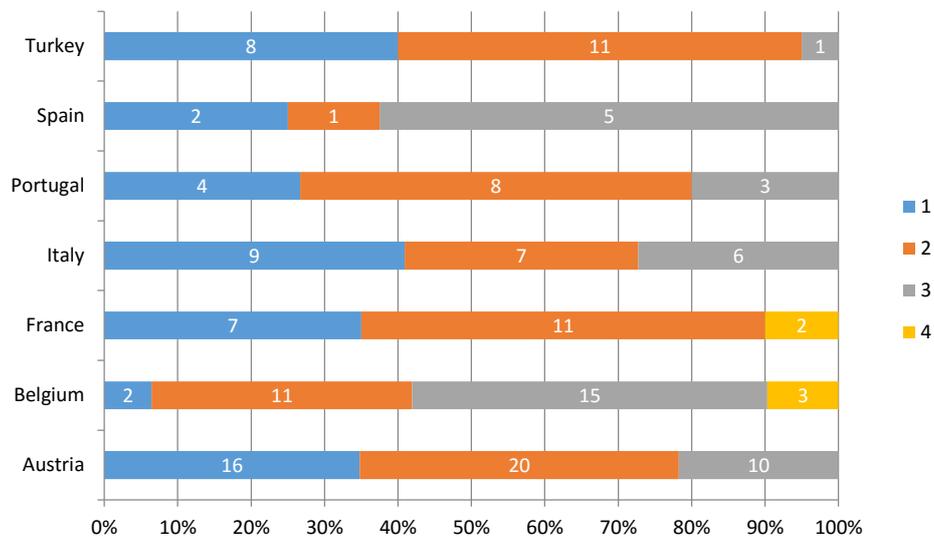


Figure 26. Children by family distributed by country.

In this survey, we asked to the parents "Have your children worked in collaborative groups at secondary school?" Just the 3 % of them (5 parents in total) recognised that they do not know if their child participates or not in collaborative situations in the secondary school. From the others, almost a half of the parents answer that their children participate in collaborative groups sometimes. 31% of parents declare that their child participate always or frequently in collaborative groups at school, and 17% declare that their children have never (4% - 6) or almost never participated (13% -21) in collaborative actions.

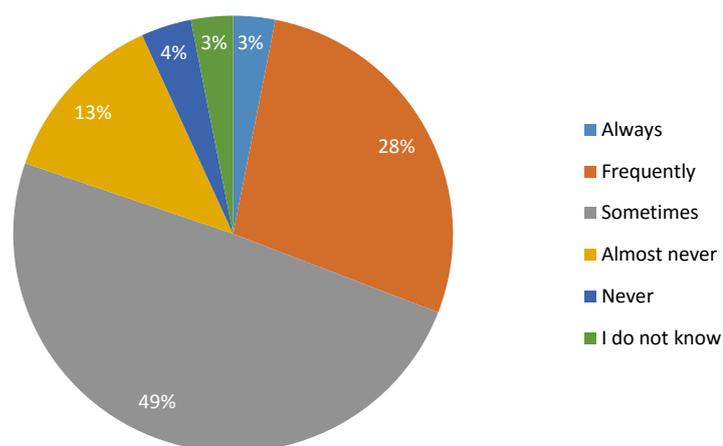


Figure 27. "Have your children worked in collaborative groups at secondary school?"

In this case, when we see the data by country it is very remarkable the case of **Belgium**, where the whole sample is distributed, almost equally, between those parents that

declare that their child has participated in collaborative groups in the secondary school frequently (47% -15) or Sometimes (53% - 16). This distribution is very similar in **Austria** (Frequently 40% and Sometimes 45%) also appeared some cases in the extremes, but marginal in comparison to the country sample.

The case of **France** is also remarkable, taking into account that **none of the respondents** declares that their children participate more than "sometimes" in collaboration activities.

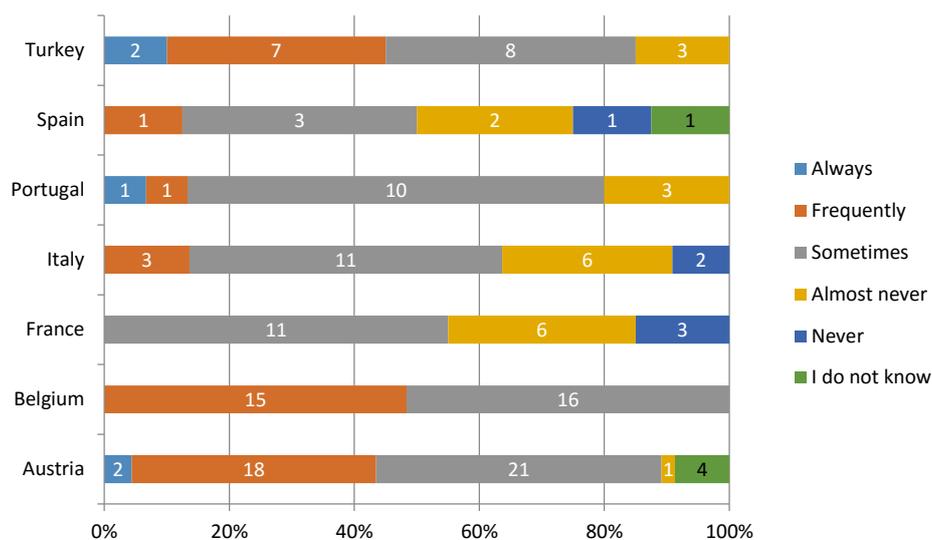


Figure 28. "Have your children worked in collaborative groups at secondary school?". Distribution by Country.

The first question we asked parents about their perception related to collaboration was: "**Do you think that educational policies (in your country or region) help to develop collaborative learning in secondary school?**" to which parents answered almost in equal proportion to the three options given:

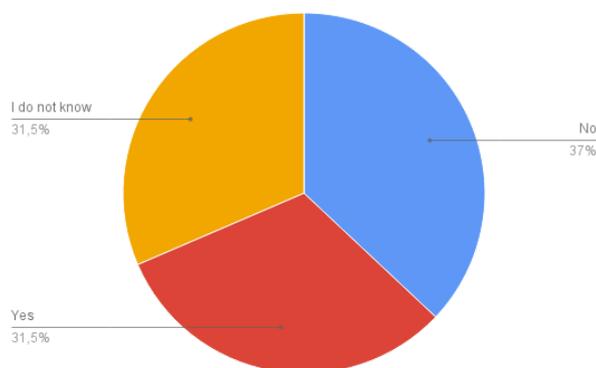


Figure 29. "Do you think that educational policies (in your country or region) help to develop collaborative learning in secondary school?"

Nevertheless, we understand that the results of this question by country would give us a better perspective, taking into account the obvious differences among policies on every country.

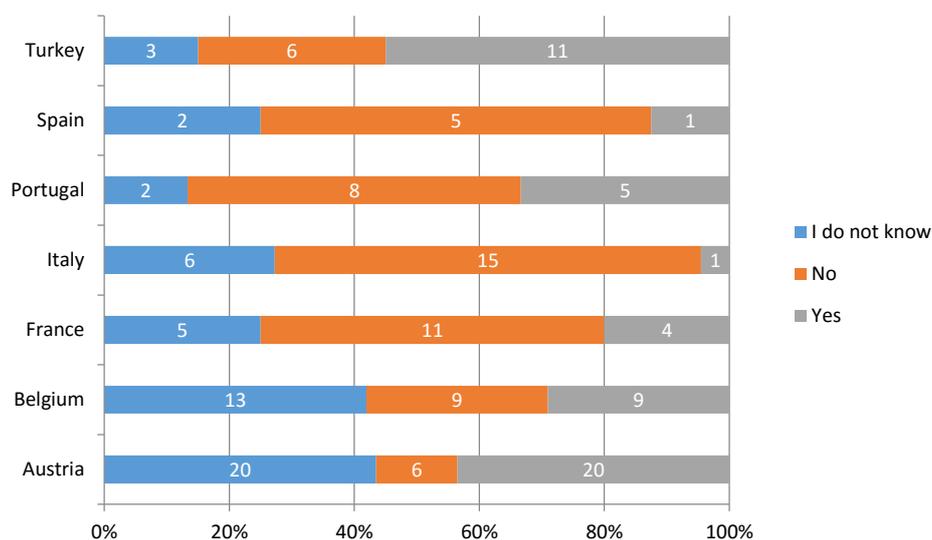


Figure 30. "Do you think that educational policies (in your country or region) help to develop collaborative learning in secondary school?". Distribution by Country.

In this case, it is remarkable that more than 40% of parents from Belgium and Austria declare that they ignore the role of educational policies in the developing of collaborative learning. Also is remarkable, the criticism of Spanish, Italian, Portuguese and French parents, regarding the policies of its countries. Thus more than a half of them consider that the policies do not help to develop collaborative learning in secondary schools.

Where we asked the parents about their perceptions about Collaborative Learning (CL), we asked about three principal focus: Impact of collaborative learning, Resources Adequation to CL, Personal Supporting to CL and.

To know the perception of parents about the importance of CL, and its impact we have asked them three main questions:

- Q.17. Do you think that students learn better with collaborative methods?
- Q.18. Do you think that collaborative learning may be a useful methodology to reduce ESL (Early school leaving) and improve learning motivation?
- Q.19. Do you think that collaborative learning prevents students from dropping out?

As would be seen in the following graph, the majority of parents consider the CL as positive in the development of children.

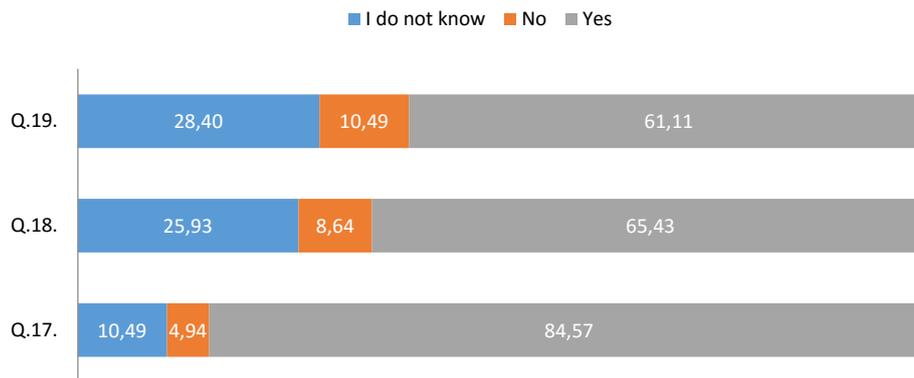


Figure 31. Q.17, Q.18 and Q.19 Percentages.

They definitively believe that children learn better using CL (84,57%), and, even when they are less optimistic, the majority of them consider CL as useful to prevent Early School Leaving (65.43%) dropping out (61.11%). Nevertheless, it is remarkable the scepticism evidenced by parents. 10.49% of them declare they do not know the effects of CL on learning, 25.93% on ESL and 28.4% on dropping out.

The two questions used to measure the adequation of the school resources to collaborative learning were:

- Q.8. *Are the subjects in secondary school adequate to promote collaborative learning?*
- Q.10. *Do you think that the equipment (computer, board, video projector,...) or furniture of the classrooms are adequate to work collaboratively with students?*
- Q.11. *Is the school building adequate to promote good practices in collaborative learning?*

The parent's answers were distributed as it follows (figure 43).

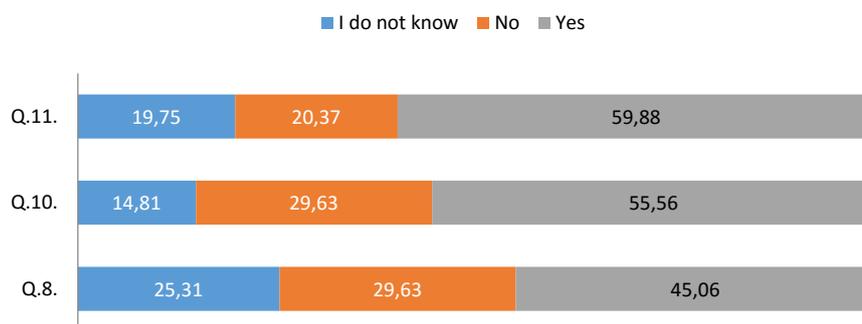


Figure 32. Q. 8, Q.10 and Q. 11. Percentages.

In the three cases, parents agreed. From their perception, *subjects* (45.06%), *equipment* (55.56%) and *school buildings* (59.88%), are adequate to promote CL.

To know the perception of parents about how people (participants) could influence in the developing of CL at secondary schools we used basically 76 questions:

- Q. 7. *Who are the key players to promote and support the adoption of collaborative learning in secondary schools*
- Q.9.*Do you think that teachers may need assistants (e.g. teaching assistant, technical staff,...) when implementing collaborative learning?*
- Q.12. *Do you think that teachers have enough skills to implement collaborative learning in secondary school?*
- Q.13. *Do you think that your children have enough skills to work collaboratively in secondary school?*
- Q.14. *Do you think that your support/involvement is relevant to ensure collaborative learning in classroom?*
- Q.15. *Do you think that teachers see you as relevant factor to improve cooperative experiences?*
- Q.16. *Is it relevant to have support from educational stakeholders (institutions, associations,...)?*

Firstly, we explore the results of questions 9, 12, 13, 14, 15 and 16 in the following graph:

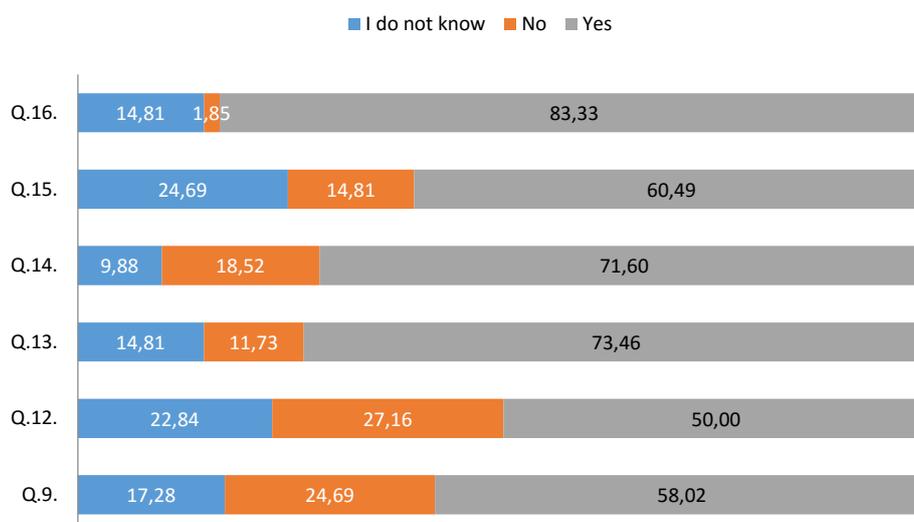


Figure 33. Q.9, Q.12, Q.13, Q.14, Q.15 and Q.16. Percentages.

Parents consider that teacher (Q.12) and students (Q.13) have enough skills to promote CL. Nevertheless, they consider children as much more competent (73% of yes to Q.13). In the case of teachers, parents believe that they have enough skills to promote CL (50% of yes in Q. 12), but at the same time, 58.02% of them consider that teacher may need assistants (e.g. teaching assistant, technical staff,...) when implementing collaborative learning (Q. 9).

Parents assume that their support to CL is crucial (71% of yes in Q. 14), and consider that the majority of teachers consider important parent's support to CL as well (60.49%

in Q.15). Additionally, 83.33% of parents consider important the support of other stakeholders in the developing of CL.

In Q. 7. we have asked parents about, in their opinion, Who are the key players to promote and support the adoption of collaborative learning in secondary schools? For it, we have proposed them a list of agents (Principal, Teachers, Other school staff, Students, Parents, Stakeholders, Other agents) and they had to choose, three of them. Parents consider that the key players to promote and support the adoption of collaborative learning in secondary schools are, by order, teachers (89.5%), school principal (50%), students (40.7%), Parents (28.4%) and other school staff (21%).

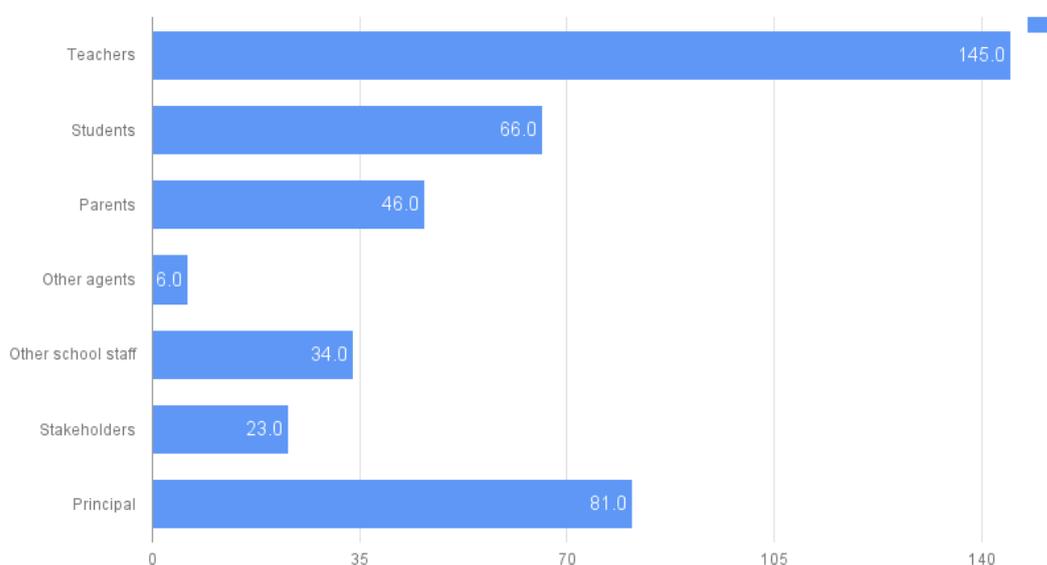


Figure 34. Q.7. Who are the key players to promote and support the adoption of collaborative learning in secondary schools?

Finally, we proposed to parents a list of factors related to CL:

- Equipment, furniture
- Curriculum & Policies
- Teacher training or skills
- Parent skills
- Student skills or motivation
- School organisation (timetables, supporting, coordination)
- Support of external agents
- Lack of time

Moreover, with them, we have asked them to choose just three of them to answer:

- *Q. 20. What are the three factors which may promote the development of good collaborative practices in secondary schools?*

- Q.21. *What are the three factors which may hinder the implementation of CL in the context of secondary education*

The principal factors consider by parents as **essential to developing good CL practices** are Teacher training or motivation, Curriculum & policies and the School organisation. Similarly, the reader would see that parents consider the same factors (Teacher training or motivation, Curriculum & policies and the School organisation) as those that could hinder the implementation of CL in the context of secondary education.

Stakeholders

We have collected 67 answers in our sample of stakeholders. Here we are going to present all data in every item understanding that the interest rests on the global perspective. In the end of this part, we will explain some relevant conclusions in order to support the relevance of this CARMA project from the point of view of stakeholders in all these countries.

We begin with data about the description of the sample and we can observe that there is almost the same percentage of female (55%) and male (45%). About the country, we have collected more answers in Austria (22 people, 32,8% of the total amount) followed by Italy, Turkey, Spain, Belgium and finally the smallest participation has been in Portugal (only 1 people).

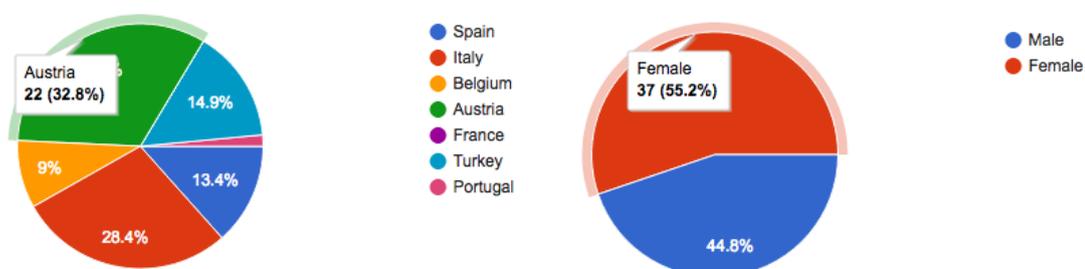


Figure 35. Sample of stakeholders by country (left) and gender (right).

We asked about the professional profile to describe the relation among stakeholders and secondary schools. The answers shows that 42% are professionals in the field of education; 22% are people from non-profit organizations; 12% are regional or local government and also 12% are from parent's association; the rest of the percentages are less relevant.

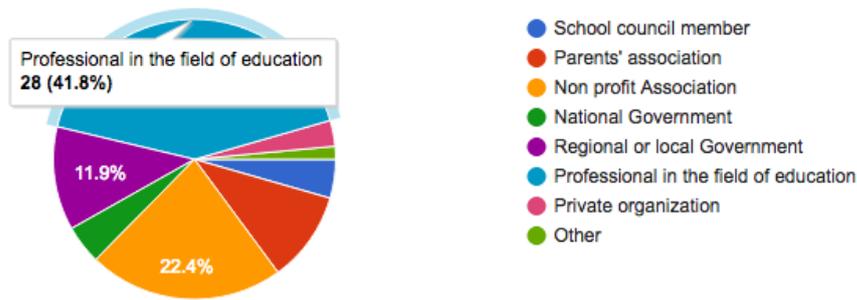


Figure 36. Professional profile.

Question number 4: Have you got any relation with collaborative experiences in secondary school? Answering to this question, the results are not significant because there are not a majority of the stakeholders showing a trend. Half of the sample shows that they have a relevant relation (options between good, very good and excellent), 51%. In a negative sense we can find 47% of the answers (fair and poor). So we can conclude that our sample show us a good picture of the reality because we have people with a professional profile but also that they aren't. We have parents (10%) and people from the Government (12%), too.

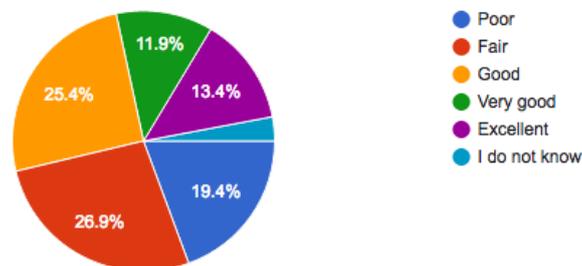


Figure 37. Relation with collaborative experiences in secondary schools.

In the item number 5 we asked about educational policies (in the country or the region). We wanted to know if they could help to develop collaborative learning in secondary schools. It is very relevant that almost 54% suggest that "sometimes" added to 13% that suggest "frequently" (total: 67%). In a negative sense, 36% suggest that educational policies do not help collaborative learning (27% "almost never", 6% "never").

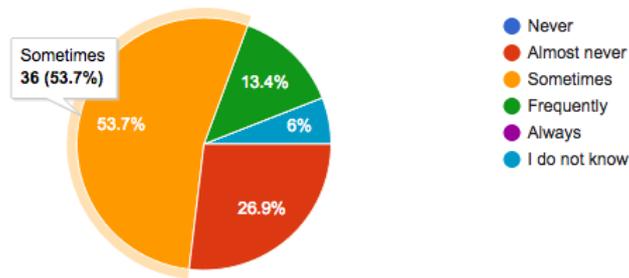


Figure 38. Opinion about educational policies.

We asked about the structure of curriculum to know if it is adequate -or not- to promote collaborative learning at schools. The stakeholders show us that this factor is sometimes relevant (55%) while 20% consider that it is not adequate ("never" and "almost never") and 25% consider that it is adequate ("frequently" and "always").

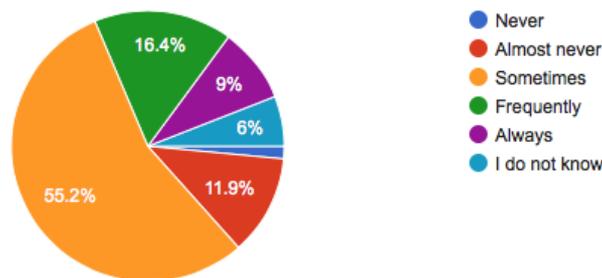


Figure 39. Structure of curriculum as aid to promote collaboration.

In the next two questions we wanted to know the opinion from stakeholders about the material resources. That is, the adequacy of equipment (computer, board, video projector) or furniture in classrooms (question 9) and the building in general (question number 10). Do they think that they are adequate or not to work collaboratively? About the equipment and furniture of the classrooms, the answer "yes" was chosen by 52%, but the rest were divided among "no" (25%) and "I do not know" (22,4%). In the same sense, we asked about the building. The majority of the answers were positive (58%) while only 36% answered that it would be not adequate. So we can conclude that stakeholders show that the infrastructure in the classroom and the building are in general adequate to develop collaborative methodologies in classrooms.

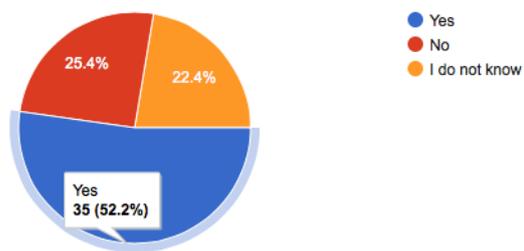


Figure 40. In general, is equipment/furniture adequate?

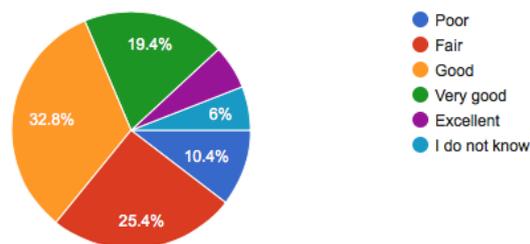


Figure 41. In general, is the building adequate?

The question number 6 was about the key players. We were interested to know who are the key agents to promote and support the adoption of these methodologies in Secondary schools. There were 7 options to answer, but each person could choose up to three. It is for that reason which percentages are not equal to 100% otherwise the total amount is more than 100%.

About the answers we can conclude that the most relevant player is the teacher (f= 57; 85% of the answers) and next the Principal (f=43; 64%), other school staff (f=23; 37%), parents (f=16; 24%), stakeholders, it is, themselves (f=12; 18%) and students (f=8; 12%).

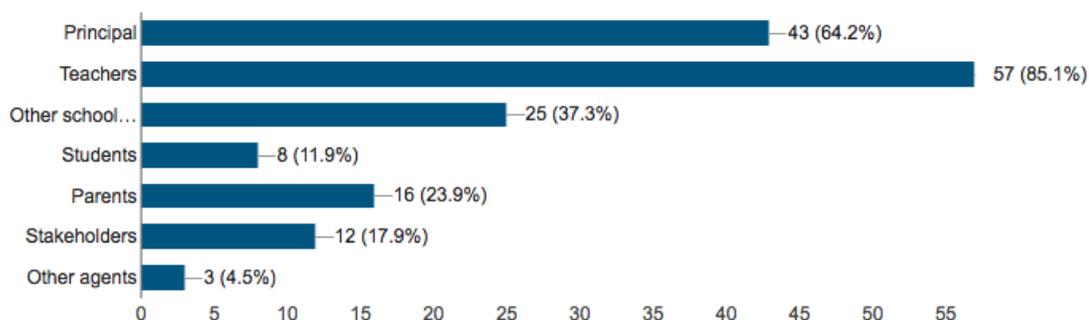


Figure 42. Key players to implement collaboration at secondary schools.

Stakeholders had to express their opinion about assistance to teachers when they use collaborative methodologies, for example a teacher assistant or technical staff. Opposite to other previous questions, here we can find a clear trend: they need assistance. The addition of percentages show that assistance is an important aid for 83'5% (48% "sometimes", 28% "frequently" and 7,5% "always"), while only 15% suggest that not (12% "almost never" and 3% "never").

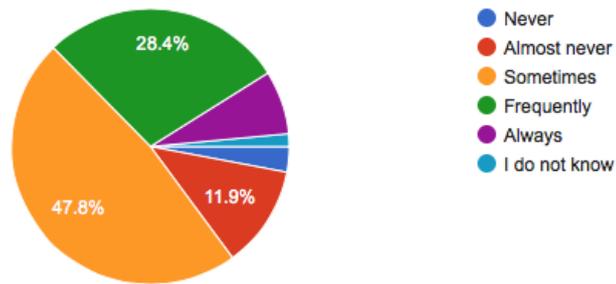


Figure 43. Assistance to teachers as relevant aid.

Questions 11 and 12 were about collaborative skills of teachers and students. We can compare the answers in the graphs that we have below this lines. And we can observe that the percentages are very similar. Over half of the sample marks the options "good" and "very good". The option "poor" is marked by 15% in the case of teachers' skills and 7,5% in the case of students' skills. The option "excellent" has been chosen by 5% in relation to teachers and 10% in relation to students. This comparison shows that the trend is more positive in the case of recognizing the worth of students than teachers.

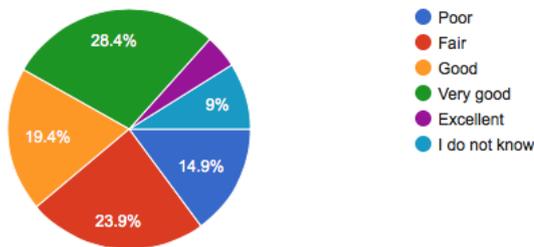


Figure 44. Opinion about teachers' skills

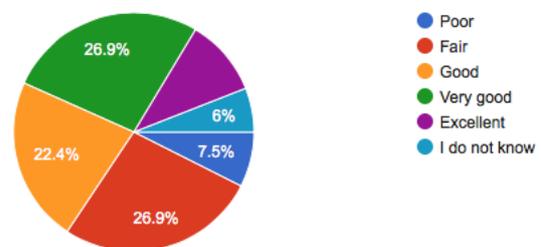


Figure 45. Opinion about students' skills

Next question was about the relevance of stakeholders' support in relation to success of collaborative experiences. Negative answers were 15% ("never" and "almost never"); "sometimes" was chosen by 37%; and positive answers were the majority of them (39% adding "frequently" and "always"). So the self-perception of stakeholders shows us that they consider themselves as a key factor to improve collaboration and to get success in the end.

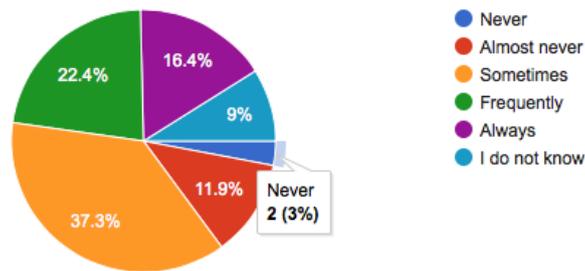


Figure 46. Influence of stakeholders in the success of collaborative learning.

In relation to this issue we can explain the question about the perception of teachers: Do teachers see stakeholders as relevant to develop collaboration? It is curious because stakeholders think that teachers see them as relevant. If we compare positive answers ("sometimes", "frequently", "always") between this item and the previous one, around 60% of the sample think that teachers see them as relevant and over 70% consider that they are relevant, so there are not significant differences.

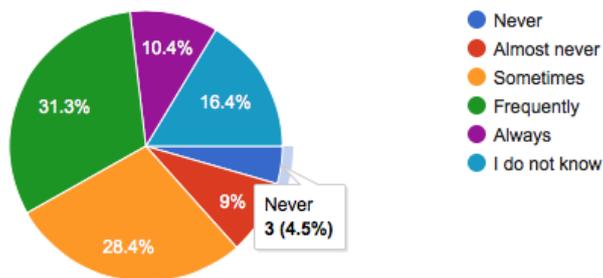


Figure 47. Do teachers see stakeholders as relevant?

Fourth question was relative to parents' support. Do stakeholders consider it as relevant or not? In this case the percentage of "always" is higher than in other questions, 21%. Between "always" and "frequently" the addition is 38%. "Sometimes" is chosen by 37%. Finally, the negative answers ("almost never" and "never") mean the 20% of the sample.

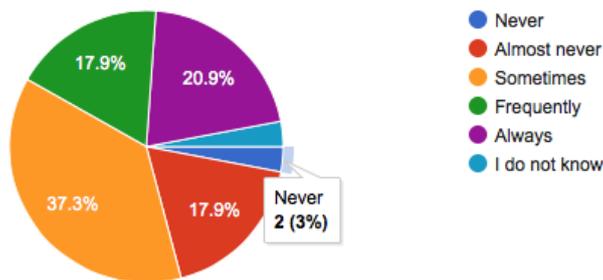


Figure 48. Relevance of parents' support.

Three questions were about the impact of this type of methodologies in relation to learning, to reduce ESL and to prevent dropping out. The results of these questions suggest that this methodology could be really relevant in Secondary school, this is the opinion of stakeholders that are in our sample. Here we have the detailed answers, but it is significant: all these issues (learning, ESL and dropping out) can improve with collaborative methodologies in the opinion of stakeholders.

The first of these questions was about the opinion of stakeholders in relation to the *learning*. The result is very clear: the majority of them (88%) think that this methodology can be very effective improving learning in Secondary level.

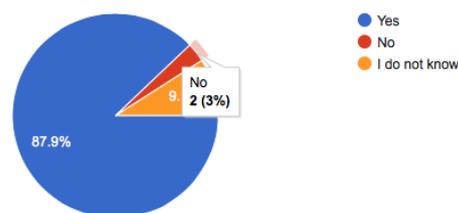


Figure 49. Do students learn better?

The second factor was the opinion about the usefulness of collaboration to *increase motivation* and to *reduce ESL*. The opinion is clearly positive: 70% of the stakeholders polled consider that the answer is "yes".

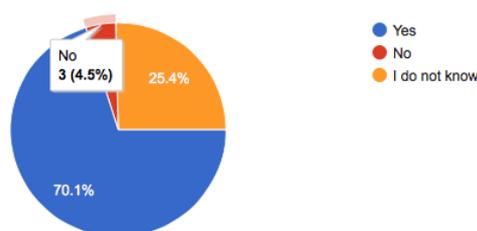


Figure 50. Relevance to reduce ESL improving motivation.

About the prevention from *dropping out* using collaboration, the trend is also positive: over 65% choose the option "yes".

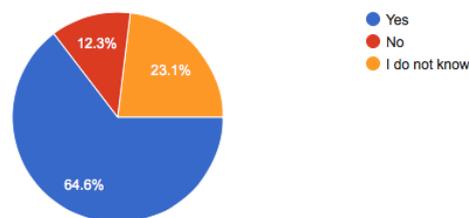


Figure 51. Prevention from dropping out.

We have described a list of relevant factors in relation to collaborative practices. Each stakeholder polled had to choose a maximum of three factors that contribute to promote them and, in another list, three factors that could hinder the implementation of good collaborative practices. Sixty-six people answered these questions, so only one person less than the global sample (f=67).

To complete the quantitative approach, we made two open questions to collect qualitative information about these topics: factors to improve and factors to hinder good collaborative practices. These are the results.

Firstly, we asked about factors to improve collaboration and 66 people answered it, as we have explained above. We have found 52 answers (around 80%) indicating "teacher training" as most relevant factor; next to this, curriculum and policies (6%), school organization (41%), human resources (32%), student skills (27%) and equipment and furniture (23%). The other options were less significant.

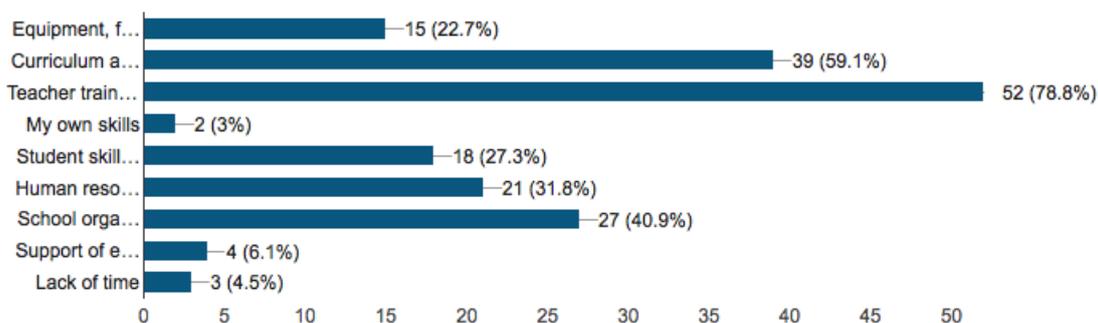


Figure 52. Factors to improve collaboration.

Only 20 people answered the open question. After analysing the answers, we can conclude that stakeholders consider very relevant:

- Motivation of teachers or students (3)
- Method (assessment, guidance, reflective practices,...) (2)
- Training programmes for students or social clubs (2)

- Parental support (2)
- Abilities (2)
- Culture (1)
- I do not know (5)

On the other hand, we asked about factors to hinder collaborative practices. The results show us curriculum and policies as the worst (62%), followed by teacher training (54%), school organization (48,5%), lack of time (32%), human resources (23%), equipment and furniture (15%), student skill (11%) and others with less percentage.

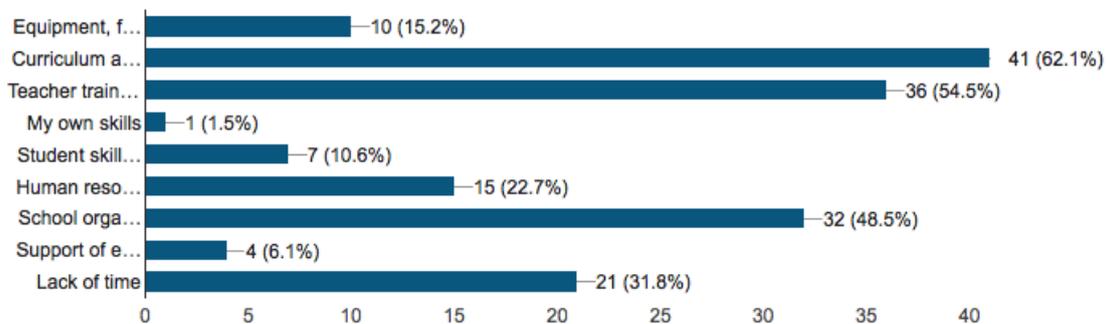


Figure 53. Factors to hinder collaboration.

About the qualitative question, we can find 15 answers and they are very similar to another answers about positive factors. The analysis shows us these difficulties to develop collaborative learning with secondary students:

- Teachers (5): autonomy, training, skills, knowledge, awareness, leader.
- Method, materials, evaluation (3)
- Parental support (1)
- Motivation (1)
- School areas (1)
- Culture (1)
- I do not know (5).

If we compare both last graphs, we find these results (see table below). The results are almost the same; the factors that stakeholders find as the key to improve good collaborative practices are also the key factors to difficult them.

	PROMOTE		HINDER	
	Position	%	Position	%
Equipment, furniture	6	23	6	15
Curriculum and policies	2	59	1	62
Teacher training	1	79	2	55
My own skills	9	3	9	2
Student skills	5	27	7	10
Human resources	4	32	5	23
School organization	3	41	3	48
Support of external agents	7	6	8	6
Lack of time	8	5	4	32

Figure 54. Factors to promote/hinder CL

Conclusions

The needs analysis developed has been crucial in order to explore the real needs and to quantify these needs to have a deeper knowledge on how to adapt the non-formal learning methods in secondary education. The results of all questionnaires strengthen the relevance of CARMA project and their aims.

Participants' opinion shows us that they agree with the **importance of CL**. That is, students think they learn better in groups and they are happy implementing group work in their houses and in school, but the majority of them prefer school as a space for working with others. On the other hand, teachers say they have had good or very good practical experience using collaborative learning and they think that students learn better in groups. About parents, they are very positive regarding the role of collaborative learning in their children learning. And finally stakeholders think that this methodology can be very effective improving learning in Secondary level.

As we have explained before, there are not negative answers among participants about the importance of collaborative learning but their perceptions **about needs to implement CL** in class are different. Teachers say that they need more technical assistance than human help to develop collaborative activities in their classrooms. They specify their needs regarding equipment (computer, board, video projector,...) are bigger than needs relating to have a teacher assistant or technical staff. Despite of the fact that teachers do not consider that teacher assistant is needed, parents, students and stakeholders consider the support of other teacher is really important to develop CL in class.

Moreover, **parents' support** is understood differently depending on who provide the answer. Parents consider their selves as a key aspect to promote CL in class. The same happen with teachers' and stakeholders' opinions meanwhile under students' perspective parents' support is not needed.

On the other hand, students and teachers are aware of the **subject organization** in secondary school and the **equipment, furniture and school building** because for them this organization is suitable to promote CL in class. In this way, parents' opinion is different because just half of them consider the school infrastructures (curriculum, material resources and building) satisfactory to keep on collaborative learning in their secondary schools. For stakeholders the structure of the curriculum has not a clear influence in collaboration meanwhile equipment, furniture and school building are suitable to implement CL.

One of the most key factors for teachers to be able to implement collaborative experiences is the **support from educational stakeholders**. In the same way, stakeholders find educational policies very relevant to promote CL. Parents and students' opinions are different in this key factor because they do not perceive the role of policies (national educational policies and stakeholders' support) in the implementation of collaborative learning. According to the students' opinion we have found that the key players to promote CL are actors closer to the educative process: teachers, students and the school principal but not stakeholders.

It is important to highlight the questions related to the **skills perceptions**. Students think that they are more skilled to promote group work than teachers and classmates. Self-perception in this question is very important because the most part of students asked think that they know how work collaboratively. These answers are according to teachers' opinion. Teachers think their students are able to work collaboratively and that their students are old enough to work cooperatively. Also parents consider that teachers and, especially, students, have skills enough to carry on collaborative practices in secondary schools. Under stakeholders' perspective teachers and students' skills to collaborate are enough but they are better in students than in teachers.

Although students are not sure is in the question related with **dropping out** because they do not know if CL is a good way to prevent student from that, in the opinion of

stakeholders, parents and teachers CL is very important to prevent Early School Leaving and dropping out.

According to the all participants' opinion, **teacher training** is one of the most important factors to develop good collaborative practices and also a key factor to difficult them. It is significant that all teachers, regardless of the country of origin, say they do not have received any specific training regarding collaborative learning. And this is the base of CARMA project: our aim is to work with groups of teachers to develop and to improve collaborative methods in secondary classrooms.

Teachers and students find their selves skilled to work collaboratively and CL is understood important to improve motivation among students and prevent them from dropping out. Projects like CARMA are very crucial and needed because go in deep in these aspects: students' motivation, ESL and teacher training.

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Non-formal learning for student motivation