

# Intellectual Output 2

## A4: Validation exercises

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CIVIC

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## REVISION HISTORY

Version	Date	Author	Description	Action	Pages
1.0	18/02/2022	INOVA+	Creation	C	TBS
	30/06/2022	CIVIC			

(\*) Action: C = Creation, I = Insert, U = Update, R = Replace, D = Delete

## REFERENCED DOCUMENTS

ID	Reference	Title
1	2020-1-UK01-KA201-078934	IPinSTEAM Proposal
2		

## APPLICABLE DOCUMENTS

ID	Reference	Title
1		
2		

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# 1. IPinSTEAM project

## 1.1 The context

On the point of creativity and innovation being the roots of European cultural and socio-economic growth, respecting others' work becomes a far-reaching need both for professional and personal development of individuals (EUIPO, 2017). On the other hand, nowadays that online sharing of information is rife, one cannot help but wonder whether people are aware of proper ways to attribute others' ideas along with the necessity to reap the benefits of intellectual potential given the fact that most innovations are now highly related to technology.

Au contraire, the absence of Intellectual Property (IP) protection of educational materials and innovations – with online learning only deteriorating the situation – reveals a significant problem in many European countries. In fact, while uncontrolled access is given to educational resources across the Web, the majority of learners are not aware if IP is implemented in their work as well as ways to protect their own intellectual property (Evans, 2016).

On the grounds that STEAM comprises continuous innovation, invention, discovery and understanding of technical knowledge that lead to (commercial) products, the protection of inventions becomes more and more complex (National Inventor Hall of Fame, 2019). Conceivably, this reveals the rationale behind the lack of IP in school education. In particular, recent research has depicted the knowledge and implementation gaps related to IP, resulting in lack of knowledge about working definitions of IP in the field of Arts. In conjunction with the fact that most European countries are not in position to capture the relevance of IP in STEM, the need to integrate IP in STEAM curricula becomes even more significant (Office for Harmonization in the Internal Market, 2015).

## 1.2 Objectives

In order to address the lack of IP knowledge resulting in an inefficient implementation of IP in the world of inventions, the **IPinSTEAM project** aims at promoting IP strategies in schools and more specifically in STEAM education under the prism of confronting this issue from its roots. To generate awareness about Intellectual Property across European educational institutions, the project will develop an innovative ICT-enabled training package focused on the needs of K-12 STEAM teachers.

Towards that purpose, the project will develop and validate training materials tailored to the real needs of school teachers, educational institutions and STEAM departments towards giving shape to the integration of IP concepts into STEAM curricula.

## 1.3 Target groups

The **direct target group** of the project involves STEAM teachers, mainly primary school and lower secondary school teachers (ages up to 12). They will learn the key concepts of Intellectual Property along with useful information and guidelines about ways to efficiently implement IP strategies in STEAM-related subjects and integrate them into their curricula. By all means, all school STEAM departments can be regarded as direct target group of the project.

The **indirect target audience** of the project comprises:

- Students up to 12 years old
- Schools and educational institutions teaching STEAM-related subjects
- Law schools and departments
- Policy makers responsible for the design and implementation of actions relevant to ICT strategies for educational purposes
- Other institutions or organizations that are active in school education
- Authorities or organizations that can organize specific actions in order to contribute to the development of high-quality education
- Networks, voluntary associations and other NGOs that are active in school education
- Research communities active in the broader field of lifelong learning.

## 2. National report

### 2.1 Objectives

The objective of the present report is to present the results of the validation activities performed with representatives of the target group at national level. Each partner will have to engage at least 20 teachers and 5 students to validate the project outcomes, collecting the results of the validation questionnaires for teachers and for students. The aim is to receive valuable feedback towards continuous improvement.

## 2.2 Questionnaire for teachers

Please score the following statements considering the scale:

**1 = Completely Disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Completely agree.**

	1.	2.	3.	4.	5.
The topics and contents addressed by the Gamified Mediator were relevant					
The scenarios proposed in the Gamified Mediator were adequate to the acquisition of knowledge on Intellectual Property (IP)					
The scenarios proposed in the Gamified Mediator were relevant/significant for teaching IP concepts on STEAM subjects					
The tips/feedback provided were adequate and relevant					
The proposed scenarios were original					
The proposed scenarios were adapted to the target-group					
The overall visual design of the Gamified Mediator was adequate					
The text was legible					
The animations used in the Gamified Mediator were adequate					
The proposed scenarios promoted students' engagement					
The proposed scenarios allowed the acquisition of knowledge in a fun and enjoyable way					

My general evaluation of the Gamified Mediator is positive

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Please, feel free to add anything you find relevant regarding the Gamified Mediator.

## 2.3 Questionnaire for students

Please score the following statements considering the scale:

**1 = Completely Disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Completely agree.**

	1.	2.	3.	4.	5.
The topics and contents addressed by the Gamified Mediator were relevant					
The Gamified Mediator helped me to understand better the importance of Intellectual Property in STEAM subjects					
The Gamified Mediator gave me important knowledge and resources to apply Intellectual Property in STEAM subjects					
The proposed scenarios were original					
I enjoyed the Gamified Mediator					
The overall visual design of the Gamified Mediator was adequate					
The text was legible					

The animations used in the Gamified Mediator were adequate

The tips/feedback were useful for clarifications

The proposed scenarios allowed me the acquisition of knowledge in a fun and enjoyable way

I would recommend this Gamified Mediator to others

My general evaluation of the Gamified Mediator is positive


Please, feel free to add anything you find relevant regarding the Gamified Mediator.

### 3. Conclusions




CIVIC conducted the Validation activities of the second Intellectual Output testing the IPinSTEAM's tool, the Dynamic Demonstrator with participants of the target group.

The training material was tested along with the testing of the project's first Intellectual Output result, the training course.

However, the fact that CIVIC doesn't hold many collaborations with schools, made it difficult to reach 20 teachers and 5 students. Nonetheless, CIVIC managed to reach 3 teachers and 21 students from the target group.

The main channel of dissemination used to reach participants was social media: mainly CIVIC's Fb page and their LinkedIn account (see pictures below).




 **CIVIC**  
Pubblicato da Rosa Amaro · 25 maggio alle ore 09:34 ·  · 

The consortium of IPinSTEAM is recruiting participants for validating their training course and Gamified Mediator! If you are a student or teacher and want to help us improve this content about the use of Intellectual Property in STEAM subjects, please have a read at how many modules you like here: <https://www.ipinsteam.eu/intellectual-output-1> and then fill in this questionnaire: <https://forms.gle/KXrFqcDiHG1ih1tV6>

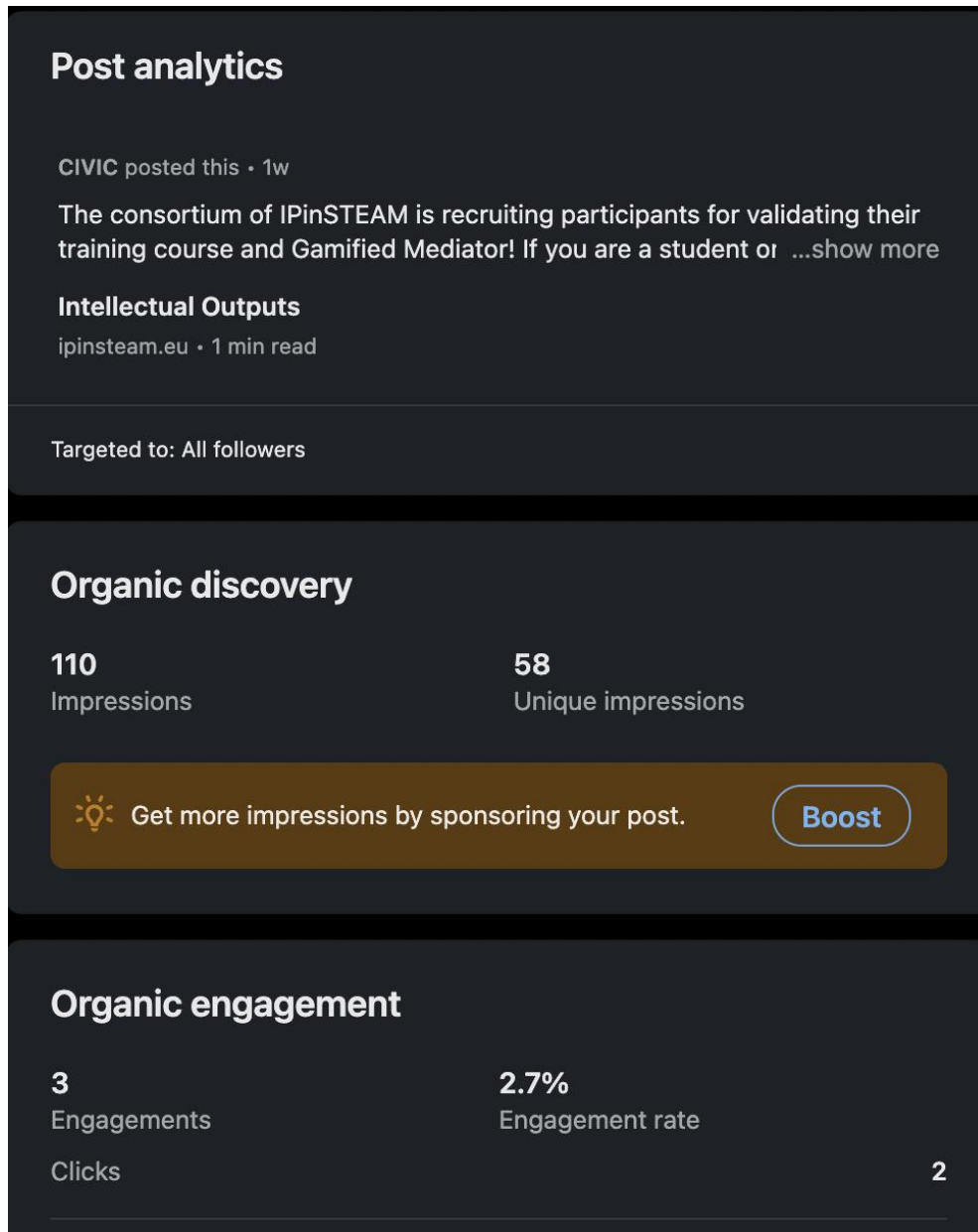
If you want to review our tool, the Gamified Mediator, go here: <https://ipinsteam-demonstrator.eu/>, follow the instructions and learn!  
After, fill in this questionnaire: <https://forms.gle/8tq9DVRsfEHcNRHx6>

Thanks!  
For more information about the project, visit our project website: <https://www.ipinsteam.eu/>  
[#ErasmusPlus](#) [#EUFunded](#)



IPINSTEAM.EU  
**IPinSTEAM**

35 Persone raggiunte    7 Interazioni    ↓ -1,1x in media Punteggio di distribuzione    [Metti in evidenza il post](#)



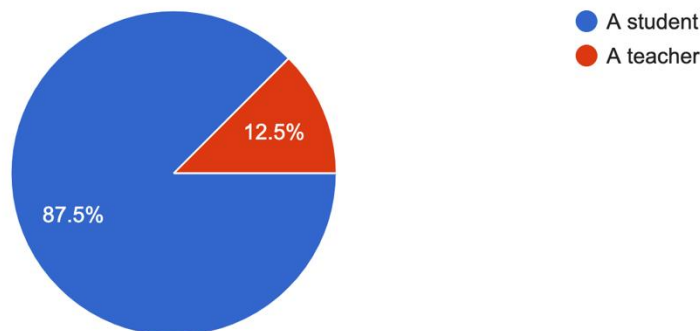
The validating activities took place from the 25<sup>th</sup> May 2022 to the 30<sup>th</sup> June 2022 and the final number of participants reached was 24.

Results from the validating activities of the IPinSTEAM 's tool, the Gamified Mediator will be analysed in more detail.

As mentioned before and as shown in the chart below, of all 24 participants reached, only 3 were teachers while the rest was composed by students.

### Are you a student or a teacher?

24 responses

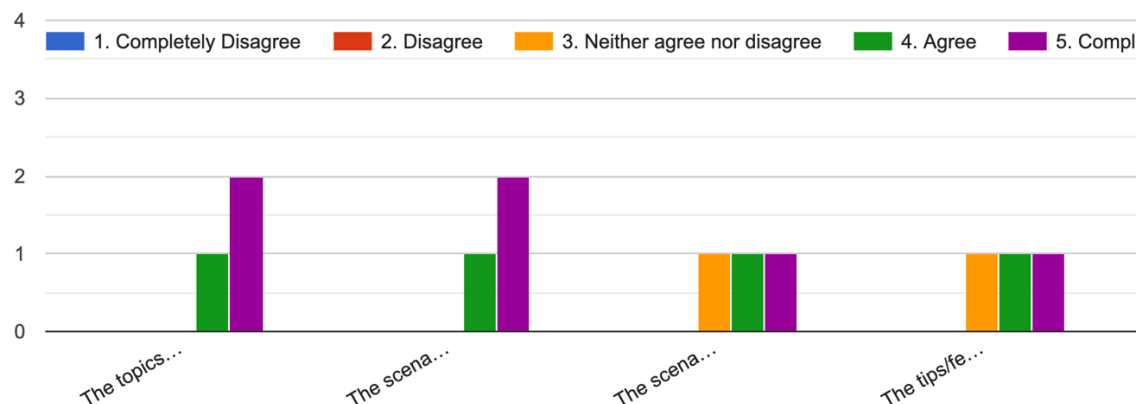


In the second part of the questionnaire, both teachers and students were asked to rate their experience with the Gamified Mediator, the quality of the material proposed, the originality of the scenarios and relevance of the topics addressed to the IP concepts taught.

In the graphs below, it's possible to observe the teachers' answers to the questionnaire.

When asked about the relevance of the topics and content addressed by the Gamified Mediator (question 1), the answers were generally positive and same type of positive answers were given when asked about the relevance of the content, tips and feedback proposed to the acquisition of knowledge of the IP concepts (questions 2,3,4).

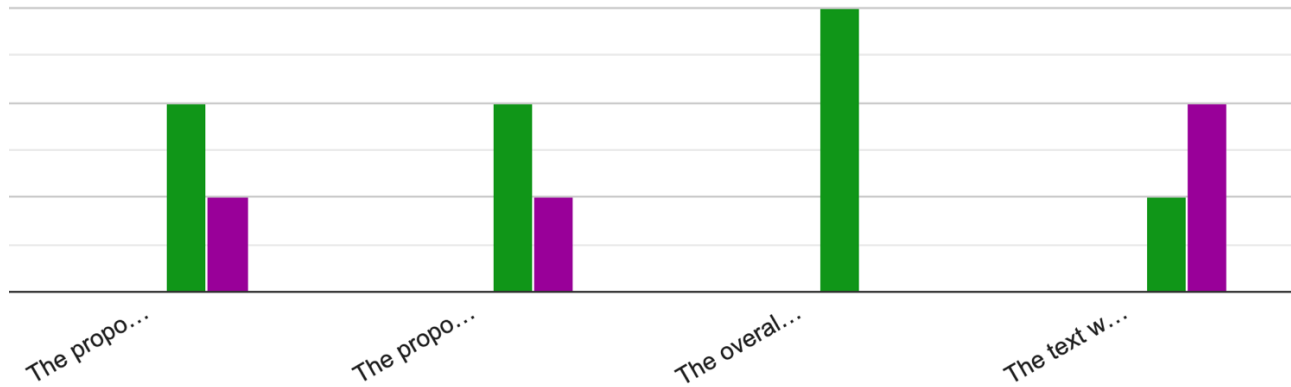
Please score the following statements considering the scale: 1 = Completely Disagree; 2 = Disag



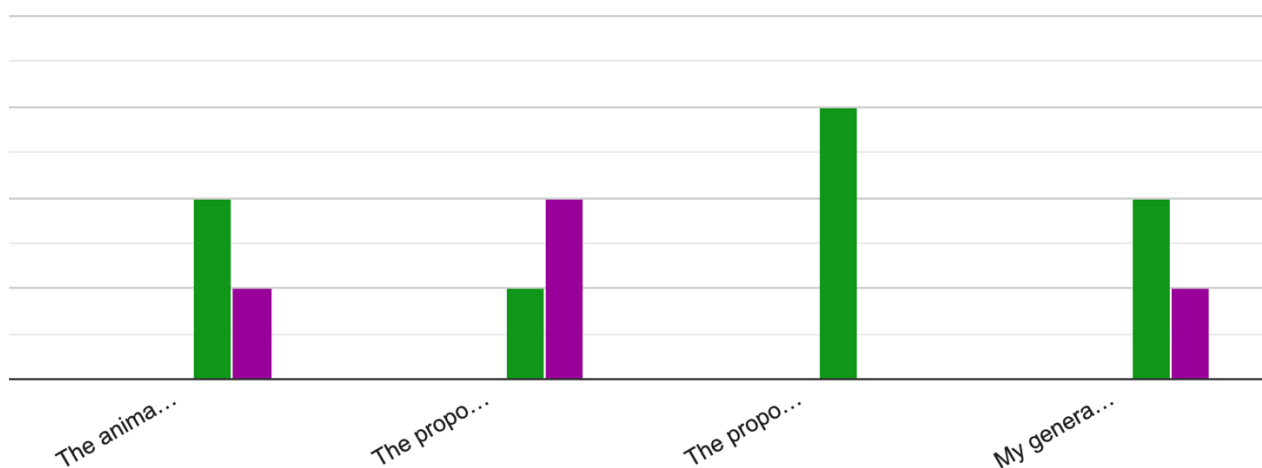
In the following part, teachers were asked if the scenarios proposed were original, appropriate for the target group and if the general overall visual design of the tool, including its text, was adequate (questions 5,6,7,8). Once again, answers were overall positive with 3 out of 3 teachers agreeing that the overall visual design was appropriate.

ree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Completely agree.

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When asked about the general experience with the Gamified Mediator, including the students' engagement and the perception of the tool and its scenarios as a fun and entertaining way to learn (questions 9,10,11), teachers thought that the tool could certainly promote students' engagement and represent an entertaining tool that promotes the acquisition of knowledge in a different way. All the general feedback of the overall experience with the tool, can be synthetized in the last question (question 12), when teachers were asked to agree or disagree with the following statement "My general evaluation of the Gamified Mediator is positive". Teachers responded very positively to this statement



To conclude, the overall experience of the teachers interviewed to test the tool, was very positive, with no particular negative remark.

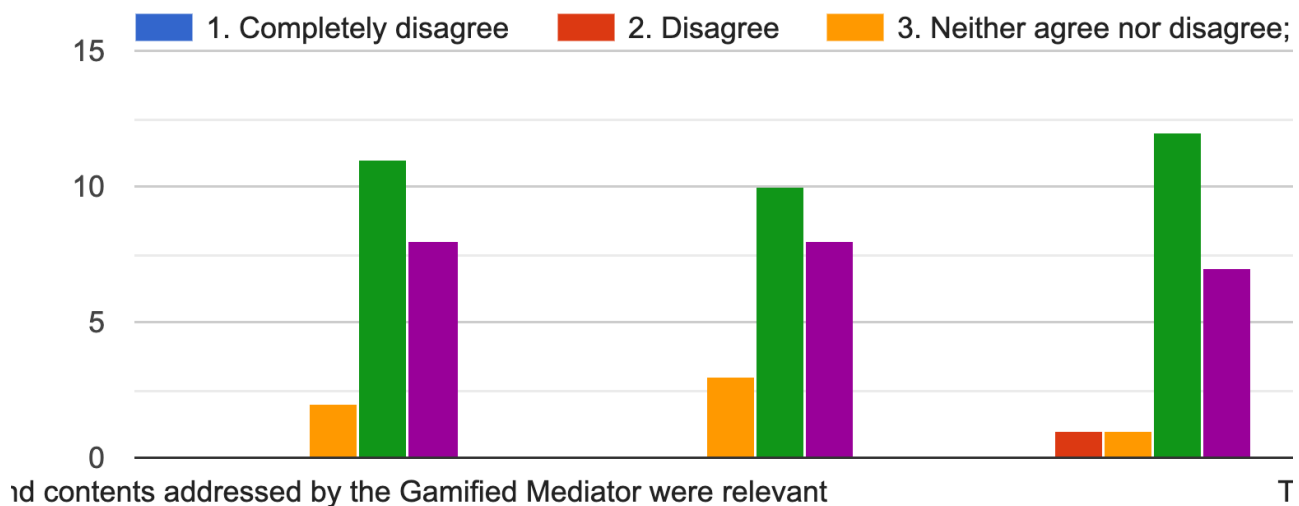
The second part of this report will analyse students' answers to the questionnaire. The questions proposed were very similar to the teachers' questionnaire analysed before. The number of students reached for this piloting activity was of 21.

For the first question, students were asked if the topics and content addressed by the tool were relevant.

The answers were mainly positive with 11 students out of 21 agreeing and 8 of them completely agreeing with the statement.

In the following questions, they were asked more specifically if the Gamified Mediator helped them to understand better the importance of Intellectual Property in STEAM subjects and if the tool gave them important knowledge and resources to apply Intellectual Property in STEAM (questions 2,3).

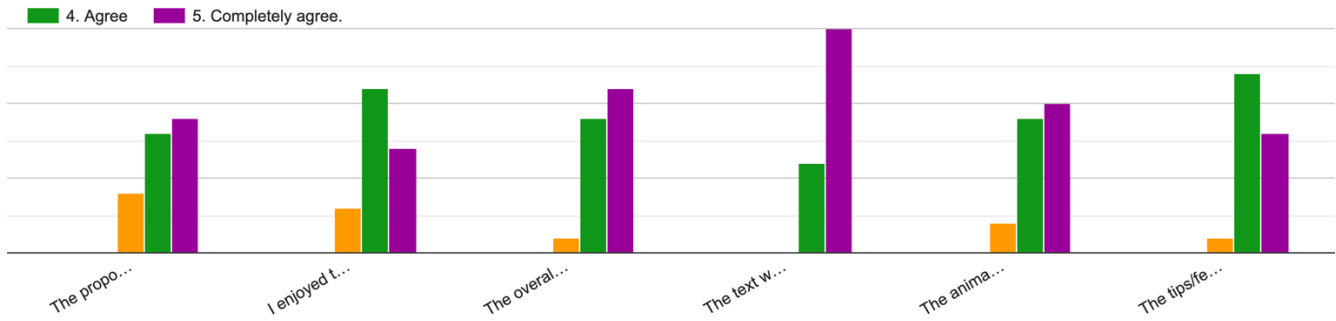
As shown in the graphs below, students reacted quite positively to these questions as the majority of them agreed or completely agreed with the statement. The results show that the tool has definitely the potential to achieve its aim and this is a very important result for our project.



In the next set of questions students were asked about the overall visual design of the tool, the readability of the text, the originality and adequacy of the scenarios proposed and tips/feedback offered, and also if they personally enjoyed using the Gamified Mediator (questions 4,5,6,7,8,9).

As shown in the graphs below, it's once again possible to observe that the overall response to the set of questions was very positive. When asked if they enjoyed using the tool the majority of participants agreed or completely agreed with the statement, which is another very important note for our project, in order to teach concepts in a lighter and entertaining way.

Students also liked the overall design of the tool with the text being legible, the animations proposed and they also felt that the tips/ feedback offered by the tool were useful for clarifications (20 out of 21 students agreed or completely agreed with the statement).

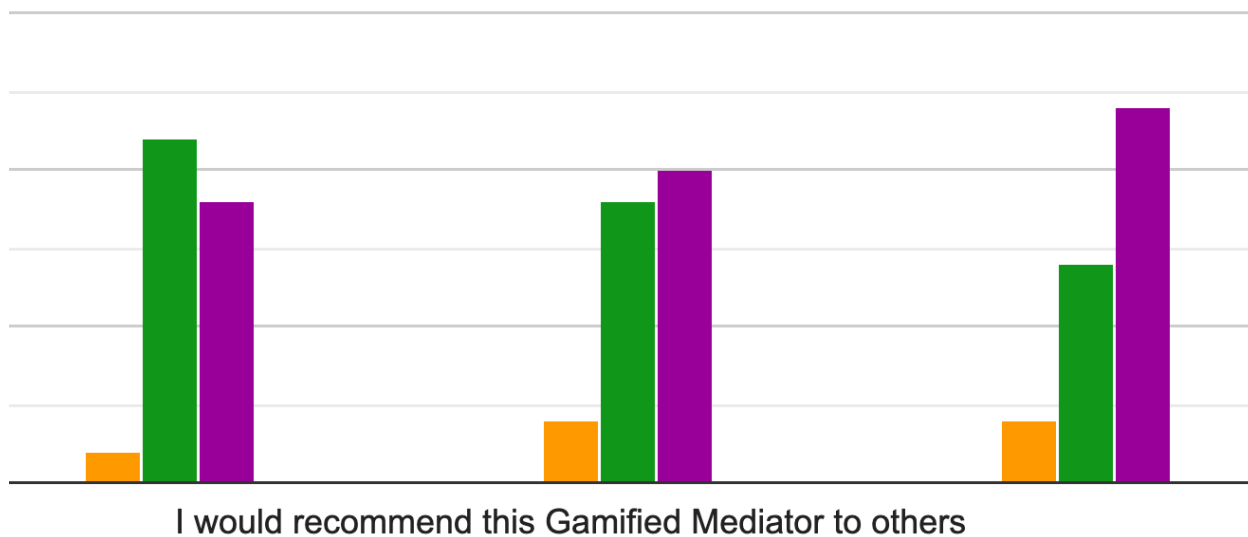


In the last three questions of our questionnaire proposed for students, participants were asked if the proposed scenarios allowed them to learn in a fun and entertaining way, if they would recommend the tool to others and finally if their overall experience with the tool was positive.

Observing the graphs below, the majority of positive answers is again easily noticeable.

As mentioned before, for the IPinSTEAM' consortium, it was very important to create a tool that would allow students to learn about IP concepts in a lighter and entertaining way, so the first question, to which 20 out of 21 students answered with "Agree" or "Completely agree" represents a very important result for us.

The students interviewed would definitely recommend the use of the tool to others (19 out of 21 agreeing or completely agreeing) and finally 12 out of 21 students completely agreed when asked if their experience with the Gamified Mediator was positive.



To draw some conclusions, CIVIC managed to reach 24 participants for the evaluation and testing of the Gamified Mediator, the product of the 2<sup>nd</sup> Intellectual Output of the IPinSTEAM project.

Out of 24 participants, mainly reached through social media, 21 were students and 3 were teachers. The overall results and feedback received, both from teachers and students, were very positive, with all participants, mainly responding very positively to the questions asked about their experience with the tool.

Teachers confirmed that the tool, with its original scenarios and useful tips and feedback, would definitely promote students' engagement and represent an entertaining tool that promotes the acquisition of knowledge in a different way.

Students instead confirmed that the Gamified Mediator is a tool that can help them better understand the importance of Intellectual Property in STEAM subjects and give them more knowledge about it.

Also, the fact that they would recommend the tool to others, also highlights the fact that the tool is innovative as it can teach important concepts using a light and fun way.

## 4. References

Please use [APA Style](#) to write down your references.