



Project Number: 2018-1-PT01-KA203-047361



FINAL TRANSNATIONAL EVALUATION REPORT



Project Applicant: Istituto Politecnico Do Braganca (PT)

with the technical support of Pixel (IT)

Period: 1 September 2018 – 31 August 2021

Report produced by: Pixel (IT)



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Introduction

The purpose of the Evaluation Report is to help the project partnership to improve the outcomes and impact of the project.

The Evaluation Report provides an overview of the strengths and weaknesses of the project. The purpose is the identification of improvement strategies to overcome the weak points.

The evaluation of the project's activities was carried out according to the evaluation strategy developed by Pixel (IT) and agreed upon among the project partnership.

The evaluation report is based on the following:

- Results of the Interim Evaluation Questionnaires addressed to the project's partners,
- The project reports submitted by each project partner,
- Deliverables and outcomes produced.

For every single project stage, an ad hoc "Evaluation Questionnaire" was created, to be filled in by the project's partners as far as the management activities; information systems; meeting organisation etc. are concerned.

The evaluation, carried out at the end of the project, was therefore made on the basis of:

- Final project evaluation questionnaires
- Partners' meetings evaluation questionnaires

The aspects of the project which are subject to the evaluation are:

- The evaluation of the project planning
- The evaluation of the project management
- The evaluation of the project activities
- The evaluation of the project results

The *evaluation of the project planning* takes into account the quality of the action plan; the level of co-operation between the project's partners, the response of the idea to existing needs, a structured and clear definition of objectives, the expected results of planned objectives and the reached results etc.

The *evaluation of the project management* observes the effective management of project activities (e.g. administrative and financial resources, human resources, time, work organisations, etc.). It also takes into account the effective management of the partnership by the project's coordinator (e.g. organisation and management of activities, respect of time and of milestones, meeting management information management).



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The *evaluation of the project activities* observes in detail the quality of each activity completed as well as its level of efficiency in relation to the project objectives and outputs.

The *evaluation of the project results* aims to confirm the project ability to achieve the users' expected results according to their needs. To verify the results, we refer the evaluation of the activities concerning project planning. During the planning phase, the objectives were defined in a clear and realistic way. A comparison is made between the original project objectives and the actual project results that were achieved.

The evaluation activity resulted in the creation of this progress transnational report, based on the elaboration of the results of each single evaluation activity carried out (analysis of questionnaires filled in) and on the evaluation reports produced by each of the project partners.

The evaluation report also focus on the analysis of the results reached which is based on, alongside other factors, the following general elements:

- Identification on what has been achieved (availability of a structured presentation of what has been achieved; characteristics of the direct and indirect users of the project activities, satisfaction levels of the users; level of transferability);
- Verifying the aim (congruity of the choice of users; level of achievement of the initial objectives in terms of impact and results);
- Quality of the contents (suitability of the qualification levels of the subjects involved in all the phases of the project; availability of standards of reference for the defined methods; suitability of the materials developed; efficiency of the monitoring methods and evaluation etc.).

The activity of monitoring and evaluation was constantly carried out throughout all the project period, so as to allow for prompt intervention to correct and adapt particular elements, in order to assure that the planned activities are carried out in the best possible way, inserting, where necessary, further actions not originally included in the project planning phase, but which have identified themselves as a necessity.



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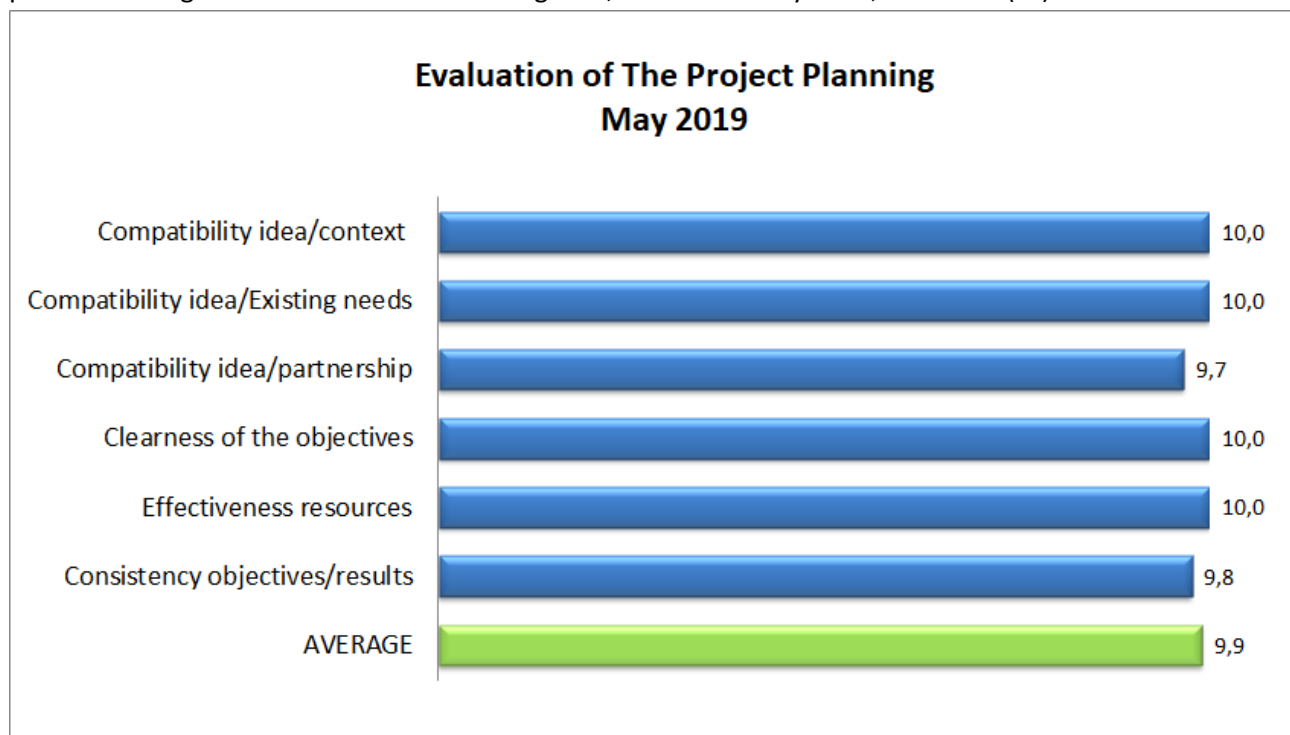
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Evaluation of the Project Planning

In order to give an evaluation of the project planning, we make reference to the data provided by the project evaluation questionnaire filled in by each project partner. During the second and fourth partners' meeting, each project partner has been asked to evaluate the project planning through the following parameters:

- Compatibility of the idea with the context;
- Compatibility of the idea with the existing needs;
- Compatibility of the idea with the partnership skills;
- Clearness of the objectives;
- Effectiveness of the Resources;
- Consistency between the planned objectives and the results reached.

The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT).



The average of 9,9 out of 10 is close to the maximum and a really high result for the progress evaluation of the project, showing that all participants considered the project very interesting and its planning pointed to the right path. About that Marie Walsh from Limerick Institute of Technology (IR) commented that *"this project is well planned"*.

4 categories have obtained the maximum evaluation from all the participants (10 out of 10) and they are: "Compatibility idea/context", "Compatibility idea/Existing needs", "Clearness of the objectives" and "Effectiveness resources".

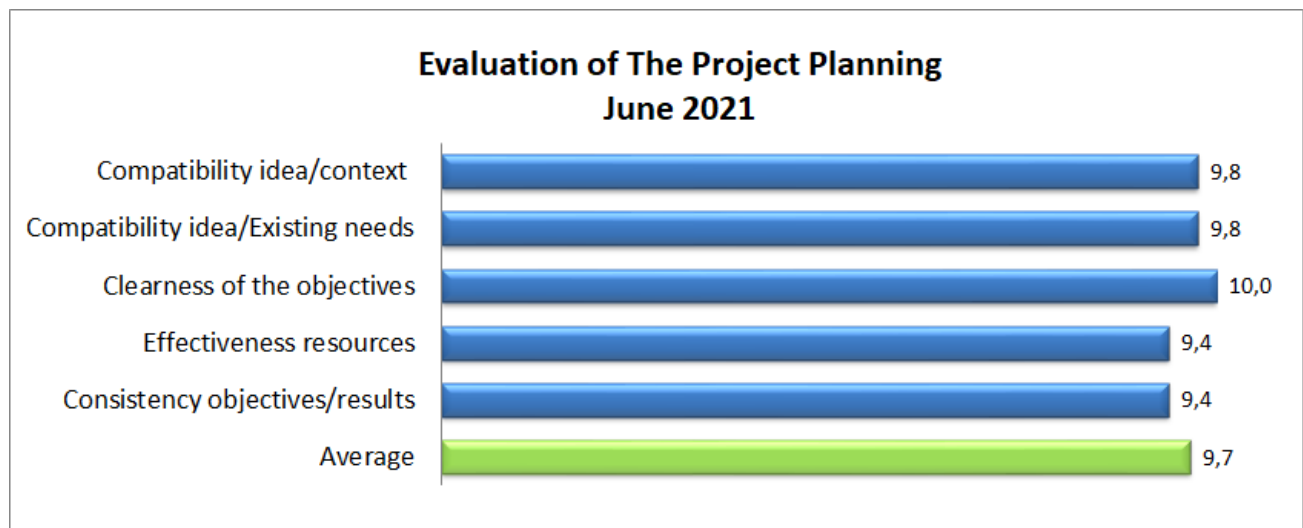


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These results mean that all the partners were really satisfied with the project aims and especially in response to the benefits it can bring with respect to real and existing needs as well as the project is totally in line with the priority and prerogatives of all the participants countries involved

The other two categories “Consistency objectives/results” and “Compatibility idea/partnership” obtained respectively 9,8 and 9,7 out of 10 and in any case two votes very close to the maximum. These results means that the project is going in the right way and the meeting were really useful to clarify doubts.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



The average of 9,7 is a really good result that shows that the participants considered the project interesting and, most important, truly responding to users existing needs. About that, Marcel Roman from TUIASI (RO), commented: *“We consider the project very useful for our students as well as for our lecturers in the teaching process, for preparation and evaluation”*.

Specifically, “Clearness of the objectives” gained the highest score of the evaluation (10 out of 10) and it shows that the deliverables met the aims of the projects. It is followed by “Compatibility idea/context” and “Compatibility idea/existing needs” which both gained a score of 9,8 out of 10. This results demonstrate that the context of the project is more or less identified in the frame-work and it is in line with the priority and prerogatives of all the participants' countries involved.

Related to this aspect, it is really interesting the comment from Maria de Fátima Pacheco from IPB (PT), who reported: *“I think that the most part of the accomplished outcomes suited the students' and teachers' needs but require some adjustment in what concerns the assessment section of the platform.*

Community of practice is also a delicate item since I feel the students are not interested in online debating outside their usual social media”.



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“Effectiveness resources” and “Consistency objectives/results” both have been evaluated with a score of 9,4 out of 10. They are good evaluations which underline that partners were enough satisfied with the resourced available for the development of the project and with the idea behind the project and the good results achieved based on the proposed objectives.



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Evaluation of the Project Management

The overall project management was articulated between the administrative issues and the coordination of the project activities. Great efforts have been made to allow all partners to be able to carry out the project activities assigned to them.

The organisation of the project partnership and the work methodology adopted has proven to be effective and has ensured the full commitment of all partners to the project and the consistency of the activities with the aims of the project and the planned timetable.

As for the project's planning we analyse the results coming from the Progress questionnaires filled in by each partner and the comments coming from the evaluation reports filled in during the partners meeting.

Each partner has been asked to evaluate each parameter of "The Project Management" that is divided into four groups:

- Project Coordination
- Internal Communication
- Partnership
- Financial Management

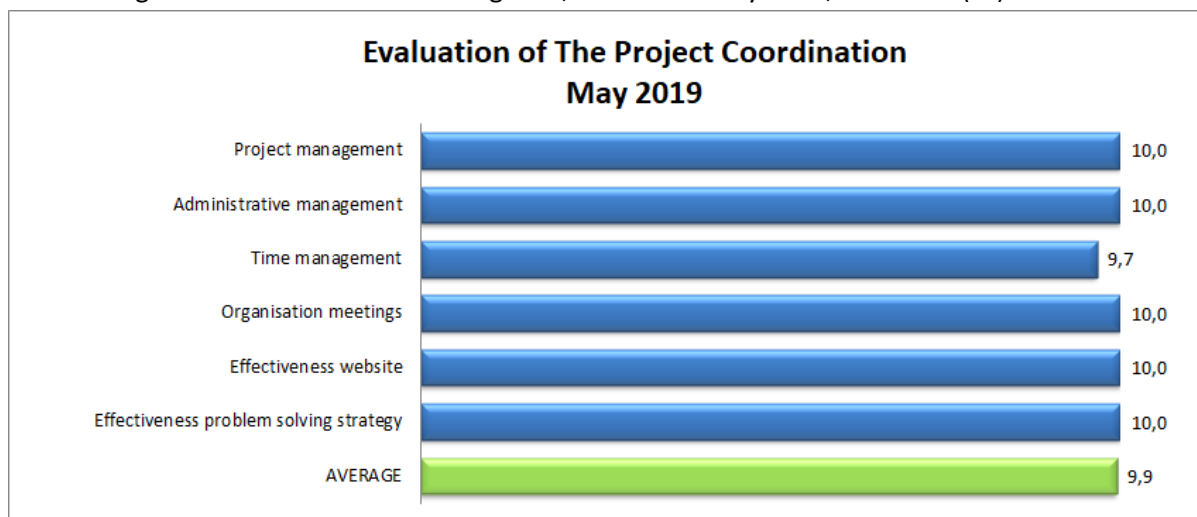
The Project Coordination

As for the project planning, we analyse the results coming from the Interim and the final questionnaires filled in by each partner and the comments coming from the evaluation reports filled in.

Each partner has been asked to evaluate the following aspects of the project management:

- Overall project management by the project coordinator
- Management of the financial and administrative resources by the project coordinator
- Time management of the project activities and the respect of deadlines
- Organization and management of the project meetings
- Effectiveness of the project website for the management of the project

The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT)



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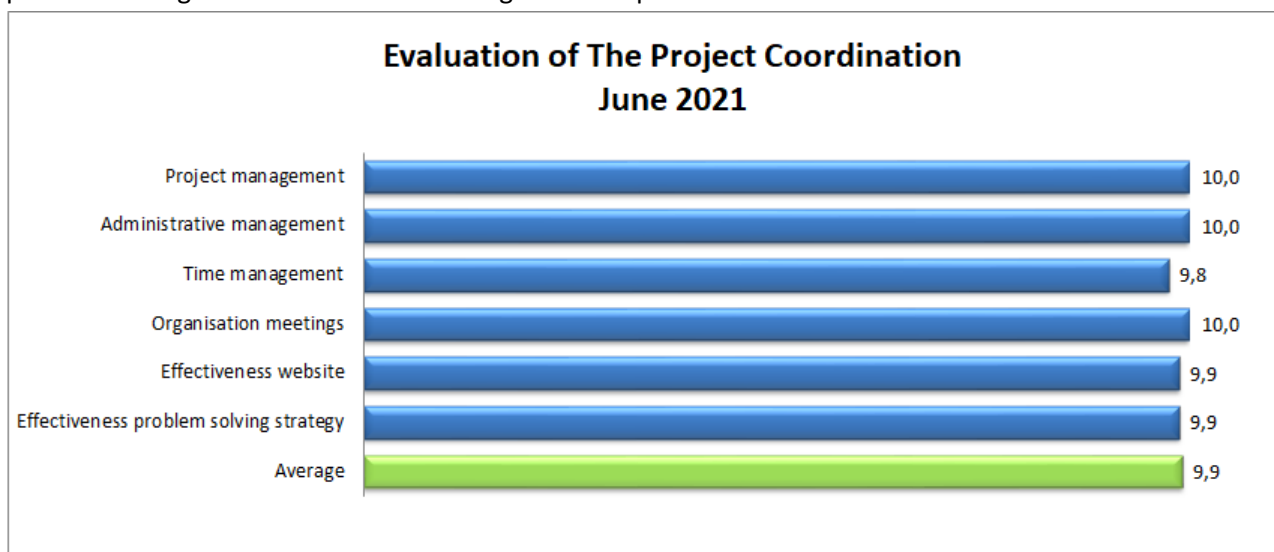
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The average of the evaluation of the project coordination is 9,9 out of 10, then again really close to the maximum and a really high result for the progress evaluation of the project. In fact, Roman Marcel from TUIASI (RO) has identified in the cooperation of the partners and in *"the working atmosphere"* a strong point of the project.

All the specific categories except one gained 10 out of 10. "Effectiveness problem solving strategy", "Effectiveness website", "Organisation meetings", "Administrative management" and "Project management" reached the maximum score from all the participants. This is certainly a symptom of total satisfaction on the part of all partners with regard to all aspects related to coordination. In particular, Ancia Constantin from EuroED (RO) reported that the *"overall project management"* was a strong point of the project.

"Time management" is the category which gained the lowest evaluation (9,7 out of 10) even if it is a really great result so close the others. It reflects the good work from each partner despite some normal problems that have been overcome.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



The average of 9,9 is an excellent result and it demonstrates that the coordination and the management were well appreciated by the partners. About that, Ana Isabel Pereira from Instituto Politécnico de Bragança (PT), commented: *"Work of Pixel is always amazing! The professional way that they do things is amazing! But, my final words go to Lorenzo Martellini. Thanks, Lorenzo for your work and effort to support everything that the partners identify in the project! The project has a higher success because of you!"*.

Three different categories have been evaluated with a perfect score of 10 out of 10:

- "Project Management" and "Administrative Management": these results show that the management and administration of the managerial aspects were carried out with strong efficiency during the time of the project.



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- “Organisation meetings”: it demonstrates that the organization of the meeting was well appreciated by the partners. Marcel Roman from TUIASI (RO) highlights this aspect by reporting that the meetings were *“very well coordination from PIXEL as well as from IPB”*.

“Effectiveness website” and “Effectiveness problem-solving strategy” have been both evaluated with a score of 9,9 out of 10. This means that the website has been very useful for partners to communicate all the news progress quickly and practically as well as that the project’s coordinator managed with dedication strategic and administrative issues, taking also into consideration the issues arisen from the COVID19 pandemic.

About that, Arvid Perego from University of Genova (IT) and Marie Walsh from LIT (IE) respectively commented: *“Very efficient coordination”* and *“All activities well managed”*.

To conclude, “Time management” gained a score of 9,8 out of 10. It is another great result also taking into account the problems caused by the pandemic which necessitated the rescheduling of some activities.

Project Partnership

The project partnership is composed by different actors covering a wide range of skills and experience so that each project partner could bring into the project its added value in terms of competences and contacts.

Istituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), made an effort to give the partners a specific role respecting each institution’s expertise.

As for the nature of the project needs all the partners have been involved in all the activities, with similar tasks: involvement of project end users, contribution to the creation of the contents of the Students’ Assessment Toolkit, of the Video Library, participation in the community of practice

The organization of the project partnership and the work methodology adopted has been planned by the Instituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), so to ensure the full commitment of all partners to the project and the consistency of the activities with the aims of the project and the planned timetable.

Each partner has been asked to evaluate the following aspects of the project partnership:

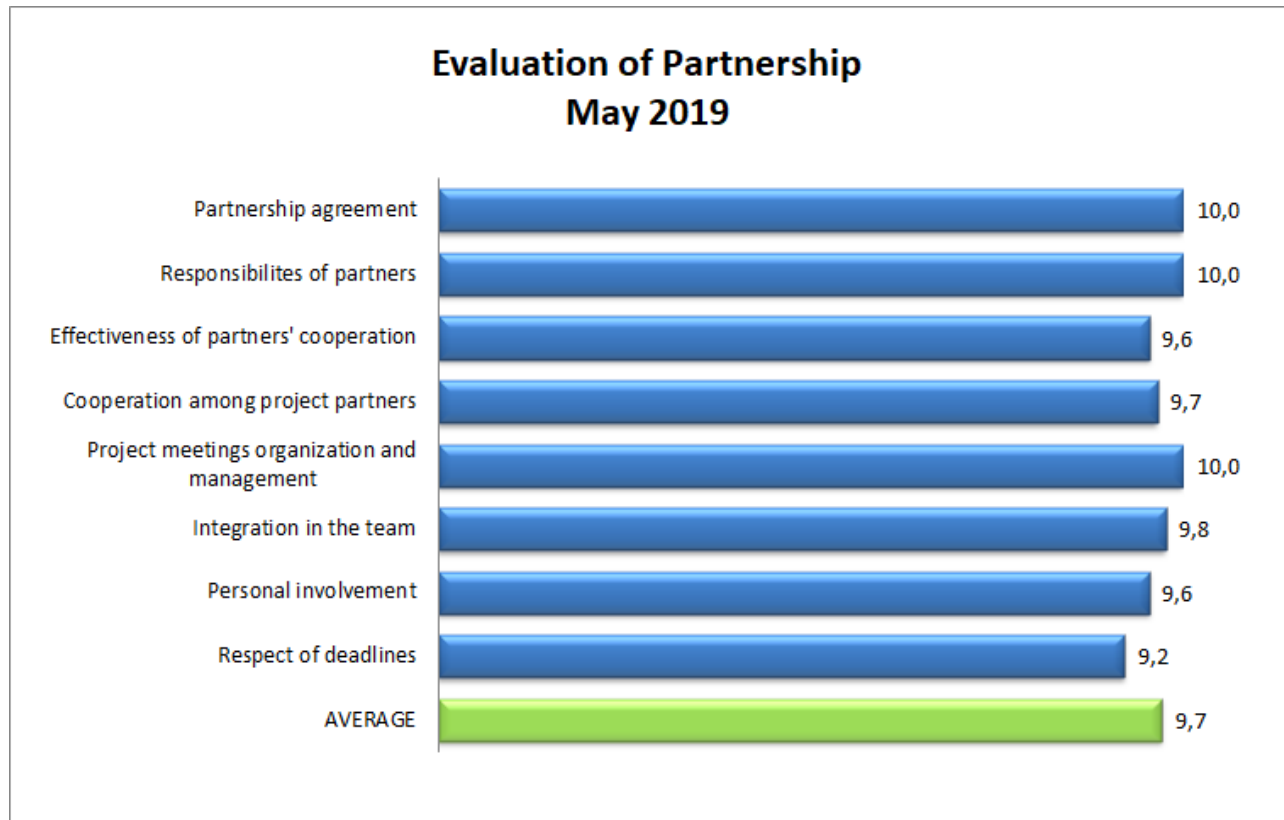
- Appropriateness of Contract with the project’s partners
- Responsibilities of partners
- Effectiveness of partners’ cooperation
- Cooperation among project partners
- Project meetings organization and management
- Integration in the team
- Personal involvement
- Respect of deadlines



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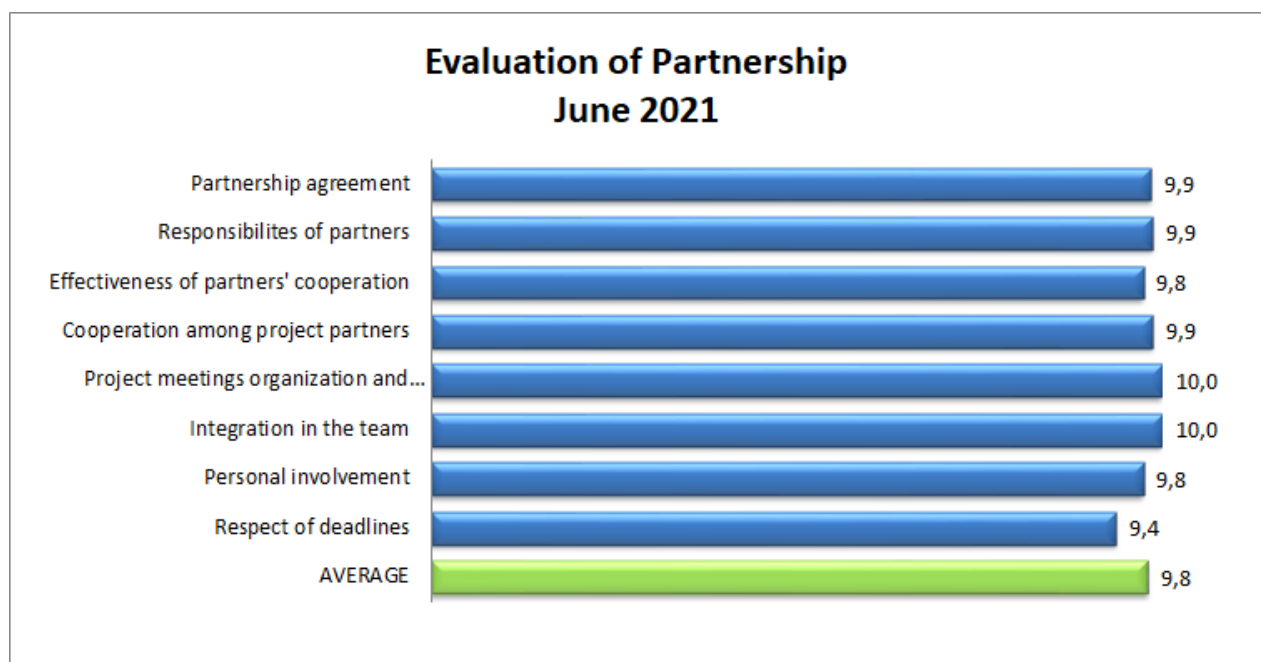
The average evaluation of the partnership is really positive and it reached a score of 9,7 out of 10. All the evaluations were very positive and each one received a score higher than 9,2 out of 10. Among these, even 3 have obtained the maximum rating with 10 out of 10: “Partnership agreement”, “Responsibilities of partners” and “Project meetings organization and management”. This result demonstrates that the partnership was really excellent and each partner worked in the right way. Vida from KTU (LT) commented that she *“really appreciate the partnership. It is easy to work with such a strong team”*.

Also the category “Integration in the team” reached an almost perfect result with a score of 9,8 out of 10. This result confirms that the partners found a strong cooperation in terms of organization and to make each contribution available. About that, Carmen Antonmita from EuroED (RO) has identified *“the quality of project meetings organization and meetings”* a strong point of the project.

“Cooperation among project partners”, “Effectiveness of partners' cooperation” and “Personal involvement” gained a great evaluation as well, obtaining respectively 9,7, 9,6 and 9,6 out of 10 and it shows that the level of organization and management of the meeting was very high and well appreciated by the partners. Again Vida from KTU (LT) reported that a notable strength of the project was, in fact, the partnership and the involvement of each partner in the activities assigned to him.

The lowest score of this evaluation is linked to the category “Respect of deadlines” which gained 9,2 out of 10. It is still a great result showing that the deadlines were met and there were no particular problems in their management.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



“Partnership” gained an average of 9,8, so a very good result. Maria de Fátima Pacheco from IPB (PT), highlighted this result by commenting: *“From a personal perspective, the great cooperation and getting to meet and work with the partners is one of the very positive gains of the project. Of course some are more committed to the required tasks than others but the overall appreciation is that it was a very good partnership, that accomplished important results”*.

“Project Meetings” and “Integration in team” gained the highest results of the evaluation with a score of 10 out of 10. This means that the organisational and managerial aspects of the meeting were well carried out and that the results achieved always reached the expectations of the partnership as well as that all the partners could work in teamwork without problems. About that, Ana Isabel Pereira from Instituto Politécnico de Bragança (Portugal) commented: *“Considering the results obtained, It is obvious that the consortium was perfect”*.

Three categories have been evaluated with a score of 9.9 out of 10:

“Partnership agreement” and “Responsibilities of partners” shows that the partners kept a strong commitment and cooperation during the time of the project reaching the results pre-set at the beginning of the project.



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This high result also in the “Cooperation among project partners” category means that each partner provided their own competences/knowledge for the achievement of the results.

“Effectiveness of partners' cooperation” and “Personal involvement” reached the score of 9,8 out of 10, this means that each partner felt engaged in the team and could work with the other partners. Marie Walsh from LIT (IE) commented: “A very good working partnership with well shared roles and responsibilities”.

To conclude, “Respect of Deadlines” received the lowest score in the evaluation (9,4 out of 10) even if the result is still good. About this aspect, Marcel Roman from TUIASI (RO) reported that *“some of deadlines was not respected by us but we solved the problems in an appropriate time”*.

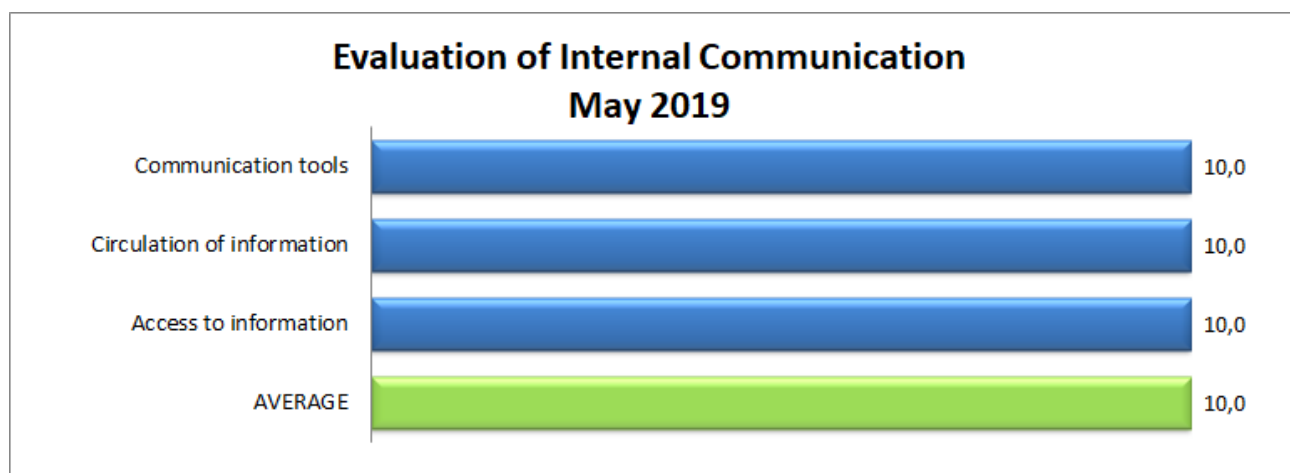
Project Internal Communication

Communication between the project's partners was constant throughout all of the project period. The mostly used communication mean was e-mail through the project mailing list. In order for each partner to be always updated on the activities going on in all the partners' countries, each partner was required to produce, once every three months, according to a given common format, a national activities report and a dissemination report. Both were published under a specific section of the project's web site (<https://mathe.pixel-online.org/MNG-wip.php>; <https://mathe.pixel-online.org/MNG-diss.php>).

Each partner, during the partners' meetings, has been asked to evaluate the following aspects of the project internal communication:

- Communication means used for managing the project activities;
- Circulation of the information within the partnership;
- Access to information.

The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT).

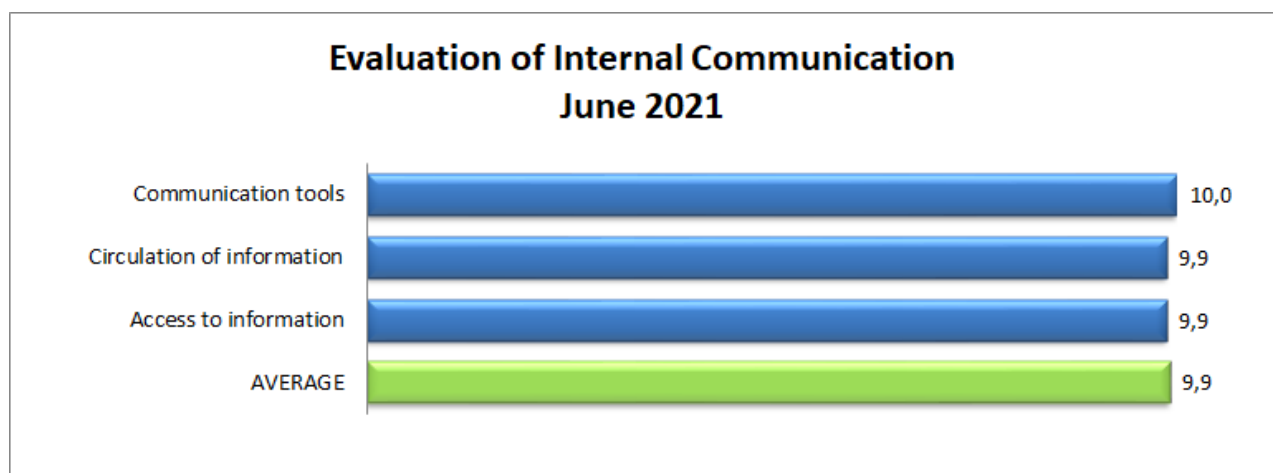


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The evaluation of “Internal Communication” scored an average of 10 out of 10, the highest achievable, as each specific category achieved this perfect result. Obviously, this result is excellent and testimonies a perfect communication and sharing of information among partners. Each partner appreciated all the aspects related to the communication; in particular, Maria F. Pacheco from IPB (PT) reported that she really liked about the meeting the *“building of a sense of community among peers, allowing change of experiences. It didn't happen before”* and Ana Pereira from IPB (PT) highlighted the strong partnership with her comment *“the partners work very well”*.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



The category of “Internal Communication” received an average score of 9.9 out of 10, which is an important result since communication can be considered essential for the project. Ana Isabel Pereira from Instituto Politécnico de Bragança (PT) added the following comment to describe this section: *“always excellent!”*.

All the specific categories have been evaluated with a score of 9,9 or higher. In general, therefore, partners highly valued internal communication and this result is in line with the proposed evaluation of the partnership. Both the efficiency of communication and its appropriateness and usefulness were appreciated.

Arvid Perego from University of Genova (Italy) and marie walsh from LIT (Ireland) left two comments to underline again their satisfaction: *“Very efficient communication”* and *“Always excellent and exhaustive communication”*.

Financial Management

The project financial management was carried out by the Instituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT).



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Istituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), checked the administrative and financial manual. Furthermore, Instituto Politecnico Do Braganca (PT) participated to the coordinators meetings organized by the Spanish National Agency to collect all the information and rules for the correct administrative and financial management of the project.

On the basis of this information Pixel (IT) produced and distributed to the partners during the first meeting a complete Manual for administrative and financial management of the MathE project.

The project partners were asked to produce their financial report and to send all the necessary supporting documents.

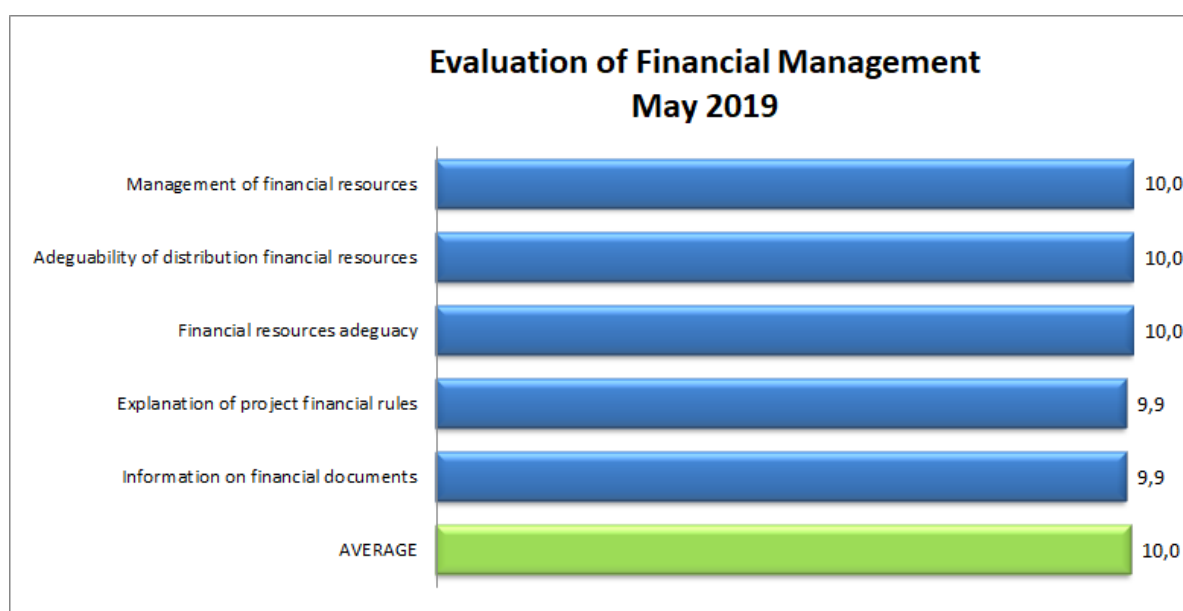
Each financial report was checked by Instituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), and eventual requests of integration and modification of the reported expenses and related supporting documents were asked.

A final version of the report was therefore agreed upon between Coordination team and each project partner and the related data were used by Instituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), to produce the Financial Report.

To evaluate the consistency of the process the project partners were asked to give feedback concerning:

- Overall financial management
- Adequate distribution of financial sources among the project partners
- Consistency of the financial sources with the activities to be carried out
- Clarity of financial management rules
- Clarity of financial reporting rules

The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT).



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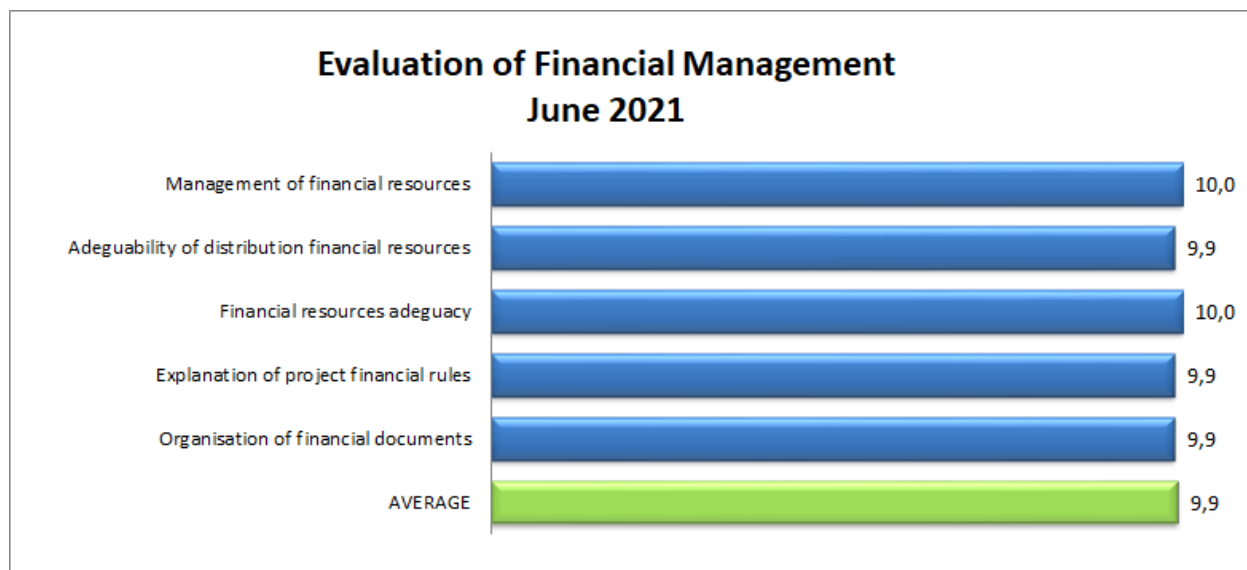
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Also the evaluation of “Financial Management” scored an average of 10 out of 10, the highest achievable. Such a high average in this category can be considered an excellent result because of the natural criticism of the financial aspects that affects every project. It is the result of the following single scores:

“Management of financial resources”, “Adequability of distribution financial resources” and “Financial resources adequacy” gained the maximum evaluation with a perfect score of 10 out of 10 and it means that each partner evaluated very positively the way in which the resources have been distributed and managed.

“Explanation of project financial rules” and “Information on financial documents” gained an almost perfect score of 9,9 out of 10 and it is an important achievement for Pixel and the coordinator which underlines how all the aspects of financial management worked almost perfectly and administration was excellent.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



In project management, this category is very often one of the most complicated and difficult ones. Nevertheless, in the case of this project, both per progress and the final assessment of Financial Management received a high evaluation. In this case, the average score of 9,9 out of 10 underlines a very great satisfaction. About that, Marie Walsh from LIT (IE) commented that *“the administration was excellent”*.

Following the trend of the progress evaluation, “Financial resources adequacy” and “Management of financial resources” reached the highest results with a score of 10 out of 10. This means that partners found the Financial resources adequate for the good realization of the meeting and that they were really well able to manage them during the project lifetime.



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The other three categories have been evaluated with a score of 9,9 out of 10, which means partners found the information and the rules almost clear. This can be still considered a very good result especially with all the issues come up with the COVID19 pandemic.

Evaluation of Partners Meetings

The aim of every meeting was, for the partners, to jointly report on the activities carried out in every country. During every meeting the partnership assessed the activities carried out until that moment and made detailed plans for future project developments and activities.

Information about each of the 6 meetings is available on the project Portal at: <https://mathe.pixel-online.org/MNG-prjmeeting.php> (password protected, username: partner, password: pixel).

The MathE project benefited from the organization of 6 transnational meetings of the steering committee in which representatives of the project partners participated with 1 to 2 representatives. In particular, the 6 partner meetings took place in the following dates:

Meeting	Location	Date
1 st Partners' Meeting	Florence, IT	29 – 30 October 2018
2 nd Partners' Meeting	Kaunas, LT	23 – 24 May 2019
3 rd Partners' Meeting	Limerik	23 – 24 May 2019
4 th Partners' Meeting	Zoom	25 June 2020
Online Meeting	Zoom	21 December 2020
5 th Partners' Meeting	Zoom	23 June 2021

Each partners' meeting was carefully organised through the implementation of the following activities:

- **Practical Organization of the Meeting:** the possible dates and the agenda for the meeting were proposed and approved with the partners. Information was given for the partners to organize the travel in the due time. The hotel was reserved and information was given about the hosting city and the practicalities available.
- **Preparation of the Meeting:** meeting folders were distributed to each project partner representative, containing all the necessary material to appropriately follow and participate to the discussions. The Meeting folder included: the calendar of activities; a summary of the project deadlines; the PowerPoint presentation of the activities carried out; templates to be used for reporting the project management activities and the administrative and financial state of art. The approved version of the meeting folders contents was also uploaded after the meeting, on the project Website.



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- **Management of the Meeting:** During the meeting, the agenda was proposed and approved, all the activities carried out were presented, the in-progress results were analysed and the future deadline discussed and approved. The partners' questions were answered and the doubts clarified.
- **Minutes of the Meeting:** After each of the meetings, detailed minutes were prepared and shared among the project partners. The annexes were also produced, updating when necessary the draft version presented and discussed during the meeting. The minutes and the annexes were then uploaded on the website to be easily available for all the partners.

The evaluation strategy developed by Pixel (IT), foresaw the use of questionnaires which were designed to evaluate the management of the partners meetings. At the end of each meeting, the partners are requested to complete these questionnaires. The coordination team then analysed, collected and organized this information. This allowed for an immediate and constant monitoring on behalf of the partners regarding the organisation of the meetings and their involvement. The information derived from the evaluation questionnaires could be used to improve the planning and organisation of the following meetings. The evaluation questionnaires also allowed the partners an occasion to express their own impressions and opinions on the MathE Project.

The aspects of the meeting that each partner was required to evaluate are the following:

- The degree of participation in the meeting
- Consistency between the results and the initial objectives
- The results reached
- The time management
- The time available
- The answers to questions
- The general management of the meeting
- The working atmosphere
- The meeting Agenda
- The technical equipment
- The level of the transnational coordination
- The information provided before the meeting



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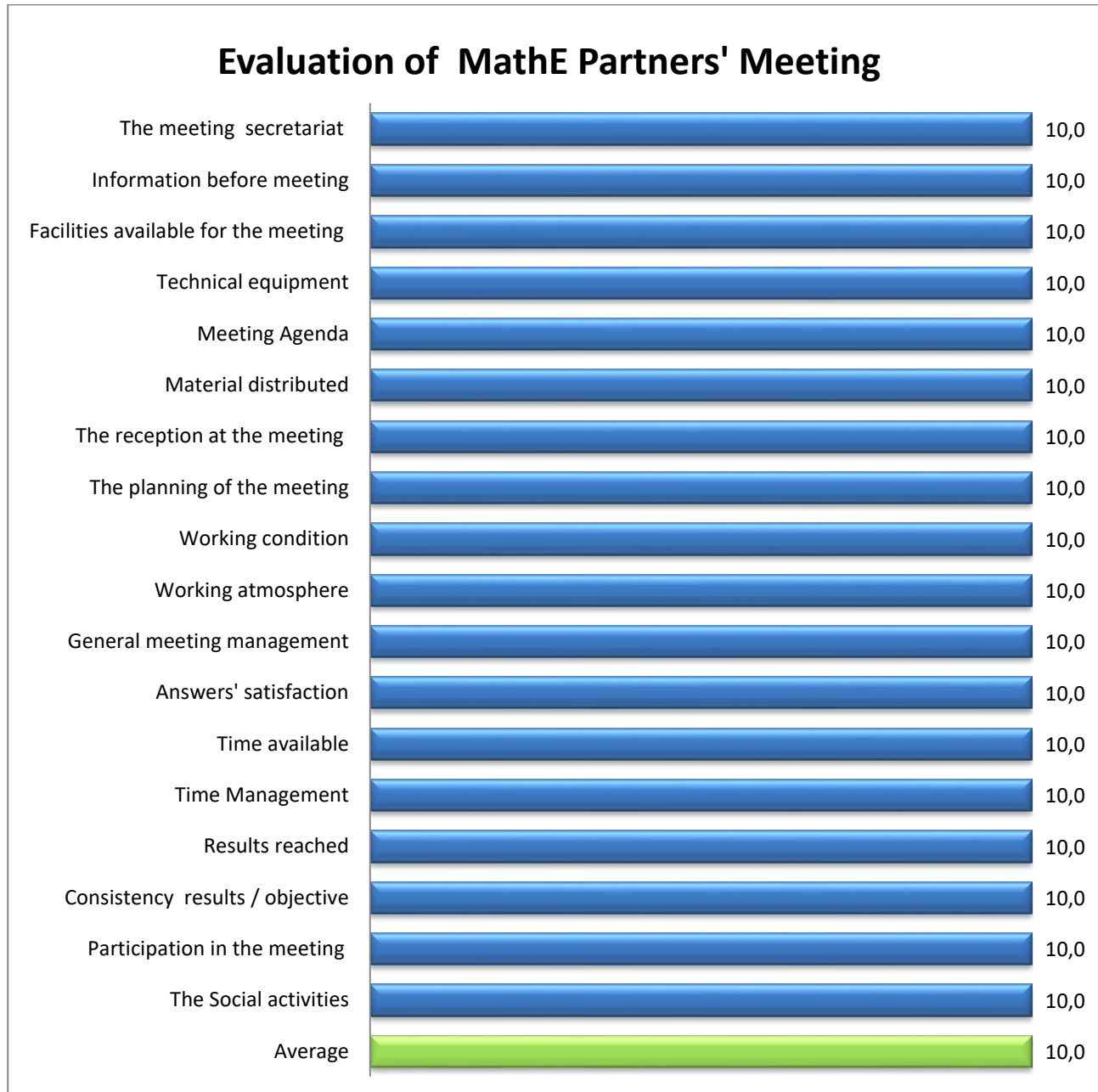
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Project Number: 2018-1-PT01-KA203-047361

First Partners' Meeting

The graph below illustrates how the project partners evaluated the MathE Partners Meeting which took place on 29 – 30 October 2018 in Florence, Italy.



All the categories of this chart gained 10.0 points, the maximum score. This was a great result for Pixel because demonstrated that this European Project was really appreciated and well conducted.

From “The meeting secretariat”, that was evaluated completely efficiently by the partners. It means that there was a very good coordination among the partners during the project’s creation.

Also “the information that the partners received before the meeting” were considered clear, helpful and exhaustive.



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“The facilities available for the meeting” was evaluated suitable according to the nature and aims of the project.

As well as “the technical equipment”, that satisfied the needs and expectations of all the partners during the meeting.

The maximum score obtained by the categories “Meeting agenda”, “Time available” and “Time management” was a reason of great satisfactory for Pixel because demonstrated that the organization of the activities carried on worked very well. The agenda was clear and the time-sharing was adequate to reach the objectives and expected results. Marie Walsh from Limerick Institute of Technology (IE) liked *“the clear and well organised agenda”*.

“Material distributed” during the meeting was well thinking and useful according with the activities planned.

10.0 points of score obtained by “The reception at the meeting” testified that all the partners felt welcome and very integrated in the project group and in the contest’s meeting.

“The planning of the meeting”, that concerned the themes approached, the time available and the various procedures, was clear from the very beginning.

“Working conditions” and “Working atmosphere” were satisfactory for all the partners. It means that during the meeting a positive environment was created and consequently it allowed to carry out all the activities planned and all the results expected.

“The general meeting management” worked very well and it was considered a plus of the entire meeting. Roman Marcel Romică from Technical University of Iași (RO) very appreciated *“the professionalism of the meeting’s organizers. It was his first participation in a meeting organized by Pixel and expressed that everything was perfect”*. Also Carmen Antonita from EuroED (RO) liked *“the general management of the meeting”*.

Furthermore, the partners declared that they received always “satisfactory answers” to their doubts.

The categories “Results reached at the end of the meeting” and “Consistency results/objectives” demonstrated that the results obtained have satisfied the expectations of the project partners. The project’s aim was always respected and central during the organization of the meeting.

“Participation in the meeting” was valued as very satisfactory by all the partners. So, it expressed the fact that the level of coordination and collaboration among the partners was high and it allowed to create a very strong project team. Ana I. Pereira from Instituto Politécnico de Bragança (PT) expressed that *“all the partners were involved in the project”*. Also Florbela Fernandes from Instituto Politécnico de Bragança (PT) expressed that *“the group of people was nice and friendly and everyone is inspired”*. Marie Walsh from Limerick Institute of Technology (IE) appreciated *“the collaborative approach of the partners”*.

Finally, all the partners joined “The social activities”, organized during the meeting, as a good way to interact with each other and to create a positive work context.

In conclusion, Pixel couldn’t be more satisfied of these results and the team will continued to work in this way to reach results like these.

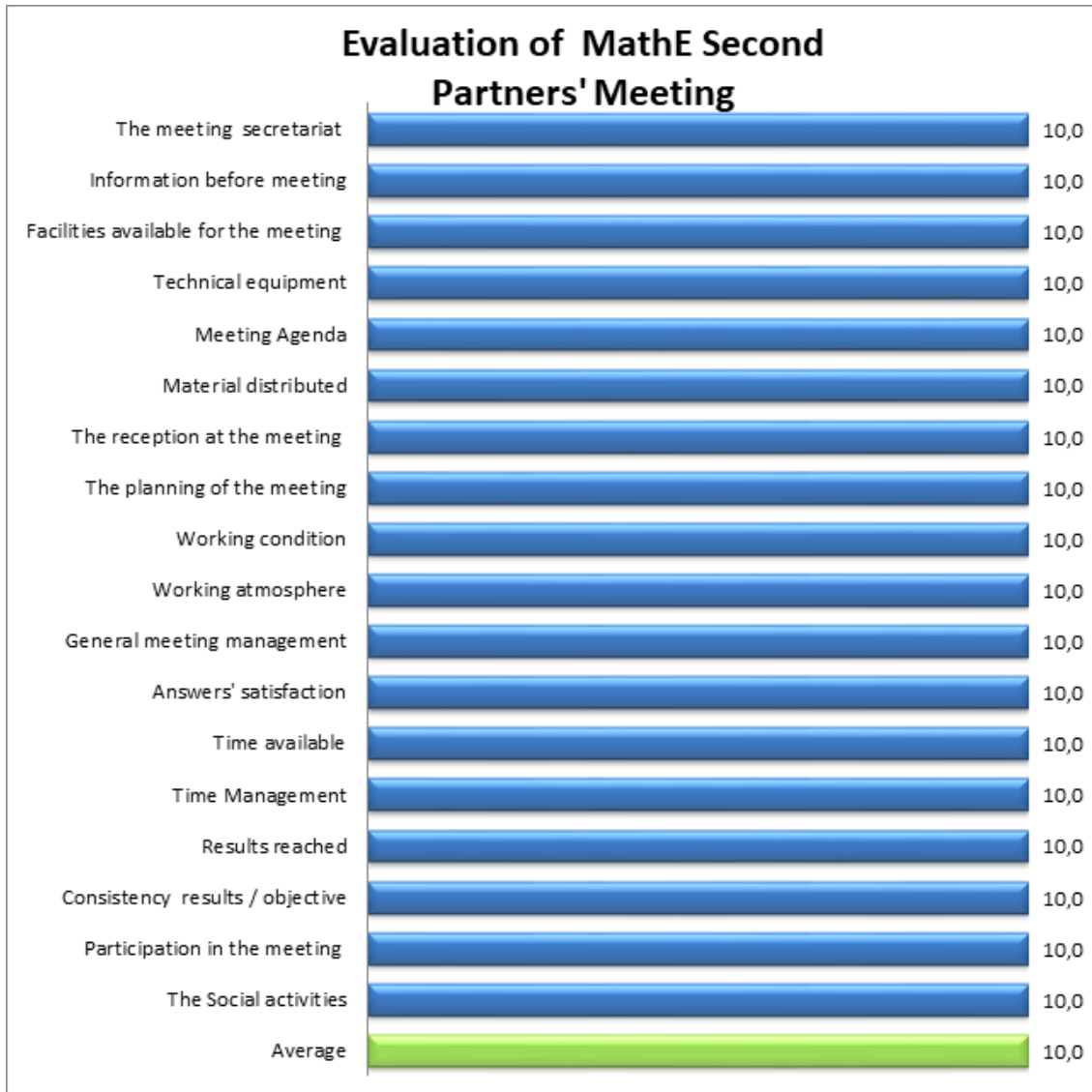


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Second Partners' Meeting

The graph below illustrates how the project partners evaluated the MathE Second Partners Meeting which took place on 23 – 24 May 2019 in Kaunas, Lithuania.



All the categories of this chart gained 10.0 points, the maximum score. Such a great result that makes the Pixel team satisfied.

From “The meeting secretariat”, that was evaluated completely efficiently by the partners. It means that there was a very good coordination among the partners during the project’s creation.

Also “the information that the partners received before the meeting” were considered clear, helpful and exhaustive.

“The facilities available for the meeting” was evaluated suitable according to the nature and aims of the project.



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As well as “the technical equipment”, that satisfied the needs and expectations of all the partners during the meeting.

The maximum score obtained by the categories “Meeting agenda”, “Time available” and “Time management” was a reason of great satisfactory for Pixel because demonstrated that the organization of the activities carried on worked very well. The agenda was clear and the time-sharing was adequate to reach the objectives and expected results.

“Material distributed” during the meeting was well thinking and useful according with the activities planned.

“The reception at the meeting” testified that all the partners felt welcome and very integrated in the project group and in the contest’s meeting.

“The planning of the meeting”, that concerned the themes approached, the time available and the various procedures, was clear from the very beginning.

“Working conditions” and “Working atmosphere” were satisfactory for all the partners. It means that during the meeting a positive environment was created and consequently it allowed to carry out all the activities planned and all the results expected.

“The general meeting management” worked very well and it was considered a plus of the entire meeting. Roman Marcel Romică from Technical University of Iași (RO) liked that *“the time management of the meeting was precise, all the problems were very well solved and the organization of the meeting was excellent”*.

Furthermore, the partners declared that they received always “satisfactory answers” to their doubts.

The categories “Results reached at the end of the meeting” and “Consistency results/objectives” demonstrated that the results obtained have satisfied the expectations of the project partners. The project’s aim was always respected and central during the organization of the meeting.

“Participation in the meeting” was valued as very satisfactory by all the partners. Ana I. Pereira from Instituto Politécnico de Bragança (PT) commented that she liked the involvement of all partners, and that the work was all done.

Finally, all the partners joined “The social activities”, organized during the meeting, as a good way to interact with each other and to create a positive work context.

In conclusion, the meeting was close to perfection, showing the way this kind of meetings have to follow to fulfil the needs of the project.

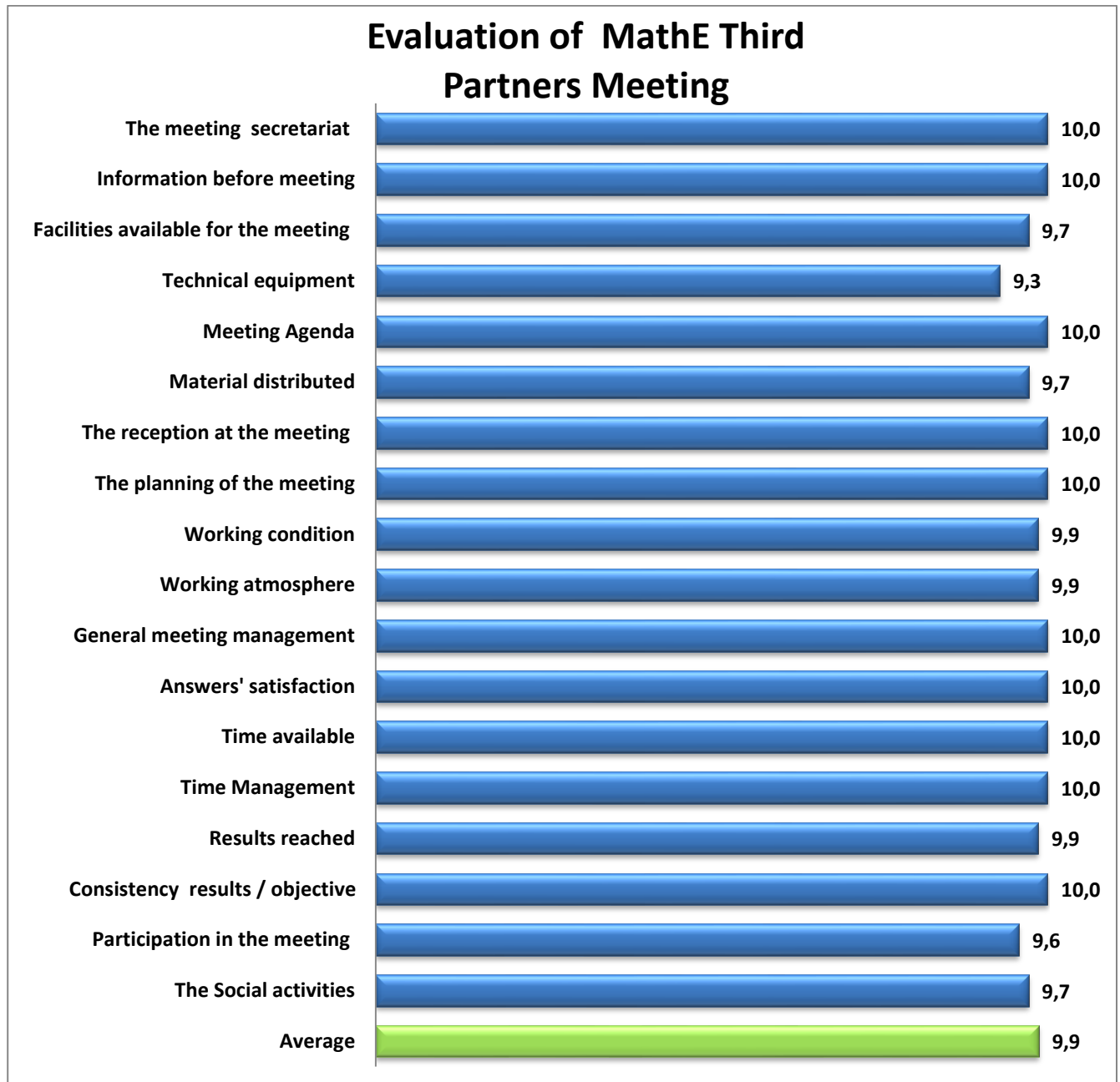


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Third Partners' Meeting

The graph below shows the results obtained during the MathE Third Partners Meeting that took place in Limerick (IE) on 2-3 December 2019.



The general average of 9,9 means that partners appreciated a lot everything and above all it means that partners appreciated each effort made by the meeting organizers.

Ten categories obtained the maximum score of 10,0 that has a very good significance because it shows that everything in these categories carried on in a very good way without any sort of problems. They are:

1. "The meeting secretariat": the high score reached signifies that all the activities that support the meeting were well planned and partners appreciated it a lot.



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2. "Information before the meeting": partners were really satisfied with the information and the agenda of the meeting received before the start of it.
3. "Meeting agenda": partners found the agenda of the meeting well planned and very clear, so they did not have any trouble or doubt about it.
4. "The reception at the meeting": each participant felt welcome and very well integrated in the project meeting.
5. "The planning of the meeting": partners appreciated so much the manner in which the organizers defined and distributed the activities during the meeting days.
6. "General meeting management": the maximum score in this category illustrates that Pixel did a very good job in the organization of the meeting projects and everything went in the right direction, as testified by some participants' comments. Carmen Antonita from EuroED (RO) reported that *"The general management of the meeting was very good"*. Marie Walsh from Limerick Institute of Technology (IE) reported that *"As usual, the project meeting management was excellent"*.
7. "Answers' satisfaction": this high result demonstrates that the information and the communication level was maintained always high during the meeting and partners received all the answers they needed, as clarified by some comments. Lina Dindienė from Kaunas University of Technology (LT) reported that the things she liked the most were *"Productive work and a lot of cleared questions"*. Marie Walsh from Limerick Institute of Technology (IE) reported that during the meeting there were *"Good discussions and clarification of some points"*.
8. "Time available": the duration of the meeting was adequate to the activities that partners had to do during the meeting.
9. "Time management": the organization of the various and proposed activities worked well.
10. "Consistency results/objective": this high result demonstrates that the project aims and objectives were respected and carried on through the end.

Other three categories almost reached the maximum score (9,9):

- "Working condition": this high result testifies the fact that partners found the right requirements in which they could work well.
- "Working atmosphere": partners found a positive and friendly atmosphere during the meeting days, as testified by some comments. Arvid Perego from University of Genova (IT) reported that the thing he liked the most about the meeting was *"The working atmosphere"*. Florbela Fernandes from Instituto Politécnico de Bragança (PT) reported that *"The working atmosphere was really good"*.
- "Results reached": the results obtained were well satisfactory and the entire project went on the right way. Daiva Petkevičiūtė-Gerlach from Kaunas University of Technology (LT) reported that *"In general it was a very nice and productive meeting. Sharing experiences is something valuable"*. Carmen Antonita from EuroED (RO) said that *"The results reached at the end of the meeting were very good, so there is not anything to improve"*.

With the score of 9,7 there are three categories:

- "Facilities available for the meeting": partners received suitable facilities and tools that allowed them to work without obstacles.



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- “Material distributed”: the material (not the electronic ones) distributed were suitable and valuable for partners’ work.
- “The Social activities”: social activities were well appreciated by the partners and they contributed to make the meeting better and more enjoyable.

The two categories that reached the lowest scores, even if 9,6 and 9,3 cannot be defined low, are:

- “Participants in the meeting” (9,6): partners felt well engaged during the meeting days and they could work together without any problems. Ana Isabel Pereira from Instituto Politécnico de Bragança (PT) reported that the thing she liked the most about the meeting was *“The partners’ effort in the MathE project”*.
- “Technical equipment” (9,3): the not so high score is due to the instability of the wi-fi, but despite this problem they could work with the electronical tools they had at their disposal.

In the end, Pixel can be very satisfied with this result because partners left the meeting very content, as they declared. Arvid Perego from University of Genova (IT) said that *“Everything was perfect”*. Ana Isabel Pereira from Instituto Politécnico de Bragança (PT) reported that during the meeting *“Everything was perfect!”*.

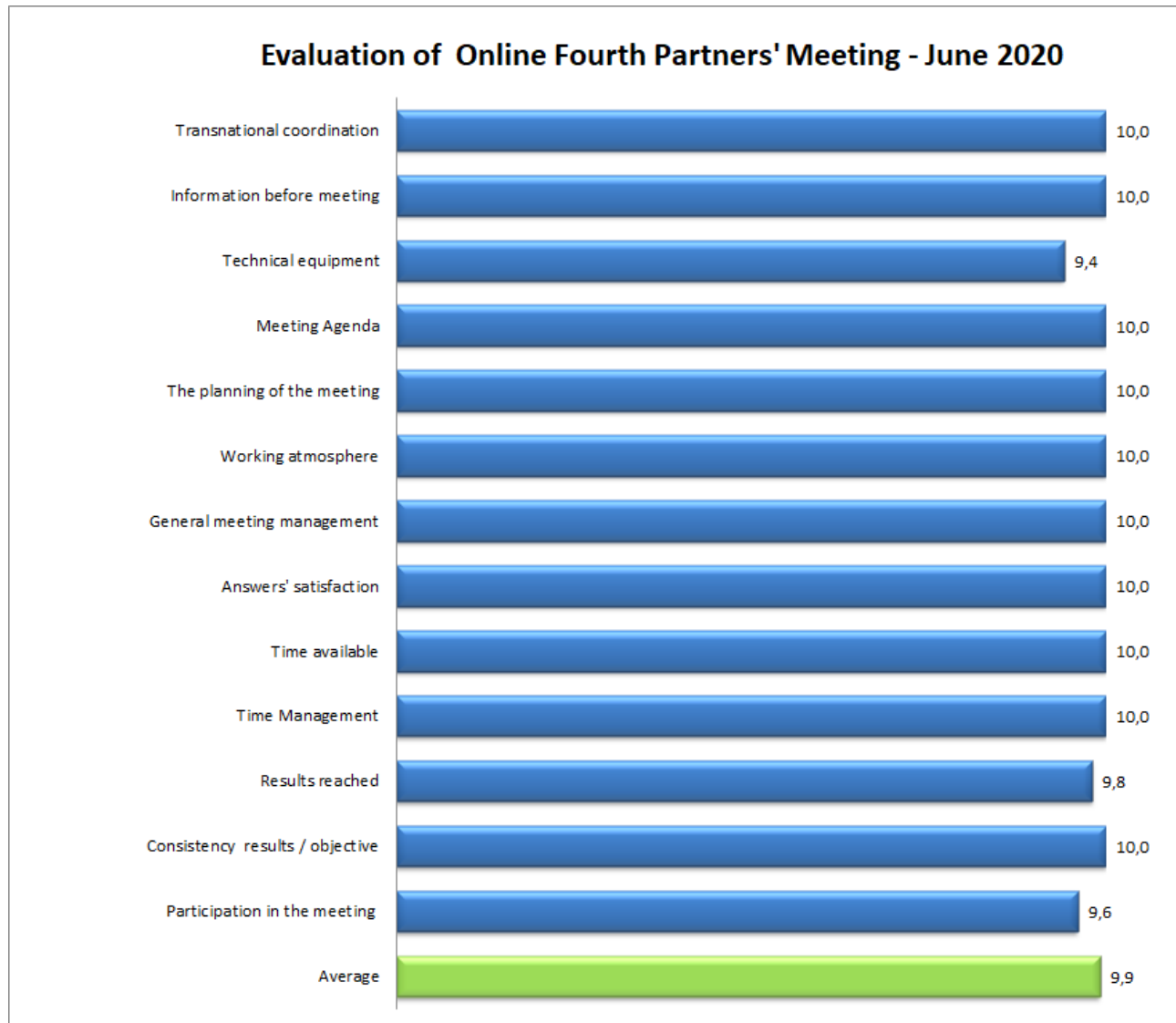


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Fourth Partners' Meeting

The graph below shows the results of the Fourth Partners' Meeting that took place online on 25 June 2020.



The evaluation of the Fourth (online) Partners' Meeting obtained an average grade of 9,9, almost the maximum score obtainable. This was a great result for Pixel because demonstrated that the meeting was really appreciated and well conducted in all its aspects as it is highlighted by Marcel Roman from Gheorghe Asachi, Technical University of Iasi (RO) who reported that *"the meeting was very well organized, I obtained all useful details about our activity in the project. The online meeting reached my expectation!"*.

Almost all the categories evaluable gained a perfect score of 10 out of 10:

- "Transnational coordination": such a high rating in this category shows that partners really appreciated cooperation and organization in working together to achieve the meeting objectives.



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About that, Florbela Fernandes from IPB (PT) commented that she liked the most about the meeting *“the good understanding between the partners”*.

- “Information before meeting”: the perfect evaluation in this category means that all the partners were totally satisfied with the information received before the meeting because they were clear and helpful for the good success of the meeting.
- “Meeting Agenda”: this result underlines that the organization of the meeting totally satisfied the expectation of all the partners and it means that all the activities supporting the meeting were well planned and useful.
- “The planning of the meeting”: the perfect score in this category is a great result for Pixel and for the partnership; it demonstrates that the organization of the activities carried out worked very well and the meeting in general was a great success.
- “Working atmosphere”: this is another excellent result in this evaluation which underlines again the good intentions for an excellent success of the project. A score of 10 out of 10 in the working atmosphere category shows a collaborative and friendly partnership able to stimulate each participant to work better.
- “General meeting management”: the maximum score in this category shows that both the organizers and the participants involved in the meeting worked efficiently and in the right way in the preparation and in the management of the meeting. Maria de Fatima Pacheco from Polytechnic Institute of Bragança (PT) highlighted that *“as always, I was impressed by the organization and efficiency of the management”*. She liked the most about the meeting *“the friendly atmosphere that makes Pixel meetings pleasant everytime”*.
- “Answers' satisfaction” was really appreciated by all the participants. It means that during the meeting a positive environment was created and consequently it allowed carrying out all the activities planned and all the results expected.
- “Time available” and “Time Management”: both of these categories gained the maximum evaluation; this result underlines the excellent organization of the meeting, the definition of a period of time appropriate to the management of scheduled activities and the fruition of all the planned activities according to the “Time available” of the meeting.
- “Consistency results / objective”: this result underlines a great level of correspondence of the results of the meeting with the established objectives.

In addition to these categories that have obtained the maximum score, we find other three that have obtained a very good score as well:

- “Participation in the meeting” which gained a score of 9,6 out of 10. It means that the partners were really satisfied with the participation of all the participants in the meeting activities. It is really important to stimulate a productive discussion and achieve the objectives in the best way and without delays.
- “Results reached”, with an evaluation of 9,8 out of 10 really close to the maximum it emphasizes again the satisfaction in achieving consistent results corresponding to the predefined final objectives. About that, Lorenzo Martellini from Pixel (IT) commented that he liked the most about the meeting the *“partners' willingness to create a portal useful for math students and lecturers”*.



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- “Technical equipment”: this category gained the lowest score of the evaluation even if it gained a score of 9,4, really high and satisfactory. The minor evaluation depended on the fact that it was one of the first meetings held online and faced some related technical problems due to the first experience. Fortunately it was all fixed quickly and with great results

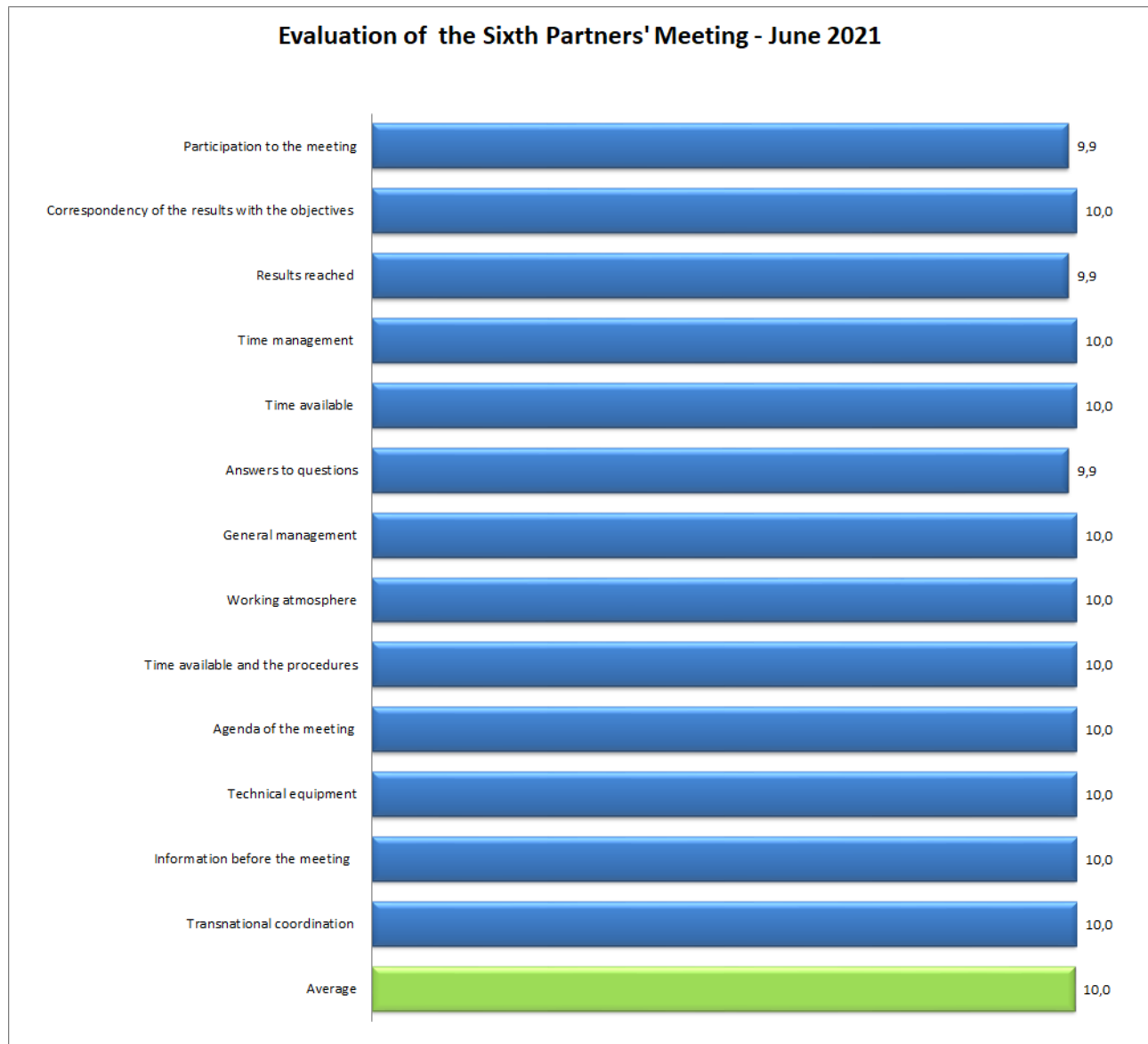


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Fifth Partners' Meeting

The graph below shows the results of the Fifth Partners Meeting that took place online on 23 June 2021.



The sixth transnational meeting achieved a perfect overall rating with the highest average score of 10 out of 10. This shows a general high satisfaction from the participants with all the different categories addressed.

This evaluation is the result of perfect ratings in all categories but 3 which has been evaluated with an almost perfect 9,9 out of 10.

“Information before the meeting” gained 10 out of 10. This underlines the effort put into the organisation of the meetings; it is a great satisfaction for the team of coordinators as it shows that all participants highly appreciated how the meeting was prepared and the documents/information given to them in the days before the meeting took place.



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“General meeting management”: this category got another perfect grade and it is certainly very important for Pixel, for the success of the meeting and for the project in general as it shows how the management has received appreciation from all partners.

Marcel Roman from TUIASI (RO) reported that he liked the most about the meeting that *“once again, the meeting was very well organised, the analysis of the project achievements was complete and the collaboration was fruitful”*.

“Working atmosphere” reached the highest score in this meeting evaluation (9,8 out of 10) and it is an excellent result underlining a perfect starting point for the project in general. The atmosphere and the understanding between the partners that was created during this first meeting is an excellent sign of a partnership that can lead to numerous successes. It is a great satisfaction for Pixel and for all partners to receive these evaluations especially if accompanied by comments that underline this result. Luca Siracusano from the University of Teramo (IT) commented that he liked the most about the project precisely *“the working atmosphere”*.

Furthermore, Vida from KTU (LT) commented that she liked the most about the meeting *“partnership, decision making, as well agreement between partners, as well management was clear and professional”*.

“Time available” and “Time management”: both of these categories reached the score of 10 out of 10. It is another great result for the meeting and it means that the meeting activities were well organized concerning the time available as well as the agenda was prepared very efficiently and the time management was very effective.

“Working atmosphere” is part of the group of categories which have been evaluated with the perfect score. This excellent result underlining the satisfaction of the participants with the atmosphere of the meeting. This is certainly a very important aspect for the running of the project as it contributes to achieving the desired results.

This satisfaction is highlighted by Lorenzo Martellini from Pixel (IT), Marie Walsh from LIT (IE) and Maria de Fátima Pacheco from IPB (PT), who respectively commented that they liked the most about the meeting *“the working atmosphere and cooperation”*, the *“good congenial atmosphere”* and *“the efficiency of the organization and the friendly atmosphere that makes the work a pleasure”*.

The evaluation of the “Correspondency of the results with the objectives” and “Results reached” categories, respectively with a score of 10 and 9,9 out of 10, highlight that the level of correspondence of the results of the meeting with the established objectives as well as the quality of results are really high. As described by Ana Isabel Pereira from Polytechnic Institute of Bragança (PT) this was also possible thanks to the *“partners work”*. About that, Andreea Ionel from EuroEd (RO) stated: *“I much appreciated the collaboration among the partners in dealing with the project issues. I liked very much the results obtained by the project in the end”* and Arvid Perego from University of Genova (IT) commented that he liked the most about the meeting *“the summary of the nice work we did during these years and the nice atmosphere”*.

Also “Agenda of the meeting”, “Time available and the procedures” and “Technical equipment” have been evaluated with the perfect score of 10 out of 10. This shows that the meeting activities were well organized concerning the time available as well as the agenda was prepared very efficiently and the time management was very effective.



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“Participation in the meeting” reached almost the highest score of the evaluation (9,9 out of 10) and it is another great result. During the meeting, in fact, all partners collaborated in the discussion by providing their competences and skills (both on the content and technical side) and clarifying any doubts that arose. This result is very important considering that the meeting took place online and all the partners have expressed in the comments the desire to have the meeting the presence; for instance: Ana Isabel Pereira from Polytechnic Institute of Bragança (PT), Arvid Perego from University of Genova (IT) and Maria de Fátima Pacheco from IPB (PT) agreed on reporting that the thing they liked least about the meeting was the fact that it had to be done online, even if it did not created any problem in terms of participation.

To conclude, “Answers to questions” gained 9,9 out of 10. This shows that the discussion among the participants was positive and useful and that comprehensive explanations were given to the various doubts that arose.



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Evaluation of the Project Activities

The evaluation of the project activities observes in detail the quality of each activity completed as well as its level of efficiency in relation to the project objectives and outputs.

Istituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), supported and coordinated all the partners in the carrying out of the activities as far as the development of the contents is concerned.

Istituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), manages the creation of all the forms to be used for the management of the project, as well as of the forms and documents to be used to carry out the project activities.

In addition, Istituto Politecnico Do Braganca (PT), with the technical support of Pixel (IT), was in charge of the transnational co-ordination and supervision of the project activities through a constant monitoring of the activities in progress and their congruency with the established deadlines.

The main project activities with the related results are:

a) Involvement of target groups

The project foresaw the involvement of at least: 25 Lecturers and 100 students. The project partners have involved 79 lecturers and 954 students. Therefore the expected outcome has been fully achieved and exceeded.

The result is available at: https://mathe.pixel-online.org/PRTN_lecturers.php.

b) Student's Assessment Toolkit

The Student's Assessment Toolkit consists of an innovative tool useful to help all academia actors (students and teachers) to evaluate their math skills in any time and any place.

Each partner was asked to define 40 questions/answers for the Student Need Assessment Tool and 20 questions/answers for the Student Assessment Tool.

The output is completed and all the results are available on the project portal divided in two different sections:

- The Student's Assessment (https://mathe.pixel-online.org/STAS_SNA.php) where students can carry out a self-evaluation of their knowledge on selected Math topics;
- The Final Assessment (https://mathe.pixel-online.org/STAS_FA.php) where teachers can elaborate Final Assessments for their students on the topics they wish to evaluate and students can apply when a Final Assessment is available for a course they attend.

It is possible to log in with the following username and password:

- Username: mathe.project.2019@gmail.com
- Password: Erasmus2018



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c) Online Math Library of Video Lessons and Educational Material

The Library contains a database of video lessons (both produced by the consortium and already available on the web) backed up by pdf files and other media resources to be used to implement the lessons contents, and validated by lecturers/researchers/teachers.

The output is completed and the partners contributed with a total number of 168 reviews of existing videos, 60 new video lessons and 198 teaching materials

All the results are available on the project portal divided in two different sections:

- Video Collection: https://mathe.pixel-online.org/MALI_VC.php
- Teaching Material: https://mathe.pixel-online.org/MALI_TM.php

It is possible to log in with the following username and password:

- Username: mathe.project.2019@gmail.com
- Password: Erasmus2018

d) Math-e teachers and students Community of Practices

The Community of Practices consists of an online space which can give the possibility to teachers and students of sharing their experiences with MathE library.

The website foresees:

- The Students' Community of Practices (<https://student-mathe.pixel-online.org/>)
- The Lecturers' Community of Practices (<https://teacher-mathe.pixel-online.org/>)
- MathE Around the world (https://mathe.pixel-online.org/CM_community.php): a virtual place to exchange teaching and learning experiences between teachers and students

e) Phase 4 – Training Activity

The training activity took place online from 14 to 18 June 2021. The programme was organized in 5 days and delivered by the experts of the hosting partner, IPB (PT) with the support of the other contractual partners. The course has been organized according to the ECTS standards.

All the relevant documents are available at <https://mathe.pixel-online.org/MNG-prjresult.php>

Each project partner was asked to evaluate the project activities. The activities were evaluated according to the following parameter.

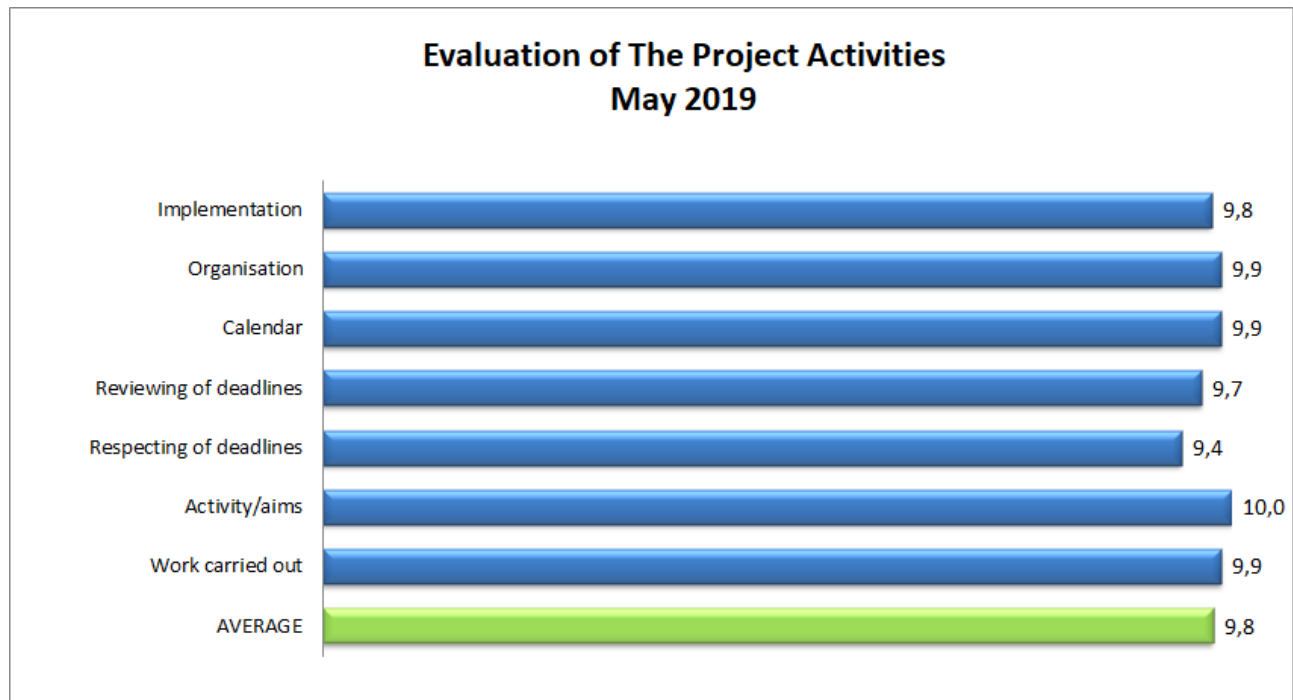
- Implementation
- Organization of the project activities
- Proposed calendar of activities
- Reviewing of deadlines
- Respect of the deadlines
- Consistency between the activities carried out and the expected outcomes
- Quality of the work carried out



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The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT).

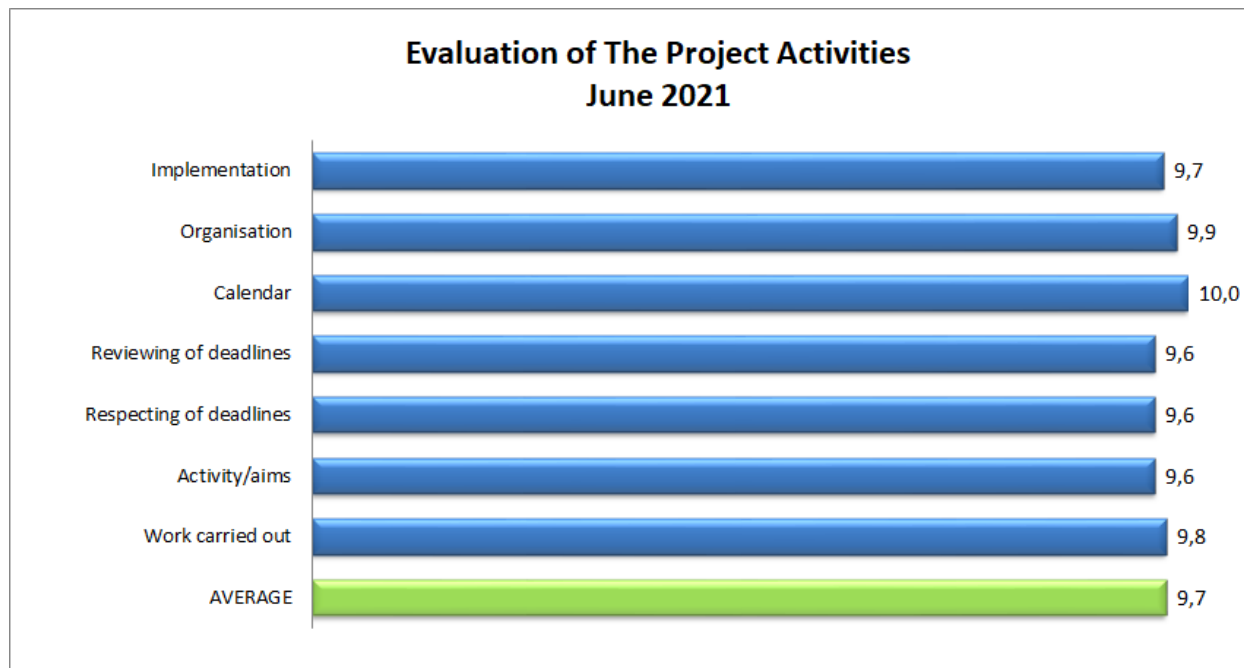


The evaluation of the project activities gained another almost perfect score of 9,8 out of 10. According to the results and the comments on the questionnaire, each partner found the project activities excellently carried out both in their organization, implementation and objectives.

In fact, the categories “Activity/aims”, “Calendar”, “Organisation”, “Work carried out” and “Implementation” gained an excellent score higher than 9,7 and the satisfaction of the partners has been highlighted from the statement of Florbela Fernandes, from IPB (PT), who reported that *“everything is working well and on time, as expected”*.

“Respecting of deadlines” and “Reviewing of deadlines” gained a lower score but anyway an excellent result since both categories scored higher than 9,4. It means that, even with some small normal problems in respecting deadlines, the work was carried out in the best possible way, without encountering particular difficulties or delays.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



The average of this chart is 9,7; it is a another great result in line with the other categories of the Final evaluation. A general overview of the activities carried out has been reported by Andreea Ionel from Fundatia EuroEd (RO:): *“The work carried out by the project team respected very well their areas of expertise and showed an excellent cooperation for achieving successful and qualitative results”*.

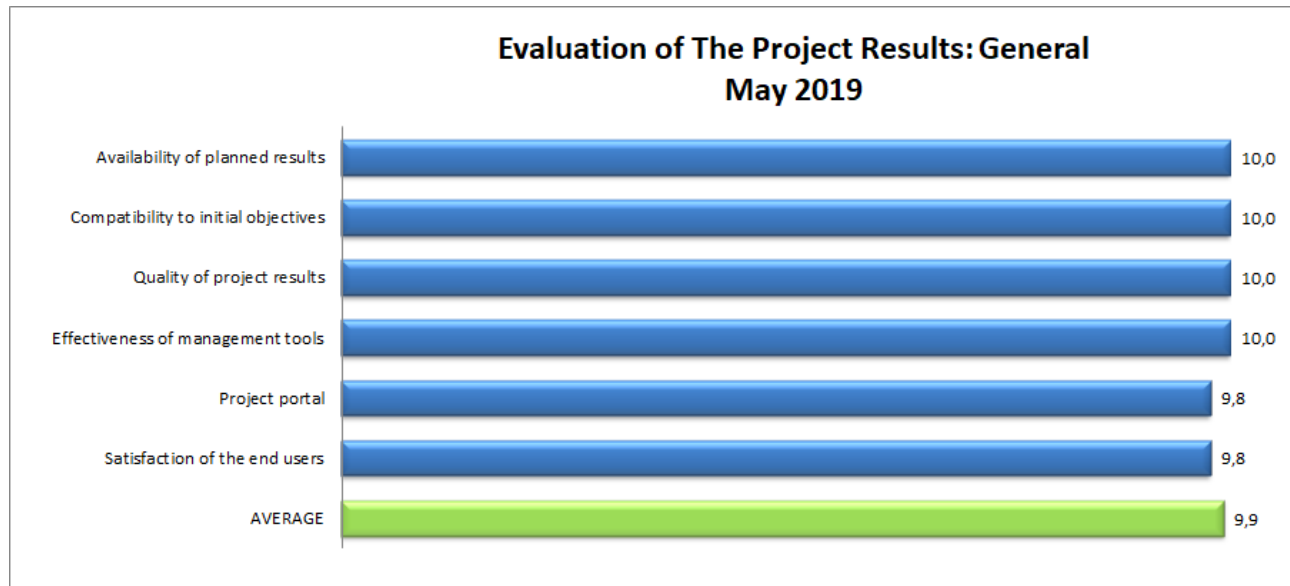
“Organisation” and “Calendar” reached the highest scores of the evaluation (10 and 9,9 out of 10); it means that that project the team worked effectively without many problems and every issue was dealt with high level of management and organisation.

“Work carried out” reached the score of 9.8 meaning that the partners are highly satisfied with the deliverables developed showing a strong cooperation and commitment among the partners in carrying out the activities assigned. This point is highlighted by Ana Isabel Pereira from Instituto Politécnico de Bragança (PT) who commented: *“As the scientific coordinator, I am totally satisfied with the project results. But the most important is that we develop useful material for the students and teachers. commented “The objectives were clear and we reached them despite the difficult situation”*.

All the other categories have been evaluated with a score of 9,6 (9,7 for “Implementation”); these results show a general appreciation of the partners for the work of planning and organising deadlines as well as for the work done by each organisation. About that, Arvid Perego from University of Genova (IT) reported: *“The activities that were planned were consistent with the fixed plans and the results are even better than expected”*.

Evaluation of the Project Results

The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT).

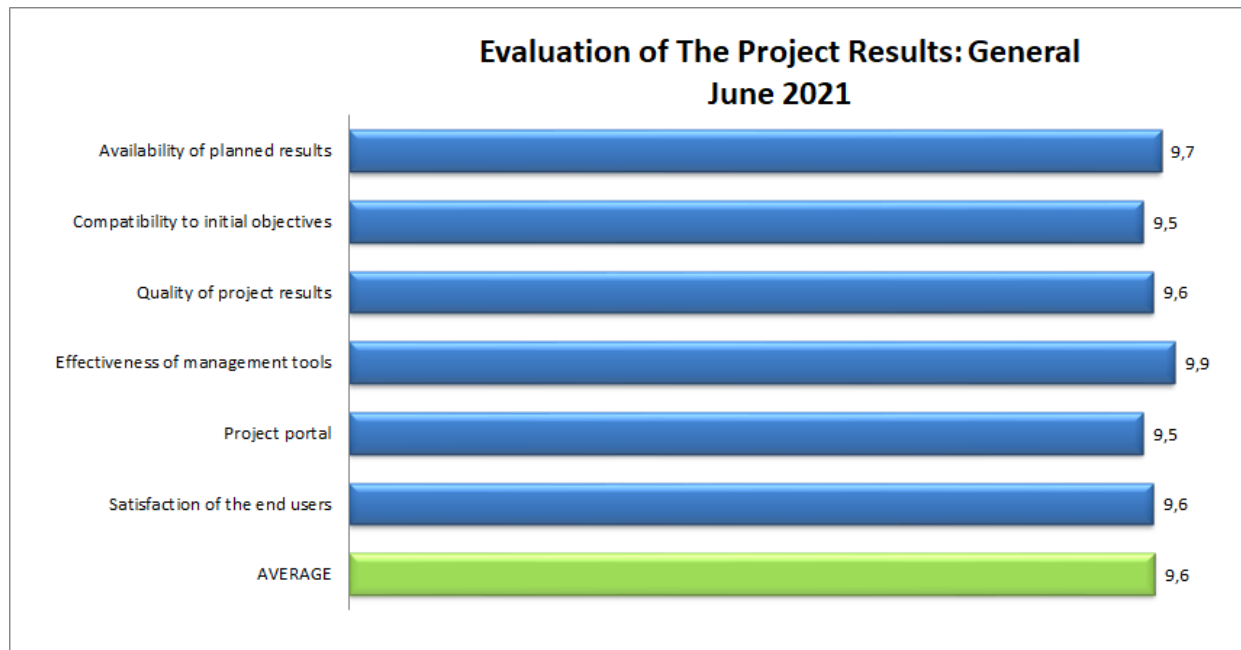


The average of 9,9 is very good result (almost perfect) and it demonstrates that the project results in general were really well appreciated by all the partners. About that, Marie Walsh from Limerick Institute of Technology (IR) commented that *"this project is well planned and results on target"*.

"Availability of planned results", "Compatibility to initial objectives", "Quality of project results" and "Effectiveness of management tools" gained a score of 10 out of 10. This underlines the perfect work done by the partnership in terms of quality of the work performed, compliance with the objectives set in the initial phase and quality in the general management of the activities.

"Satisfaction of the end users" and "Project portal" reached a score of 9,8 out of 10, so really high as well. It means that the realization of the project the importance of a functional website for the implementation of all the activities have been well appreciated by the partners and the users

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



With an average score of 9.6 the chart demonstrates that partners were generally satisfied by the general results obtained thanks to the project.

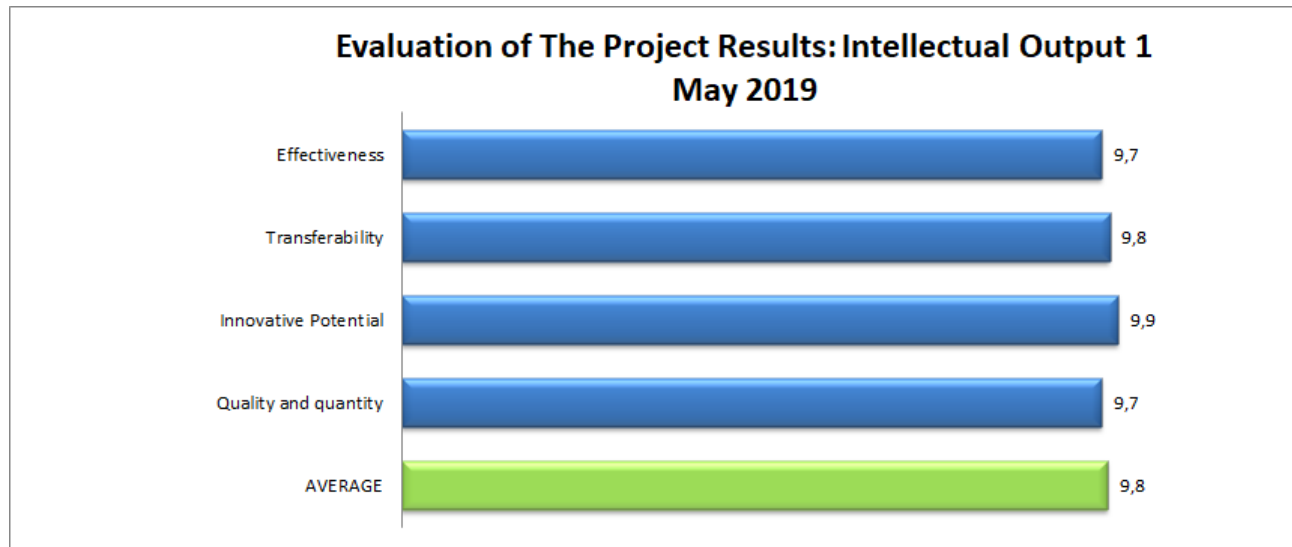
The highest score of the chart has been reached by the “Effectiveness of Management tools” category which gained an evaluation of 9,9 out of 10. This is certainly a great result underlining that all the partners were very satisfied with regards to the quality of the tools produced for project management.

According to the graph, all the other categories have been well evaluated with all the scores between 9,5 and 9,7. It underlines once again that the implementation of the activities is following the right path.

Also Andreea Ionel from Fundatia EuroEd (RO) and Arvid Perego from University of Genova (IT), respectively reported that *“the project covered the needs of the target group we addressed to, and the feedback was very positive and appreciative for all the results produced by the project. The MathE project offers a fantastic library of based teaching and learning sources to reinforce specific mathematical topics and the opportunity to have lecturers’ videos on very interesting math problems is a great asset”* and that *“the achieved results are better than expected and had a positive feedback”*.

Intellectual Output 1 - Student Assessment Toolkit

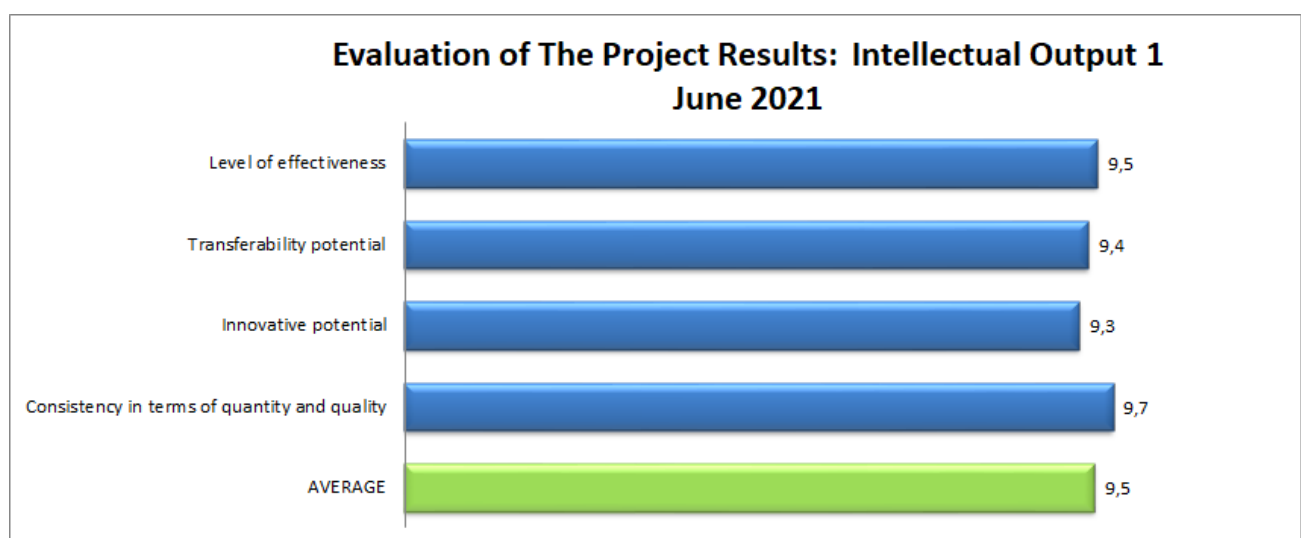
The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT).



The first Intellectual Output of the project has been evaluated by the Progress Evaluation since its implementation had already begun. This evaluation gained a really high score (9,8 out of 10) which is in line with the general evaluation of the project shown by the previous graphs. This high result underlines that all the partners are really satisfied with the material produced in the Intellectual Output 1 with a specific focus on its “Innovative potential”.

“Effectiveness”, “Transferability” and “Quality and quantity” gained great scores as well, respectively 9,7, 9,8 and 9,7. According to these answers, all the partners appreciated the quality and the consistency of the contents as well as its transferability side.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.





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The average score of 9.5 is in line with the high results obtained of the other charts and with the progress evaluation, indeed all the voices received a score between 9.3 and 9.7 showing a general satisfaction of the partners with the material produced in the Intellectual Output 1.

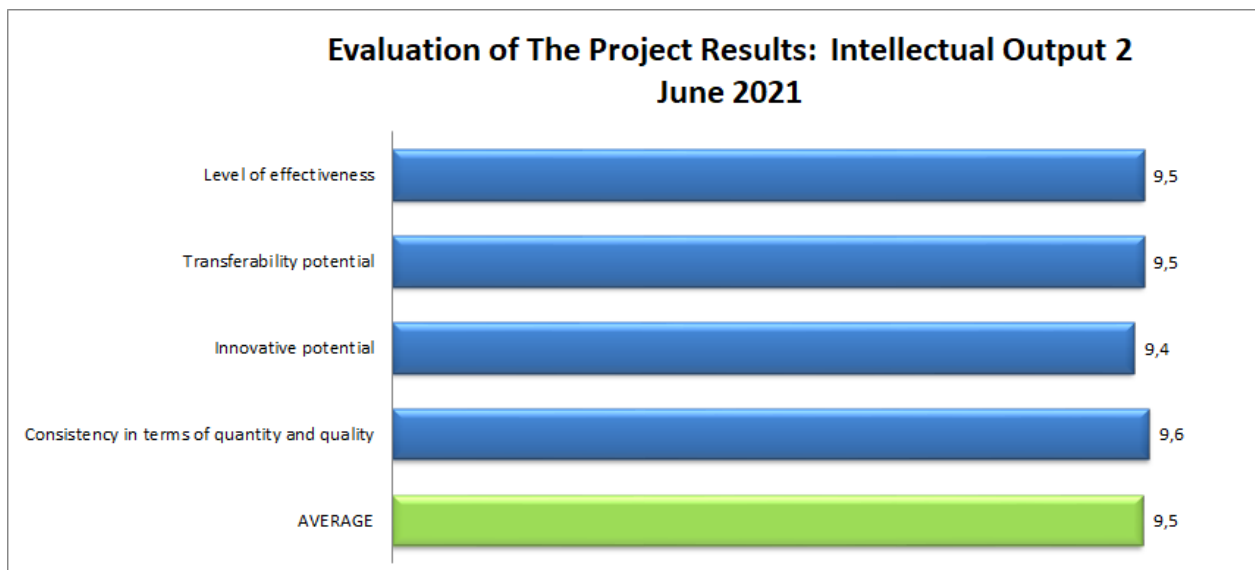
“Consistency in terms of quantity and quality” gained the highest score in the chart with a score of 9,7 out of 10; it means that the partners put a strong effort to produce the deliverables in line with the aim of the project and addressed to the target groups identified.

“Innovative potential” and “Level of effectiveness” have been evaluated with 9,3 and 9,5 out of 10. Andreea Ionel from Fundatia EuroEd (RO) tried to justify the scored with the following explanation: *“the assessment tool has been very well appreciated. The assessment tool is especially useful. Some of the students mentioned that there are different levels for the math problems, so some can be appropriate, other are too simple. But in the same time, teachers raised the importance of using the resources for smaller age students (high school students) from the Math excellence clubs”*.

“Transferability potential” has been evaluated with a score of 9,4 out of 10; it is an important result which show that the deliverables produced can be used by a wide range of users. This aspect has been highlighted also by Ana Isabel Pereira from Instituto Politécnico de Bragança (PT) and Arvid Perego from University of Genova (IT), which respectively reported that *“the number of students that is using the mathE portal is is clear that the Assessment Toolkit is excellent”* and *“the student's toolkit may be extended to other categories of students (high school or even lower level), and has a high level of transferability potential”*.

Intellectual Output 2 - Math Library

The Intellectual Output 2 has not been evaluated in the Progress Report since the activities related to it were in preliminary state. The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



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The Intellectual Output 2 obtained a general score of 9.5, which can be considered as a good score, taking into consideration coming from the COVID19 pandemic and that no indexes received a score below 9,4.

“Consistency in terms of quantity and quality” gained the highest score of 9,6 out of 10. Marcel Roman from TUIASI (RO) and Andreea Ionel from Fundatia EuroEd (RO) tried to collect some feedback from the users and wanted to explain the result of this evaluation through the following comments: *“the feedback from students prove the effectiveness of video lessons and teaching materials”* and *“the opportunity to watch video lessons of lecturers, with very clear explanations on various Math problems has been very, very much appreciated. The video gallery is a big plus”*.

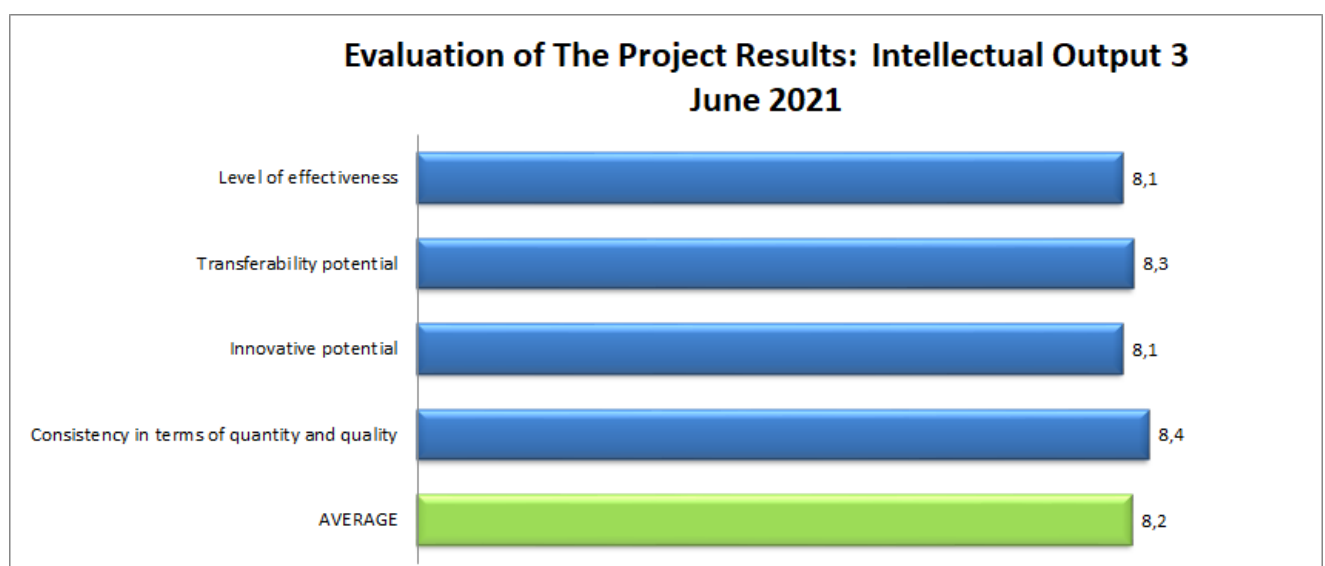
According to the chart and to the comments, also the “Level of Effectiveness” of the IO2 achieved a good level of satisfaction from partners; the category gained a score of 9,5 out of 10 and Marie Walsh from LIT (IE) reported that *“the students gave a highly positive evaluation of the video library”*.

The “Transferability potential” and “Innovative potential” categories have been respectively evaluated with 9,5 and 9,4 out of 10; it shows a general satisfaction by all the partners in terms of transferability and innovativeness. About that, Arvid Perego from University of Genova (IT) commented that *“the most important part consists of the videos that were created by the partners, I think it is the most innovative part and may be increased”*.

Intellectual Output 3 - Community of Practice

The Intellectual Output 3 has not been evaluated in the Progress Report since the activities related to it were in preliminary state.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



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The average of 8,2 shows that partners found the output good but the IO3 rating is slightly lower than others. As reported in many comments, it is probably still early to give an overall assessment of the deliverable; in fact, Vida from KTU (LT) commented that *“this section will get more importance in the next years with suggestions and feedbacks”*, while Arvid Perego from University of Genova (IT) reported that *“more participation would be great. This is an evolving part of the project”*.

The highest score was given to “Consistency in terms of quantity and quality” which obtained a score of 9,4 out of 10; it means that the deliverable meets the expectation of target groups and the aims present at the beginning of the project. About that, Marcel Roman from TUIASI (RO) reported that *“the opportunity to bring students together in communicating and debating on various Math topics was very much appreciated. Nevertheless this community should be more challenging and engaging”*.



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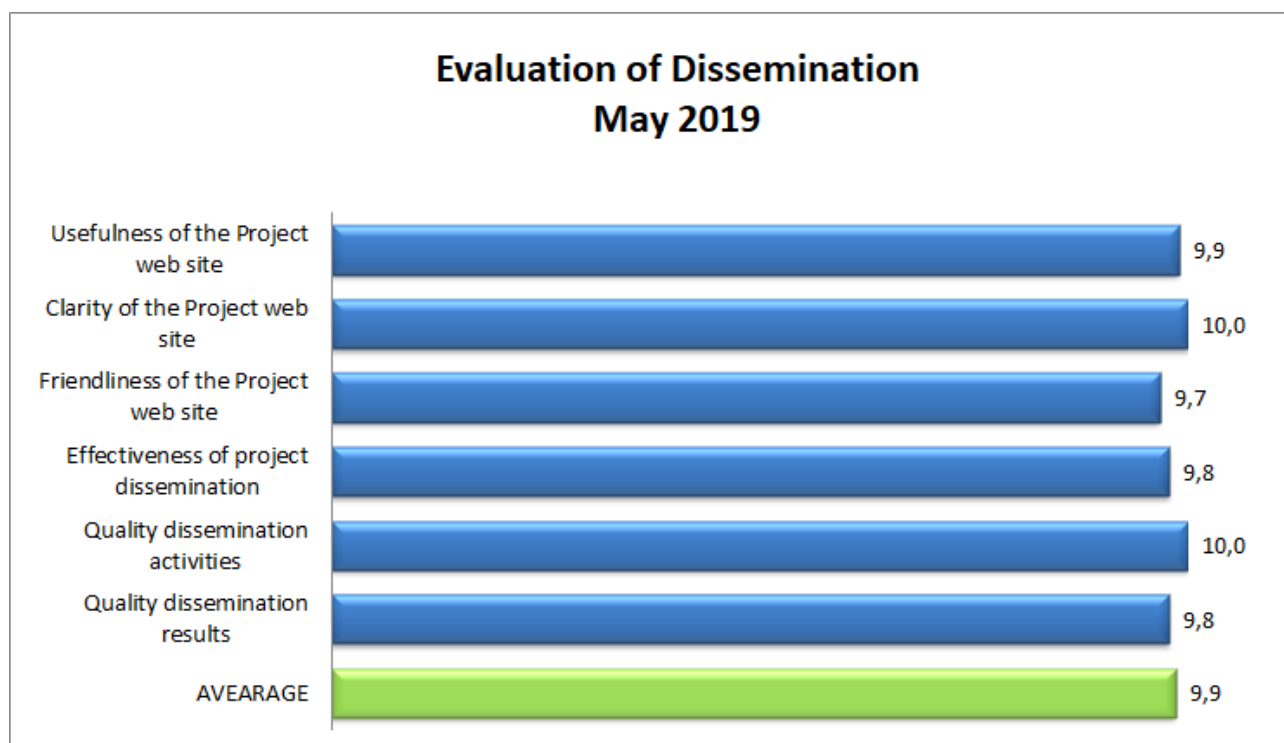
Evaluation of Dissemination

The dissemination strategy is clearly defined and in addition to the contractual obligations, each project partner carried out about 1 dissemination action each month. These actions were registered by the partner on the specific form which was published on the project website (<https://mathe.pixel-online.org/index.php>). Therefore all partners were able to access the information about the dissemination events organized by the others and draw ideas from them. The project's partners could therefore learn from each other dissemination practices.

The evaluation made by the partners had reference to:

- The results achieved by the dissemination activities
- The quality of the dissemination activities
- The effectiveness of the dissemination activities

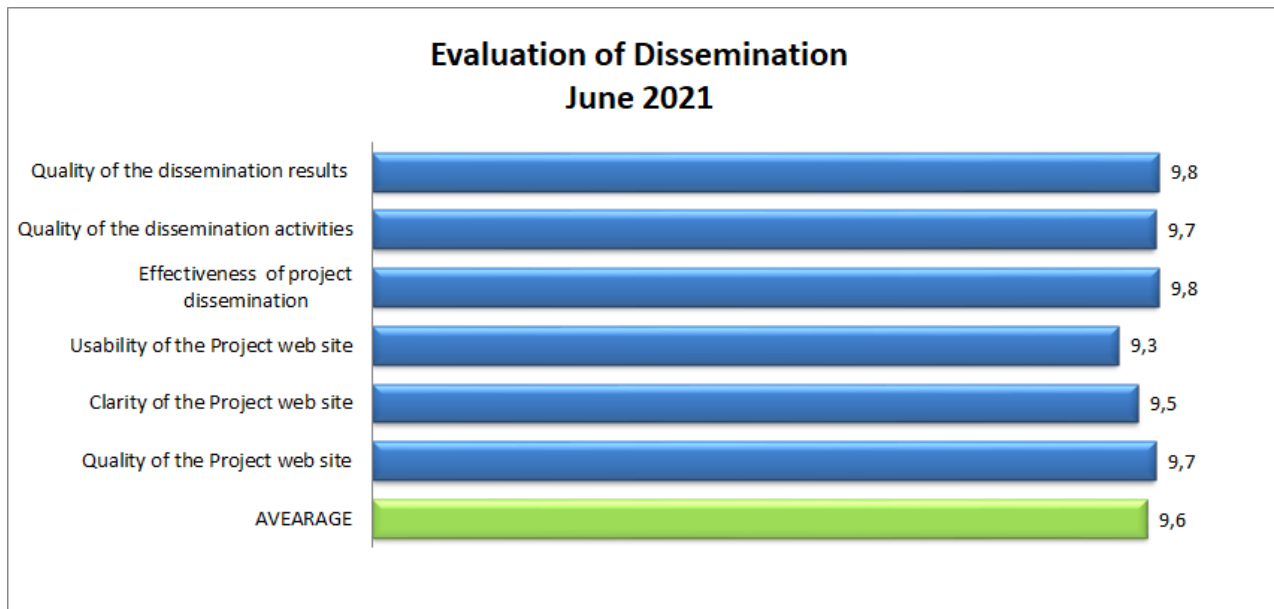
The graph below shows the results provided by the Progress Evaluation Questionnaires submitted to the partners during the Second Partners Meeting held, on 23 – 24 May 2019, in Kaunas (LT).



The average score gained by dissemination is 9,9 and it can be valued as an almost perfect result. This result also follows the positive trend of the other categories and in general Pixel can be so satisfied with this project because it went well and partners appreciated all the work.

“Clarity of the Project web site” and “Quality of dissemination activities” have been evaluated with a perfect score of 10 out of 10. It means that all partners were satisfied with the level of dissemination the project has achieved also thanks to the achievements of the project portal which was valued as useful and helpful, considering also its organization that resulted clear and friendly to use.

The graph below shows the results provided by the Final Evaluation Questionnaires submitted to the partners during the Fifth Partners Meeting that took place online on 23 June 2021.



Dissemination has been good evaluated as well, following the trend of all the previous categories. It gained an average score of 9,6 out of 10.

“Quality of the dissemination results” obtained the highest score of the evaluation (9,3 out of 10) which is a very good score, especially if taking into account the difficulties encountered by the partners in carrying out an effective dissemination strategy during all the limitations caused by the COVID19 pandemic. About that, Marie Walsh from LIT (IE) commented that *“Dissemination has resulted in great numbers of users of the platform”*.

“Website quality” and “Website clarity” reached a score respectively of 9,7 and 9,5 out of 10. The website reached a high level of satisfaction from all the partners involved in the project; all the participants really appreciated it in terms of quality, clarity and usability as well. In general, Pixel and the coordinator can be really satisfied with the project evaluation as the chart underlines that partners appreciated a lot also the organization and the management of the dissemination in terms of the result reached.

In order to understand such high evaluations it is necessary to take into consideration the results achieved by the partnership:

- More than 330 dissemination events carried out <https://mathe.pixel-online.org/MNG-diss.php>
- More than 40 online press releases published https://mathe.pixel-online.org/press_review.php
- Organisation of 1 conferences <https://mathe.pixel-online.org/conferences.php>

The dissemination activity is indeed strength of this project.



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Conclusions

The **planning** of the project proved to be effective. The project is answering to the initial expectations both in terms of consistency with the needs of the context it is addressing (math teaching and learning) and in achieving the foreseen results through the cooperation of the project partners and the effective use of the planned resources.

The **objectives of the project** have proved to be consistent with the skills and expertise of the partnership. The objectives were understood by the project partners as clearly defined from the beginning. Moreover the project objectives are consistent with the needs and expectations of the end users. This is proved by the fact that the number of teachers and students already exceed the expected result indicated in the application form.

The partners were very satisfied with the **Project management** carried out by IPB (PT), with the technical support of Pixel (IT). The coordination of the project activities demonstrated its efficiency and effectiveness and allowed the project partners involved to reach the planned deliverables. Communication among the partners has allowed a good and constant circulation and sharing of information.

The 6 project meetings have been carefully organised and managed and this guaranteed the highest degree of participation from all the institutions and people involved. The optimal working atmosphere, combining effectively the needed leadership and the necessary flexibility and democratic approach has been recognised by the project partners as a key point for the success of the project.

The project partnership, even if wide in terms of number of institutions involved and heterogeneous with respect of skills, experiences and geographic coverage has shown good capacity to work in team. The partners felt to work as a group and helped each other in reaching the expected results.

The activities carried out are in line or even in advance with the expectations and the calendar of activities proposed at the beginning of the project and updated during each project meeting has been respected. The careful planning of the activities and related deadlines has ensured so far that eventual minor delays did not affect at all the project achievements.

Also, as mentioned above, many of the expected results were exceeded, for example in terms of questions for the self and final assessment or for the material available in the MathE library. This is a proof of the partners' commitment.

The project results were highly evaluated by the project partnership and they are in accordance with the initial project objectives and expectations. Students and lecturers have been involved in the evaluation of the project results and their testimonials are available at <https://mathe.pixel-online.org/testimonials.php>.



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Strong Points

- The meetings with the teachers organised in the framework of the project activities have underlined how much this project meets the needs of its target group.
- The project partnership really managed to work as a group, implementing perfectly the spirit of a Network, transforming the potential difficulty of a group composed by actors who represent different national context and working methods in an enrichment point for the project results. Partners always worked as a team and contributed to the project development with their specific expertise and skills.
- The management and coordination of the project was appreciated by the partners and allowed to solve all the eventual challenges in a positive balance between leadership and open discussion.
- The dissemination events carried out by the partners showed that there was a lot of interest for the project and for the portal. Many of the people met asked to be involved about the project and training activities.



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