iLCD

Intelligent iLearning-eCreativity-eDiversity

RESULT 4
Digital Educational Platform e-me (e-me4all)

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iLCD

Intelligent iLearning Environment for Creativity and Diversity

RESULT 4.5

e-me Digital Educational Platform

European Edition (eme4all.eu)

Evaluation Report

CTI DIOPHANTUS

Educational Technologies,
Training & Certification Directorate

Athens, 2024

Erasmus+

Table of Contents

1. Introduction

The *e-me Digital Educational Platform, European Edition* (eme4all.eu) has been designed to support educators and learners, foster collaborative learning and enhance educational outcomes across Europe. This evaluation report aims to provide a comprehensive analysis of the platform's functionalities, strengths, and areas for improvement based on user feedback and insights.

The primary purpose of the report is to assess the effectiveness of the *e-me Digital Educational Platform (European Edition)* in meeting the needs of its users during the iLCD project. By gathering feedback through a structured evaluation process, it seeks to identify key areas where the platform excels and where enhancements may be required. Insights gathered from this evaluation are instrumental in informing ongoing development efforts to ensure the platform remains responsive to the evolving demands of educators and learners.

The report begins with an overview of the *e-me Digital Educational Platform*, outlining its core features and the educational philosophy underpinning its design. It explores the platform's evolution from its origins in Greece to its expansion across Europe.

Additionally, the report delves into the methodology employed for evaluating the platform, detailing the questionnaire used, its distribution process, and the demographic characteristics of respondents.

Following this, the report presents a thorough analysis of the evaluation findings across key dimensions:

- **Usability and User Experience**: Assessing interface clarity, navigation ease, and user support.
- **Communication and Collaboration**: Examining tools facilitating interaction and collaborative learning.
- **Accessibility**: Evaluating platform compatibility with devices and accessibility features.
- **Engagement**: Analyzing user engagement through interactive elements and social features.
- **Content Creation**: Reviewing tools for creating and sharing educational content.
- **Data and Content Security**: Addressing user perceptions and platform practices in safeguarding data and content integrity.

The report concludes with a summary of key findings, highlighting user satisfaction levels, valued platform features, suggested improvements, and proposed next steps for enhancing the *e-me Digital Educational Platform (European Edition)*.

2. Overview of the e-me Digital Educational Platform

2.1   What is e-me

e-me Digital Educational Platform is a collaborative, social and extendable digital educational platform, a digital working and collaboration space for students and teachers.

e-me is a personal learning environment which supports:

- ✓ creation of private and public collaboration spaces (hives) by teachers and pupils,
- ✓ communication and social networking among students and teachers,
- ✓ organization, storage and exchange of files on the cloud,
- ✓ easy creation of digital interactive learning objects,
- ✓ assigning and monitoring of tasks,
- ✓ creation of e-portfolio for keeping selected personal achievements,
- ✓ display of work via collaborative and personal blogs,
- ✓ use of open educational resources from digital repositories,

while it further provides digital "tools" to enhance teaching and learning.

2.2   Background & e-me European

e-me Digital Educational Platform originated in Greece, where it currently operates as an official platform of the Greek Ministry of Education for all students and teachers, serving over 600.000 users.

In 2022, two European projects—the Horizon2020-PAFSE and the ERASMUS+ iLCD project—provided the opportunity for *e-me* to expand beyond Greece. The multilingual European edition of *e-me* was created and launched as a new installation. It is offered as a free service to everyone across Europe to support collaborations among schools, teachers, students, universities, and the broader educational community. The platform currently supports eight languages and has been piloted in schools in Portugal, Poland, Cyprus, Bulgaria, Lithuania, Latvia, and, of course, Greece.

3. Evaluation of e-me Digital Educational Platform (European Edition)

3.1 Purpose of the Evaluation

The purpose of the evaluation was to gather insights and opinions about various aspects of the *e-me Digital Educational Platform (European edition)*. This feedback was critical for understanding the platform's strengths and identifying areas for improvement, ensuring the platform continues to meet the needs of its users effectively.

3.2 Methodology

3.2.1 Description of the Questionnaire

The evaluation questionnaire, tailored specifically for the European edition of *e-me Digital Educational Platform* available at e-me4all.eu (see Appendix), served as a comprehensive instrument designed to gather user perspectives and insights across various dimensions of the platform. Respondents were asked to provide ratings on a five-point scale, ranging from "Strongly Disagree" to "Strongly Agree," which facilitated a detailed understanding of user satisfaction and identified areas requiring improvement.

In particular, the questionnaire initially sought demographic information from respondents, including age, gender, country of residence, educational background, and professional status. This foundational data contextualized responses and provided insights into how different user profiles perceived and interacted with the *e-me* platform.

The core evaluation of the questionnaire was structured around several key domains. First and foremost was platform usability and user experience. Participants were prompted to assess aspects such as the clarity and visual appeal of the interface, the speed and ease of navigation, and the availability and clarity of user guides or technical support. These elements were critical as they directly impacted how intuitively users could engage with the platform's interface and features.

Communication, collaboration, and peer interaction formed another vital dimension of the questionnaire. Questions in this section focused on the effectiveness of communication tools within the platform, including their ability to facilitate interaction between students and instructors. The evaluation also addressed the functionality of collaborative spaces, such as Hives, designed to support group projects and foster a sense of community among platform users.

Accessibility features were carefully examined to ensure inclusivity across diverse user needs. Participants were asked to rate the platform's accessibility across different devices (e.g., desktops,

tablets, mobile phones) and its compatibility with various web browsers. Furthermore, the questionnaire explored the effectiveness of the UserWay Accessibility Widget in providing customizable options like adjustable font sizes, contrast modes, and support for screen readers, aiming to accommodate users with disabilities or unique accessibility requirements.

Engagement was another pivotal aspect evaluated through the questionnaire. It assessed how well the platform incorporated interactive elements that enhanced learning experiences, as well as opportunities for active participation in discussions and learning activities. Additionally, the integration of social elements like invitations, notifications, and feedback mechanisms was examined to understand their impact on user engagement and satisfaction.

The questionnaire also delved into the platform's capabilities for content creation. Participants were asked to evaluate the user-friendliness of tools like the "e-me content" app, the variety and adequacy of educational resource types available, and the platform's support for creating interactive and engaging learning materials. These insights were crucial for assessing the platform's effectiveness in supporting educators and learners in content development and delivery.

Security of data and content was another critical area of evaluation. Participants were prompted to rate the platform's transparency regarding data security practices and policies, its promotion of responsible content creation and sharing, and its responsiveness in addressing issues such as copyright infringement or misuse of content. These measures were essential for maintaining user trust and safeguarding sensitive information within the educational environment.

Ultimately, the questionnaire concluded by soliciting participants' overall satisfaction with the *e-me Digital Educational Platform*. It employed a scale ranging from 'Not at all satisfied' to 'Extremely satisfied,' providing a quantitative measure of user sentiment. Additionally, participants were encouraged to provide qualitative feedback on the platform's strengths, areas for improvement, and specific suggestions for enhancement. This open-ended section allowed respondents to articulate their experiences and offer constructive insights that could inform future developments and optimizations of the platform.

In conclusion, the evaluation questionnaire served as a thorough tool for gathering diverse perspectives on the platform's usability, functionality, accessibility, engagement features, content creation capabilities, and security measures. By soliciting both quantitative ratings and qualitative feedback, the questionnaire aimed to empower users to express their experiences fully and provide constructive insights. This feedback is important for fostering ongoing enhancements and ensuring that the platform evolves to meet the dynamic needs of its educational community effectively.

3.2.2 Distribution and Collection Process

The questionnaire was distributed online (as a Google form) by the eLearning Lab of the University of Crete (project coordinator) to partners of the iLCD project across five European countries: Greece, Cyprus, Bulgaria, Lithuania, and Latvia. The eLearning Lab also managed the collection of responses.

3.3 Analysis

3.3.1 Respondent Demographics

The evaluation received a total of 15 responses from the five iLCD project countries, providing a snapshot of user demographics and experiences.

The majority of respondents were women, accounting for 80% of the participants.
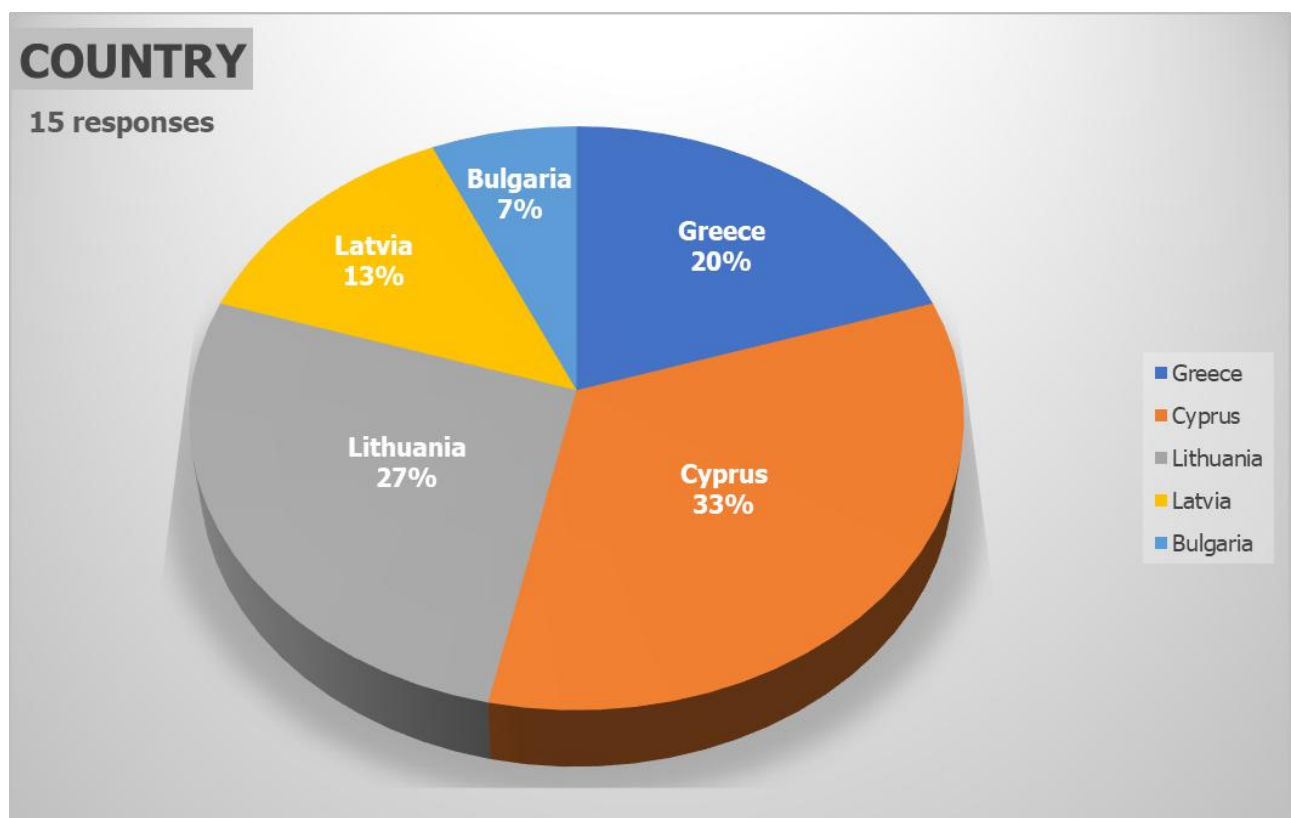
Figure 3.1: Distribution of respondents by country
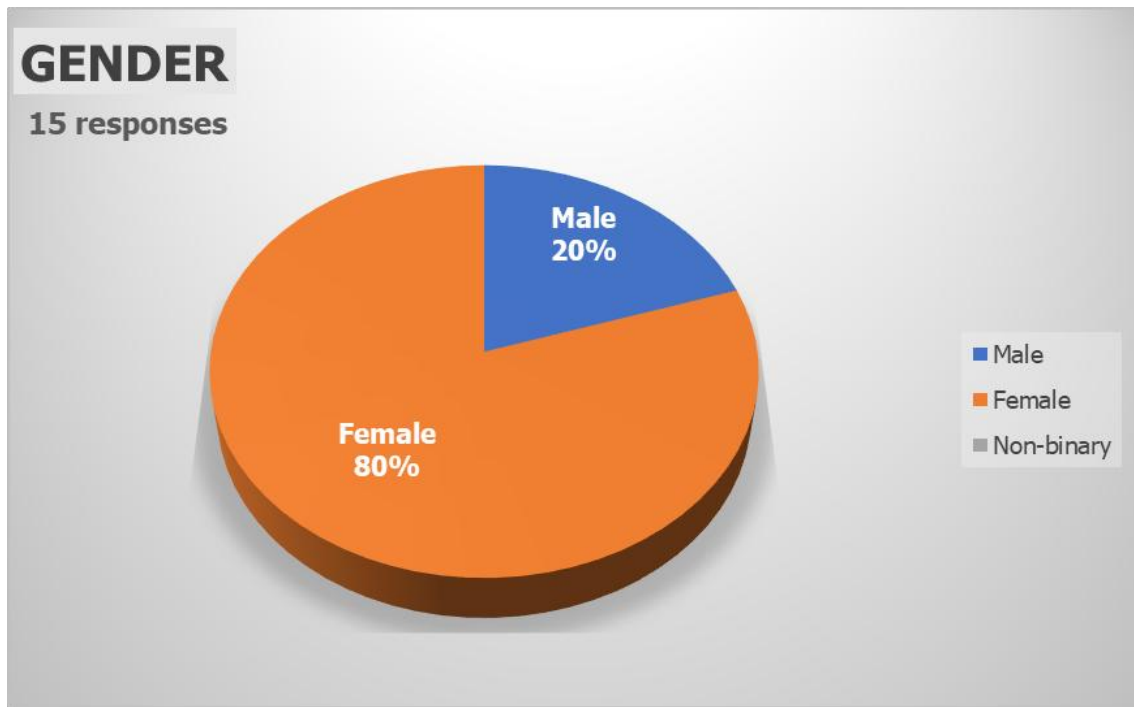
Figure 3.2: Demographics of respondents by gender

Regarding age, the responses covered the entire range from 30 to 60 years, with most respondents being between 40 and 50 years old.
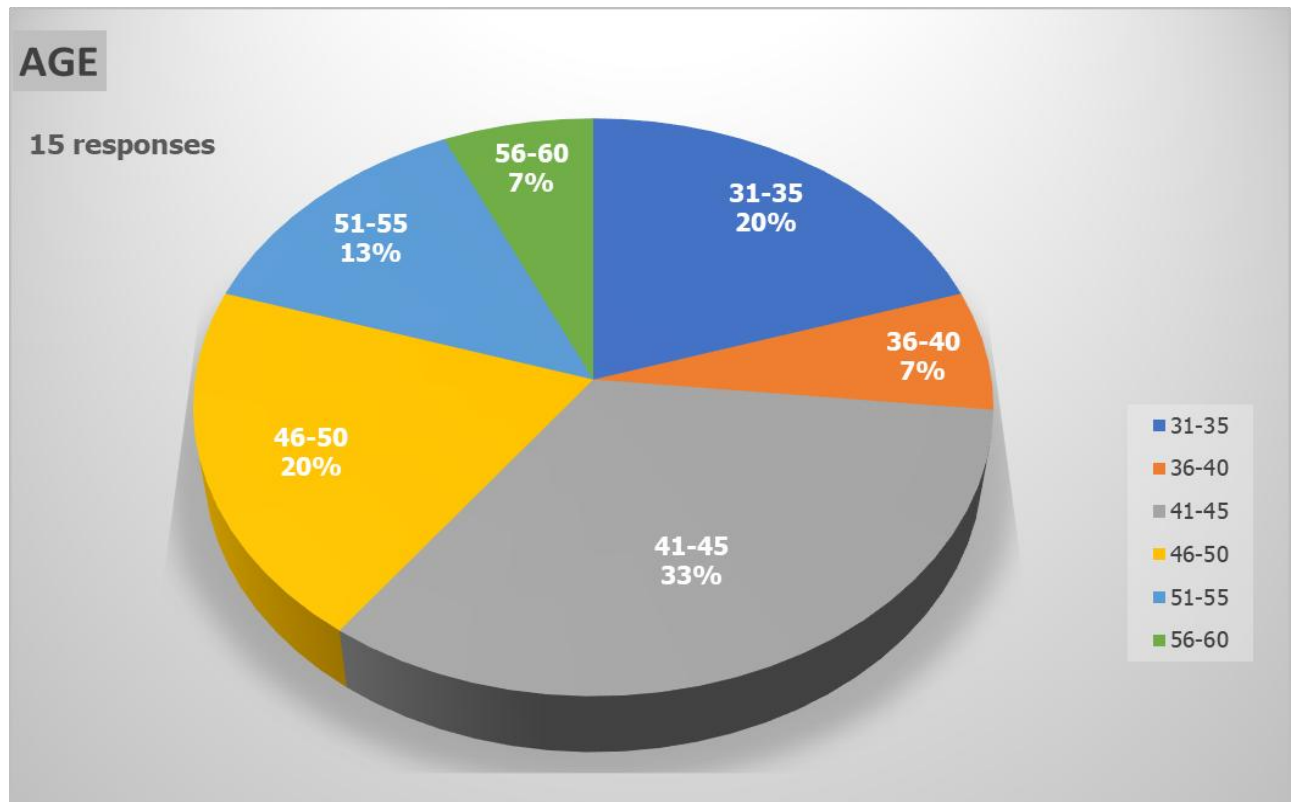
Figure 3.3: Demographics of respondents by age

All respondents were teachers, including a headmaster, primary school teachers, language teachers, a psychologist, and others.
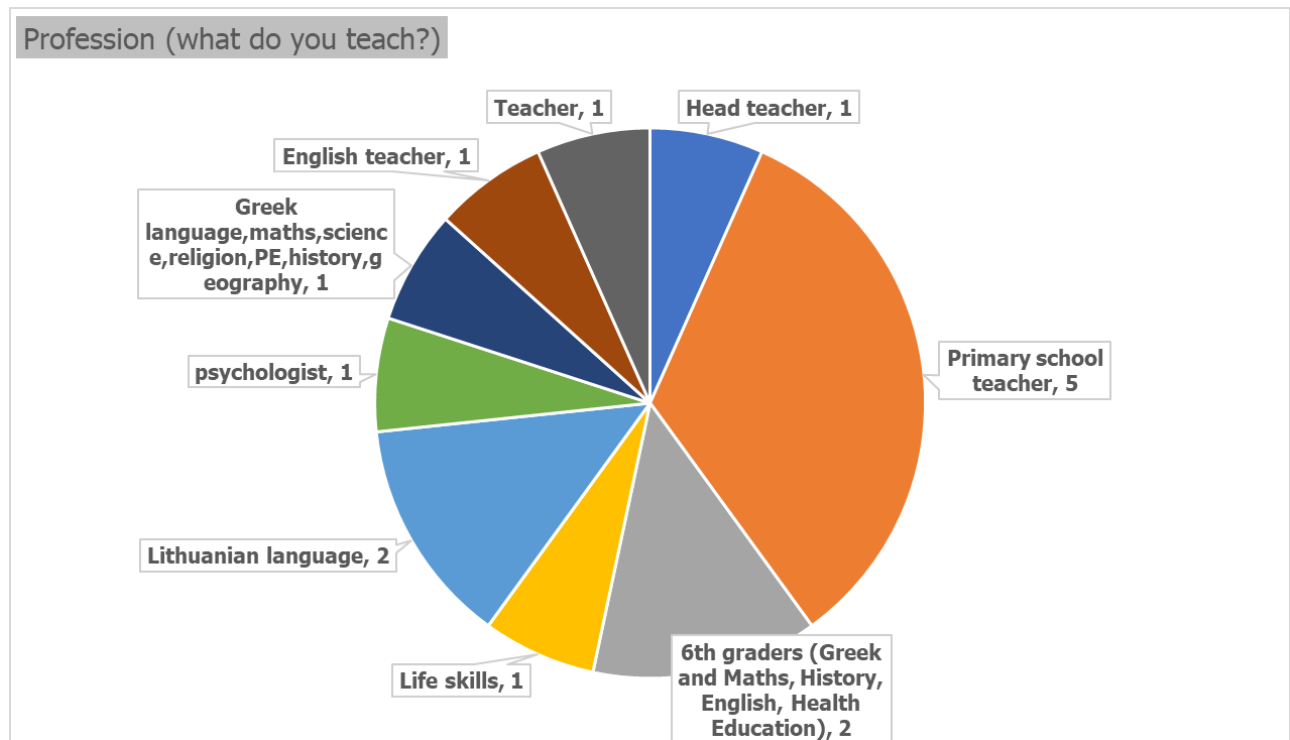
Figure 3.4: Professional background of respondents

The majority had long teaching experience, with 34% having 21-25 years and 13% having 16-20 years of experience, indicating a seasoned group of educators providing feedback.
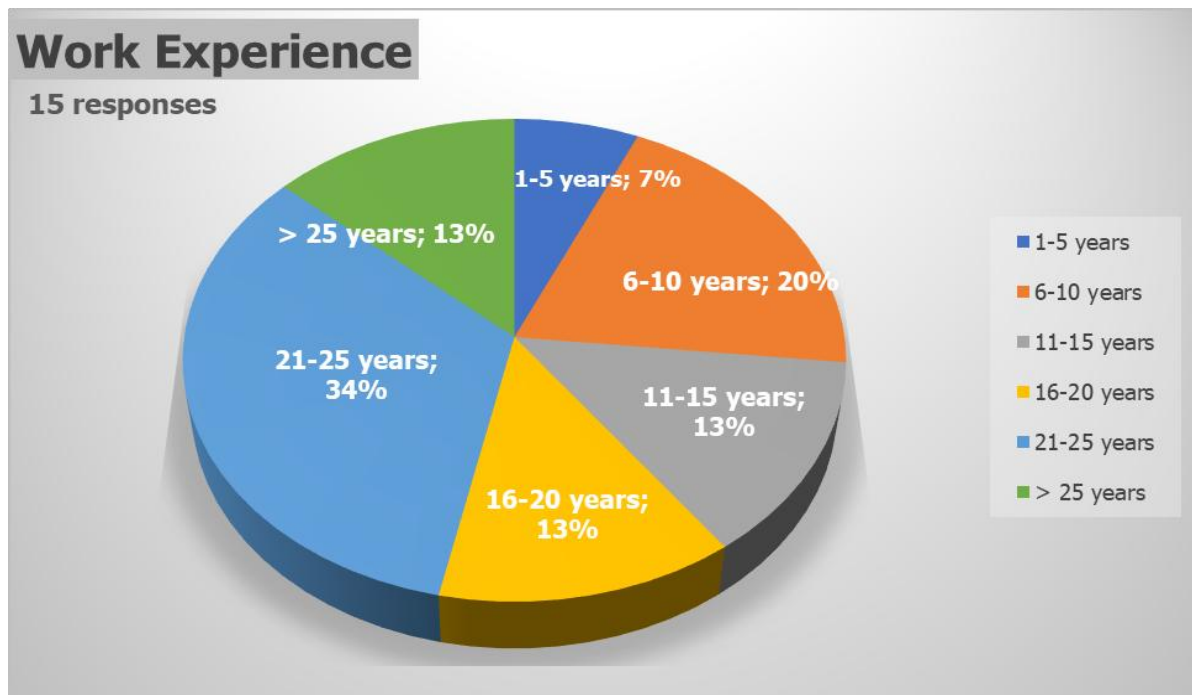
Figure 3.5: Teaching experience of respondents

3.3.2 Key Findings

3.3.2.1 User-Friendliness

The user-friendliness of *e-me*, including its usability and user experience, received positive feedback. A significant portion of respondents, 40%, strongly agreed, and 53% agreed that *e-me* has a clear and visually appealing interface, with only 7% remaining neutral.
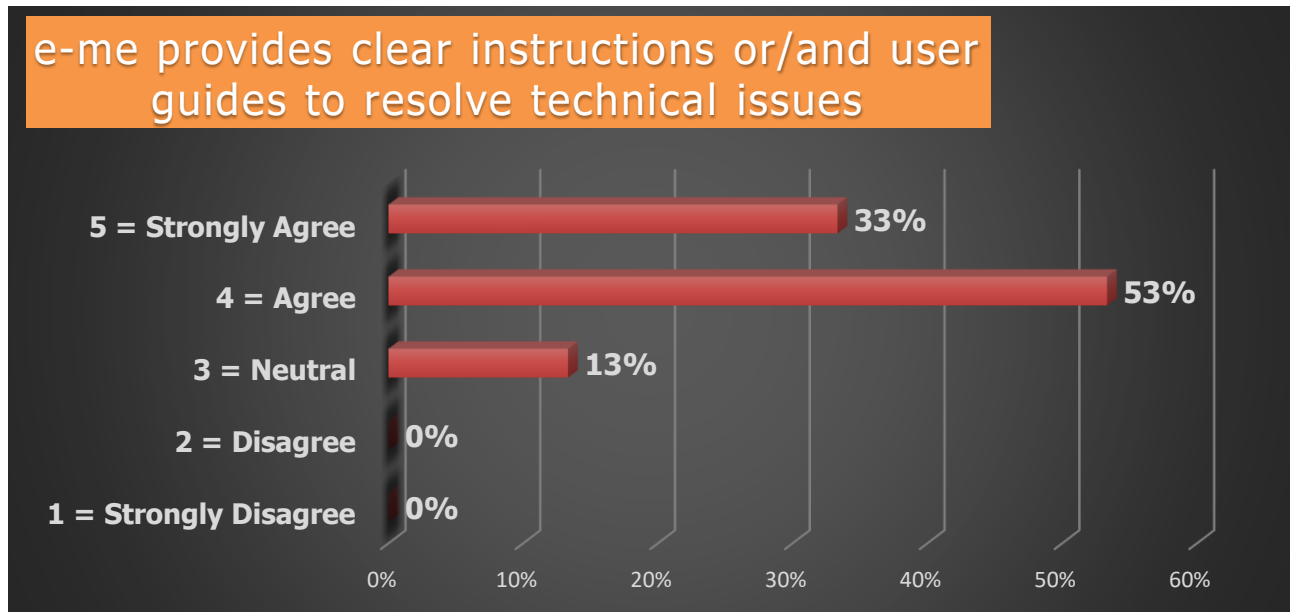
Figure 3.6: User perception of e-me's interface clarity and visual appeal

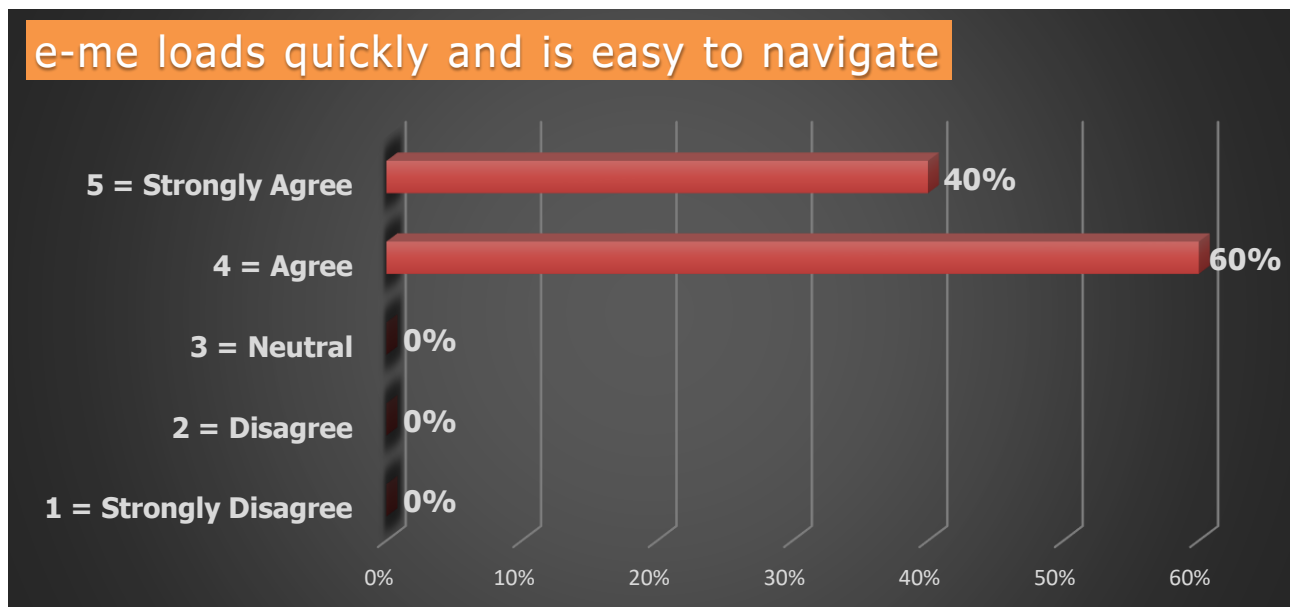When it came to quick loading times and easy navigation, all respondents agreed, with 40% strongly agreeing.

Figure 3.7: Loading speed and navigation ease of the e-me platform

Additionally, regarding whether *e-me* provides clear instructions and user guides to resolve technical issues, 33% strongly agree, 53% agree, and 13% are neutral, seeking better guidance.
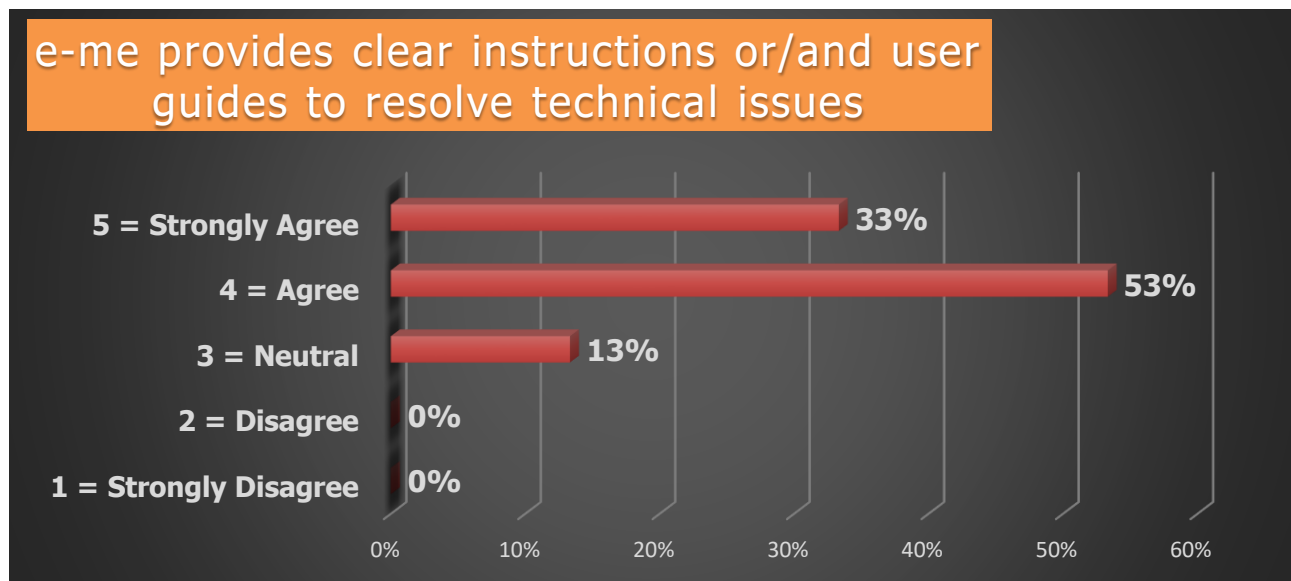

Figure 3.8: Clarity of instructions and user guides for technical issues on e-me

3.3.2.2 Communication and Collaboration

The communication and collaboration features of *e-me* were highly praised.

The platform was noted for facilitating effective communication and interaction between students and instructors, with 80% strongly agreeing and 13% agreeing, though one respondent (7%) disagreed. It would be very interesting to have more details about this response, as it doesn't align with the other related questions of this section.
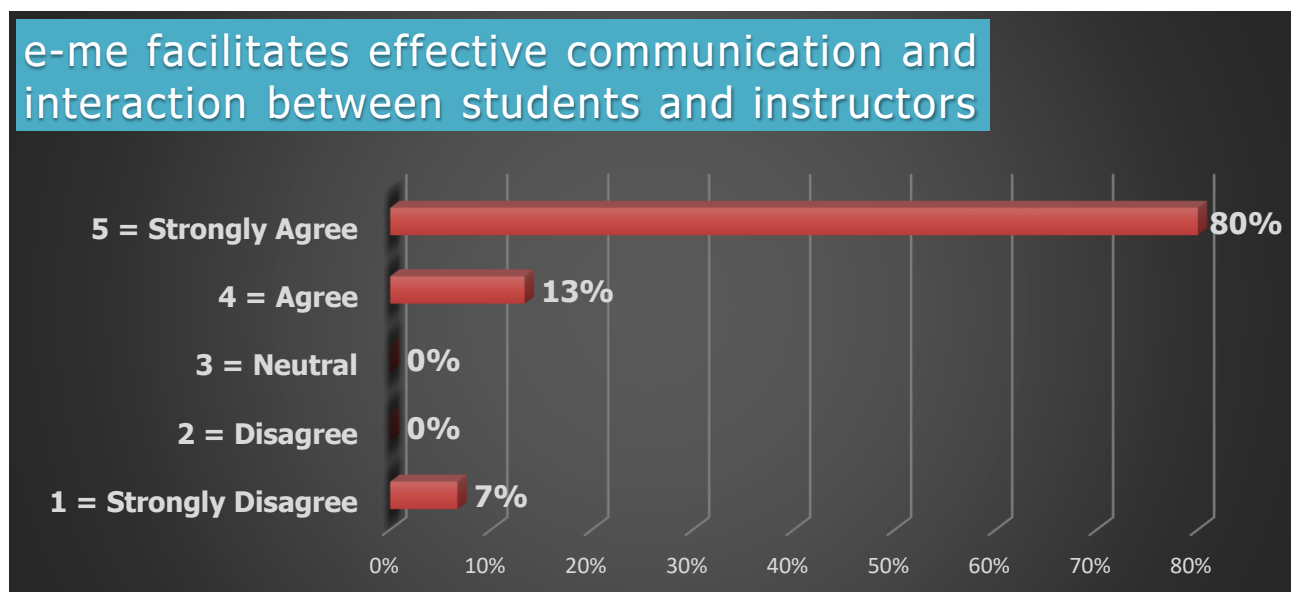

Figure 3.9: Effectiveness of e-me in facilitating communication and interaction

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All respondents agreed that the collaborative spaces on *e-me*, i.e., *Hives,* support group projects and discussions, with 60% strongly agreeing.
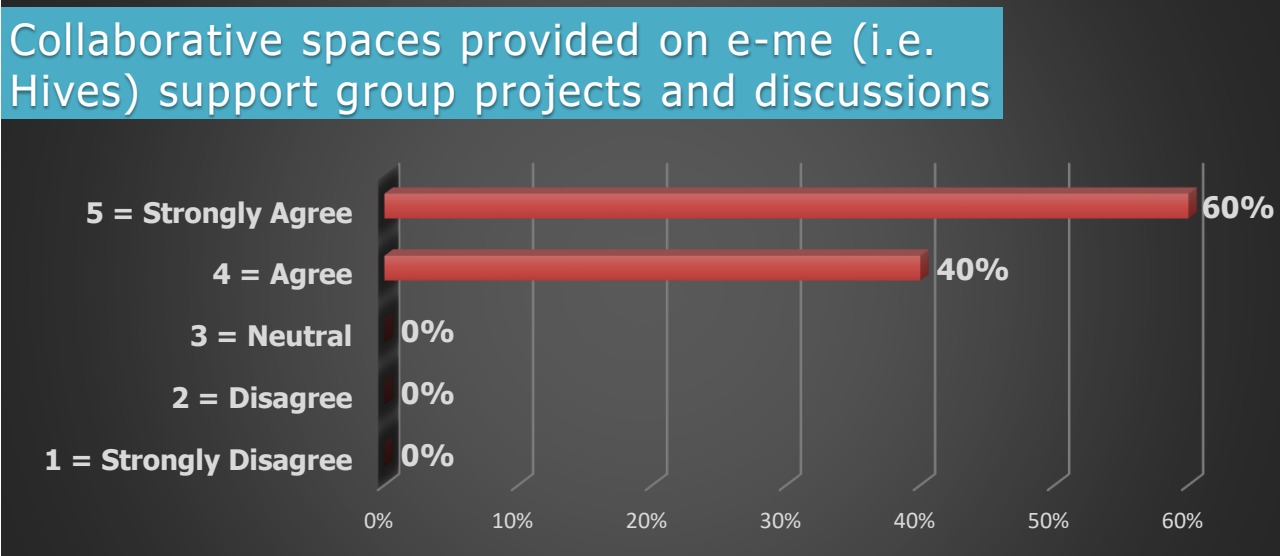
Collaborative spaces provided on e-me (i.e. Hives) support group projects and discussions

5 = Strongly Agree	60%
4 = Agree	40%
3 = Neutral	0%
2 = Disagree	0%
1 = Strongly Disagree	0%

Figure 3.10: Effectiveness of collaborative spaces (Hives) for group projects and discussions on e-me

Hives, which are a key structural concept of *e-me*, were seen to foster a sense of community among members, with 53% strongly agreeing and 47% agreeing on their effectiveness.

Hives foster a sense of community among members

5 = Strongly Agree	53%
4 = Agree	47%
3 = Neutral	0%
2 = Disagree	0%
1 = Strongly Disagree	0%
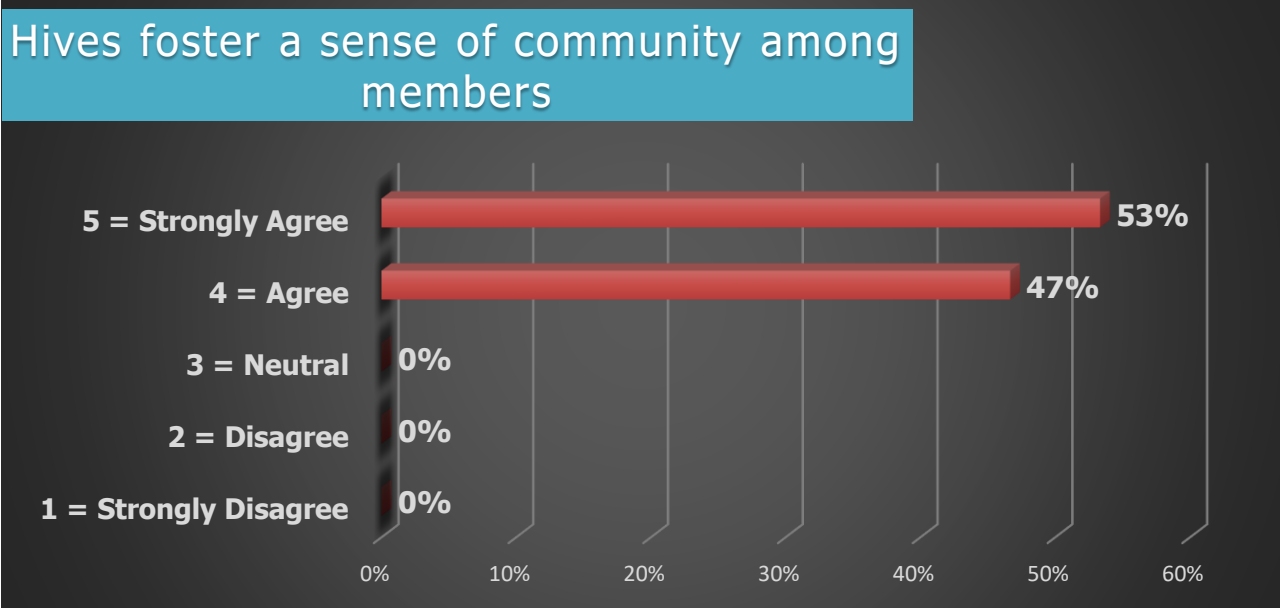
Figure 3.11: Perceived community building effect of Hives on e-me Platform

3.3.2.3 Accessibility

The accessibility and compatibility of *e-me* across different devices were well-regarded, with 53% strongly agreeing and 40% agreeing that the platform is accessible across desktops, tablets, and mobiles.
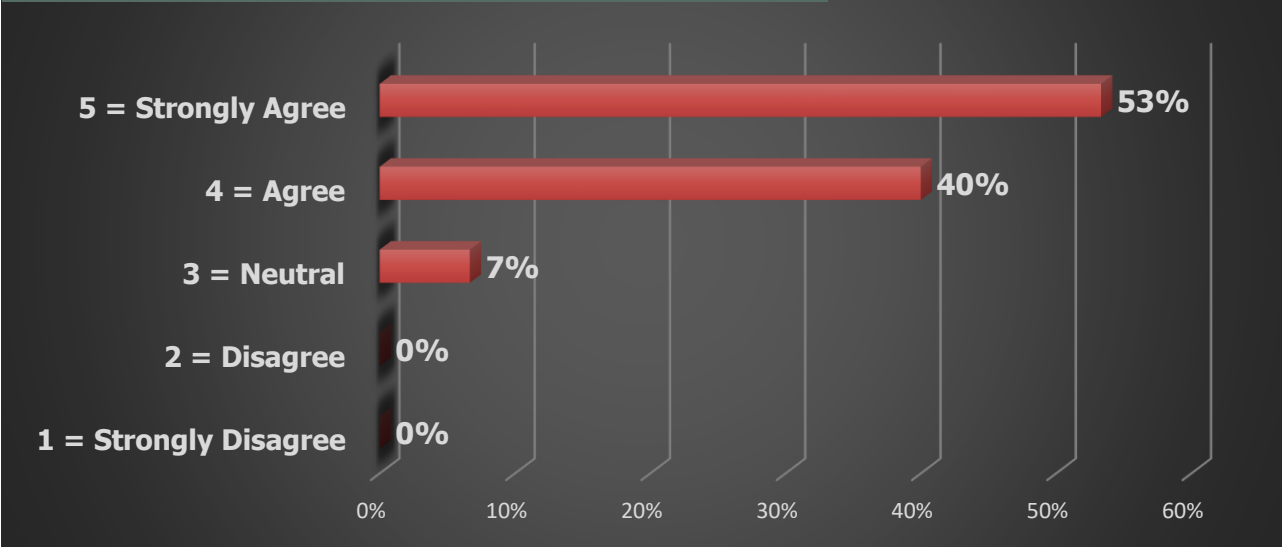
Figure 3.12: Accessibility of e-me across various devices

Similarly, *e-me*'s compatibility with multiple web browsers received positive feedback, with 67% strongly agreeing and 27% agreeing.
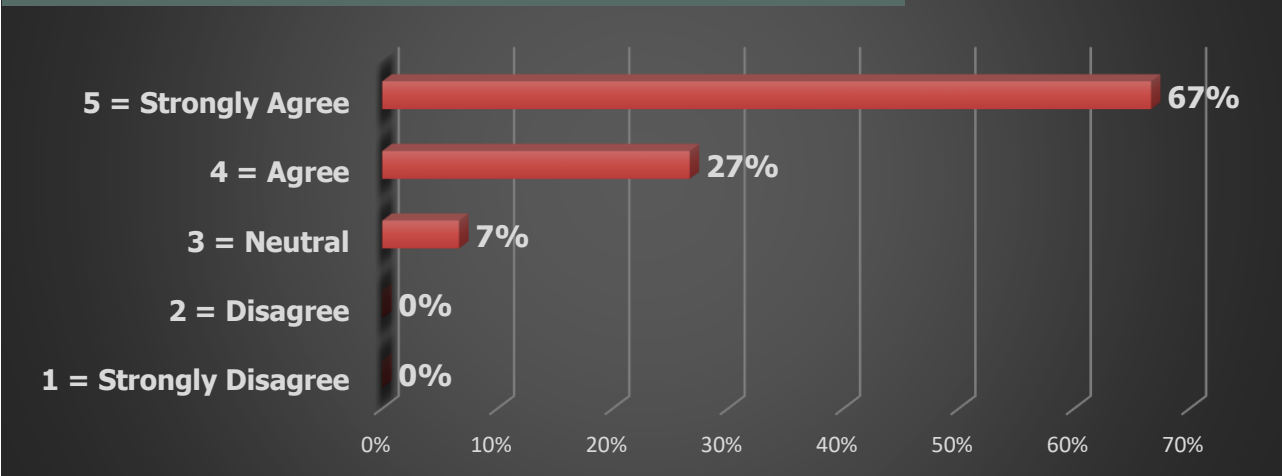

Figure 3.13: Compatibility of e-me with various web browsers

The UserWay Accessibility Widget on the platform, offering options such as adjustable font sizes and contrast modes, was also positively reviewed, with 40% strongly agreeing, 53% agreeing, and 7% neutral.
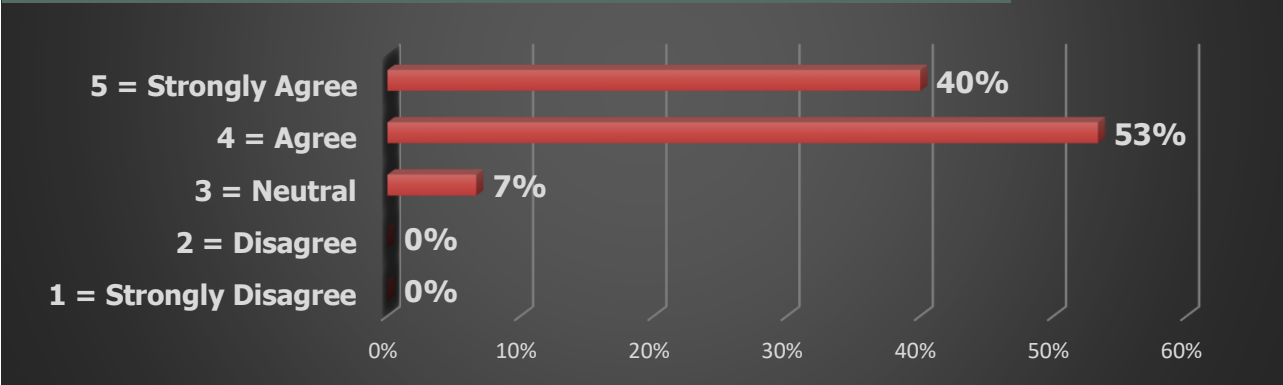
Figure 3.14: UserWay accessibility widget effectiveness on e-me

3.3.2.4 Engagement

The platform's ability to engage users was highly praised, with all respondents agreeing that *e-me* offers interactive elements that enrich students' learning experiences; 67% strongly agreed with this statement.
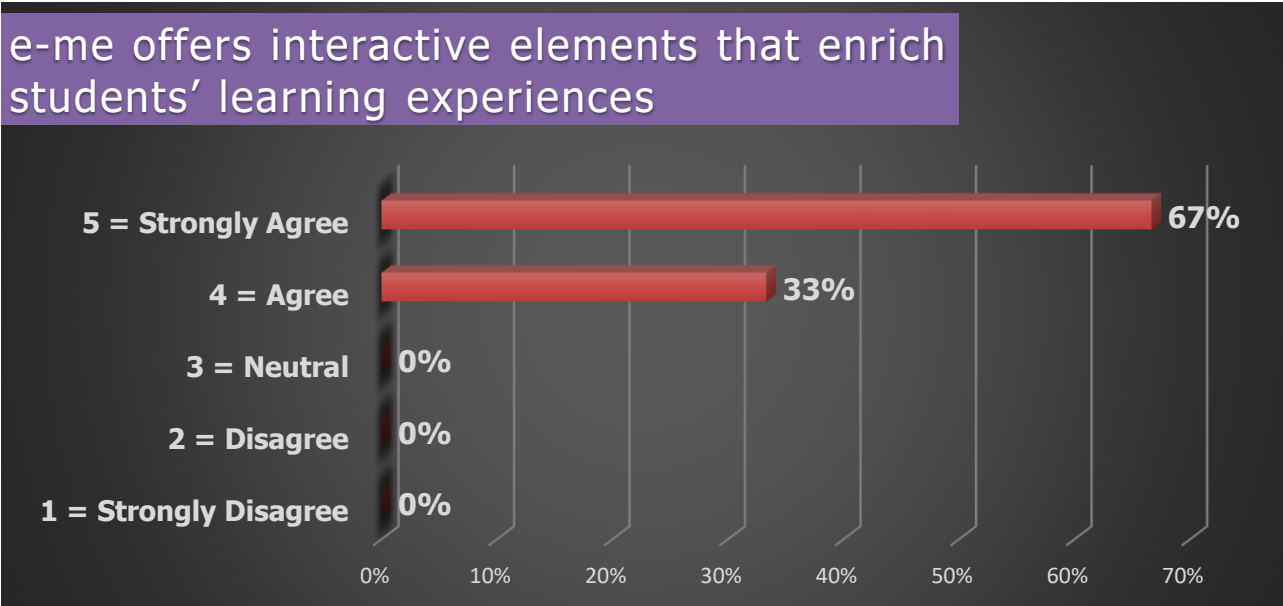

Figure 3.15: Engagement level offered by e-me's interactive elements

Additionally, 87% of respondents strongly agreed, and 13% agreed that *e-me* provides opportunities for active participation in discussions and learning activities.
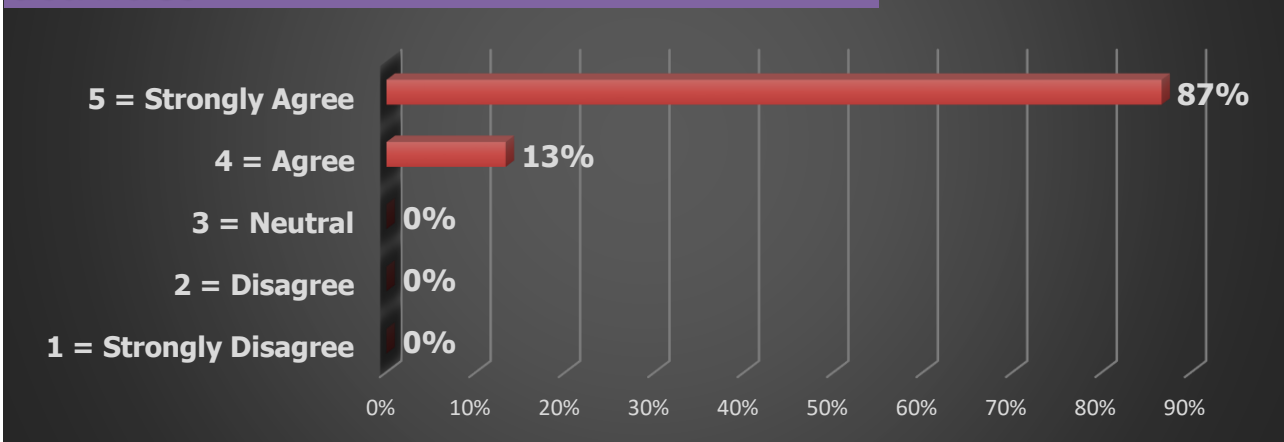
Figure 3.16: Opportunities for active participation in discussions and learning activities on e-me

The integration of social elements like invitations, notifications, and likes was perceived as enhancing engagement, with 73% strongly agreeing, 20% agreeing, and 7% neutral.
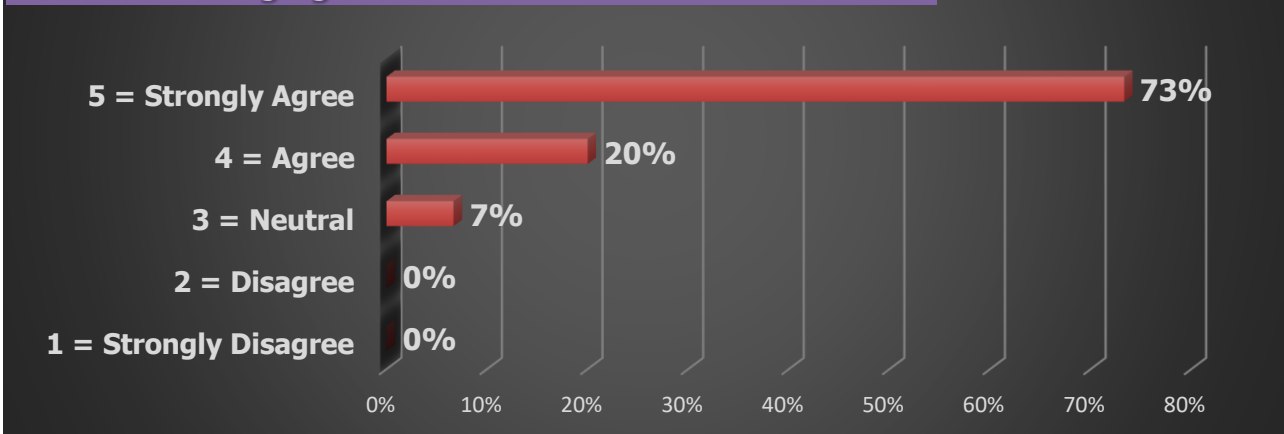

Figure 3.17: Integration of social elements on e-me

3.3.2.5 Content Creation

The content creation capabilities of *e-me*, particularly through the "e-me content" app, received unanimous approval. All respondents found the educational content creation tool user-friendly, with 67% strongly agreeing.
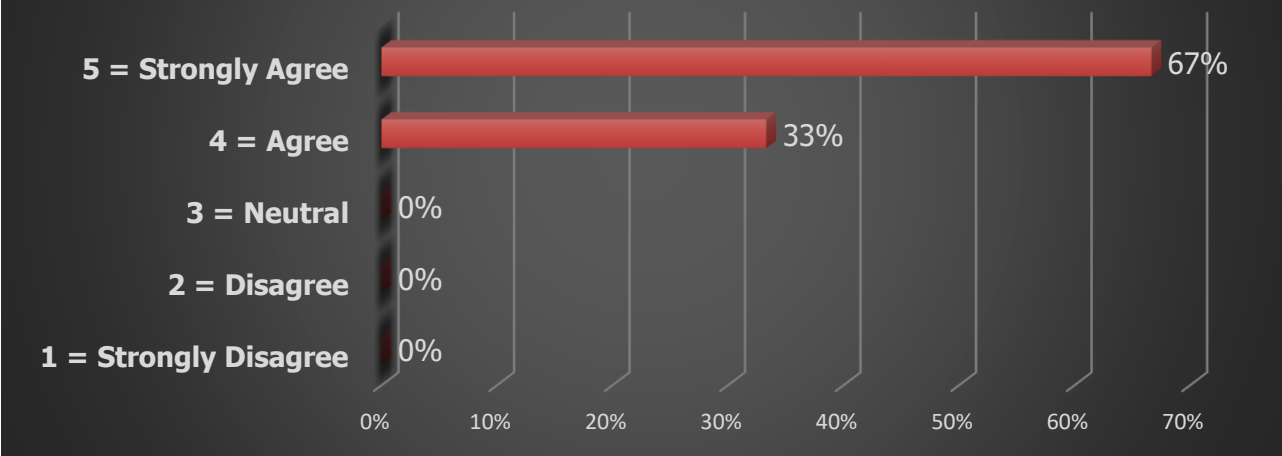
Figure 3.18: User-Friendliness of e-me content creation tool

The range of educational resource types offered by the app was satisfactory to all respondents, with 80% strongly agreeing.
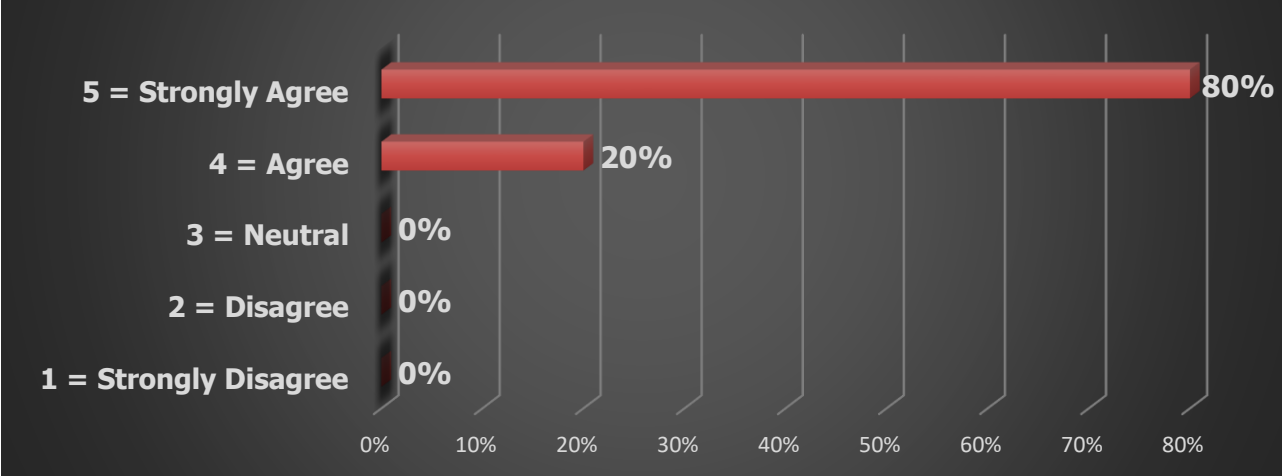

Figure 3.19: Range of educational eesource types offered by e-me content app

Furthermore, 73% strongly agreed, and 27% agreed that the app supports the creation of interactive and engaging learning materials.
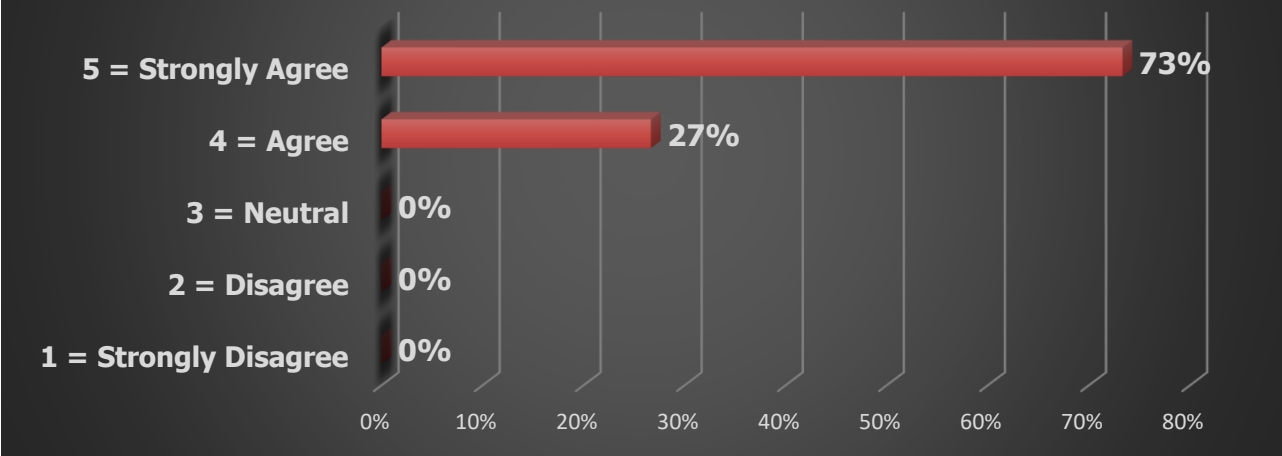
Figure 3.20: Effectiveness of e-me in creating interactive learning materials

3.3.2.6 Data and Content Security

Opinions on data and content security were more varied. While 47% strongly agreed and 27% agreed that *e-me* provides clear information about its data security practices and policies in its Terms of Use, 27% were neutral. This feedback indicates a need to enhance the clarity of the information provided.

Figure 3.21: Clarity of data security practices and policies in e-me's Terms of Use

When it came to promoting responsible content creation and sharing practices, 67% strongly agreed, and 27% agreed, with 7% neutral.

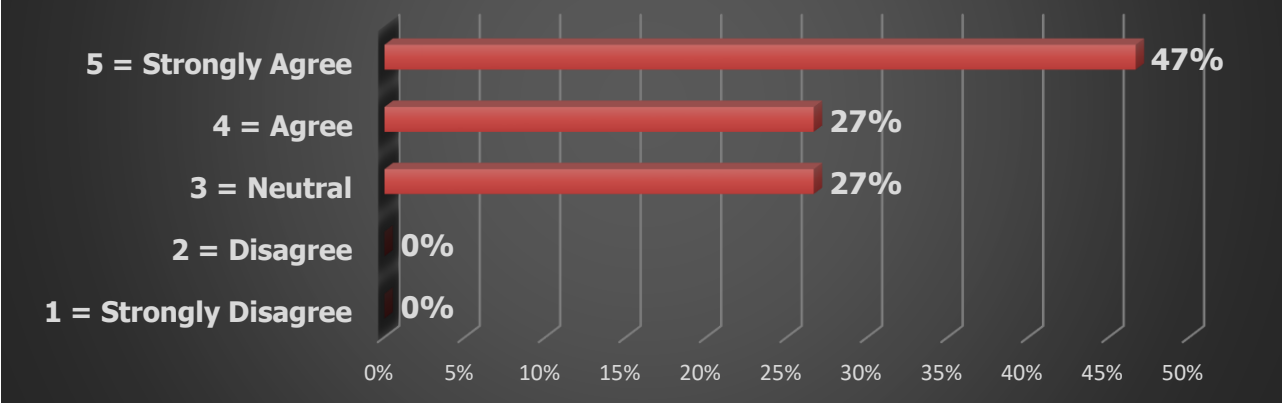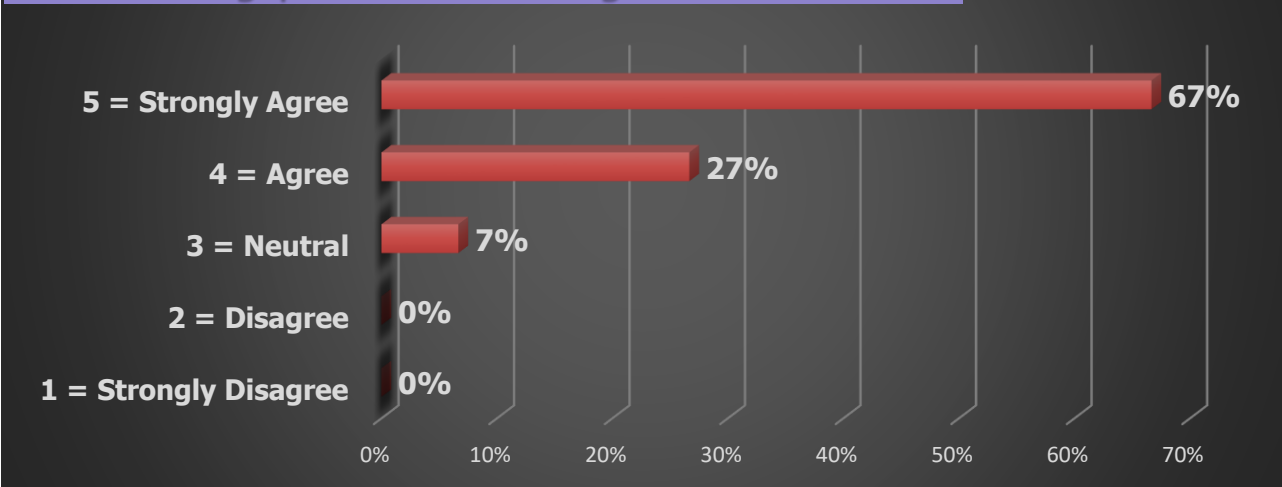Figure 3.22: Promotion of responsible content creation and sharing practices on e-me

Regarding actions to address copyright infringement or content misuse, responses were mixed, with 27% strongly agreeing, 27% agreeing, and 47% neutral, indicating a desire for the platform to take a more active role in resolving such issues.
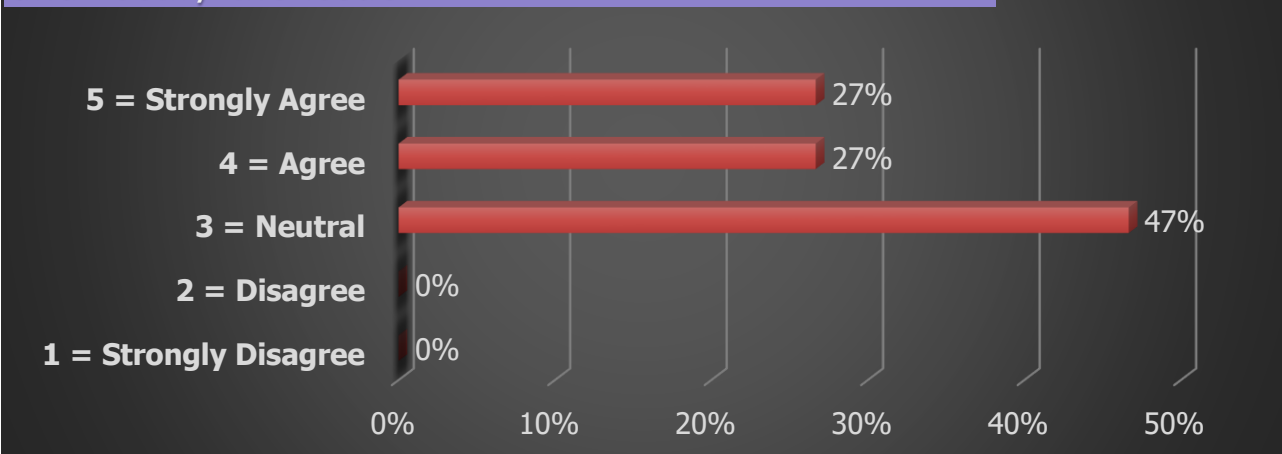
Figure 3.23: Actions to address copyright infringement or content misuse on e-me

3.3.3 Overall Satisfaction

Overall satisfaction with the *e-me Digital Educational Platform (European Edition)* was very high. A significant portion of users, 47%, expressed that they are extremely satisfied, while 54% indicated they are very satisfied. This positive feedback underscores the platform's effectiveness and appeal among its users.

Figure 3.24: Overalll satisfaction with e-me

Responses to the open-ended question regarding the most valued features of the *e-me* platform reveal a broad spectrum of attributes that resonate with users, showcasing its multifaceted appeal.
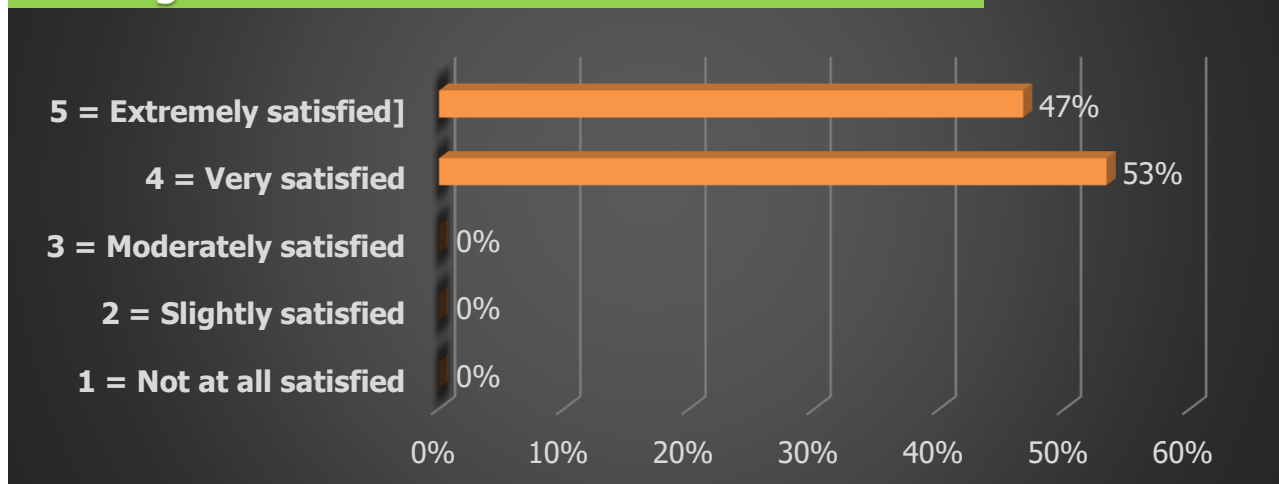
Several respondents highlighted the significance of "Hives," indicating that the collaborative spaces provided by *e-me* are highly appreciated. This repeated mention suggests that users find substantial value in "Hives" for group projects, discussions, and collaborative activities.

Furthermore, communication was mentioned as a valuable feature, suggesting that tools facilitating interaction between students and teachers are crucial. The "Hive's wall" feature was specifically noted, implying that the wall used for posting updates, announcements, or discussions within the Hives is particularly useful.

The interactive lessons and cooperation between students and teachers were also praised, pointing to the platform's tools for interactive learning, learner engagement and collaboration. "e-me content" was specifically lauded by one respondent indicating that this particular app is highly appreciated for its ease of use as well as its versatility and powerful capabilities in creating interactive learning materials.

The ability to monitor student activity was noted as another valuable feature, emphasizing the importance of tools that support educators in tracking student progress and engagement effectively.

Additionally, the ease of sharing content is noted as a key advantage, underscoring the significance of user-friendly content distribution tools within *e-me* that facilitate seamless information exchange.

Safety and privacy emerged as paramount concerns for a respondent, with strong appreciation for the platform's measures to protect users, particularly children, from unwanted intrusions.

Lastly, the platform was described as "simple, comprehensible, and attractive" highlighting the importance of an intuitive and aesthetically pleasing user interface. Similarly, the platform being "easy and understandable" reinforces the necessity of intuitive design in educational technology.

A concise respondent comment simply stating "All" suggests overall satisfaction with the entirety of *e-me*'s features, indicating a comprehensive fulfillment of user needs without singling out any aspect.

In summary, the responses indicate a strong appreciation for the collaborative and user-friendly features of *e-me*. The platform's ability to facilitate interaction, collaboration, easy content creation and content sharing, as well as student activity monitoring are particularly valued. Furthermore, the aesthetic and comprehensible design contributes to its overall positive reception.

3.3.4 Suggestions for improvements

Analyzing the responses to the open-ended question about suggestions for improving *e-me* reveals a range of perspectives and engagement levels with the platform.

Some responses express a desire for specific enhancements, such as allowing multiple teachers to have simultaneous control within a shared virtual environment, termed as a "hive." This suggests a need for collaborative teaching and administrative features to facilitate joint participation and management.

Some users express contentment with the current opportunities *e-me* provides, highlighting a positive outlook on continued learning and discovery within the platform. Responses like "I don't have," "N/a," or "None" reflect either a lack of specific suggestions or a perception that the question doesn't apply to their experience or needs.

Certain suggestions, such as improving embedding features within *e-me*'s interface, show a focus on extending integration capabilities for multimedia and external content.

3.3.5 Further Steps

Based on the feedback, several areas for improvement have been identified. Enhancing the clarity of information regarding data security practices and taking a more active role in addressing copyright issues are key recommendations. Additionally, user suggestions such as allowing two teachers to have control within the same hive and enhancing the embedding capabilities within the Hives' wall should be considered to further improve the user experience.

3.4   Conclusion

In conclusion, the evaluation of the *e-me Digital Educational Platform* has highlighted its strengths in user-friendliness, communication and collaboration, accessibility, engagement, and content creation. While overall satisfaction is very high, the feedback also points to areas for improvement, particularly in data security and copyright practices. By addressing these areas, the platform can further enhance its effectiveness and user satisfaction.

e-me Digital Educational Platform Evaluation Questionnaire

[European edition / e-me4all.eu]

The purpose of this questionnaire is to gather your insights and opinions about various aspects of the *e-me Digital Educational Platform* [European edition / e-me4all.eu]. Your input is important in helping us understand the strengths, as well as the areas for improvement of e-me.

General Info

(age, gender, country, educational background, profession)

Platform Usability and User Experience (User-Friendliness)

Rate the following statements based on your experience using e-me Digital Educational Platform [European edition / e-me4all.eu]:
  a. e-me has a clear and visually appealing interface.

  b. e-me loads quickly and is easy to navigate

  c. e-me provides clear instructions or/and user guides to resolve technical issues.

[Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree]

Communication/Collaboration/Peer Interaction:

Rate the following statements regarding the communication and collaboration aspects of the platform:
  a. e-me facilitates effective communication and interaction between students and instructors.

  b. Collaborative spaces provided on the platform (i.e. Hives) support group projects and discussions.

  c. Hives foster a sense of community among members.

[Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree]

Accessibility

Rate the following statements regarding the accessibility and compatibility features of the platform:
  a. The platform is accessible across different devices (e.g., desktop, tablet, mobile).

  b. The platform is compatible with multiple web browsers.

  c. The UserWay Accessibility Widget on the e-me platform offers options (e.g. adjustable font size, contrast modes, screen reader) to accommodate users with diverse needs.

[Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree]

Engagement

Rate the following statements regarding engagement:
  a. The platform offers interactive elements that enrich students' learning experiences.

b. The platform provides opportunities for active participation in discussions and learning activities.

c. The platform effectively integrates social elements (e.g. invitations, notifications, likes) to enhance engagement.

[Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree]

Content Creation

Rate the following statements regarding the content creation capabilities offered by the platform:
a. The educational content creation tool of the platform (i.e. the "e-me content" app) is user-friendly.

b. The "e-me content" app offers a satisfactory range of educational resource types.

c. The "e-me content app" supports the creation of interactive and engaging learning materials.

[Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree]

Data and content security

Rate the following statements regarding security of data/content on the platform:

a. The platform provides clear information about its data security practices and policies in its Term of use.

b. The platform promotes responsible content creation and sharing practices among its users.

c. In cases of copyright infringement or content misuse, the e-me platform takes appropriate actions to address and rectify the issue.

[Response scale: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree]

C. Overall Satisfaction

a) Indicate your overall satisfaction with e-me Digital Educational Platform.
[Scale: 1 = Not at all satisfied, 2 = Slightly satisfied, 3 = Moderately satisfied, 4 = Very satisfied, 5 = Extremely satisfied]

b) Which features/aspects/apps of e-me do you find most valuable? Please justify.
(free text)

c) Suggestions for improvement:
 (free text)

Completion Message

Thank you for taking the time to participate in our survey evaluating the e-me Digital Educational Platform. Your feedback is greatly appreciated.