GreAT

GREEN ALL TOGETHER

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SURVEY REPORT






Funded by the European Union

GreAT
GREEN ALL TOGETHER

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This report aims to provide a comprehensive analysis of the surveys, quizzes, and QR code activities conducted as part of the GreAT project. Throughout the project, a range of innovative methods and tools were employed to assess participants' knowledge levels, track their progress in learning, and evaluate the overall effectiveness of the educational sessions. In this context, surveys were strategically designed to measure changes in participants' knowledge and perspectives before and after the educational sessions. Through both pre- and post-surveys, the impact of the educational process was meticulously examined, providing objective data on the areas where participants made significant progress.

Quizzes played a crucial role in reinforcing the knowledge participants acquired and allowing them to test their understanding. These quizzes were administered following specific educational modules, offering immediate feedback on participants' knowledge levels and serving as a tool to evaluate the effectiveness of the learning process. Each quiz was carefully crafted to assess how well participants had grasped key concepts and whether they had achieved the learning objectives.

QR codes were integrated to provide quick access to educational materials and information. This technology enabled participants to take a more active and interactive role in the educational process, enriching their learning experience with digital tools. Through QR codes, participants could easily access the information they needed at various stages of the training, making the learning process more flexible and dynamic.

This report brings together the results of the surveys, quizzes, and QR code activities to evaluate the extent to which the GreAT project achieved its educational objectives and how it contributed to transforming participants' knowledge and skills. Additionally, the analysis presented here aims to offer valuable insights and recommendations for future projects. By deeply examining the educational outcomes and methodologies employed in the GreAT project, this report highlights the successes and areas for improvement, contributing to the development of more effective and efficient educational strategies.

Survey

Survey studies are systematic data collection processes conducted to examine individuals' attitudes, knowledge levels, perceptions, and behaviors on a specific topic. These studies are widely used in fields such as education, health, environment, social sciences, and marketing. Surveys not only measure participants' knowledge and awareness levels on a particular subject,

but they also assess their attitudes and behavioral tendencies. In this sense, surveys are crucial for objectively evaluating the impact of various programs and projects, both on an individual and societal level. Especially in educational projects, the use of pre- (before) and post- (after) surveys holds great value in tracking participants' progress and changes over time. This approach allows for a more objective assessment of a project's effectiveness and provides solid data for future improvements.

The General Role and Function of Surveys

Surveys are an effective method for gathering information on various topics and analyzing that information to make generalizations. Applied across numerous fields, surveys are used to understand societal trends, evaluate educational programs, develop marketing strategies, and formulate policies. The primary aim of surveys is to understand participants' knowledge levels, attitudes, and behaviors at the start of a program or project. In this regard, pre-survey studies are used to determine participants' starting points and assess their level of knowledge before the program begins. This phase helps identify the participants' basic needs and allows programs to be planned more effectively and targeted. Pre-survey studies also establish a baseline for evaluating the impact of a program. The data collected at the beginning can be compared with post-survey results to objectively measure the program's effect on participants.

The data provided by surveys are of great importance for understanding how participants' knowledge levels, attitudes, and behaviors change over time. This data is used to measure the success of programs, determine in which areas participants have made progress, and develop more effective strategies for future projects. For instance, in an educational program, pre- and post-survey studies enable a comparison of participants' knowledge and attitudes before and after the program, providing an objective measure of the program's impact. This allows for identifying the program's strengths and weaknesses, providing concrete data for improvements in future initiatives.

Developing Green Thinking Awareness and the Role of Surveys

Developing green thinking awareness is an integral part of achieving environmental sustainability goals, which are increasingly important in today's world. Global issues such as climate change, environmental pollution, and the depletion of natural resources have made it essential for individuals and societies to adopt environmentally conscious lifestyles. In this context, programs and projects aimed at raising green thinking awareness play a vital role in achieving sustainability goals at both individual and societal levels. Surveys are one of the most

appropriate methods for evaluating the impact of such programs and measuring the success of efforts to promote green thinking awareness.

Green thinking awareness aims to increase individuals' sensitivity to the environment and encourage them to adopt sustainable lifestyles. This awareness includes preventing environmental pollution, conserving natural resources, promoting recycling, and using eco-friendly technologies. Surveys are a critical tool for monitoring the development of green thinking awareness and raising awareness on these issues. Pre-survey studies measure participants' sensitivity to the environment and their knowledge of topics such as environmental pollution and sustainability, thereby providing a snapshot of the situation at the program's start. This phase is used to determine in which areas participants need more information and where their awareness needs to be increased.

For example, a pre-survey study might assess participants' knowledge levels regarding environmental pollution, recycling, reducing plastic use, and lowering carbon footprints. This information reveals the participants' environmental awareness and offers a roadmap for how effective the program needs to be in these areas. After establishing the initial situation of the participants, various educational workshops and awareness-raising campaigns are organized throughout the program. During this process, efforts are made to increase participants' environmental awareness and promote the adoption of sustainable lifestyles.

Post-survey studies, on the other hand, are conducted to measure the impact of these educational and awareness-raising activities on participants. The data obtained during the post-survey phase shows how much knowledge participants have gained, how their attitudes have changed, and to what extent their sensitivity to environmental issues has increased. This data is used to objectively evaluate the effectiveness and success of the program. For instance, post-survey results might reveal how well participants have adopted recycling habits, whether they have taken steps to reduce plastic use, and how their overall environmental awareness has changed. This allows for a clear assessment of the program's impact on participants and provides a measure of the project's success.

The Benefits and Long-Term Impacts of Surveys

Surveys play a critical role not only in the processes of collecting and evaluating data but also in understanding the general trends and needs of society. Survey studies offer an opportunity to understand what participants think, feel, and how they behave regarding a particular issue. This information can be used to evaluate the impact of programs and projects on participants and to ensure that future initiatives are more effective. Especially in programs aimed at increasing environmental awareness, surveys allow for a comparison of participants' pre- and post-program knowledge levels and attitudes, showing how successful the program has been and whether the intended outcomes have been achieved.

The data provided by surveys can be used to enhance the effectiveness of efforts to raise societal awareness and promote eco-friendly habits. This data offers important feedback for policymakers, educators, non-governmental organizations, and other stakeholders. The information provided by surveys is an effective tool for monitoring participants' knowledge levels, attitudes, and behaviors regarding specific issues, and this data can be used to objectively measure the success of programs. Additionally, surveys are used to track individuals' attitudes toward environmental issues over time and understand how these attitudes change.

For example, in environmental awareness programs, surveys allow for a comparison of participants' knowledge levels and attitudes before and after the program, providing an opportunity to measure the program's impact. This enables the identification of the program's strengths and weaknesses and provides concrete data for improvements in future initiatives. Surveys also help determine how much knowledge individuals have on a particular issue, how they use this knowledge, and in which areas they need more information.

The Importance of Surveys in Terms of Sustainability and Environmental Awareness

Sustainability is one of today's most important global goals, and achieving this goal requires individuals to act in a more environmentally conscious and aware manner. Surveys are a critical tool for evaluating the effectiveness of programs and projects aimed at achieving sustainability goals. Survey studies on environmental awareness and sustainability help understand participants' knowledge levels, attitudes, and behaviors on these issues. This data is used to evaluate the success of programs aimed at increasing environmental awareness and objectively assess their impact on participants.

Surveys also play an important role in monitoring the long-term impacts of environmental awareness programs. For example, surveys conducted as part of an environmental awareness program can be used to track how well participants maintain eco-friendly behaviors after the

program and how these behaviors change over time. This allows for an evaluation of the sustainability and long-term impact of the programs.

In conclusion, survey studies are one of the most effective methods for understanding societal and individual awareness levels and monitoring how these awareness levels change over time. Pre- and post-survey applications are particularly critical in environment-focused projects like developing green thinking awareness. These studies contribute to individuals and society adopting environmentally conscious and sustainable lifestyles, and the data obtained during this process provides valuable guidance for future projects. The data provided by surveys is an important tool for evaluating the success of programs and increasing general environmental awareness in society. Therefore, survey studies are considered an indispensable method for enhancing the success of sustainability and environmental awareness efforts and guiding future initiatives in this area.

This report presents an in-depth analysis of the findings from the survey studies conducted as part of the GreAT project. These surveys were designed to assess the participants' knowledge, attitudes, and perspectives on the educational topics covered during our Learning, Teaching, and Training (LTT) activities. Through meticulous data collection and rigorous analysis, we aimed to measure the impact of our educational sessions and evaluate the effectiveness of our program in fostering knowledge, awareness, and behavioral change. The primary objective of this report is to provide a comprehensive analysis of the survey data collected during the GreAT project's educational sessions. Specifically, this report details the methodology and execution of the surveys, presents findings from both pre- and post-survey assessments, evaluates participants' knowledge gains and shifts in perspectives, offers insights into the overall effectiveness of the educational sessions, and provides actionable recommendations for future improvements based on the survey results.

The survey strategy was built around the use of both pre- and post-surveys, which were integral components of our assessment framework. The pre-surveys were designed to evaluate participants' existing knowledge and understanding of the educational topics before attending the sessions, identify baseline insights and perspectives, and gather initial data that could be compared against post-survey results to measure knowledge gain. The post-surveys aimed to assess the increase in participants' knowledge and understanding following the educational sessions, measure changes in participants' perspectives and attitudes towards the topics covered, and provide both qualitative and quantitative data to evaluate the effectiveness of the

educational content and delivery methods. By employing this approach, we ensured a robust and reliable assessment of the educational interventions.

The surveys were conducted at multiple stages: pre- and post-surveys for the "C2 - Gaming Approaches to Biotechnology" and "C4 - Gaming Approaches to Green Environment" activities, followed by a final post-assessment survey at the conclusion of the Multiplier Event. This multi-stage approach allowed us to capture the progression of learning and assess the overall impact of the Great project's educational initiatives on the participants.

C2 Gaming approaches to Biotechnology

LEARNING, TEACHING, TRAINING ACTIVITY	
C2 – Gaming approaches to Biotechnology	
SUMMARY	
C2 activity focused on addressing the problem of plastic pollution. By incorporating biotechnology concepts into an interactive video game format, this activity made learning about environmental challenges both accessible and engaging. It highlighted the importance of using innovative educational tools alongside traditional education sessions to raise awareness and inspire action against plastic pollution.	
PARTICIPATING ORGANIZATIONS	
• Inercia Digital SL (Host) • Istanbul University (Educator) • International Center for Development of Education and Training (ICDET) • The Association Centre for Rural Development – SEE (CRD-SEE) • Adefis Youth International	
DATE	04.12.2023 – 09.12.2023
VENUE	Inercia Digital SL, Huelva, SPAIN

The survey study specifically aimed to evaluate participants' attitudes, perceptions, and behavioral intentions regarding environmental issues both before and after the educational sessions. Understanding personal attitudes and daily habits is crucial for environmental preservation and public health, as these factors significantly influence how individuals contribute to or mitigate environmental issues. Therefore, it was essential to conduct a pre-survey to assess participants' current behaviors, perspectives, and awareness concerning critical

topics such as environmental pollution, degradation, plastic pollution, the connection between plastic pollution and climate change, and the impact of daily habits on the environment. The pre-survey sought to understand participants' initial views and awareness of these issues to establish a baseline for comparison with post-survey results.

Following the educational sessions, the post-survey aimed to measure any changes in perspectives and behaviors, thereby evaluating the effectiveness of the activities in fostering positive environmental attitudes and promoting sustainable practices. The post-survey data provided a comprehensive overview of participants' journey from their initial state of knowledge and attitude to their transformed perspectives and intended actions, offering valuable insights for future educational programs and interventions.

The analysis of the pre- and post-survey results from the C2 LTT activity on plastic pollution reveals significant insights into the effectiveness of our educational efforts. The surveys achieved a high participation rate of 99%, reflecting strong, active, and enthusiastic involvement from participants. The survey responses demonstrate a noticeable shift in awareness and attitudes toward microplastics and the adoption of a plastic-free lifestyle. Initially, participants exhibited varying levels of awareness about microplastics in everyday products, with a significant portion somewhat aware and fewer very aware. After completing the educational sessions, a greater number of respondents became very aware, indicating a successful increase in understanding of the issue.

Regarding the adoption of a plastic-free lifestyle, initial survey responses varied. While many participants expressed optimism about making this change, a significant portion remained neutral or skeptical. After the educational sessions, responses indicated a more cautious yet positive outlook. More respondents now believe that living without plastic is fairly possible, suggesting a realistic understanding of the challenges involved. The decrease in neutral responses indicates that the educational efforts clarified doubts for many participants. However, a slight increase in those who are very unlikely to adopt a plastic-free lifestyle indicates that some skepticism remains.

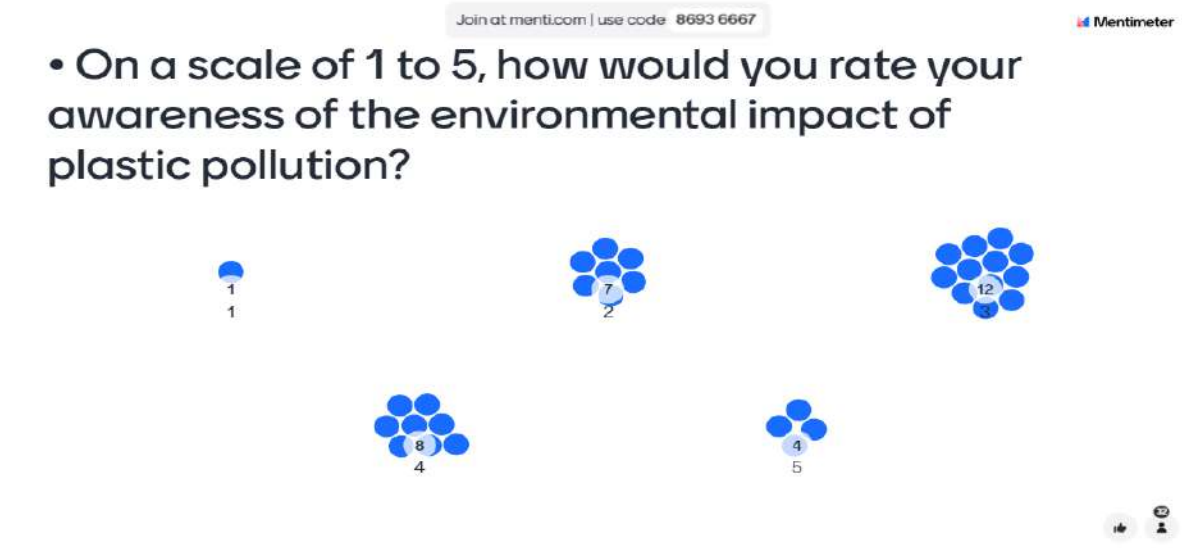
Overall, the educational interventions appear to have successfully heightened awareness and offered a clearer, more informed perspective on the feasibility of adopting a plastic-free lifestyle. This has resulted in a balanced shift toward cautious optimism. At the conclusion of the post-survey, participants were invited to write about the topic, and their responses are illustrated in the accompanying figures.

Participants' responses regarding the impact of plastic pollution on climate change reflected a diverse range of understanding and concern about the issue. Many participants recognized that plastics are derived from fossil fuels and that their production and degradation contribute significantly to greenhouse gas emissions, thus exacerbating climate change. They emphasized the importance of reducing plastic waste to mitigate these effects. Some participants also highlighted the detrimental impact of plastic pollution on marine life and ecosystems, which further disrupts climate balance. There was a strong consensus on the need for collective action, including raising awareness, enforcing stricter regulations, and promoting alternative materials.

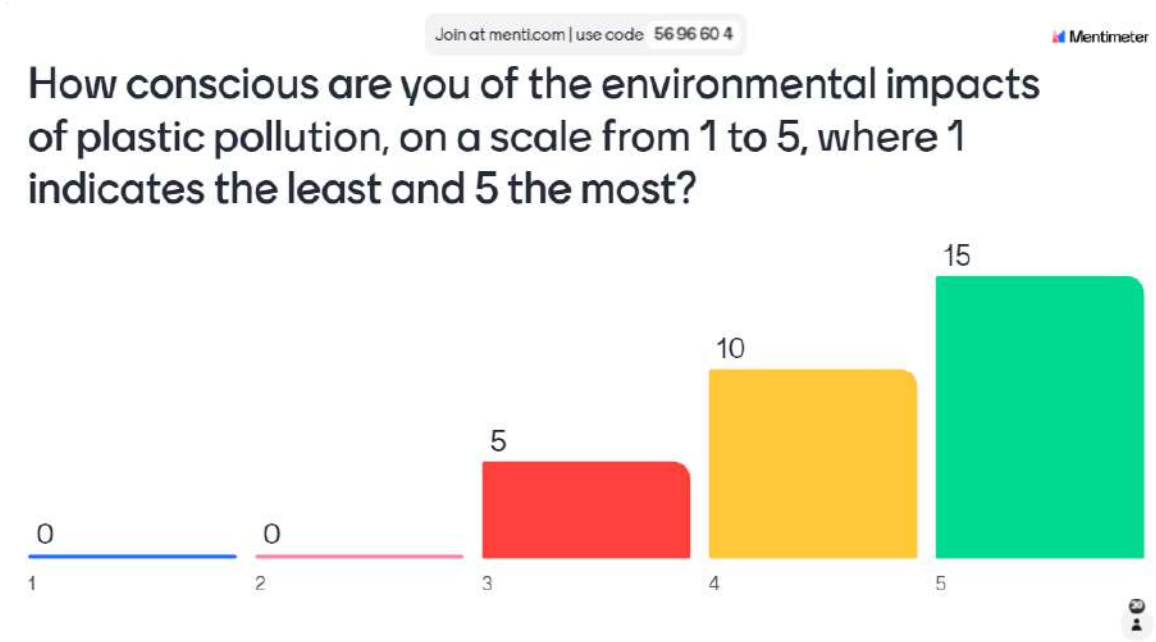
While a few comments offered a broader perspective on climate change, not solely attributing it to plastic pollution, the majority underscored the urgency of addressing plastic pollution as a critical component of combating climate change. Additionally, participants emphasized the roles of both individuals and corporations in driving change, highlighting the necessity for a shift in consumer behavior and corporate responsibility to make a meaningful impact.

In summary, the activity appears to have been successful in educating participants about the relationship between plastic pollution, environmental degradation, and climate change. The detailed and informed responses suggest that participants have gained a deeper understanding of the issue. Their calls for action at both individual and systemic levels indicate that participants are not only more aware but also feel empowered to contribute to solutions. This aligns well with the goal of motivating behavior change, suggesting that the objectives of the C2 activity have been achieved.

C2 Pre-Post Survey



C2 Pre Survey Results of 1st Question

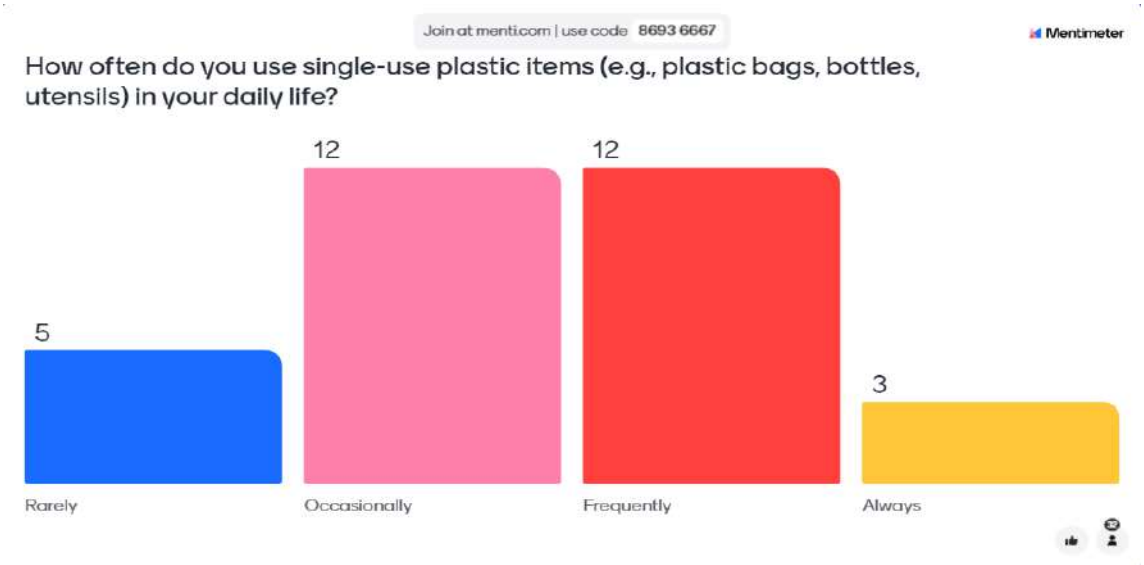


C2 Post Survey Results of 1st Question

This survey question is designed to gauge participants' self-assessed awareness of the environmental impact of plastic pollution. By using a scale from 1 to 5, where 1 represents "very low awareness" and 5 represents "very high awareness," the question allows respondents to express their level of understanding and concern about plastic pollution and its effects on the environment.

This type of question is valuable because it provides a quantitative measure of awareness that can be easily compared across different participants or groups. It also allows for the identification of trends or changes in awareness levels, especially if used in both pre- and post-surveys. For instance, if the survey is conducted before and after an educational session, a shift from lower to higher ratings could indicate the session's effectiveness in raising awareness.

Furthermore, the data collected from this question can help identify areas where further education or intervention is needed. If many participants rate their awareness at the lower end of the scale, it might suggest a need for more focused educational efforts on the environmental impact of plastic pollution. Conversely, higher ratings could indicate that the participants are already well-informed, allowing the educational program to build on that existing knowledge.



C2 Pre Survey Results of 2nd Question



C2 Post Survey Results of 2nd Question

This survey question seeks to understand how frequently participants use single-use plastic items, such as plastic bags, bottles, and utensils, in their daily lives. By gathering information on the regularity of these behaviors, the question provides valuable insights into participants' consumption patterns and their reliance on single-use plastics. This information is crucial for identifying trends and understanding the extent of plastic use, which is essential for designing effective strategies to reduce plastic waste.

Inclusion of this question in both pre- and post-surveys allows for a baseline measurement of current behaviors and helps assess the impact of educational programs or interventions. If participants report a reduction in the frequency of single-use plastic use after the program, it indicates that the educational efforts may be effective in promoting more sustainable practices.

Additionally, understanding usage patterns can guide targeted educational efforts and policy development to address plastic pollution more effectively.



C2 Pre Survey Results of 3rd Question

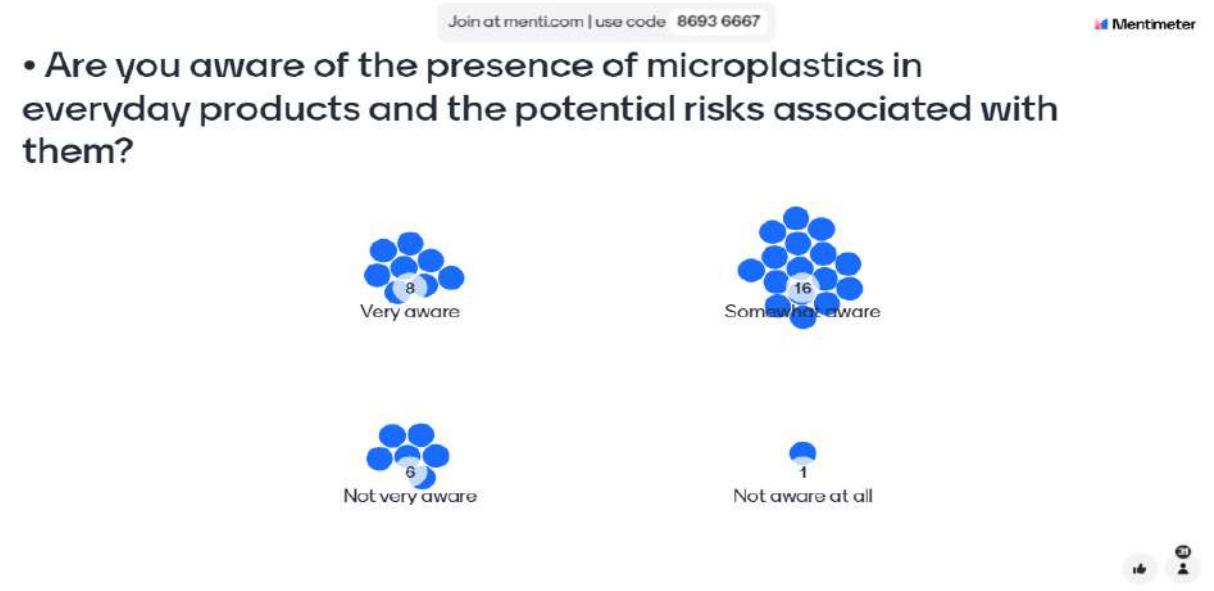


C2 Post Survey Results of 3rd Question

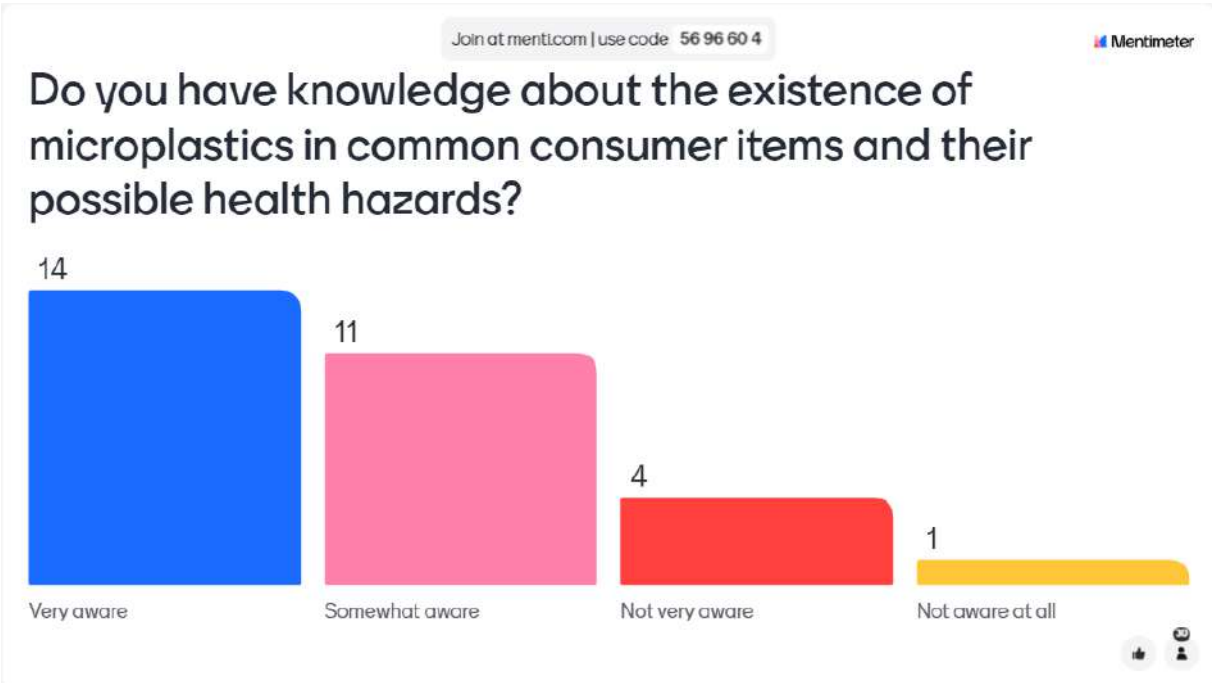
This survey question is designed to assess participants' level of engagement in plastic recycling programs within their communities. By asking whether individuals actively participate in these programs, the question aims to gauge their commitment to environmental sustainability and their involvement in local efforts to reduce plastic waste. Understanding participation levels provides valuable insight into the effectiveness of existing recycling initiatives and the overall community engagement in environmental practices.

Including this question in a survey helps to establish a baseline of current recycling behaviors, which can be compared with post-survey results to evaluate the impact of educational or outreach programs. If an increase in active participation is observed after such programs, it suggests that the initiatives have been successful in motivating individuals to take part in recycling efforts. Additionally, this information can help identify barriers to participation and

inform the development of strategies to enhance community involvement in recycling programs, ultimately contributing to a more effective approach to reducing plastic waste.



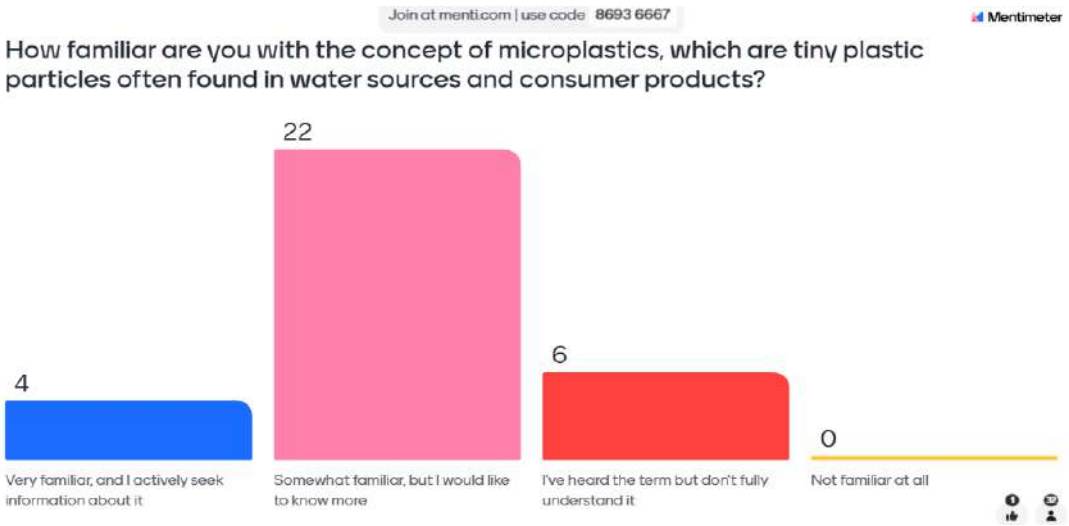
C2 Pre Survey Results of 4th Question



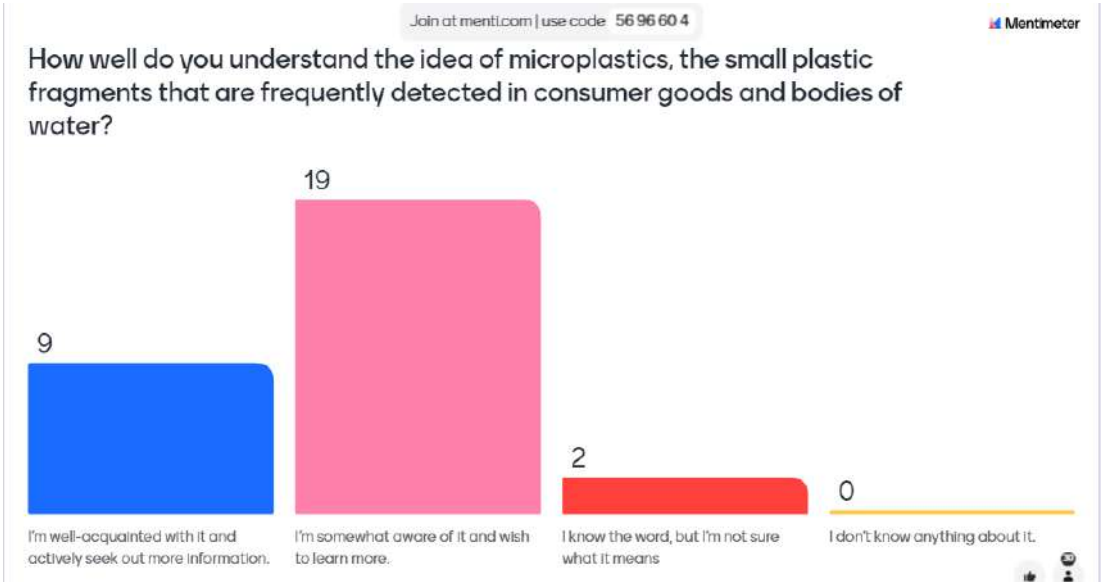
C2 Post Survey Results of 4th Question

This survey question aims to determine participants' awareness of microplastics in everyday products and their understanding of the potential risks associated with them. By asking this question, the survey seeks to assess the level of knowledge among participants regarding the presence of microplastics in items such as cosmetics, clothing, and food packaging, as well as the environmental and health risks these tiny plastic particles pose.

Including this question in a survey is essential for understanding the current awareness levels within a community or group. If many participants are unaware of microplastics and their risks, it highlights a significant knowledge gap that educational programs can address. Conversely, if awareness is high, this could indicate that participants are more informed and may already be taking steps to mitigate their exposure and impact. This question is critical for tailoring educational initiatives, as it helps identify the areas where further information and intervention are most needed to promote informed and sustainable behaviors.



C2 Pre Survey Results of 5th Question

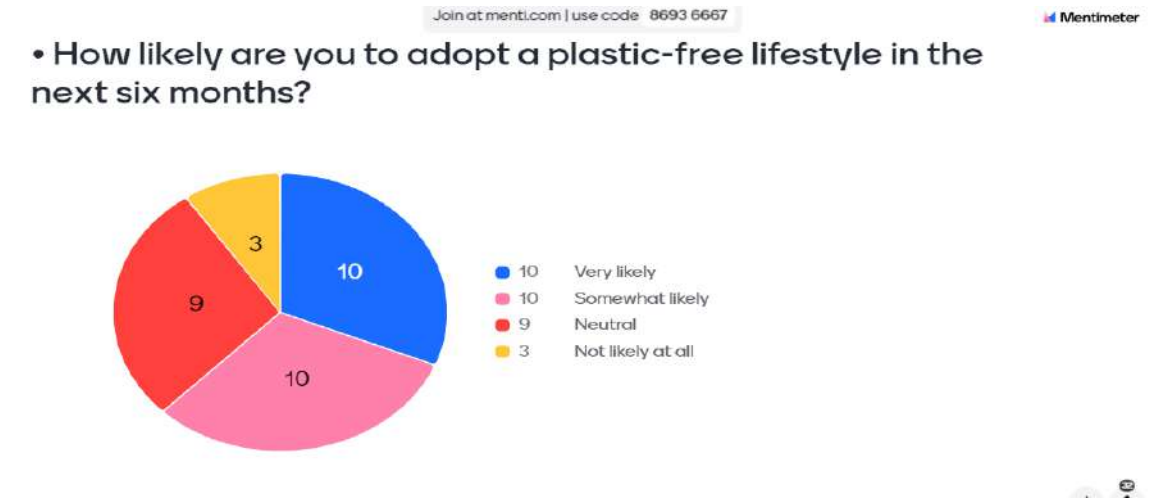


C2 Post Survey Results of 5th Question

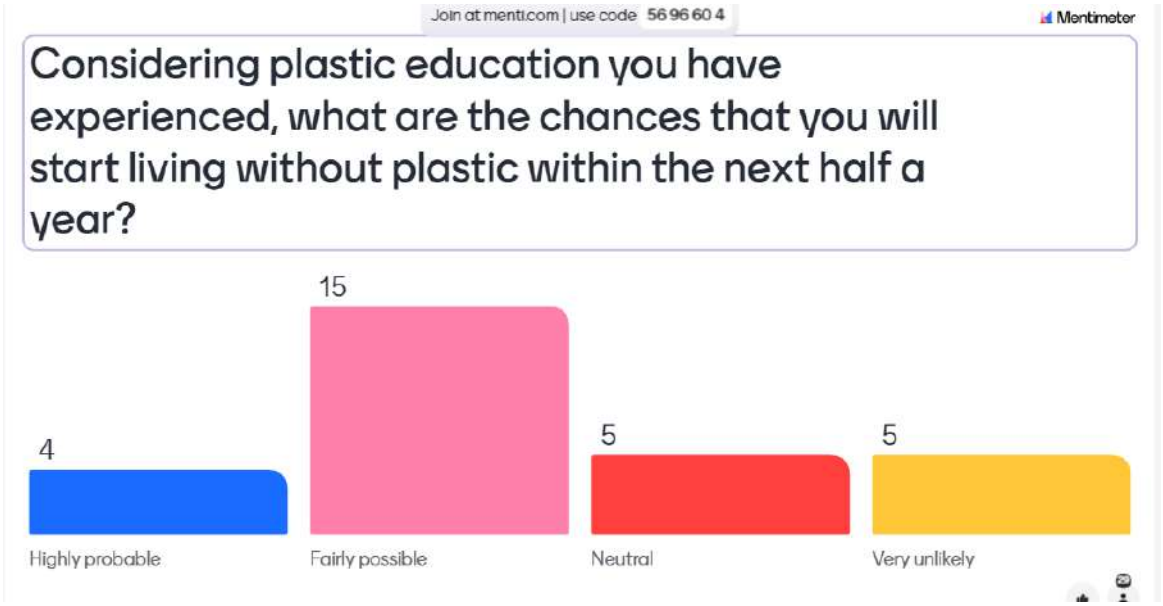
This survey question is designed to assess participants' familiarity with the concept of microplastics, which are tiny plastic particles commonly found in water sources and consumer products. By asking how familiar participants are with microplastics, the question seeks to

gauge their level of understanding regarding this environmental issue, which has significant implications for both human health and ecological systems.

Including this question in a survey provides valuable insights into the general awareness and knowledge of microplastics among participants. It helps to identify whether further education is needed to raise awareness about the sources, presence, and risks of microplastics. If participants demonstrate limited familiarity with the concept, this could indicate a need for targeted educational initiatives to inform the community about the pervasive nature of microplastics and their potential impact. Conversely, if familiarity is high, this suggests that participants are likely more aware of the issue, allowing programs to focus on deeper engagement or action-based strategies to reduce microplastic pollution.



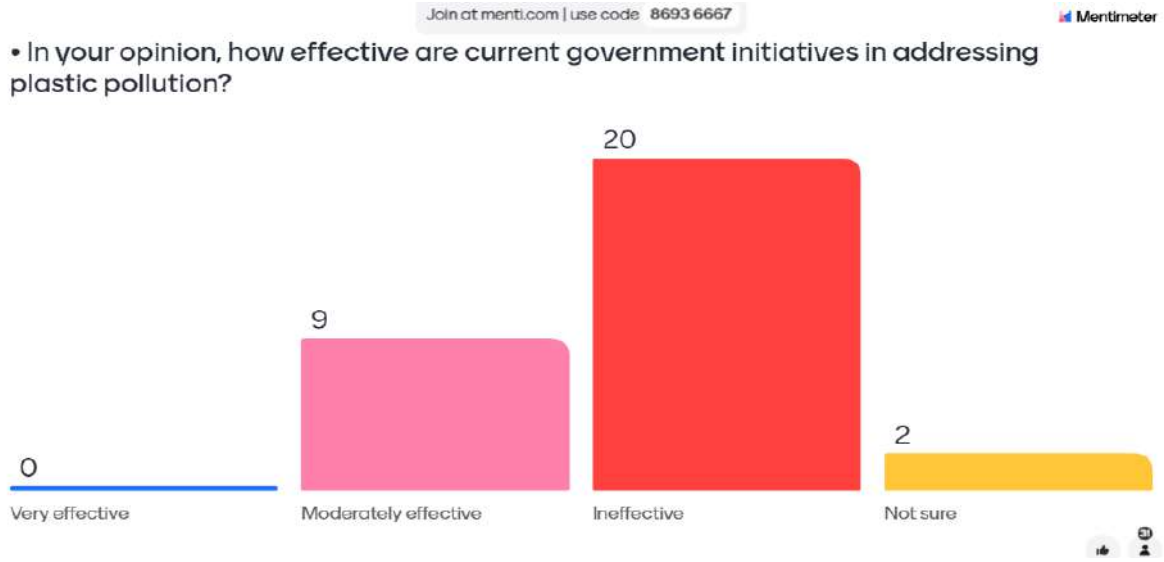
C2 Pre Survey Results of 6th Question



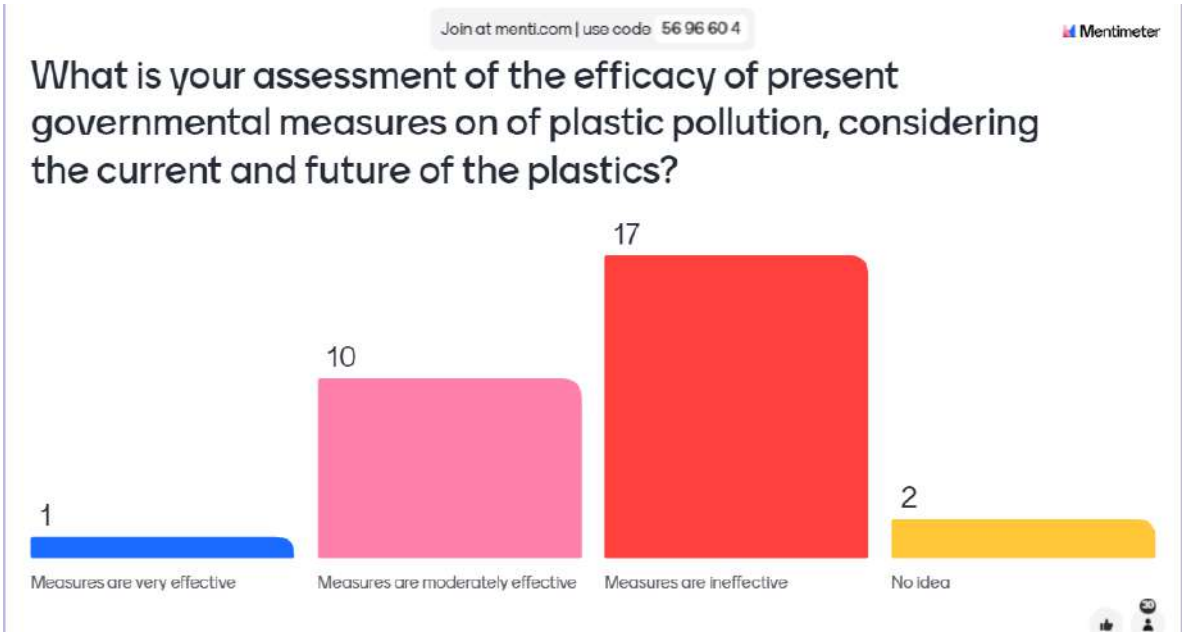
C2 Post Survey Results of 6th Question

This survey question is designed to measure participants' willingness and likelihood to adopt a plastic-free lifestyle within the next six months. By asking how likely they are to make this change, the question seeks to understand their commitment to reducing plastic usage and their readiness to implement more sustainable practices in their daily lives.

Including this question in a survey is important for gauging the potential impact of educational efforts or environmental campaigns. It helps to identify participants who are already motivated to change their behaviors, as well as those who may need additional support or encouragement. If a significant number of respondents express a strong likelihood of adopting a plastic-free lifestyle, it suggests that the educational initiatives have been effective in inspiring action. On the other hand, if respondents are hesitant or unlikely to make the change, this feedback can inform the development of targeted strategies to address barriers and promote more sustainable alternatives, ultimately contributing to broader environmental goals.



C2 Pre Survey Results of 7th Question



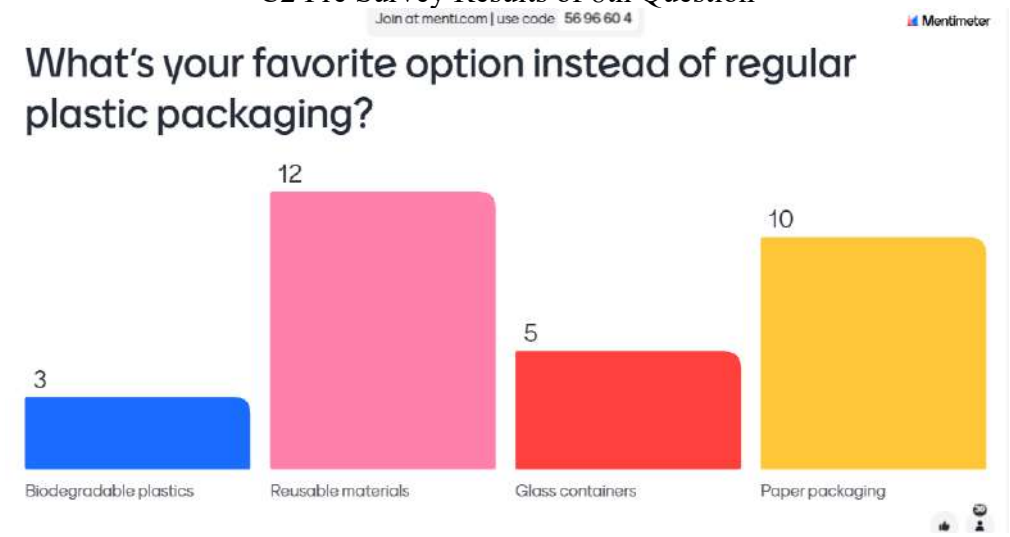
C2 Post Survey Results of 7th Question

This survey question is aimed at understanding participants' perceptions of the effectiveness of current government initiatives in addressing plastic pollution. By asking for their opinion on this matter, the question seeks to gather insights into how well these initiatives are perceived in terms of reducing plastic waste, promoting recycling, and encouraging sustainable practices.

Including this question in a survey is crucial for evaluating public sentiment towards governmental efforts to combat plastic pollution. The responses can provide valuable feedback on the perceived strengths and weaknesses of existing policies and programs. If participants generally view the initiatives as effective, it suggests that government actions are resonating with the public and may be making a positive impact. However, if participants express doubts about the effectiveness, this could indicate a need for stronger or more targeted policies, increased public awareness, or better implementation of existing measures. This feedback can help policymakers and environmental organizations refine their strategies to better address plastic pollution and meet public expectations.



C2 Pre Survey Results of 8th Question

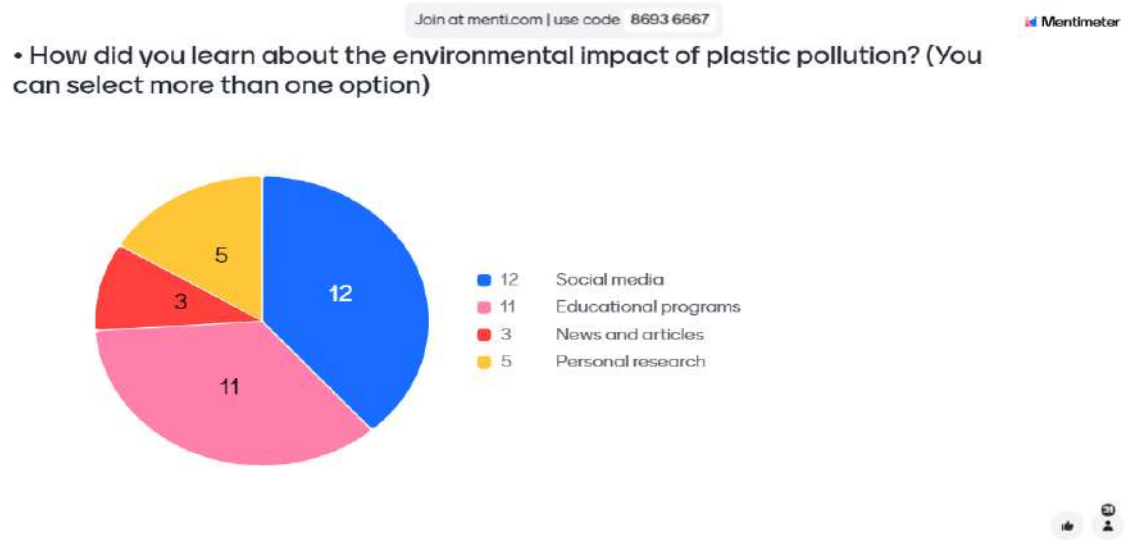


C2 Post Survey Results of 8th Question

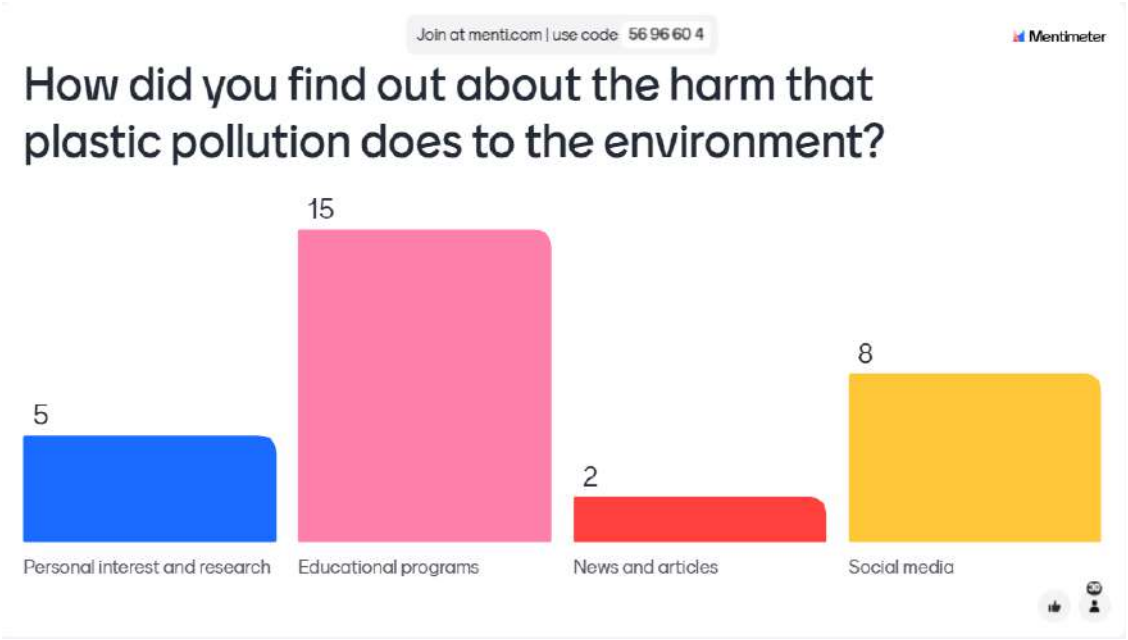
This survey question is designed to identify which alternative to traditional plastic packaging participants find most appealing. By asking for their preference, the question aims to gauge consumer interest in various sustainable packaging options, such as biodegradable materials, reusable containers, or packaging made from recycled materials.

Including this question in a survey is valuable for understanding consumer attitudes towards sustainable packaging solutions. The responses can help identify which alternatives are most likely to be accepted and adopted by the public, providing insight into potential market trends and preferences. If a particular alternative is favored by a majority of respondents, it suggests that there is strong consumer demand for that option, which can guide businesses and policymakers in promoting and investing in more sustainable packaging methods. On the other hand, if preferences are varied, it may indicate a need for further education on the benefits of different alternatives or the development of more appealing options. Ultimately, this question

helps to align sustainability efforts with consumer desires, contributing to the reduction of plastic waste.



C2 Pre Survey Results of 9th Question

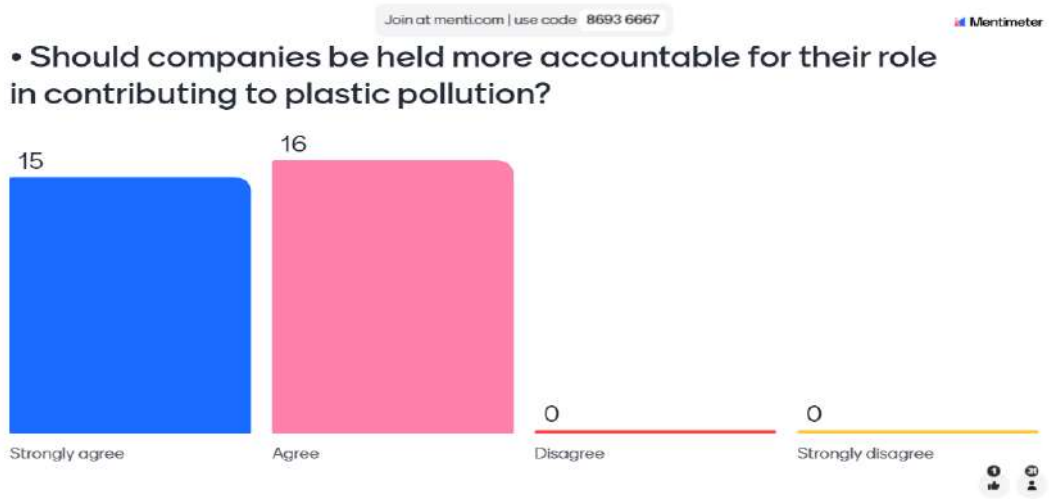


C2 Post Survey Results of 9th Question

This survey question is designed to explore the various sources through which participants have learned about the environmental impact of plastic pollution. By allowing respondents to select more than one option, the question aims to identify the most influential channels of information, such as social media, news outlets, educational programs, documentaries, or personal research.

Including this question in a survey is important for understanding how awareness of plastic pollution is being spread and which sources are most effective in reaching and educating the

public. The responses can provide valuable insights into which communication methods are resonating with people and driving awareness. If certain sources, such as documentaries or educational programs, are frequently selected, it indicates their effectiveness in conveying the message and suggests that these methods should be further leveraged in future awareness campaigns. On the other hand, if social media or news outlets are prominent, it underscores the need to continue using these platforms to reach a broader audience. This information can help shape future communication strategies, ensuring that efforts to educate the public about plastic pollution are both effective and far-reaching.



C2 Pre Survey Results of 10th Question



C2 Post Survey Results of 10th Question

This survey question seeks to gauge participants' opinions on whether companies should bear greater responsibility for their role in contributing to plastic pollution. By asking this question, the survey aims to understand public sentiment regarding corporate accountability and the

extent to which people believe businesses should be involved in addressing the environmental impact of their products and practices.

Including this question in a survey is significant for assessing the level of support for stronger regulations or initiatives that hold companies accountable for their environmental footprint. The responses can reveal public demand for more corporate responsibility and potentially influence policy decisions or encourage companies to adopt more sustainable practices. If a large majority believes that companies should be held more accountable, it highlights a growing expectation for businesses to take proactive steps in reducing plastic waste, such as investing in eco-friendly packaging or participating in recycling programs. Conversely, if opinions are divided, it suggests a need for further dialogue and education on the role of businesses in combating plastic pollution. Understanding these perspectives is crucial for developing balanced and effective strategies that involve both corporate and consumer actions in tackling the issue.



C2 Pre Survey Results of 11th Question



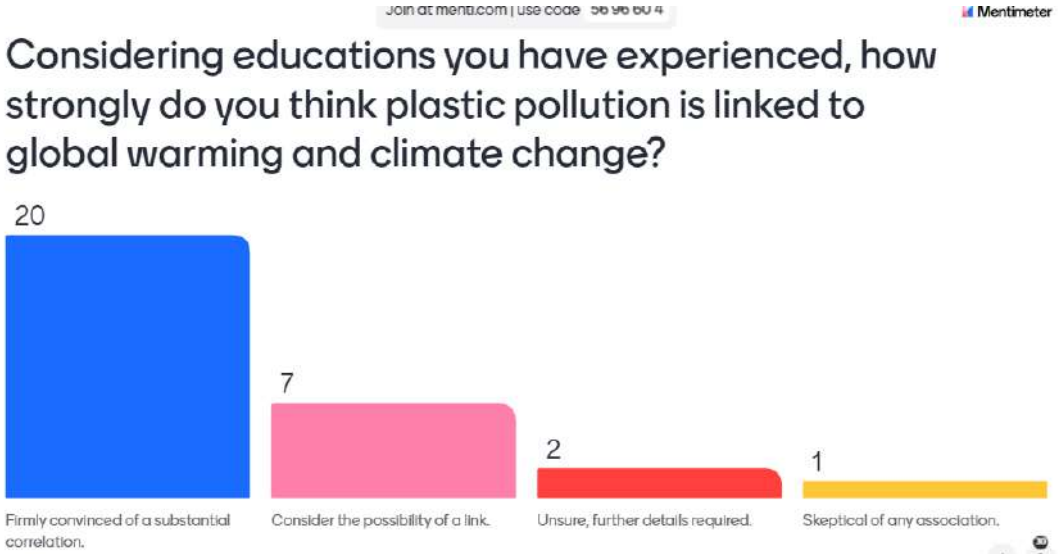
C2 Post Survey Results of 11th Question

This survey question is designed to identify which plastic-free initiatives participants believe would be most effective in reducing plastic waste. By offering a selection of options, such as banning single-use plastics, promoting reusable products, or implementing stricter recycling programs, the question seeks to gather opinions on the most impactful strategies for minimizing plastic waste.

Including this question in a survey is important for understanding public perception of different approaches to reducing plastic waste. The responses can provide insights into which initiatives are most supported by the community and are considered to have the greatest potential for success. If certain initiatives, like banning single-use plastics or promoting reusable items, are favored by the majority, it suggests a strong public endorsement of these strategies and could guide policy-making or advocacy efforts. Conversely, if the responses are more varied, it may indicate that a combination of approaches is needed to effectively address the issue. This question helps to align environmental initiatives with public expectations, ensuring that efforts to reduce plastic waste are both effective and widely supported.



C2 Pre Survey Results of 12th Question



C2 Post Survey Results of 12th Question

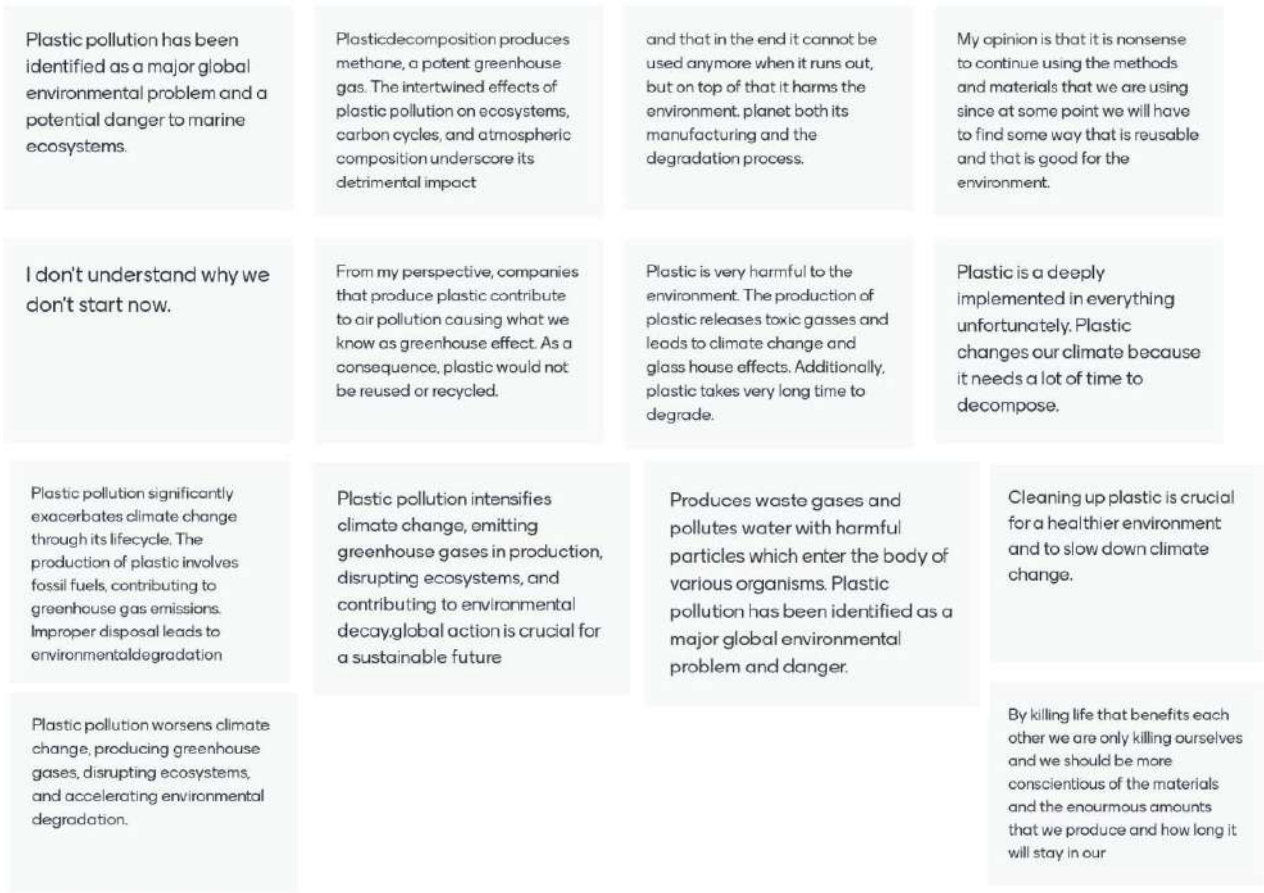
This survey question is designed to assess participants' beliefs about the connection between plastic pollution and global warming or climate change. By asking to what extent they believe in this connection, the question seeks to understand their awareness and perception of the broader environmental impacts of plastic pollution, beyond just waste management.

Including this question in a survey is important for gauging the level of understanding regarding the complex interactions between plastic pollution and climate change. Plastic production, use, and disposal contribute to greenhouse gas emissions, which are a significant driver of global warming. Understanding whether participants recognize this link can provide valuable insights into the effectiveness of current educational efforts on environmental issues. If a strong belief in the connection is prevalent, it suggests that participants are well-informed about the broader implications of plastic pollution. On the other hand, if many respondents are unsure or do not believe in the connection, this highlights a potential area for further education

and awareness campaigns. This question helps to identify gaps in knowledge and can inform future initiatives aimed at deepening public understanding of the environmental challenges we face.

- In 120 words, describe how you perceive the impact of plastic pollution on climate change, considering factors like environmental degradation.





C2 Pre Survey Results of 13th Question



C2 Post Survey Results of 13h Question

C4 Gaming approaches to Green Environment

LEARNING, TEACHING, TRAINING ACTIVITY	
C4 – Gaming approaches to Green Environment	
SUMMARY	
C4 encompassed several components from a philosophical perspective. Ecological thinking exercises encouraged participants to adopt and collectively discuss an ecological mindset, considering the broader environmental impacts of their actions. Discussion meetings held in nature fostered a deeper connection with the environment, enhancing awareness through direct engagement with the natural world. A discussion study via QR codes that combined environment and philosophy aimed to integrate eco-friendly understanding with philosophical perspectives, prompting participants to develop well-rounded, environmentally conscious viewpoints. This multifaceted approach was essential in cultivating a holistic understanding of environmental issues, merging cognitive and experiential learning methods.	
PARTICIPATING ORGANIZATIONS	
· Adefis Youth International (Host) · Istanbul University (Educator) · International Center for Development of Education and Training (ICDET) · The Association Centre for Rural Development – SEE (CRD-SEE)	
DATE	11.03.2024 – 15.03.2024
VENUE	Apartamentos Tartesos, Las Rozas de Madrid, Madrid, SPAIN

The GreAT project sought to enhance climate change and environmental awareness among youth by integrating biological sciences with practical, everyday applications. A significant component of this initiative was the C4 – 'Gaming Approaches to Green Environment' activity. This five-day program was meticulously designed to address the complexities of environmental issues from both scientific and philosophical perspectives.

The C4 activity covered several crucial topics, including 'Philosophy and the Way of Philosophical Thinking,' 'Historical Perspectives on Science and Philosophy,' 'Environmental Ethics,' and 'Philosophical Approaches to Environmental Crisis.' These subjects were selected to provide a comprehensive exploration of the human-nature relationship and encourage participants to consider environmental issues through a philosophical lens. By incorporating

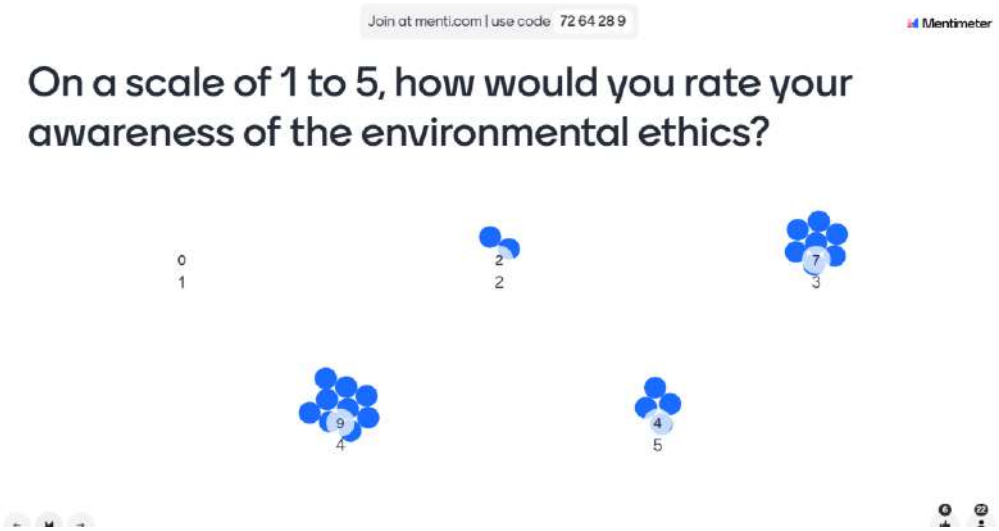
these themes, the C4 activity aimed to foster a deeper understanding of how human actions impact the environment and the ethical considerations involved in addressing these impacts.

To evaluate the effectiveness of the C4 activity, surveys and quizzes were conducted before and after the sessions. The surveys were designed to assess participants' initial knowledge, attitudes, and perceptions regarding climate change and environmental issues. By comparing pre- and post-survey results, the project team was able to measure changes in participants' understanding and attitudes resulting from the educational content.

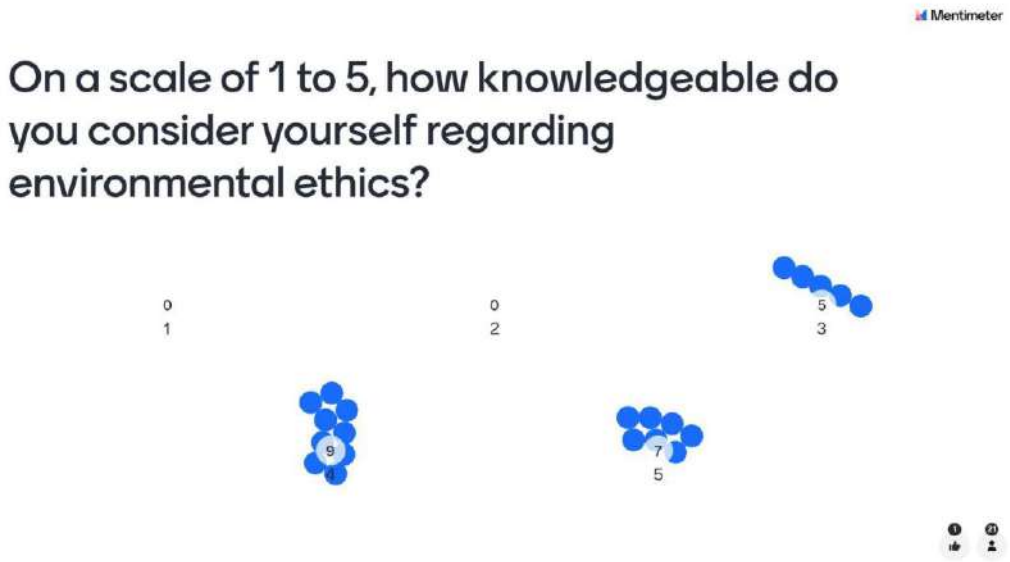
Conducting these surveys provided several benefits. They offered a structured method for collecting data on participants' awareness and attitudes, enabling a detailed analysis of the educational activity's impact. The surveys helped identify whether the sessions successfully enhanced participants' knowledge and shifted their perspectives. Additionally, the feedback obtained from the surveys highlighted areas for improvement, guiding future educational initiatives to better meet participants' needs and interests.

Overall, the C4 activity played a pivotal role in achieving the GreAT project's objectives. By combining scientific and philosophical approaches, it enriched participants' understanding of climate change and environmental problems. The comprehensive nature of the C4 activity, along with the insights gained from the surveys, underscored the effectiveness of integrating diverse perspectives in environmental education.

C4 Pre-Post Survey



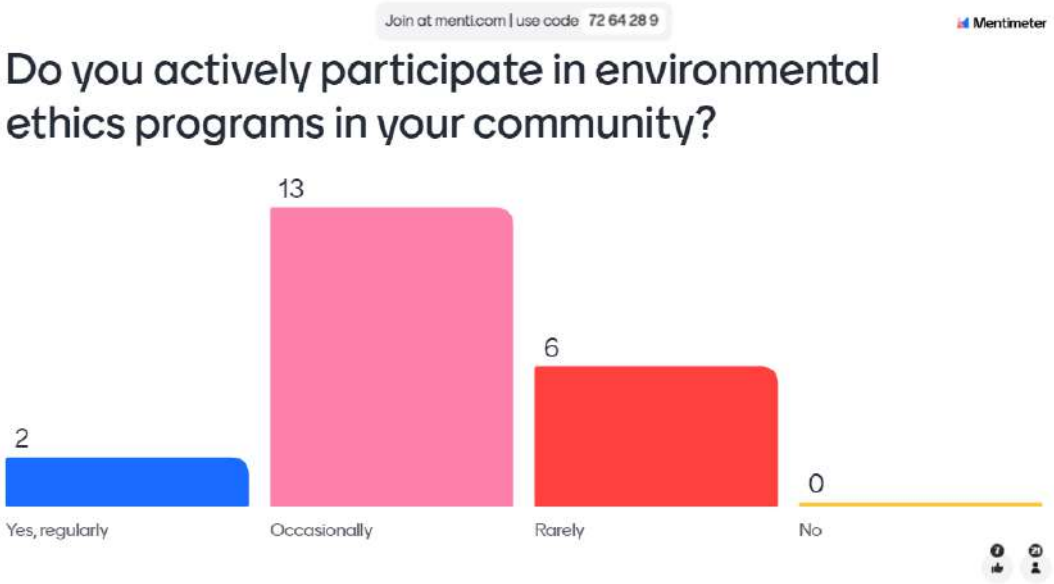
C4 Pre Survey Results of 1st Question



C4 Post Survey Results of 1st Question

The question, "On a scale of 1 to 5, how would you rate your awareness of environmental ethics?" is crucial for assessing participants' self-perceived understanding of ethical principles related to environmental conservation before and after the educational sessions. Initially, it establishes a baseline of participants' awareness, providing insight into their starting knowledge. After the educational activities, the same question is asked to evaluate any changes in awareness, helping measure the effectiveness of the program in enhancing participants' understanding of environmental ethics.

Analyzing the results from pre- and post-surveys, a noticeable increase in awareness ratings would indicate that the educational sessions successfully deepened participants' knowledge. For example, if participants initially rated their awareness as moderate or low, but showed higher ratings post-activity, it would reflect an improvement in their understanding of environmental ethics. This shift demonstrates the program's impact on fostering a more informed and thoughtful approach to environmental issues.



C4 Pre Survey Results of 2nd Question



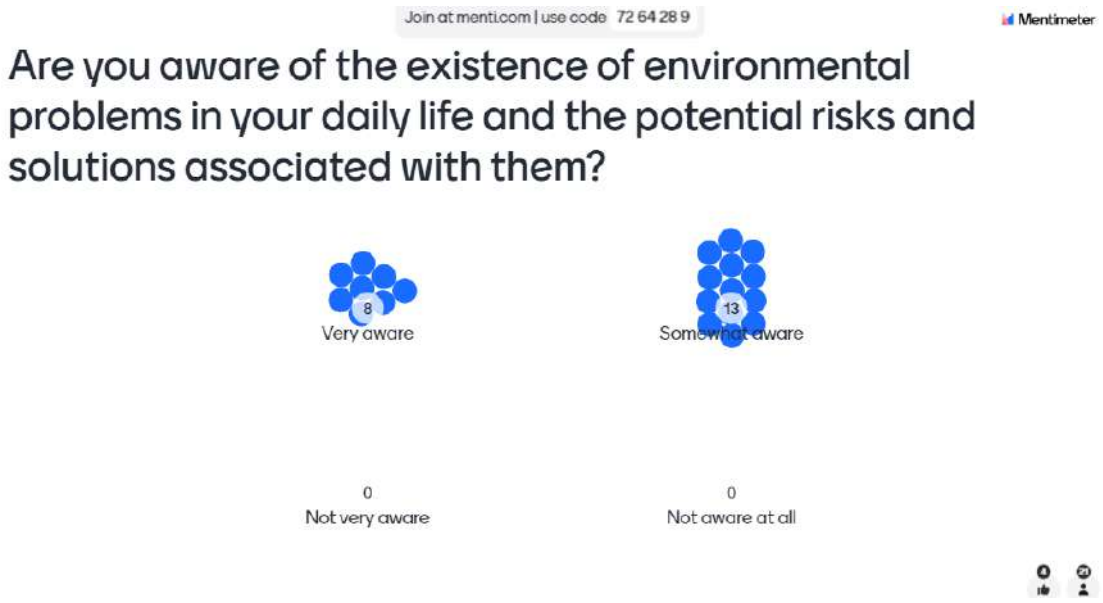
C4 Post Survey Results of 2nd Question

The question, "Do you actively participate in environmental ethics programs in your community?" is designed to assess participants' engagement with local initiatives focused on environmental ethics. This question helps to gauge the level of practical involvement participants have in applying ethical principles to environmental conservation efforts within their community.

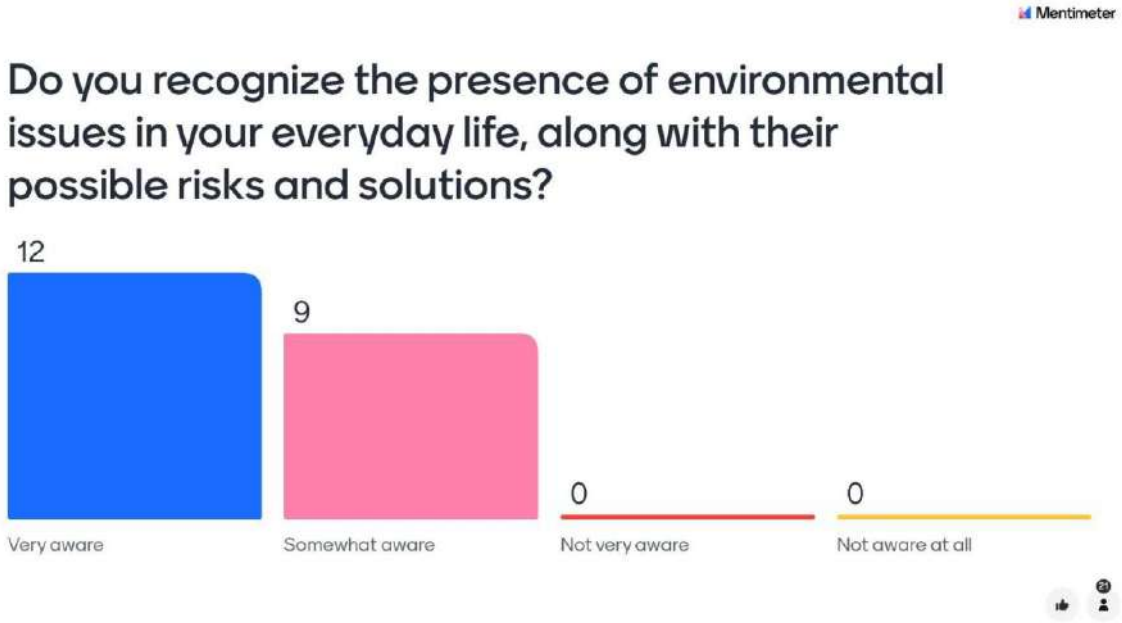
Initially, this question provides insight into the participants' current level of engagement with environmental ethics programs. It helps establish a baseline of their involvement and commitment to ethical practices in environmental issues. Following the educational sessions,

asking the same question can reveal any changes in participants' participation levels, indicating whether the sessions have encouraged greater involvement in such programs.

An increase in affirmative responses post-education would suggest that the educational sessions were effective in motivating participants to take action and engage more actively with environmental ethics programs. This shift would highlight the success of the program in not only enhancing theoretical understanding but also in fostering practical application and community involvement in environmental conservation.



C4 Pre Survey Results of 3rd Question



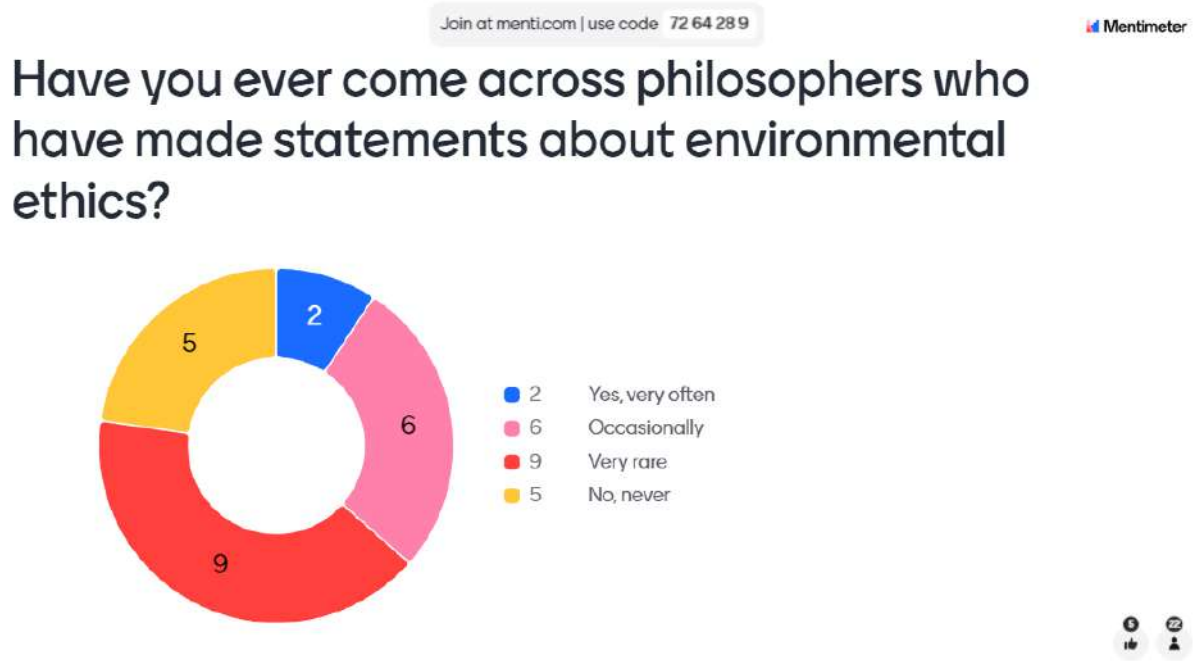
C4 Post Survey Results of 3rd Question

The question, "Are you aware of the existence of environmental problems in your daily life and the potential risks and solutions associated with them?" aims to evaluate participants'

awareness of how environmental issues manifest in their everyday activities and their understanding of the risks and possible solutions. This question helps to gauge participants' recognition of environmental challenges and their ability to identify practical measures to address these issues.

Initially, this question provides a snapshot of participants' existing awareness and understanding of how daily behaviors contribute to environmental problems. It establishes a baseline of their knowledge regarding the impact of their actions and the potential remedies. After the educational sessions, asking the same question can reveal any changes in awareness, indicating whether the sessions have enhanced participants' understanding of the environmental issues they face daily and the associated risks and solutions.

An increase in affirmative responses or a higher level of awareness post-education would suggest that the educational sessions successfully broadened participants' understanding of environmental problems and encouraged them to consider practical solutions. This shift would demonstrate the effectiveness of the program in raising awareness and promoting proactive approaches to addressing environmental challenges in everyday life.



C4 Pre Survey Results of 4th Question

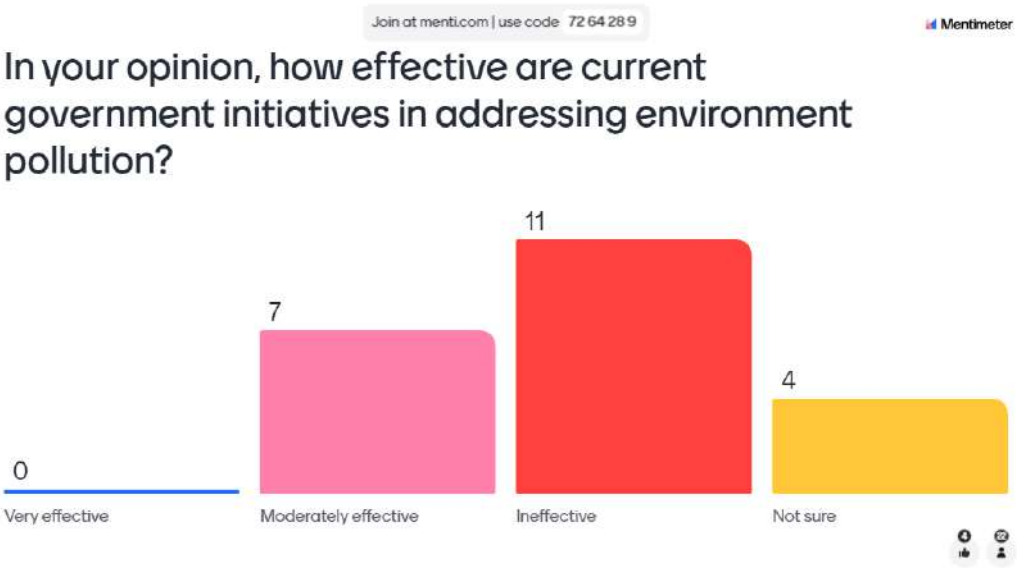


C4 Post Survey Results of 4th Question

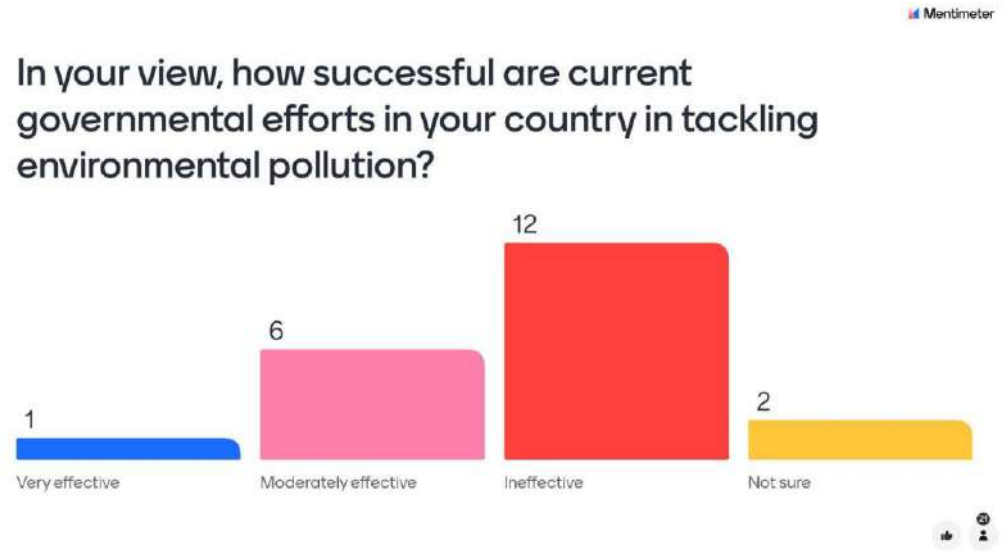
The question, "Have you ever come across philosophers who have made statements about environmental ethics?" was intended to assess participants' familiarity with philosophical perspectives on environmental ethics. This question aimed to gauge the extent to which participants had engaged with philosophical discussions or theories related to environmental issues.

Initially, this question provided insight into participants' exposure to and knowledge of philosophical viewpoints on environmental ethics. It helped establish a baseline understanding of their prior engagement with such ideas. Following the educational sessions, revisiting the same question revealed changes in participants' familiarity with environmental ethics from a philosophical standpoint, indicating that the sessions had indeed introduced or deepened their awareness of these philosophical perspectives.

An increase in affirmative responses post-education demonstrated that the educational sessions effectively introduced participants to key philosophical figures and theories related to environmental ethics. This shift highlighted the program's success in expanding participants' understanding of how philosophical thought contributes to the discourse on environmental conservation and ethical considerations.



C4 Pre Survey Results of 5th Question



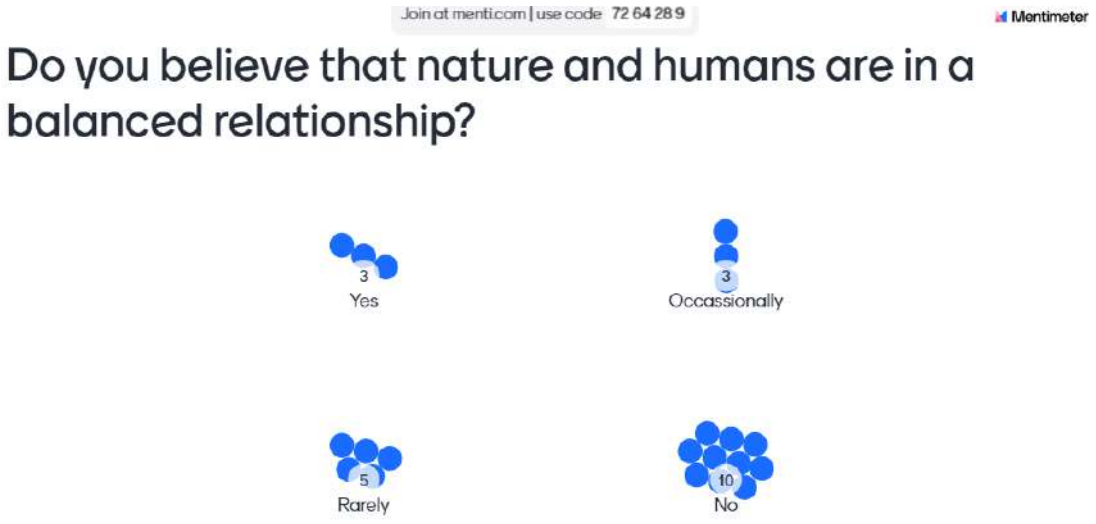
C4 Post Survey Results of 5th Question

The question, "In your opinion, how effective are current government initiatives in addressing environmental pollution?" was designed to assess participants' perceptions of the effectiveness of governmental efforts to combat environmental pollution. This question aimed to gauge how participants viewed the success and impact of existing policies and programs aimed at mitigating pollution.

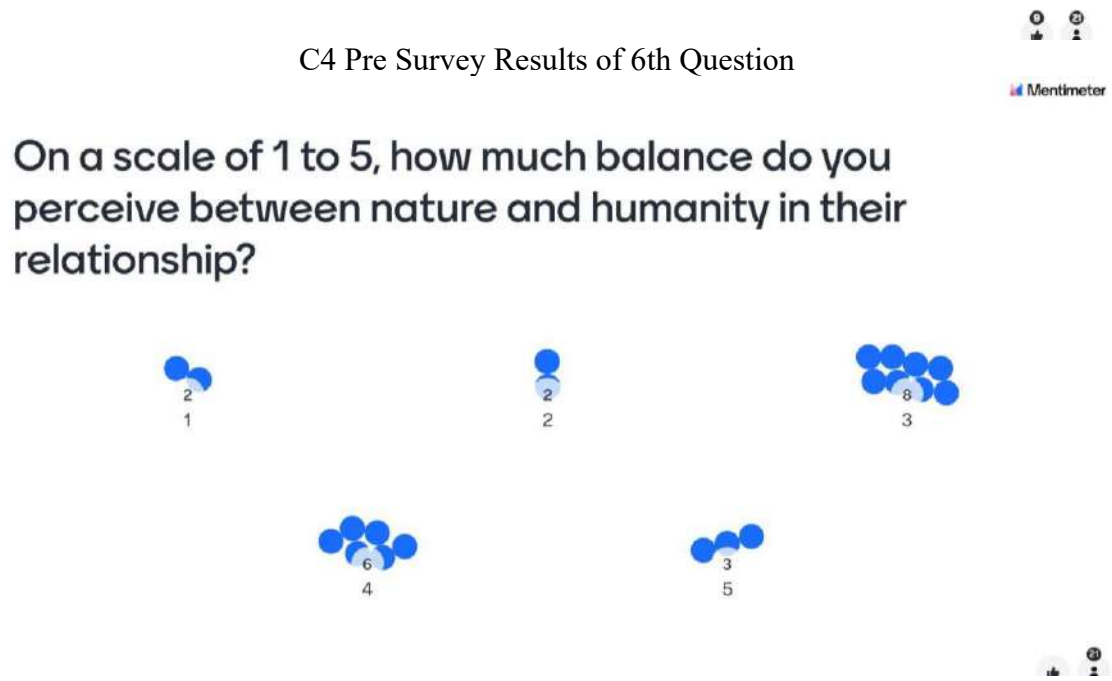
Initially, this question provided a baseline understanding of participants' views on the effectiveness of governmental measures. It reflected their opinions on whether current initiatives were making a tangible difference in addressing pollution issues. After the educational sessions, revisiting the same question revealed that participants' perceptions had

shifted, indicating that the sessions had indeed influenced their views on the efficacy of these initiatives.

An increase in positive responses or a more favorable assessment post-education showed that the educational sessions effectively informed participants about the role and impact of government initiatives in environmental protection. This shift demonstrated the program's success in enhancing participants' understanding of policy effectiveness and significantly influenced their opinions on the role of government in tackling environmental challenges.



C4 Pre Survey Results of 6th Question

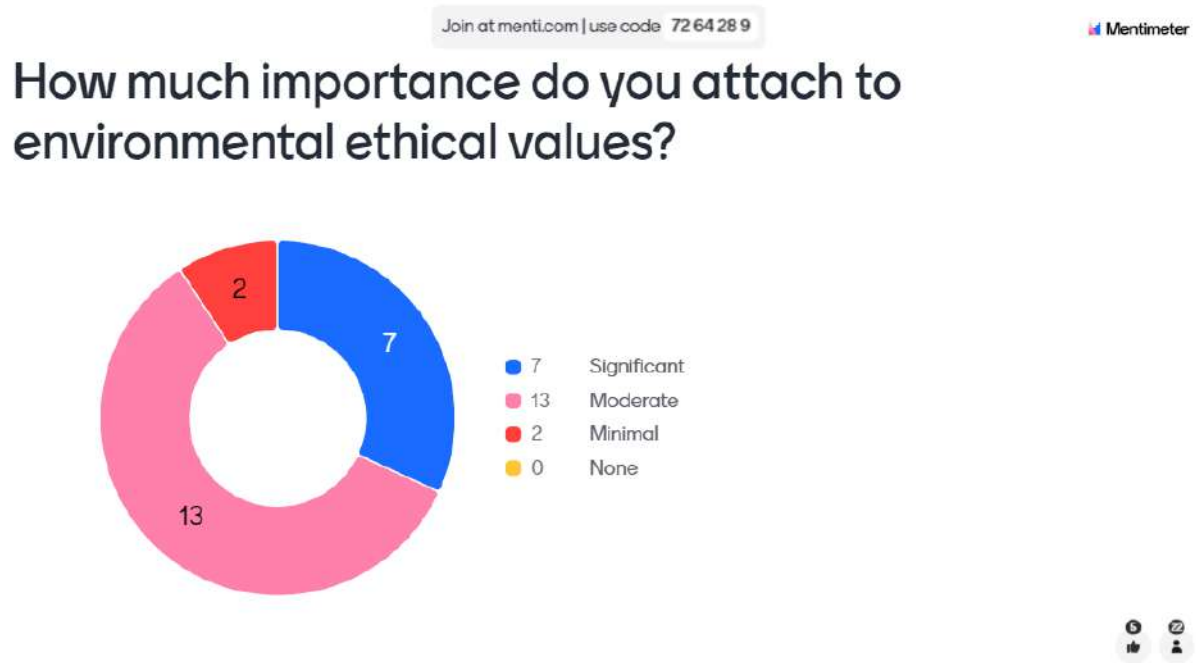


C4 Post Survey Results of 6th Question

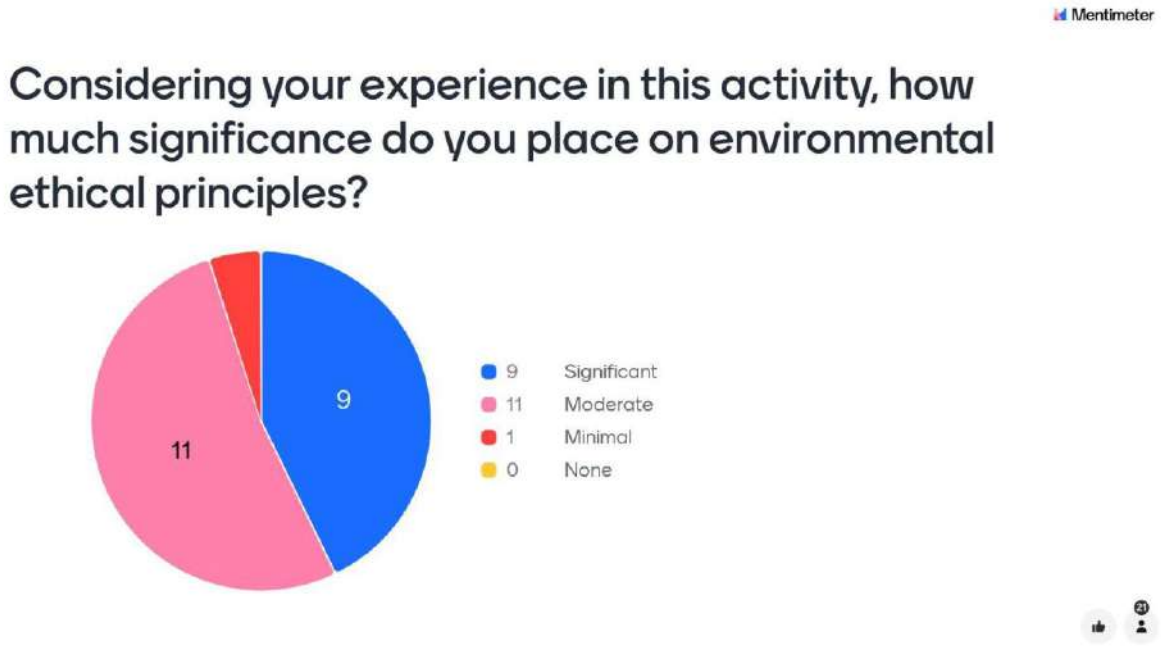
The question, "Do you believe that nature and humans are in a balanced relationship?" was designed to evaluate participants' perceptions of the current state of the relationship between humans and the natural environment. This question aimed to assess how participants viewed the equilibrium—or lack thereof—between human activities and environmental health.

Initially, this question provided a snapshot of participants' views on whether they perceived a balance or imbalance in the relationship between humans and nature. It established a baseline understanding of their current perspective on environmental and human interactions. After the educational sessions, asking the same question revealed any changes in participants' perceptions, indicating whether the sessions had influenced their views on the balance between human activities and the natural world.

A shift towards more favorable responses or an improved perception of balance post-education would have suggested that the educational sessions successfully enhanced participants' understanding of the interplay between human actions and environmental health. This change would have highlighted the effectiveness of the program in fostering a more nuanced and informed view of the relationship between humans and nature.



C4 Pre Survey Results of 7th Question

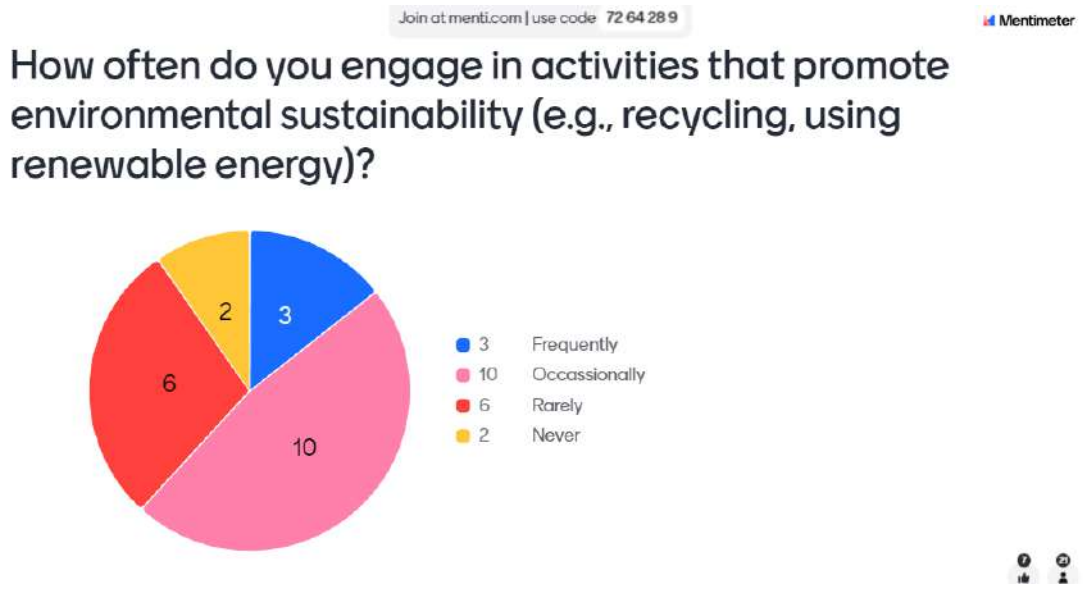


C4 Post Survey Results of 7th Question

The question, "How much importance do you attach to environmental ethical values?" was designed to gauge participants' personal valuation of ethical principles related to environmental conservation. This question aimed to assess the extent to which participants prioritized and integrated environmental ethics into their values and decision-making processes.

Initially, this question provided a baseline measure of participants' existing commitment to environmental ethical values. It reflected how central these principles were to their personal beliefs and actions. After the educational sessions, asking the same question revealed any changes in participants' emphasis on environmental ethics, indicating whether the sessions had influenced their perception of the importance of these values.

An increase in the importance participants attached to environmental ethical values post-education would have suggested that the sessions effectively highlighted the significance of ethical considerations in environmental issues. This shift demonstrated the program's success in deepening participants' appreciation for environmental ethics and encouraging them to prioritize these values in their personal and community actions.



C4 Pre Survey Results of 8th Question



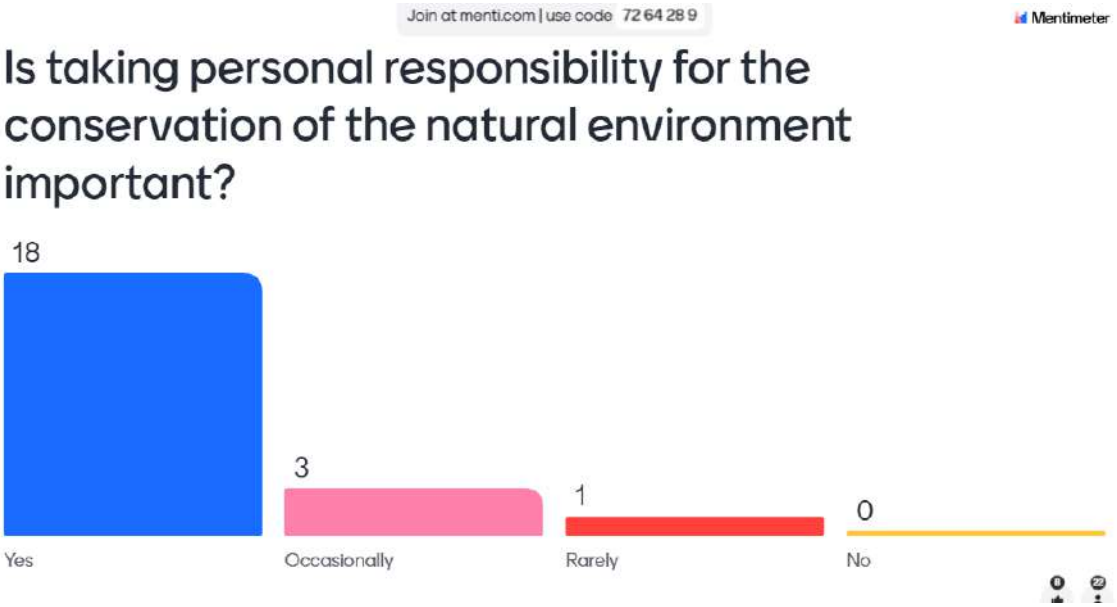
C4 Post Survey Results of 8th Question

The question, "How often do you engage in activities that promote environmental sustainability (e.g., recycling, using renewable energy)?" was designed to assess the frequency and consistency of participants' involvement in sustainable practices. This question aimed to evaluate how actively participants incorporated environmental sustainability into their daily lives.

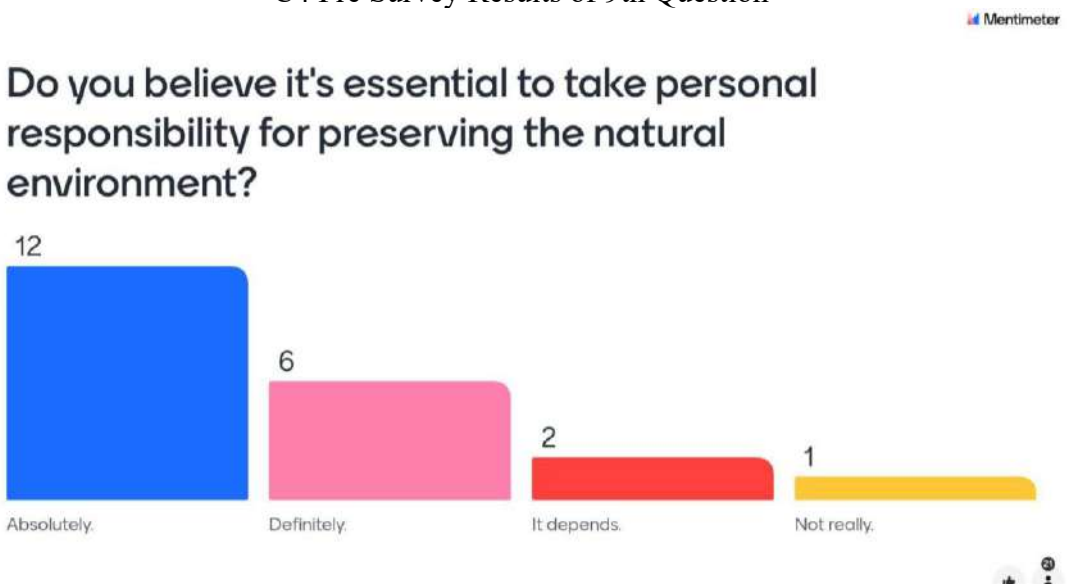
Initially, this question established a baseline understanding of participants' current engagement in sustainable activities. It provided insight into the regularity with which they practiced behaviors that supported environmental sustainability. After the educational sessions, asking the same question revealed any changes in participants' engagement levels, indicating

whether the sessions had encouraged more frequent or consistent participation in sustainability efforts.

An increase in the frequency of reported engagement in sustainable activities post-education would have suggested that the sessions effectively motivated participants to adopt and maintain environmentally friendly practices. This shift demonstrated the program's success in promoting actionable sustainability habits and encouraging participants to integrate these practices more regularly into their daily routines.



C4 Pre Survey Results of 9th Question



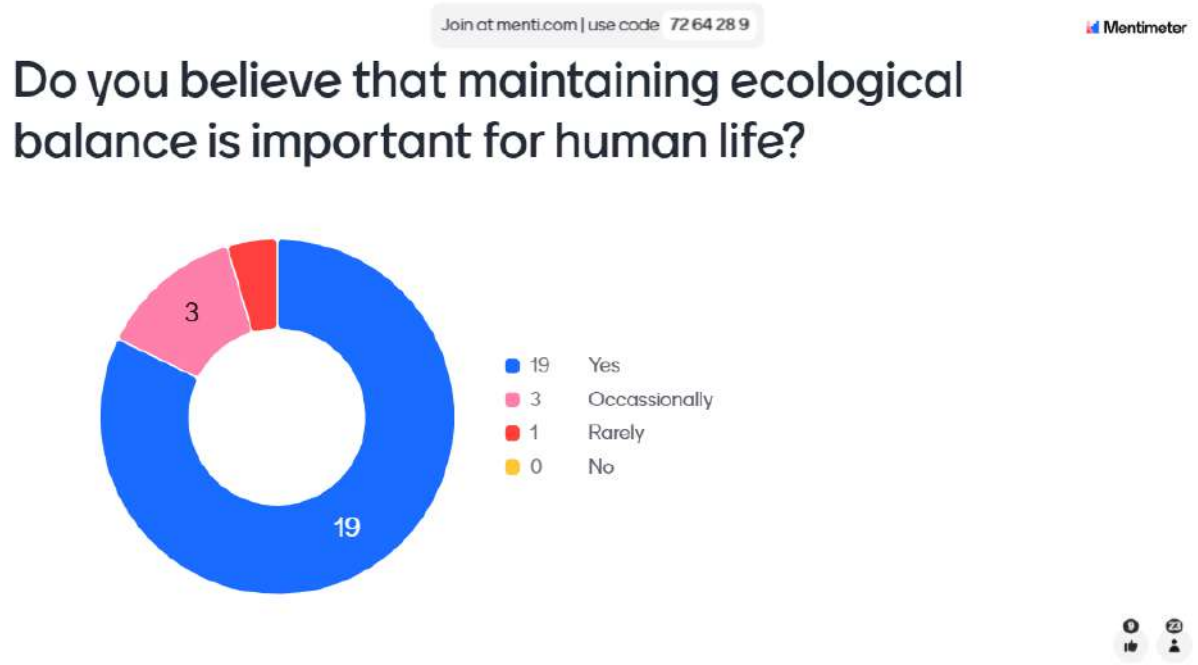
C4 Post Survey Results of 9th Question

The question, "Is taking personal responsibility for the conservation of the natural environment important?" was designed to gauge participants' views on the significance of individual

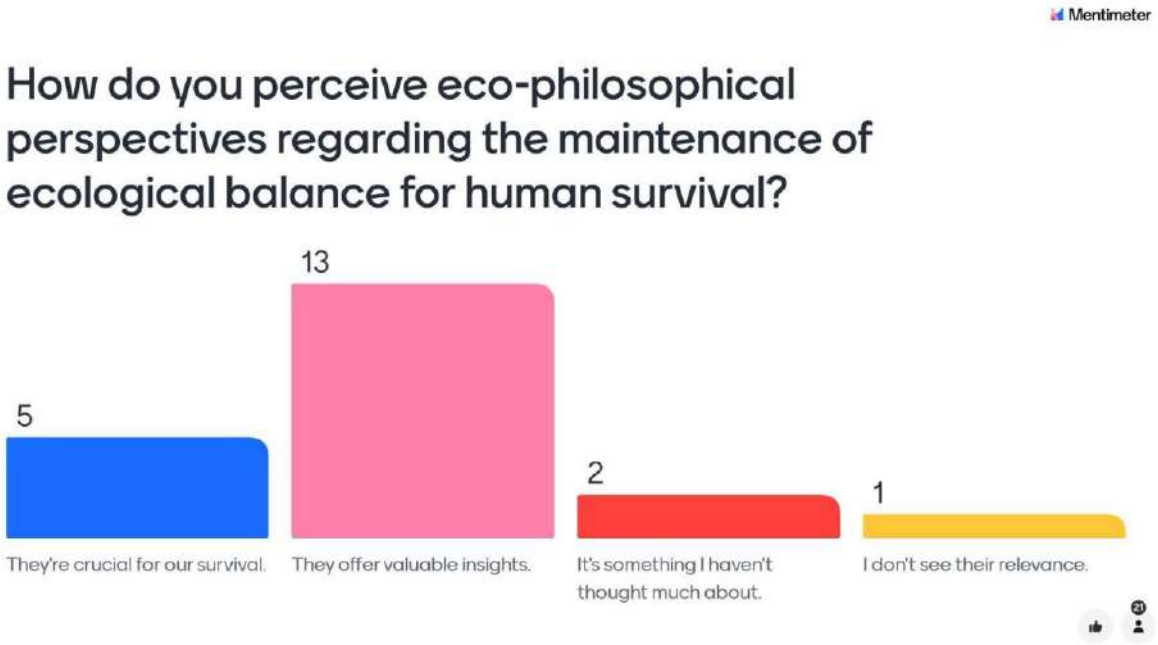
accountability in environmental conservation. This question aimed to assess how participants perceived the role of personal responsibility in protecting and preserving natural resources.

Initially, this question provided insight into participants' baseline beliefs about the importance of personal responsibility in environmental conservation. It reflected their initial understanding of how individual actions contribute to broader environmental goals. After the educational sessions, asking the same question revealed any shifts in participants' attitudes toward personal responsibility, indicating whether the sessions had reinforced or altered their views on the importance of individual efforts.

An increase in the perceived importance of personal responsibility post-education would have suggested that the sessions effectively emphasized the critical role individuals play in environmental conservation. This change demonstrated the program's success in fostering a greater sense of personal accountability and encouraging participants to take more proactive steps in supporting environmental protection.



C4 Pre Survey Results of 10th Question



C4 Post Survey Results of 10th Question

The question, "Do you believe that maintaining ecological balance is important for human life?" was designed to assess participants' understanding and beliefs about the significance of ecological balance in sustaining human life. This question aimed to gauge how much participants valued the interdependence between humans and the natural environment.

Initially, this question provided a baseline measure of participants' awareness of the critical role that ecological balance plays in ensuring the health and well-being of human life. It reflected their initial recognition of the importance of preserving ecosystems to maintain the resources and environmental conditions necessary for human survival. After the educational sessions, revisiting this question revealed any changes in participants' perspectives, indicating whether the sessions had enhanced their appreciation for the importance of ecological balance.

A stronger belief in the importance of maintaining ecological balance post-education would have suggested that the sessions effectively conveyed the interconnectedness between human life and the environment. This shift demonstrated the program's success in deepening participants' understanding of ecological principles and motivating them to support practices that contribute to ecological sustainability.



C4 Pre Survey Results of 11th Question



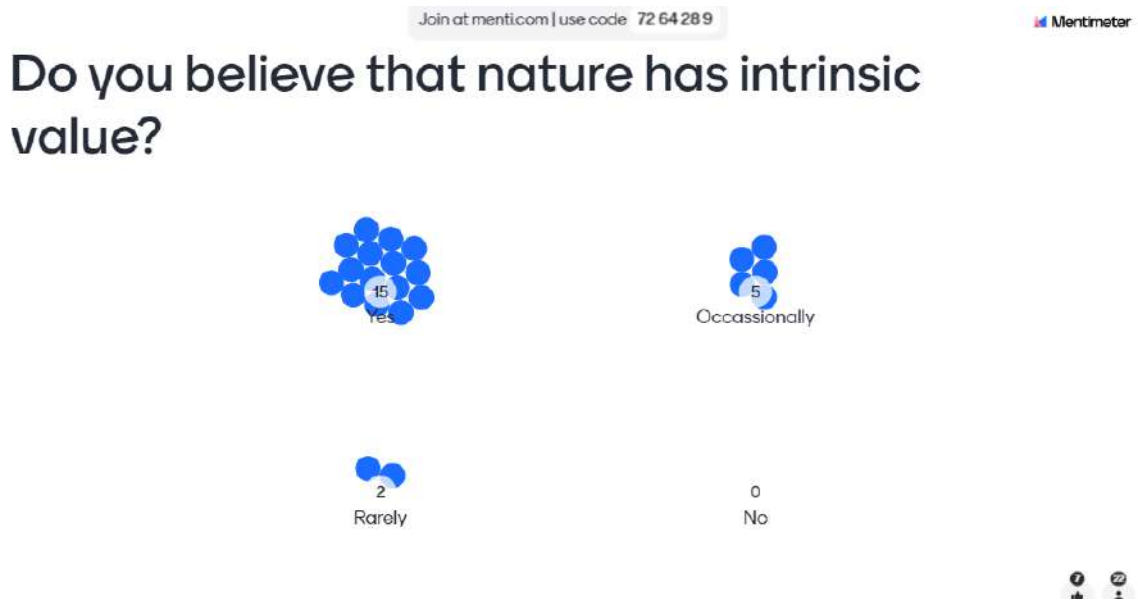
C4 Post Survey Results of 11th Question

The question, "How do you consider your waste management and recycling efforts?" was designed to assess participants' self-perception regarding their practices in managing waste and recycling. This question aimed to gauge their awareness, commitment, and effectiveness in contributing to environmental sustainability through their personal actions.

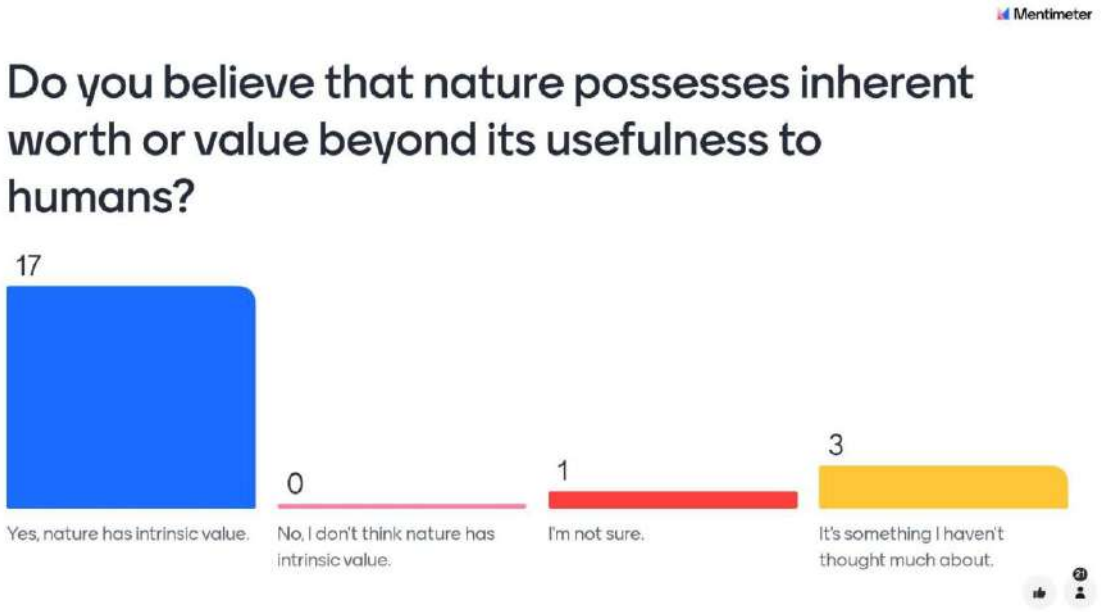
Initially, this question served as a baseline to understand how participants evaluated their own efforts in waste management and recycling before any educational intervention. It reflected their current habits, level of responsibility, and understanding of the impact of these activities on the environment. After the educational sessions, re-asking this question revealed changes in

participants' self-assessment, indicating that the sessions had inspired them to improve or maintain their waste management and recycling efforts.

An improvement in participants' self-assessment post-education demonstrated that the sessions effectively raised awareness and encouraged better waste management practices. This shift showed the program's success in promoting environmentally responsible behaviors, motivating participants to take more conscious and effective steps in managing waste and recycling.



C4 Pre Survey Results of 12th Question

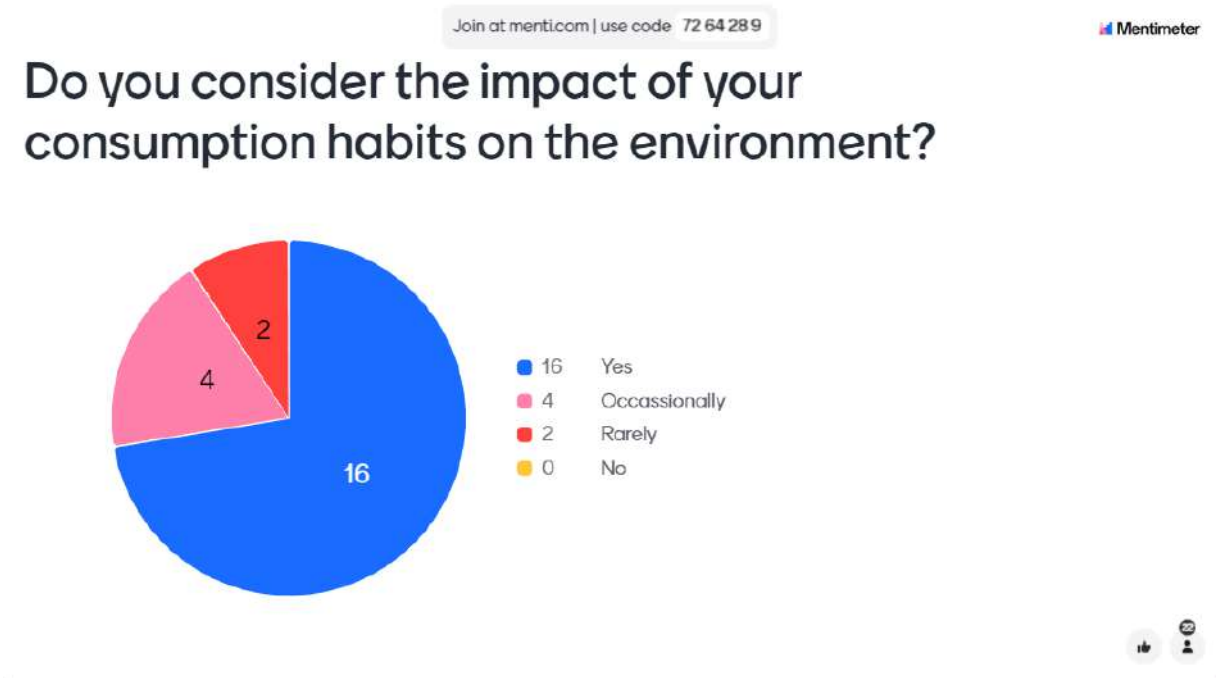


C4 Post Survey Results of 12th Question

The question, "Do you believe that nature has intrinsic value?" was designed to assess participants' beliefs regarding the inherent worth of nature, independent of its utility to humans. This question aimed to gauge their philosophical and ethical views on the natural world.

Initially, this question provided insight into participants' fundamental perspectives on the value of nature before any educational intervention. It reflected whether they saw nature as possessing inherent worth, deserving of respect and protection, or primarily as a resource for human use. After the educational sessions, which emphasized environmental ethics and the intrinsic value of nature, revisiting this question revealed shifts in participants' beliefs.

If participants demonstrated a stronger belief in the intrinsic value of nature after the sessions, it indicated that the educational content effectively deepened their understanding and appreciation of nature's inherent worth. This change suggested that the program successfully encouraged participants to adopt a more ethical and respectful attitude towards the environment, aligning with the goal of fostering a more sustainable and harmonious relationship between humans and nature.



C4 Pre Survey Results of 13th Question



C4 Post Survey Results of 13th Question

The question, "Do you consider the impact of your consumption habits on the environment?" was aimed at evaluating participants' awareness and mindfulness regarding the environmental consequences of their daily choices. This question sought to understand how much thought participants gave to the sustainability of their consumption patterns, such as the products they purchased, the waste they generated, and the resources they used.

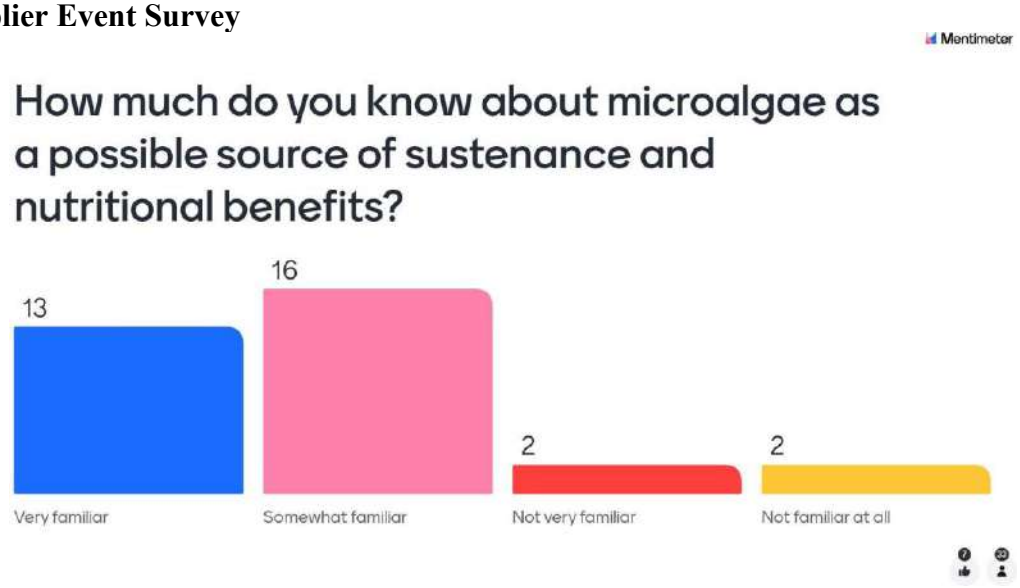
Initially, this question served to identify the level of consideration participants gave to the environmental impact of their consumption habits before any educational intervention. It shed light on their current awareness and the extent to which they incorporated environmental concerns into their decision-making processes. After the educational sessions, revisiting this question revealed changes in participants' behavior and thought patterns, indicating whether they had become more conscious and responsible in their consumption habits.

An increase in participants' consideration of the environmental impact of their consumption after the sessions would have suggested that the educational content successfully raised their awareness and encouraged more sustainable practices. This shift demonstrated the effectiveness of the program in promoting environmentally responsible behavior, motivating participants to make choices that minimized their ecological footprint.

MULTIPLIER EVENT

MULTIPLIER EVENT	
GreAT: Bio-innovative Awareness	
SUMMARY	
The Multiplier Event was a crucial element of GreAT's dissemination strategy, designed to share the project's results with a broader audience. This event brought together various target groups, including educators, environmentalists, students, and community members, reaching a total of 138 participants. It featured presentations and quiz and survey studies to showcase the project's achievements and outputs. The event played a vital role in spreading awareness of the project's impact, fostering collaborations, and encouraging the adoption of the project's approach and resources in other contexts. By engaging a diverse audience, the Multiplier Event significantly expanded the project's reach and influence, ensuring that its benefits extended beyond the initial participants.	
HOST	**Istanbul University**
PARTICIPANTS	**123 local participants and 15 foreign participants, in total 138 participants**
DATE	**09.05.2024, 11.00 a.m.-16.00 p.m.**
VENUE	**Ord. Prof. Dr. Cemil Bilsel Conference Hall, Istanbul University, Istanbul, TÜRKİYE**

Multiplier Event Survey

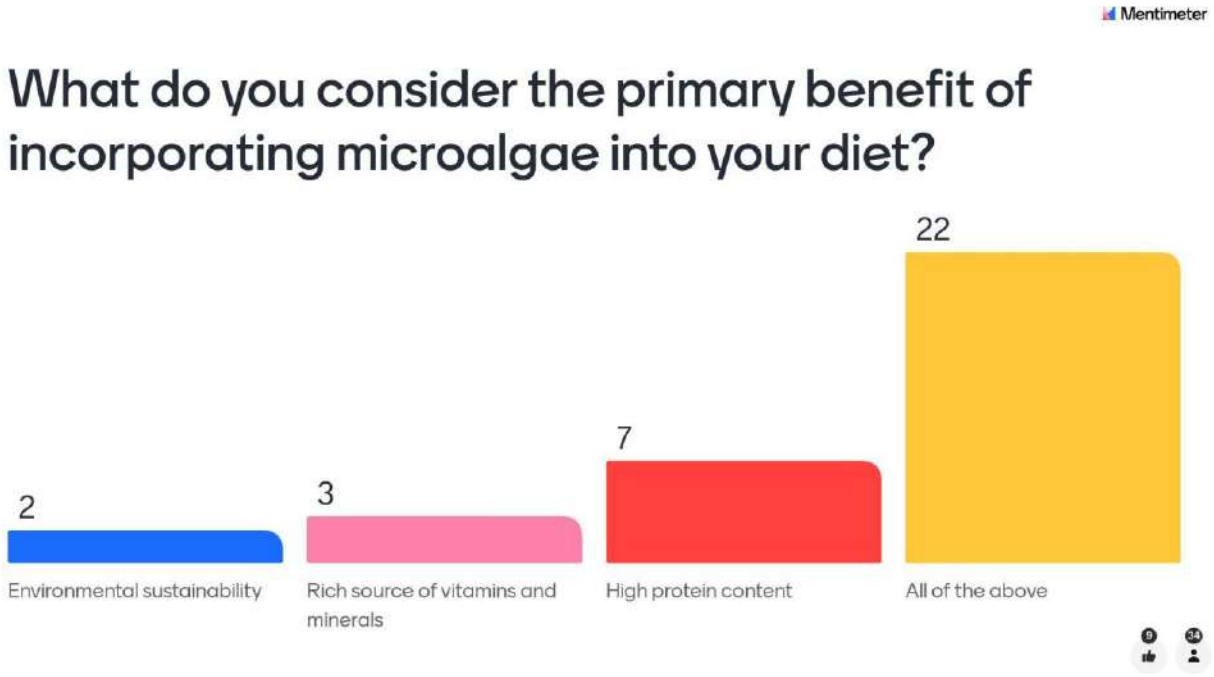


Multiplier Event Survey Results of 1st Question

This question assesses the respondent's awareness and understanding of microalgae, which are emerging as a significant source of nutrition due to their rich composition of proteins, vitamins, and essential fatty acids. Microalgae, such as spirulina and chlorella, are increasingly recognized for their potential to enhance dietary intake and provide sustainable food solutions. Evaluating this knowledge can reveal how informed people are about alternative nutritional sources and may highlight the need for more educational outreach on the benefits of microalgae.

Understanding the level of knowledge about microalgae can also help in identifying gaps in public awareness. If a majority of respondents are unfamiliar with microalgae, this might indicate a need for increased promotion and education regarding their benefits. Conversely, if the awareness is high, it could suggest that there is a growing interest in and acceptance of microalgae-based products. This information can be valuable for stakeholders in the food and nutrition sectors aiming to introduce or expand their offerings.

Lastly, this question can help gauge how receptive the public is to innovative food sources and nutritional supplements. If respondents show a high level of knowledge, it might reflect a readiness to explore new dietary options, potentially influencing market trends and encouraging further research and development in the field of microalgae.



Multiplier Event Survey Results of 2nd Question

This question seeks to uncover the perceived advantages of including microalgae in one's diet. The primary benefits might include enhanced nutritional value, improved health outcomes, or environmental sustainability. Responses will provide insight into what people value most about

microalgae, whether it's their high protein content, their role in reducing the ecological footprint of food production, or their potential health benefits like boosting immunity and energy levels.

Understanding these perceived benefits can guide future marketing and educational efforts. If respondents highlight health benefits, this could influence how microalgae products are promoted, focusing on their role in nutrition and wellness. On the other hand, if sustainability is emphasized, it may drive campaigns that showcase the environmental advantages of microalgae over traditional agriculture.

Furthermore, identifying the primary benefit helps to align product development with consumer values and expectations. For example, if the health benefits are most emphasized, product formulations and branding can be tailored to highlight these aspects, potentially increasing market acceptance and consumer demand for microalgae-based products.



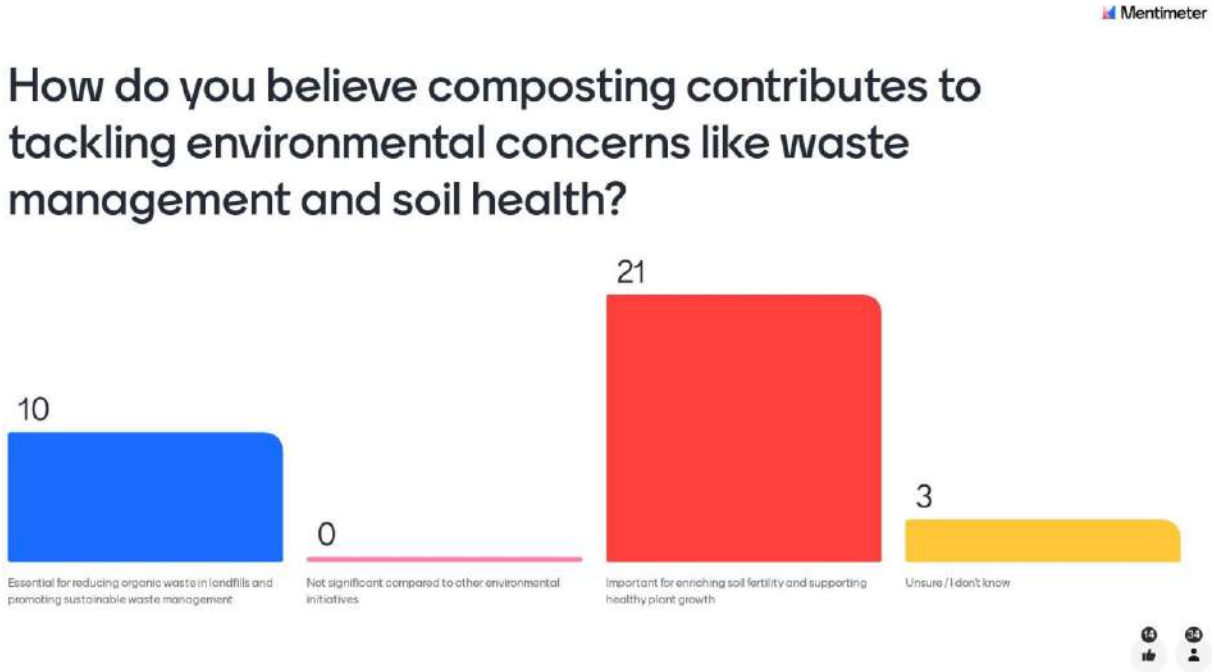
Multiplier Event Survey Results of 3rd Question

This question explores the obstacles preventing more frequent composting, which might include practical issues such as lack of space, time constraints, or insufficient knowledge about composting techniques. Identifying these barriers can help in developing targeted solutions to make composting more accessible and appealing to a broader audience.

Understanding these factors can also inform community programs and initiatives aimed at increasing composting rates. For instance, if space is a major concern, solutions like compact composting systems or community composting programs might be proposed. If lack of

knowledge is an issue, educational workshops or resources could be developed to address this gap.

Addressing these barriers can lead to more effective waste management strategies and higher rates of composting, contributing to improved environmental outcomes. By understanding and mitigating these obstacles, it is possible to foster greater participation in composting programs, ultimately benefiting waste reduction efforts and enhancing soil health.



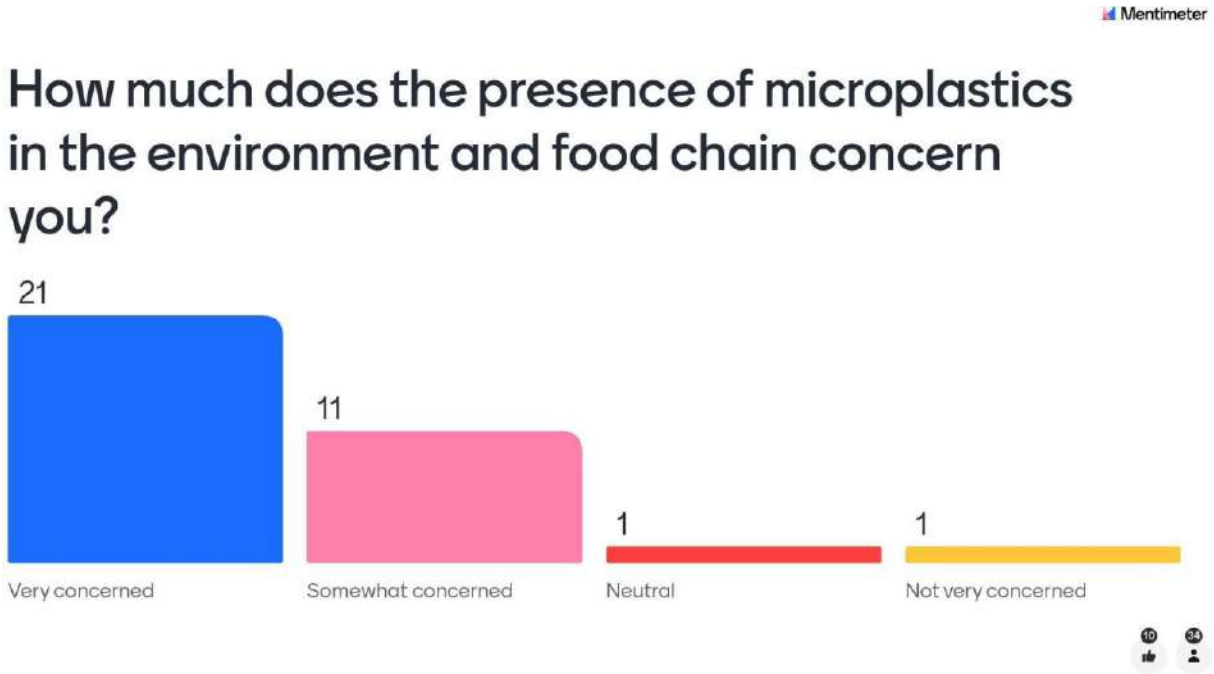
Multiplier Event Survey Results of 4th Question

This question seeks to gauge respondents' understanding of composting's role in environmental sustainability. Composting is known to reduce landfill waste, decrease greenhouse gas emissions, and improve soil quality through the addition of organic matter. Responses will reveal how well individuals grasp the environmental benefits of composting and its role in a broader waste management strategy.

Evaluating these perceptions helps to highlight the effectiveness of composting as a solution for environmental issues. If respondents recognize composting’s benefits, it could strengthen support for policies and practices that encourage composting. Conversely, if understanding is limited, this might indicate a need for more comprehensive public education on the environmental impacts of composting.

Promoting awareness about the benefits of composting can lead to increased adoption and more sustainable waste management practices. By linking composting to broader environmental

goals, such as reducing landfill waste and improving soil health, individuals may be more motivated to participate in composting programs and support related initiatives.

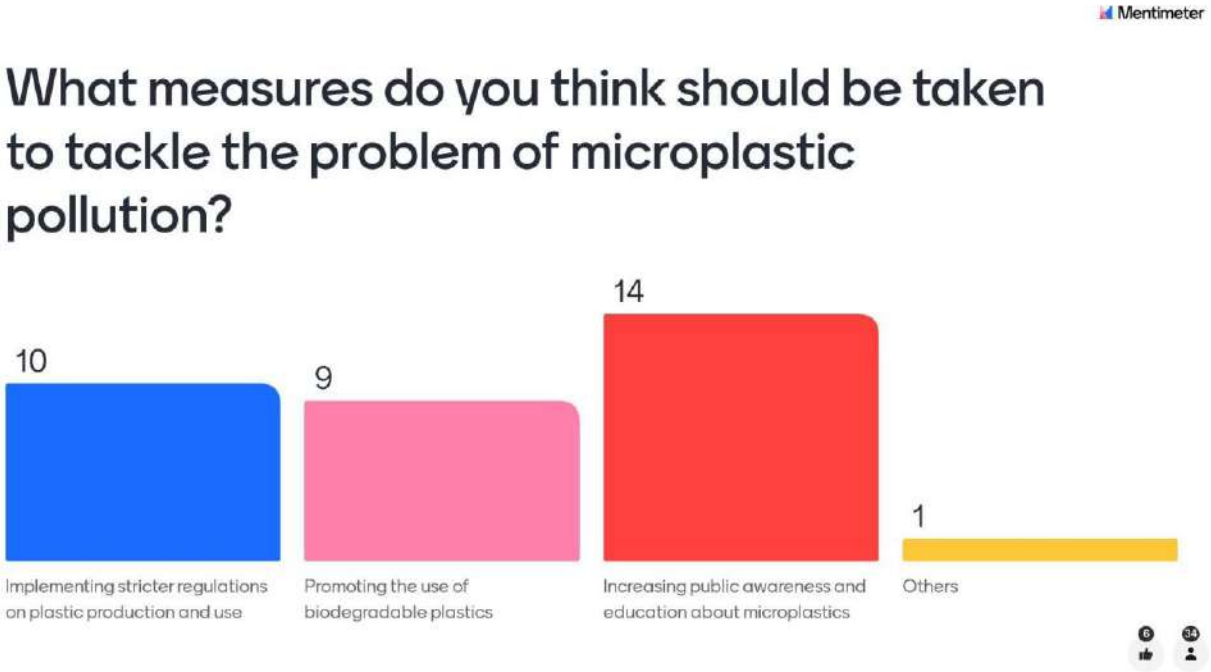


Multiplier Event Survey Results of 5th Question

This question measures the level of concern regarding microplastic pollution, which is a growing environmental and health issue. Microplastics can have detrimental effects on ecosystems and human health, and understanding the public's level of concern can inform policies and initiatives aimed at addressing this issue.

High levels of concern might indicate a demand for more stringent regulations and research into microplastic reduction and mitigation strategies. Conversely, if concern is low, it may highlight a need for increased awareness and education about the impacts of microplastics on the environment and health.

Addressing public concern about microplastics can lead to more effective actions and policies to tackle pollution. Understanding these concerns helps in prioritizing environmental issues and implementing solutions that align with public expectations and values.

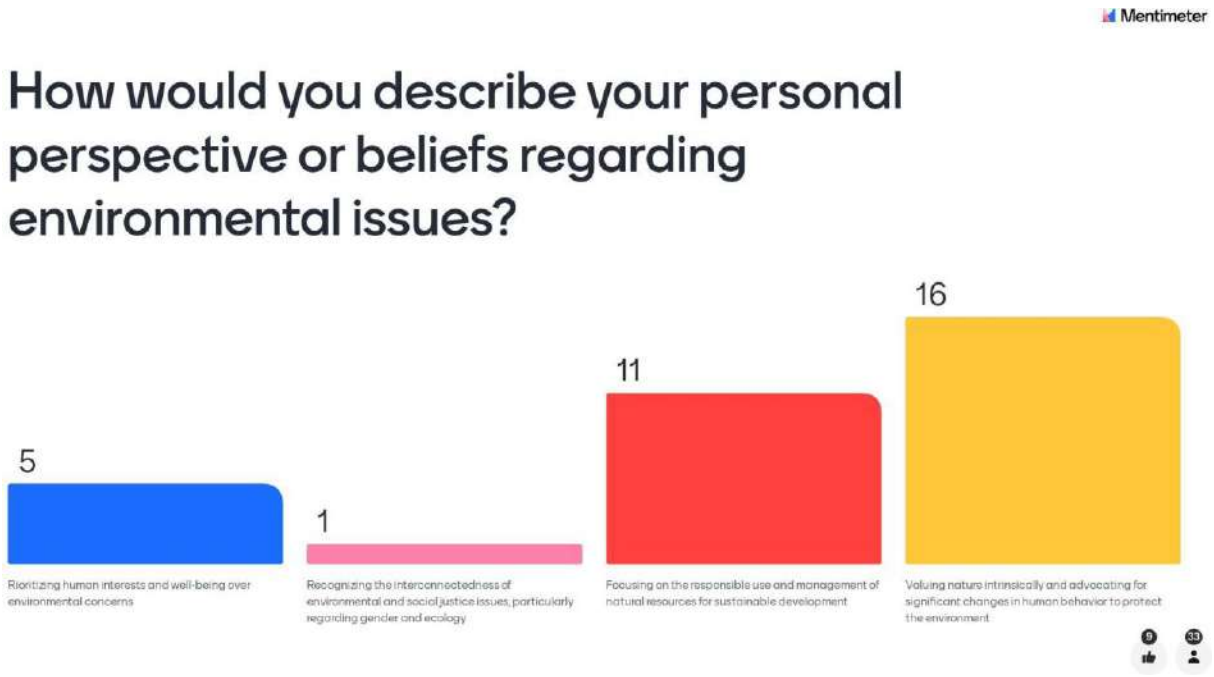


Multiplier Event Survey Results of 6th Question

This question aims to gather opinions on potential solutions for microplastic pollution, which may include regulatory measures, technological innovations, or changes in consumer behavior. Identifying preferred measures can provide insights into public expectations and support for different approaches to addressing microplastic pollution.

Responses can help shape policy decisions and guide the development of effective strategies to reduce microplastics. For example, if there is strong support for stricter regulations, policymakers might focus on developing and enforcing new rules. Alternatively, if technological solutions are favored, there may be increased investment in research and development of new technologies to address microplastic contamination.

By understanding public preferences for tackling microplastic pollution, stakeholders can design more effective and targeted interventions. This can lead to greater public support and participation in efforts to mitigate the impacts of microplastics on the environment and human health.

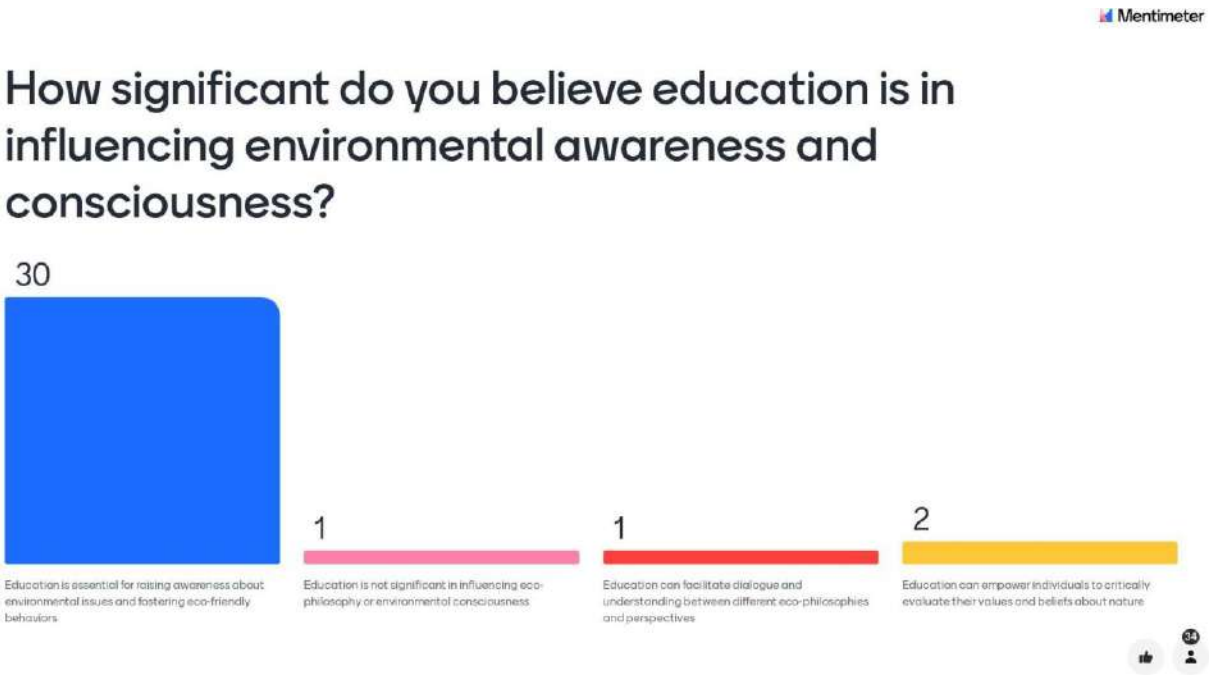


Multiplier Event Survey Results of 7th Question

This question explores individual attitudes and beliefs about environmental issues, which can range from strong environmental advocacy to more neutral or skeptical views. Understanding personal perspectives helps in identifying the diversity of opinions and values related to environmental matters.

Responses can provide insight into how people prioritize environmental issues and what motivates their actions or inactions. For example, strong environmental beliefs might correlate with support for sustainable practices and policies, while more neutral perspectives might indicate a need for increased awareness and engagement.

Understanding personal perspectives on environmental issues is crucial for designing effective communication strategies and initiatives. By aligning messages and actions with the diverse views of the public, it is possible to foster greater engagement and support for environmental efforts.



Multiplier Event Survey Results of 8th Question

This question evaluates the perceived role of education in shaping environmental awareness and promoting sustainable behaviors. Education can play a critical role in increasing understanding of environmental issues and encouraging proactive measures.

Responses will help assess the value placed on educational efforts in addressing environmental challenges. If education is seen as highly significant, there may be strong support for educational programs and initiatives aimed at increasing environmental literacy. Conversely, if education is considered less significant, it might suggest a need to explore other avenues for fostering environmental awareness.

By understanding the perceived importance of education, stakeholders can better allocate resources and design programs that effectively promote environmental consciousness. This can lead to more informed and engaged individuals who are better equipped to address environmental issues and contribute to sustainability efforts.

Quiz

Understanding Quizzes in Educational Contexts: Purpose, Expectations, and the Role of Pre- and Post-Assessments

Quizzes are valuable tools in educational settings, serving as a means to assess participants' knowledge, comprehension, and critical thinking on specific subjects. Unlike comprehensive exams, quizzes are typically brief and focused, designed to evaluate the grasp of particular concepts or topics covered in a course or program. The purpose of a quiz is multifaceted: it not

only tests what learners know but also reinforces learning by encouraging recall and application of knowledge. Quizzes can stimulate active engagement, helping participants to consolidate their understanding and identify areas that may require further attention.

The expectations from quizzes go beyond merely testing factual knowledge. They are also designed to gauge participants' analytical abilities, problem-solving skills, and the capacity to apply theoretical knowledge to practical scenarios. In the context of educational programs like GreAT, quizzes play a crucial role in evaluating the effectiveness of the curriculum. They help educators and program designers understand whether the educational content is resonating with participants and achieving the intended learning outcomes.

Conducting quizzes at both the beginning (pre-assessment) and end (post-assessment) of an educational activity is a strategic approach that provides a comprehensive view of the learning process. A pre-quiz is administered at the start of the activity to establish a baseline understanding of the participants' knowledge and perceptions on the topic. This initial assessment helps identify the existing knowledge gaps and the participants' starting point, allowing educators to tailor the instructional approach to better meet learners' needs.

The post-quiz, on the other hand, is conducted after the educational sessions have concluded. Its purpose is to measure the extent of knowledge acquisition and the effectiveness of the instructional methods used. By comparing pre- and post-quiz results, educators can evaluate the impact of the educational intervention, identifying both the strengths of the program and areas where improvements may be needed. This comparison also provides insights into the participants' learning journey, highlighting significant gains in understanding and areas where concepts might need to be revisited.

Quiz Studies in the GreAT Project: Analysis and Findings

This report presents the findings from the quiz studies conducted as part of the GreAT project's outputs. The quizzes were meticulously designed to assess participants' knowledge and perspectives on the educational topics covered during the learning, teaching, and training (LTT) activities. Through systematic data collection and analysis, the quizzes aimed to measure the impact of the educational sessions and provide insights into the effectiveness of the program.

The primary goal of this report is to offer a comprehensive analysis of the quiz data collected during GreAT project's educational sessions. The report aims to detail the content, methodology, and execution of the quizzes; present the findings from both pre- and post-quiz

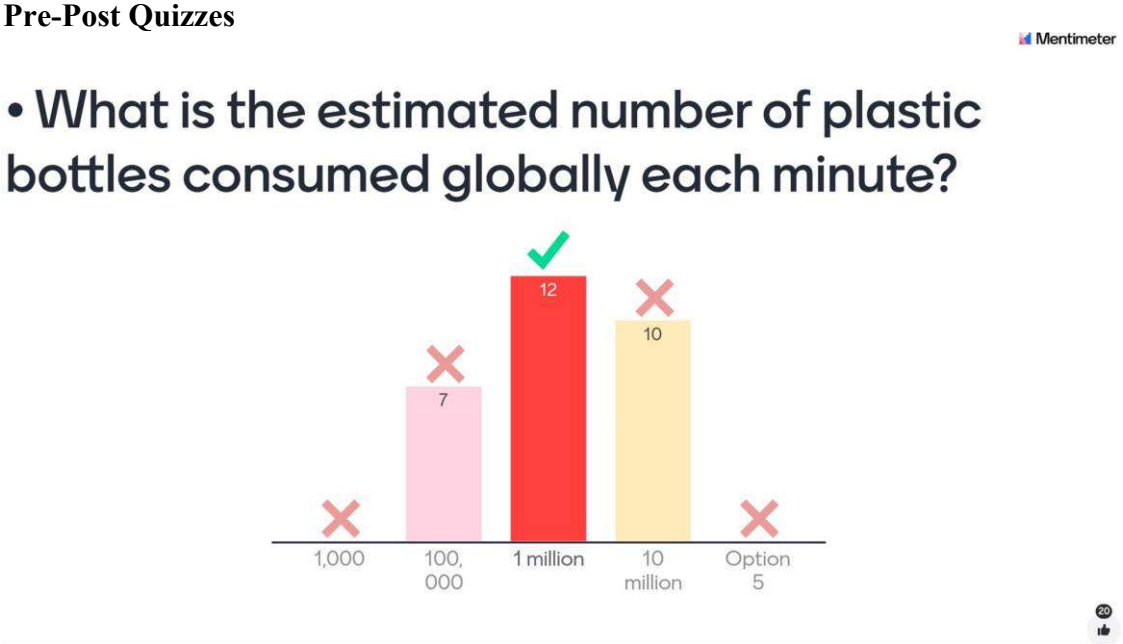
assessments; evaluate participants' knowledge prior to the sessions and the gains achieved following the sessions; and offer insights into the overall effectiveness of the educational sessions. Furthermore, this analysis will provide recommendations for future improvements based on the quiz results.

The quizzes were conducted at multiple stages of the project: pre- and post-quizzes for the "C2 - Gaming Approaches to Biotechnology" and "C4 - Gaming Approaches to Green Environment" activities, as well as pre- and post-assessment quizzes within the Multiplier Event. This multi-stage approach was essential in capturing the progression of learning and the overall impact of GreAT project's educational initiatives.

By systematically evaluating the data from these quizzes, the report aims to highlight the effectiveness of the educational strategies employed in the GreAT project and to offer actionable insights for enhancing future programs. The findings will not only reflect the participants' learning outcomes but also contribute to the ongoing development of educational methodologies that foster deeper understanding and engagement with environmental and biotechnological issues.

C2 Gaming approaches to Biotechnology

C2 Pre-Post Quizzes



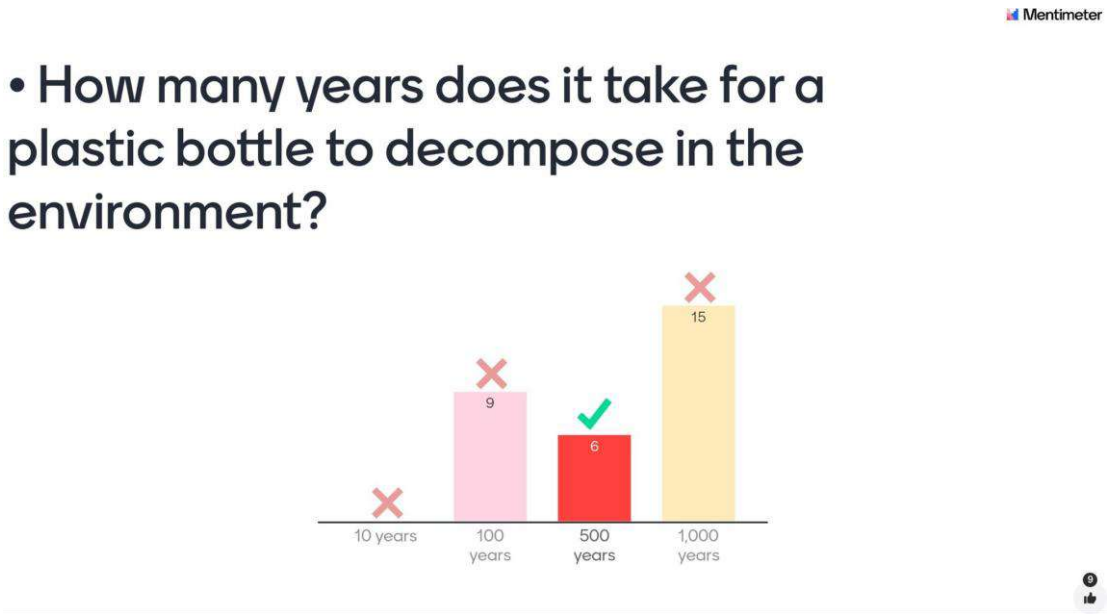
C2 Pre Quiz Results of 1st Question



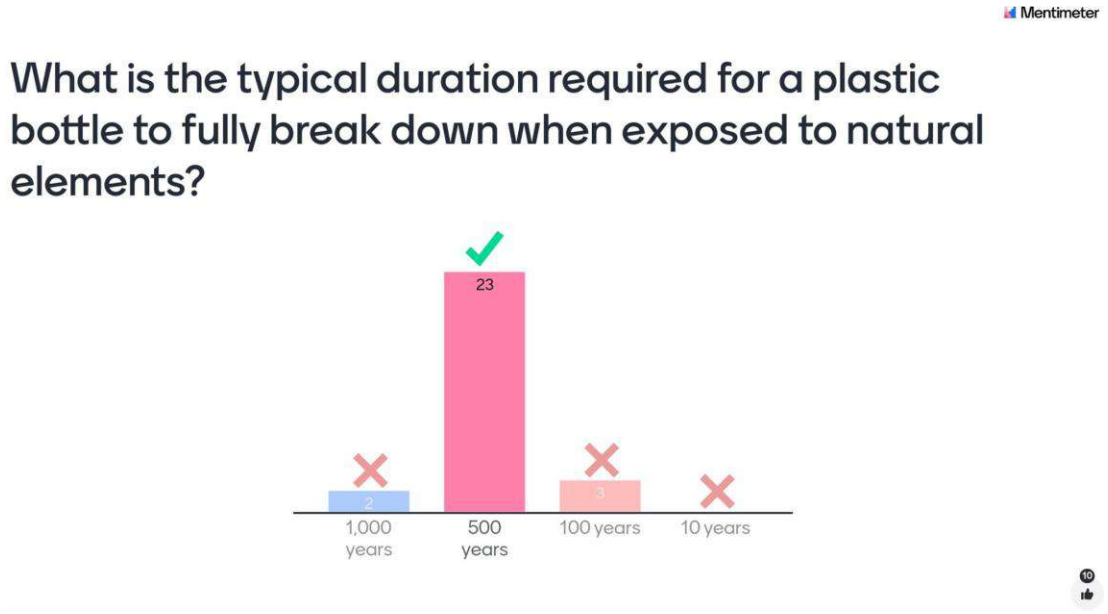
C2 Post Quiz Results of 1st Question

This question was designed to confront participants with the sheer scale of global plastic consumption, specifically focusing on plastic bottles as a symbol of the single-use plastic epidemic. The statistic on the number of plastic bottles consumed each minute underscores the rapid and unsustainable nature of our plastic use. Understanding this magnitude is crucial for participants because it highlights the broader issue of plastic waste accumulation and its environmental impacts. This knowledge not only increases awareness but also encourages individuals to reflect on their own plastic consumption habits and take responsibility for reducing their reliance on single-use plastics. It fosters a sense of urgency to support more sustainable alternatives and participate in collective efforts to address the plastic pollution crisis. By internalizing the scale of the problem, participants can become more proactive in reducing their plastic footprint.

The quizzes conducted both before and after the educational sessions revealed significant progress among participants. In the post-quiz phase, participants demonstrated a deeper understanding of the issue and a noticeable shift in their attitudes and behaviors towards reducing plastic use. The question effectively prompted participants to re-evaluate their personal consumption habits, leading to a greater commitment to sustainable practices and a heightened awareness of the environmental impact of single-use plastics. This shift illustrates the success of the educational sessions in fostering a more environmentally conscious mindset.



C2 Pre Quiz Results of 2nd Question

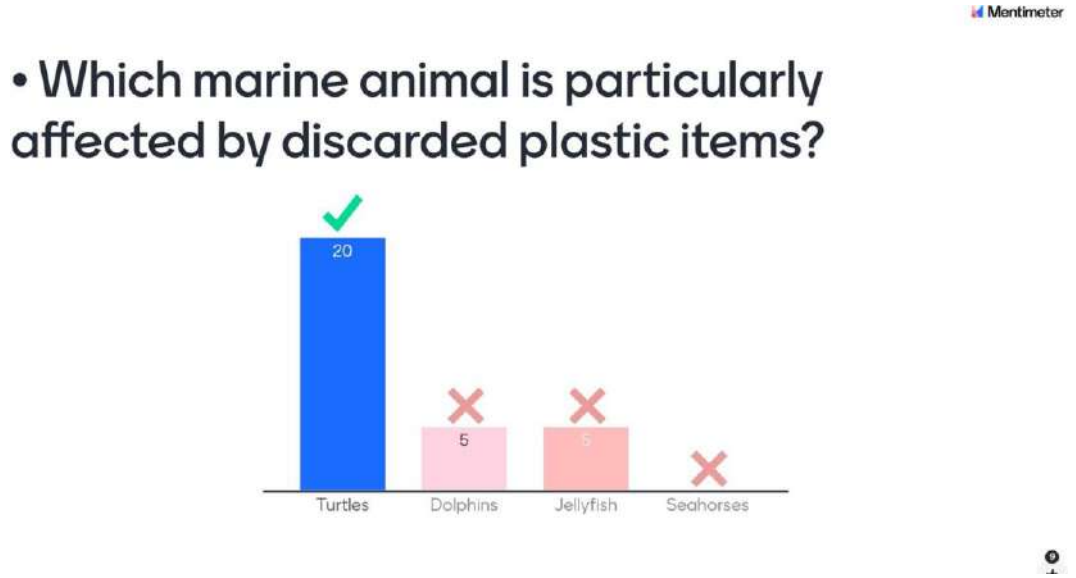


C2 Post Quiz Results of 2nd Question

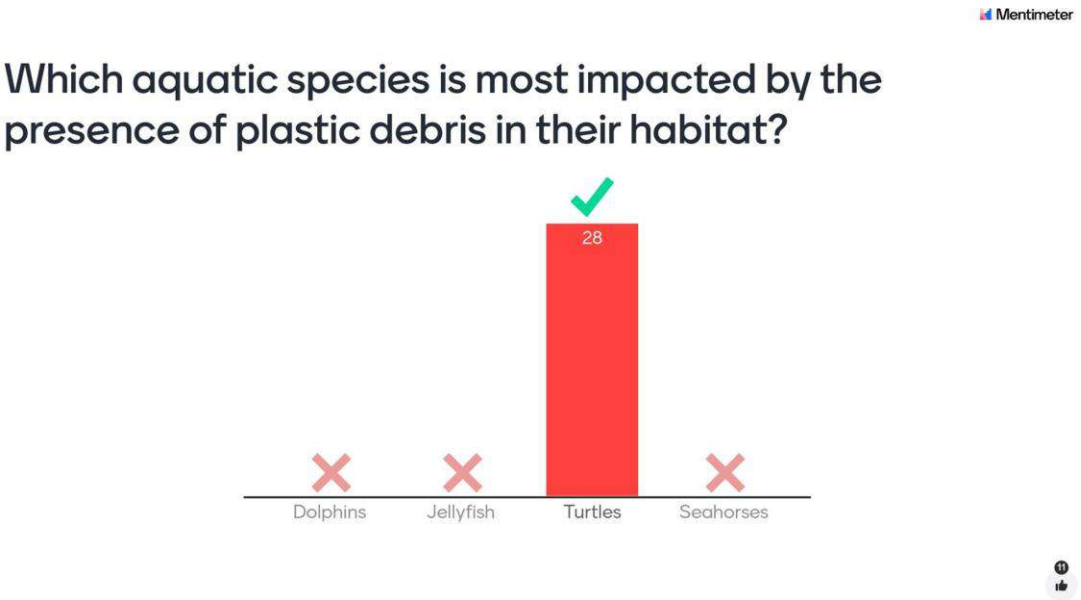
This question is designed to inform participants about the long-term environmental consequences of plastic waste, emphasizing the enduring nature of plastic pollution. Learning that a plastic bottle can take hundreds of years to decompose reveals the persistent threat that plastic poses to ecosystems long after its initial use. This information is significant because it helps participants understand that plastic waste does not simply disappear; rather, it accumulates in landfills and natural habitats, affecting wildlife and ecosystems for generations. By grasping the time scale of plastic decomposition, participants are better equipped to appreciate the importance of reducing plastic use, supporting biodegradable alternatives, and advocating for policies that minimize plastic production. This awareness fosters a deeper

commitment to sustainability and long-term environmental protection, motivating individuals to adopt more eco-conscious behaviors in their daily lives.

The quizzes conducted before and after the educational sessions showed that participants significantly improved their understanding of the lasting impact of plastic waste on the environment. Post-quiz responses indicated a heightened awareness of the long-term consequences of plastic pollution, with participants expressing a stronger commitment to reducing their plastic consumption and supporting sustainable practices. This shift in understanding and behavior underscores the effectiveness of the educational sessions in raising awareness about the critical issue of plastic decomposition and its implications for future generations.



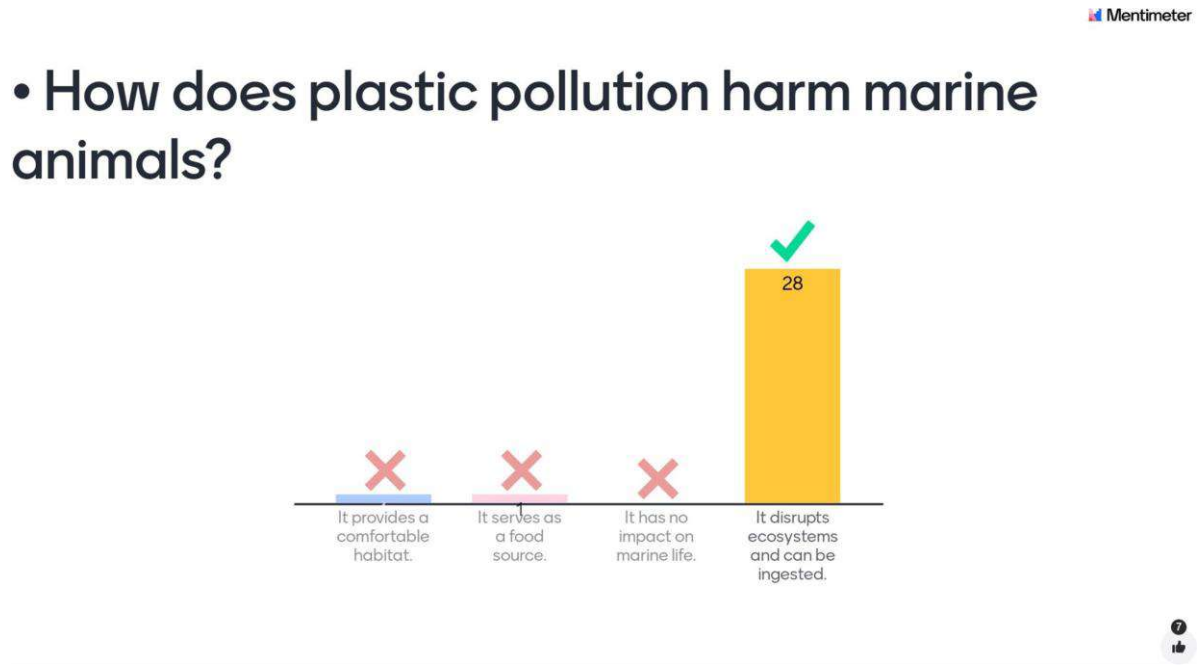
C2 Pre Quiz Results of 3rd Question



C2 Post Quiz Results of 3rd Question

This question aims to personalize the issue of plastic pollution by focusing on a specific marine animal that is especially vulnerable to plastic waste. By highlighting the plight of a particular species, participants can connect emotionally to the problem, seeing it not just as an abstract environmental issue but as a tangible threat to living creatures. Understanding which marine animals are most affected by discarded plastic items emphasizes the broader ecological impact of plastic pollution, including how it disrupts food chains, damages habitats, and threatens biodiversity. This knowledge is valuable because it fosters empathy for wildlife and a sense of responsibility for protecting marine ecosystems. By recognizing the real-world consequences of plastic pollution on marine life, participants are more likely to support conservation efforts, reduce their plastic consumption, and advocate for stronger environmental protections to safeguard vulnerable species.

Following the educational sessions, the quizzes revealed a marked improvement in participants' awareness and empathy towards the impact of plastic pollution on marine life. Post-quiz responses showed that participants had gained a deeper understanding of the specific threats plastic waste poses to vulnerable species, which, in turn, strengthened their resolve to take personal and collective action against plastic pollution. This increased awareness and emotional connection to the issue suggest that the sessions were successful in fostering a greater commitment to environmental conservation and the protection of marine ecosystems.



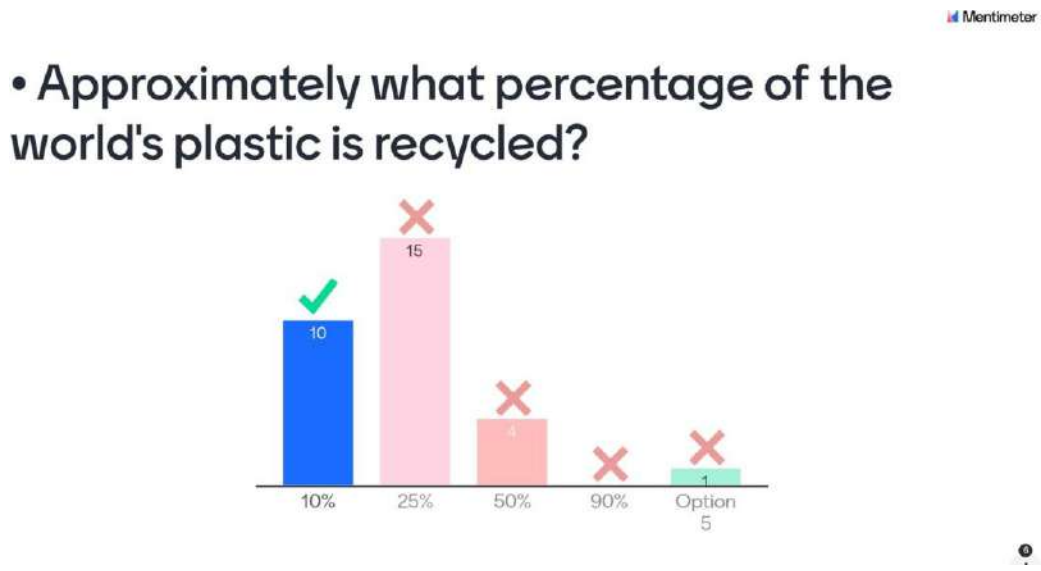
C2 Pre Quiz Results of 4th Question



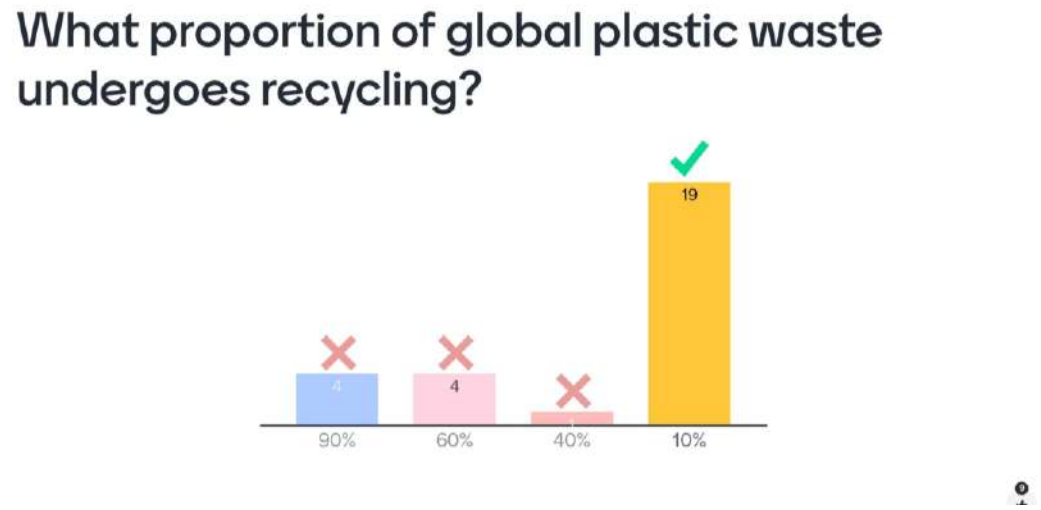
C2 Post Quiz Results of 4th Question

This question provides participants with a deeper understanding of the specific ways plastic pollution harms marine animals, including ingestion, entanglement, and habitat destruction. By detailing the direct and often devastating effects of plastic waste on marine life, this knowledge serves to highlight the severity of the problem and the urgent need for action. Participants gain insight into how plastic pollution can lead to injury, death, and population declines among marine species, disrupting entire ecosystems. This information is crucial because it emphasizes the interconnectedness of all life forms and the broader implications of environmental degradation. Armed with this knowledge, participants are more likely to become advocates for reducing plastic pollution, protecting marine environments, and supporting policies and initiatives aimed at mitigating the impact of plastic waste on wildlife and ecosystems.

Following the educational sessions, the quizzes demonstrated significant growth in participants' understanding of the detrimental effects of plastic pollution on marine animals. Post-quiz results showed an increased awareness of how plastic waste directly contributes to the suffering and decline of marine species, leading to a heightened sense of urgency among participants to address this issue. The educational content effectively deepened participants' recognition of the interconnectedness between human actions and marine ecosystems, motivating them to take more proactive measures to reduce plastic consumption and advocate for stronger environmental protections. This improvement in awareness and commitment indicates that the sessions successfully conveyed the gravity of plastic pollution and its impact on marine life.



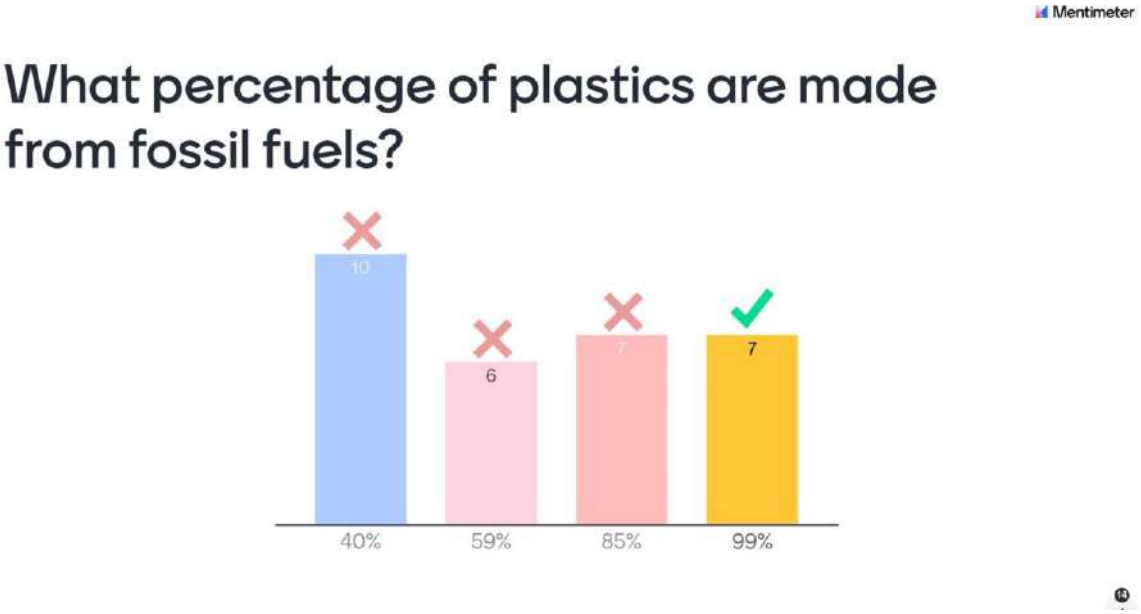
C2 Pre Quiz Results of 5th Question



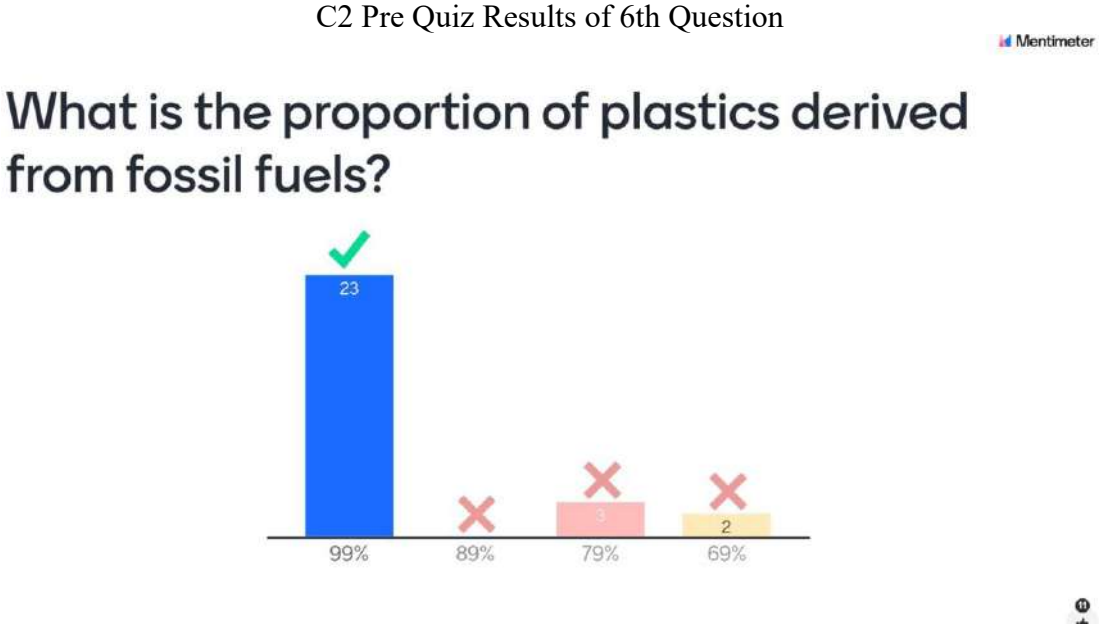
C2 Post Quiz Results of 5th Question

This question draws attention to the reality of global plastic waste management, particularly the limitations of current recycling practices. Learning that only a small percentage of the world's plastic is recycled is an eye-opener for participants, as it challenges the common perception that recycling is a sufficient solution to the plastic problem. This knowledge is essential because it encourages critical thinking about the effectiveness of recycling systems and the need for more comprehensive approaches to plastic waste reduction. Participants gain a deeper understanding of the challenges involved in recycling, such as contamination, the complexity of sorting different types of plastics, and the economic factors that limit recycling rates. By recognizing these limitations, participants are motivated to reduce their overall plastic consumption, support innovative recycling technologies, and advocate for policies that promote a circular economy, where plastic waste is minimized, and resources are reused more efficiently.

The post-quiz results have shown that the educational sessions effectively enhanced participants' understanding of the global plastic recycling crisis. Participants displayed a notable shift in their awareness, recognizing that recycling alone is insufficient to address the growing plastic waste problem. This increased awareness translated into a stronger commitment to reducing plastic use, supporting more innovative and effective recycling practices, and advocating for systemic changes that would lead to a more sustainable management of plastic waste. The improvement in participants' knowledge and attitudes toward recycling limitations underscores the effectiveness of the sessions in fostering a more critical and proactive approach to tackling plastic pollution.



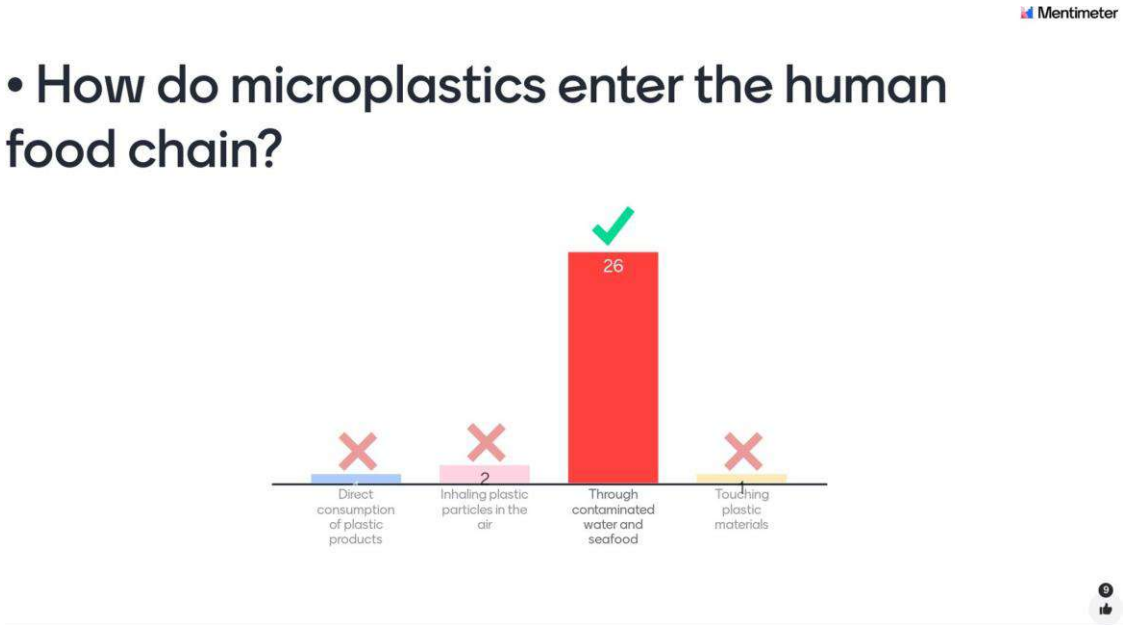
C2 Pre Quiz Results of 6th Question



C2 Post Quiz Results of 6th Question

This question highlights the environmental impact of plastic production by linking it to the fossil fuel industry, which is a major contributor to climate change. Understanding that a significant percentage of plastics are derived from fossil fuels helps participants see the broader implications of plastic use, beyond waste management, as it connects to issues like greenhouse gas emissions, resource depletion, and environmental degradation. This knowledge is valuable because it encourages participants to view plastic pollution through a wider lens, considering not only the end-of-life impact of plastics but also the environmental costs of their production. By making this connection, participants are more likely to support the development and adoption of alternative materials made from renewable resources, as well as policies that reduce our dependence on fossil fuels. This awareness also fosters a greater appreciation for the need to transition to a more sustainable and low-carbon economy.

Post-quiz results have demonstrated that the educational sessions significantly deepened participants' understanding of the connection between plastic production and fossil fuel consumption. Participants showed a marked shift in their awareness, recognizing the broader environmental impact of plastics beyond just pollution. This shift in perspective led to a stronger inclination towards supporting the development and use of alternative, sustainable materials, as well as advocating for policies aimed at reducing fossil fuel dependency. The improvement in participants' understanding of the link between plastics and climate change highlights the effectiveness of the sessions in broadening their environmental consciousness and motivating them to engage in actions that contribute to a more sustainable, low-carbon future.



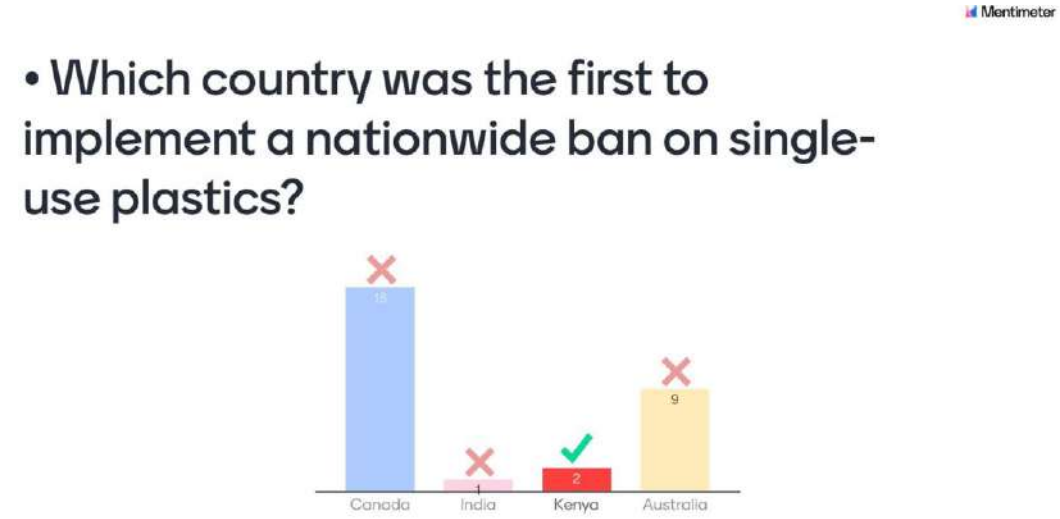
C2 Pre Quiz Results of 7th Question



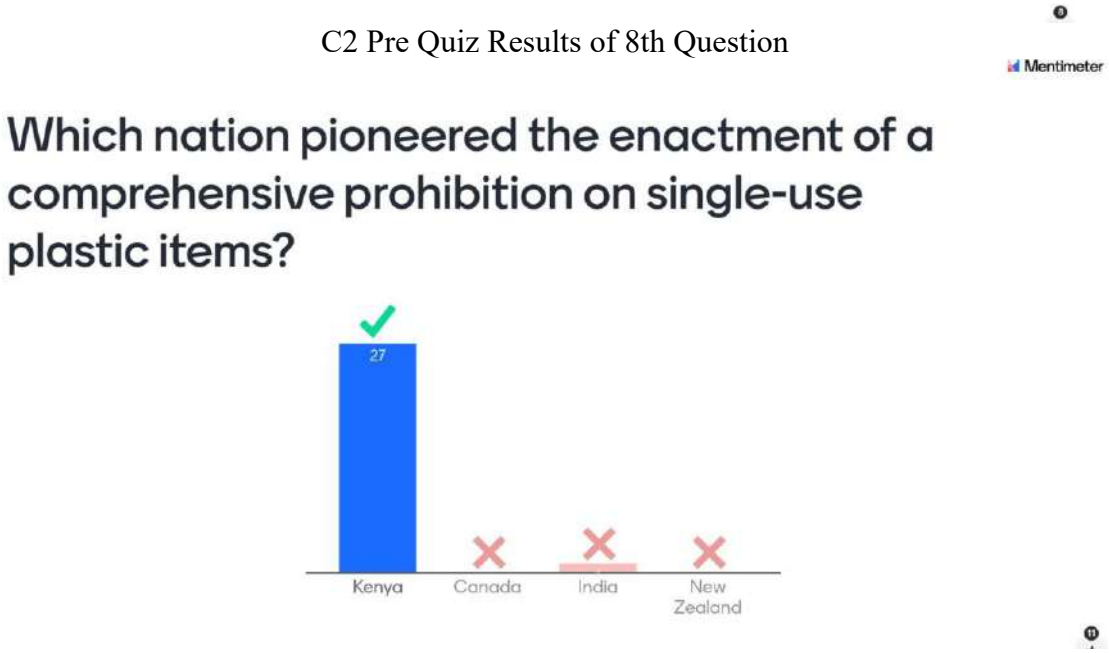
C2 Post Quiz Results of 7th Question

This question serves to raise awareness about the pervasive nature of plastic pollution and its direct impact on human health. Understanding how microplastics enter the food chain—through contaminated water, seafood, and even agricultural products—alerts participants to the potential risks of plastic pollution to their own well-being. This knowledge is crucial because it highlights the fact that plastic pollution is not just an environmental issue but also a public health concern. By learning about the presence of microplastics in the food we eat and the water we drink, participants are more likely to take personal actions to reduce plastic use, support policies that limit microplastic pollution, and advocate for further research into the health effects of microplastics. This awareness also encourages individuals to be more mindful of their consumption choices, favoring products and practices that minimize plastic contamination in the environment.

After completing the post-quiz, participants have demonstrated a heightened awareness of the health risks associated with microplastic pollution. The educational sessions effectively informed them about how microplastics infiltrate the food chain and the subsequent impact on human health. This increased understanding has led participants to reconsider their plastic consumption habits and advocate more strongly for policies aimed at reducing microplastic contamination. The shift in behavior and attitudes observed in the post-quiz results underscores the success of the educational program in motivating participants to take action against plastic pollution, not only for environmental protection but also for the safeguarding of public health.



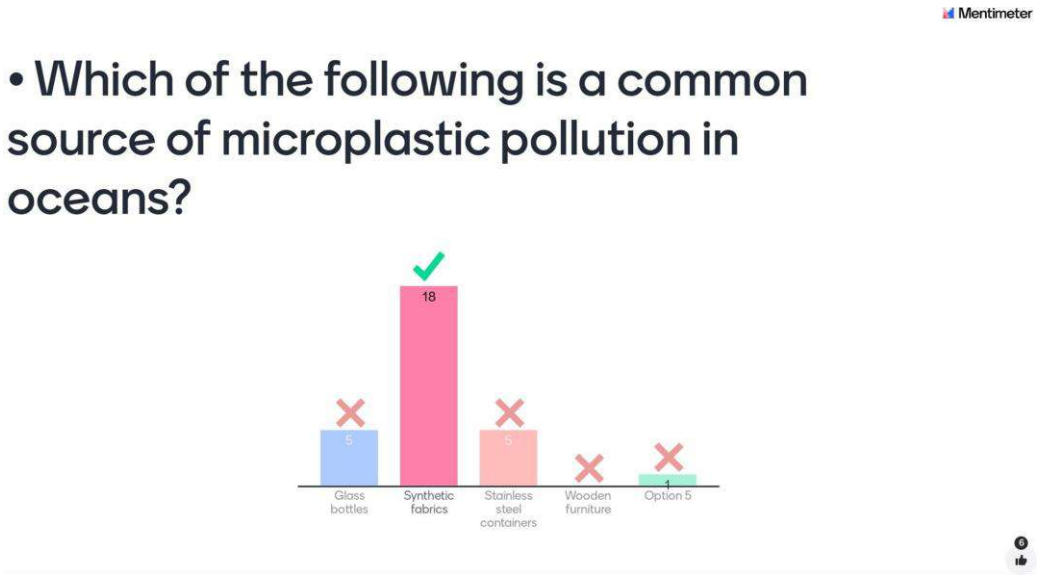
C2 Pre Quiz Results of 8th Question



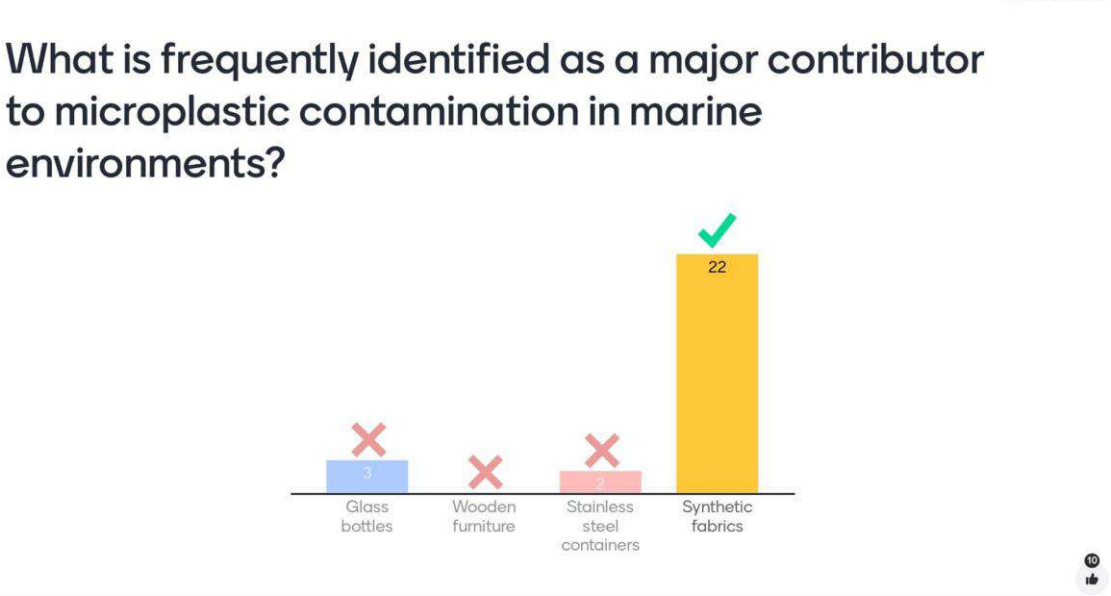
C2 Post Quiz Results of 8th Question

This question was designed to showcase global leadership in the fight against plastic pollution by highlighting the first country to implement a nationwide ban on single-use plastics. Learning about this milestone provided participants with a concrete example of how policy-driven action could lead to significant environmental progress. This knowledge was important because it demonstrated the potential for government intervention to drive systemic change and reduce plastic waste on a national scale. By seeing how one country successfully implemented such a ban, participants were inspired to advocate for similar policies in their own countries and to support international efforts to combat plastic pollution. This awareness also fostered a sense of hope and possibility, showing that meaningful change was achievable through collective action and forward-thinking legislation.

Responses to this question revealed that, following the educational sessions, participants had developed a better understanding of the role of government policies in addressing environmental issues. Many participants expressed a heightened motivation to advocate for similar legislative actions in their own countries and showed increased optimism about the effectiveness of collective efforts. This change demonstrated the educational program's success in expanding participants' perspectives on policy impact and encouraging proactive support for environmental initiatives.



C2 Pre Quiz Results of 9th Question

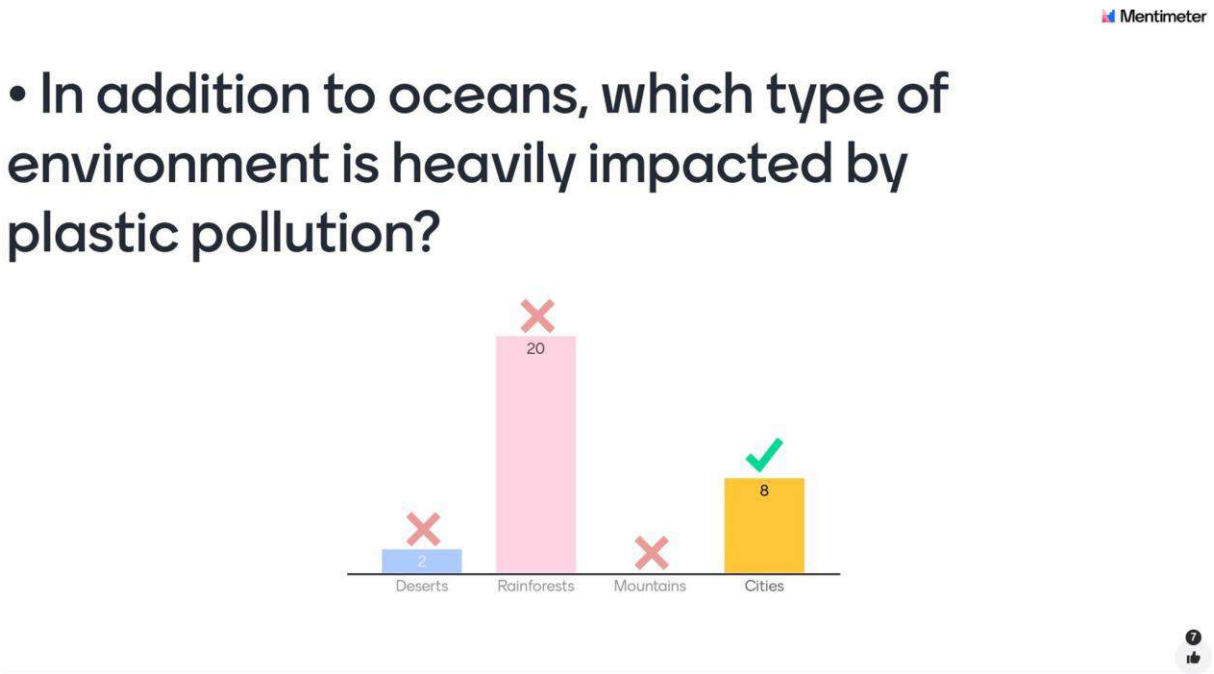


C2 Post Quiz Results of 9th Question

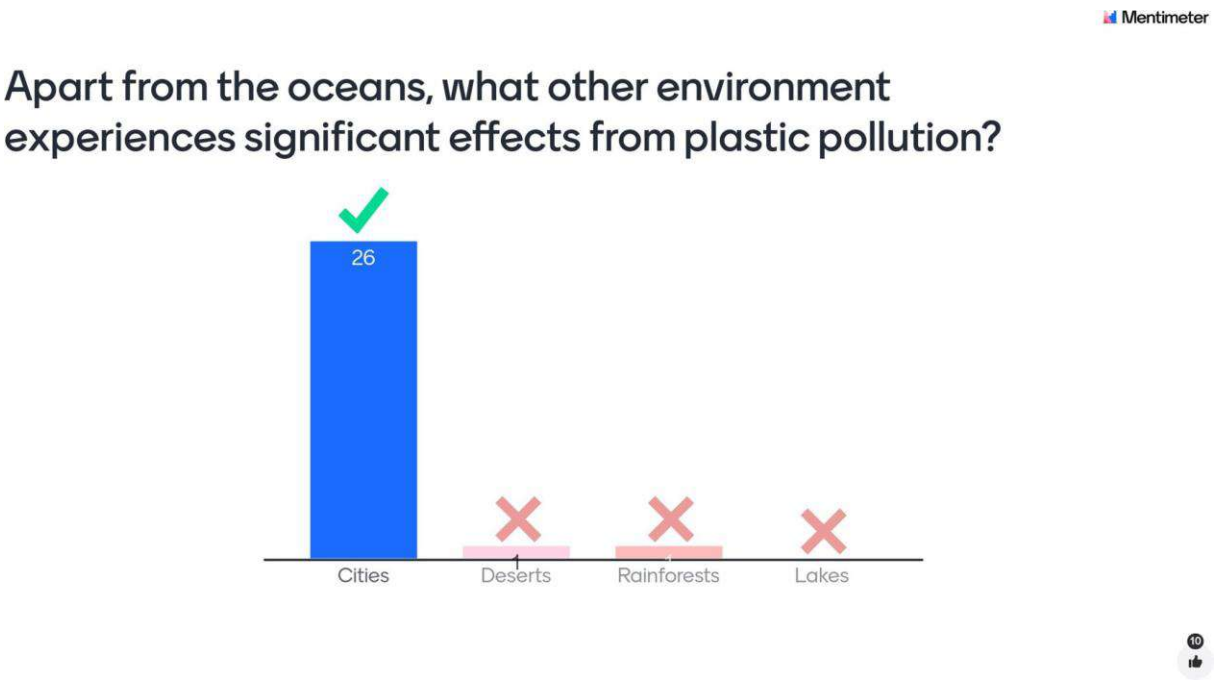
This question broadened the understanding of plastic pollution by highlighting that, beyond oceans, terrestrial environments—such as forests, agricultural lands, rivers, and urban areas—were also significantly impacted by plastic waste. Participants learned that plastic debris not

only contaminated marine ecosystems but also affected soil quality, wildlife habitats, and water sources on land. This knowledge was essential because it expanded the conversation around plastic pollution, emphasizing that it was a global issue affecting multiple ecosystems, not just the oceans. By understanding the far-reaching effects of plastic waste, participants were encouraged to consider how their actions impacted both land and water environments, promoting more holistic approaches to tackling plastic pollution, such as reducing litter, improving waste management systems, and supporting land-based conservation efforts.

Following the educational sessions, participants demonstrated a more comprehensive awareness of the impact of plastic pollution on both terrestrial and marine environments. They showed increased recognition of the need for integrated strategies to address plastic waste and were more motivated to engage in practices that reduce environmental contamination across various ecosystems. This shift highlighted the program's success in deepening participants' understanding of the broader implications of plastic pollution and inspiring them to adopt more comprehensive environmental stewardship.



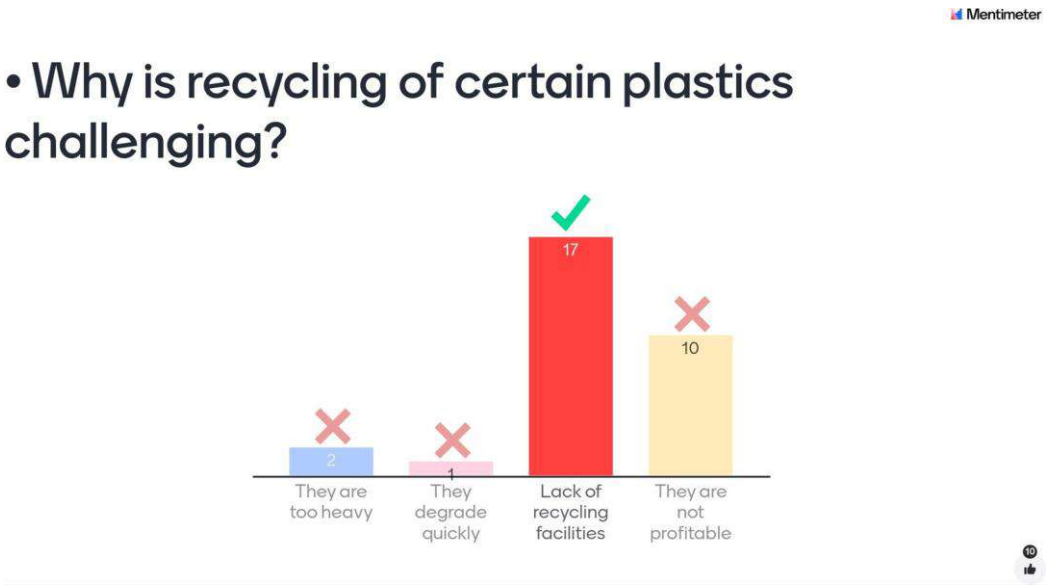
C2 Pre Quiz Results of 10th Question



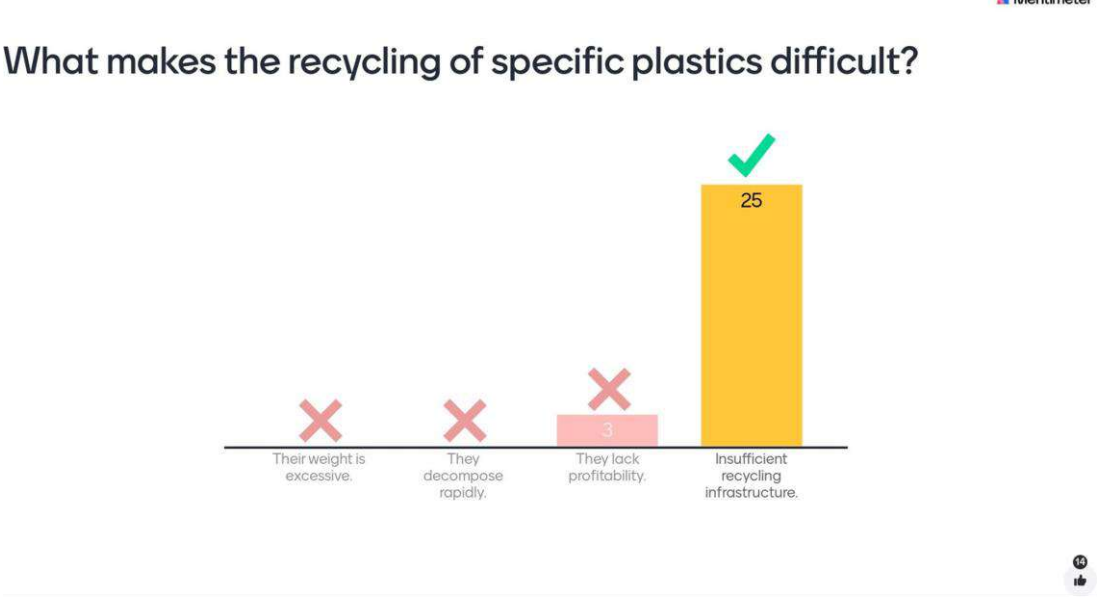
C2 Post Quiz Results of 10th Question

This question addressed the technical and economic difficulties associated with recycling different types of plastics. Participants learned that recycling certain plastics was challenging due to factors such as material composition, contamination, and the lack of infrastructure for processing complex plastic products. This knowledge was critical because it shed light on the limitations of current recycling systems and the need for innovation in waste management. Understanding these challenges encouraged participants to rethink their reliance on plastic and consider more sustainable alternatives. It also highlighted the importance of supporting advances in recycling technology and advocating for product design that prioritizes recyclability. By recognizing the complexities of plastic recycling, participants were better equipped to make informed choices about the materials they used and to push for improvements in waste reduction strategies.

Post-education, participants showed a heightened awareness of the difficulties involved in recycling different plastics and exhibited a more nuanced understanding of the limitations of existing systems. They demonstrated an increased willingness to support innovations in recycling technology and adopt practices that promote recyclability. This shift indicated that the sessions had effectively deepened their understanding of recycling challenges and motivated them to advocate for more effective waste management solutions.



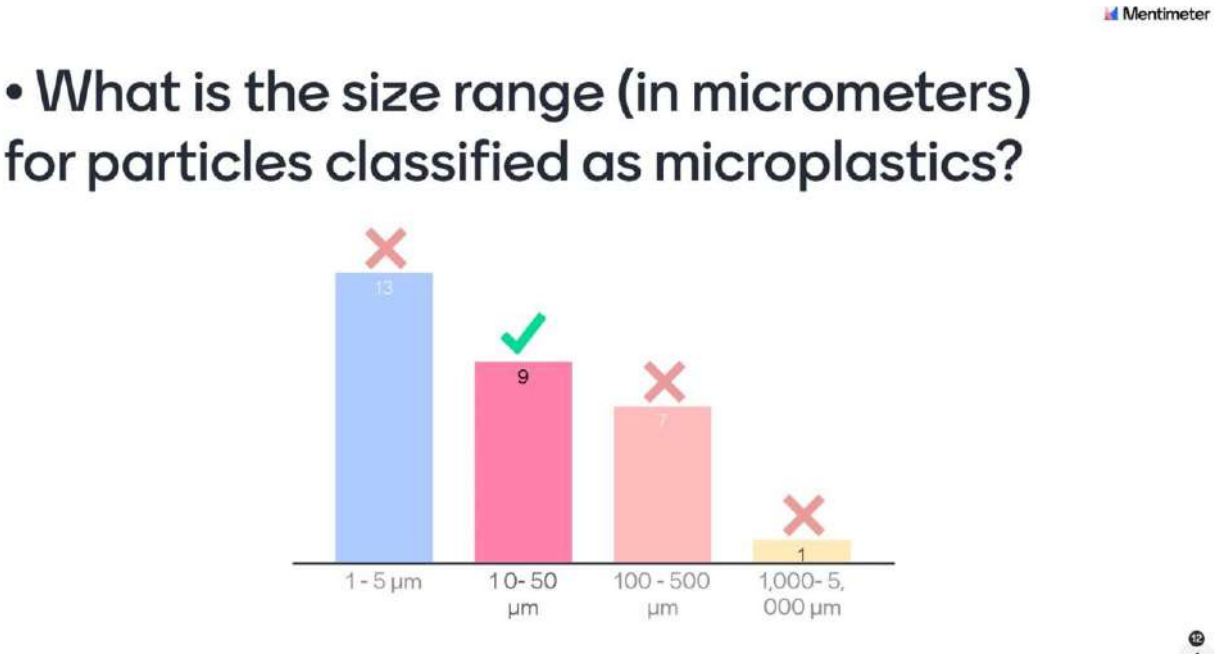
C2 Pre Quiz Results of 11th Question



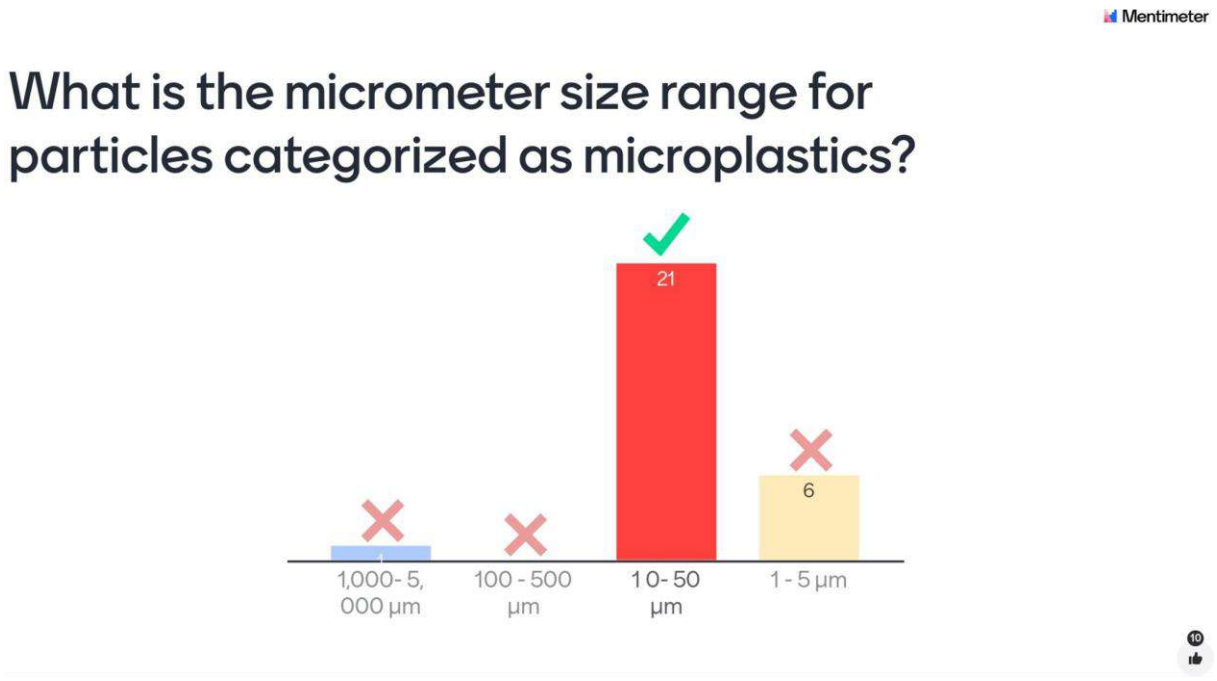
C2 Post Quiz Results of 11th Question

This question educated participants about the specific definition of microplastics, which were classified as plastic particles smaller than 5 millimeters in size, down to 1 micrometer. Understanding the size range of microplastics was valuable because it helped participants grasp the microscopic nature of these pollutants and their ability to infiltrate various environments, including the air, water, and food chains. This knowledge emphasized the difficulty in managing microplastic pollution due to their small size, which made them challenging to detect and remove from ecosystems. By learning about the characteristics of microplastics, participants gained a better appreciation for the need to prevent plastic fragmentation at the source and to support research aimed at understanding the full impact of microplastics on both the environment and human health.

Following the educational sessions, participants showed a deeper awareness of the challenges associated with microplastic pollution and demonstrated an increased understanding of the need for preventive measures. They became more informed about the implications of microplastics and expressed a stronger commitment to supporting initiatives that address plastic fragmentation and its impact on ecosystems and human health. This shift indicated that the sessions had effectively enhanced their understanding of microplastics and motivated them to engage in efforts to mitigate this environmental issue.



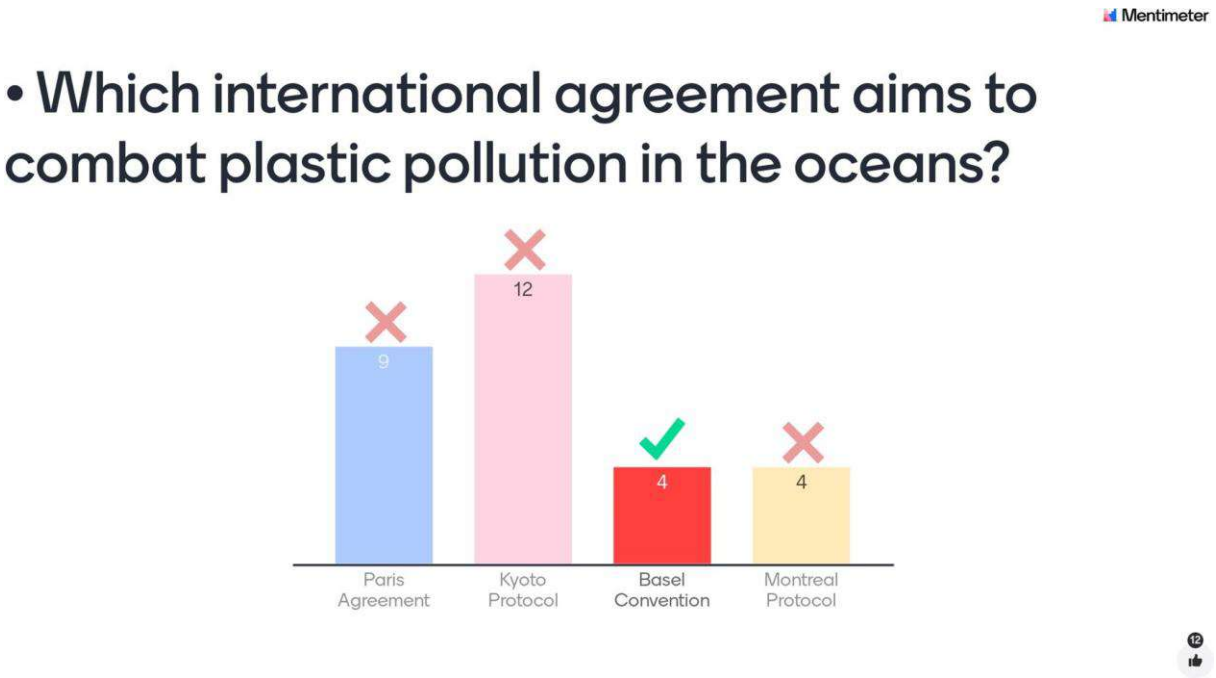
C2 Pre Quiz Results of 12th Question



C2 Post Quiz Results of 12th Question

This question educated participants about the specific definition of microplastics, which were classified as plastic particles smaller than 5 millimeters in size, down to 1 micrometer. Understanding the size range of microplastics was valuable because it helped participants grasp the microscopic nature of these pollutants and their ability to infiltrate various environments, including the air, water, and food chains. This knowledge emphasized the difficulty in managing microplastic pollution due to their small size, which made them challenging to detect and remove from ecosystems. By learning about the characteristics of microplastics, participants gained a better appreciation for the need to prevent plastic fragmentation at the source and to support research aimed at understanding the full impact of microplastics on both the environment and human health.

Following the educational sessions, participants demonstrated a heightened awareness of the challenges associated with microplastic pollution and exhibited a stronger understanding of the need for preventive measures. They showed increased knowledge about the implications of microplastics and expressed a more significant commitment to supporting initiatives that address plastic fragmentation and its effects on ecosystems and human health. This improvement reflected that the sessions had effectively deepened their understanding of microplastics and motivated them to actively participate in efforts to address this pressing environmental issue.



C2 Pre Quiz Results of 13th Question



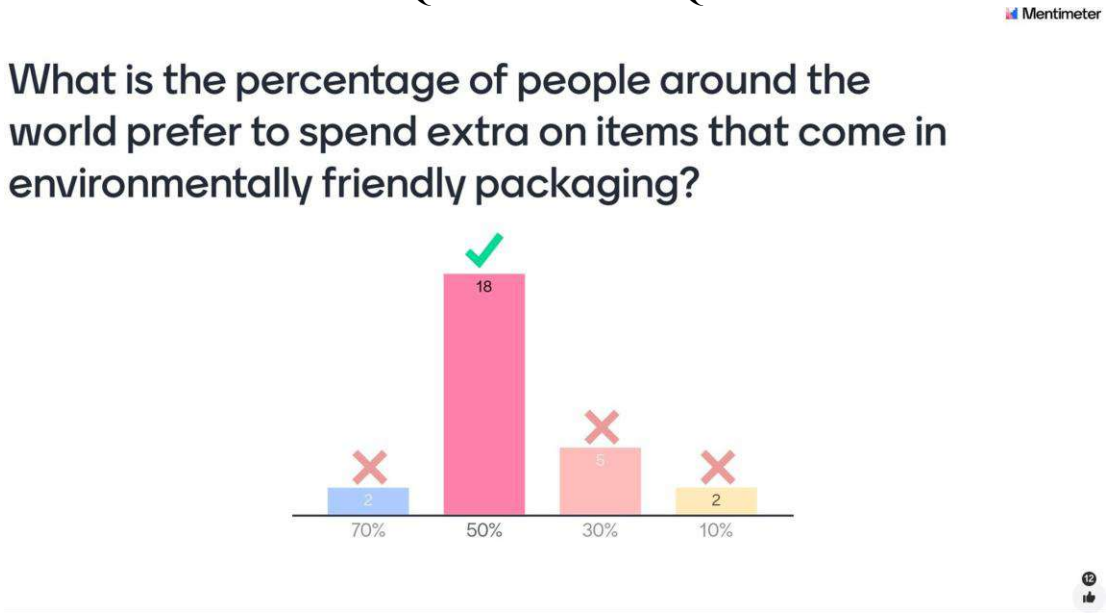
C2 Post Quiz Results of 13th Question

This question introduced participants to global efforts to address plastic pollution by highlighting a key international agreement, such as the United Nations' “Global Partnership on Marine Litter” or other initiatives aimed at reducing plastic waste in the oceans. Understanding the existence of such agreements was important because it demonstrated the global recognition of plastic pollution as a serious environmental issue and the need for coordinated international action. This knowledge empowered participants to see the role of diplomacy and international cooperation in solving environmental problems and encouraged them to support global efforts to combat plastic pollution. It also fostered a sense of shared responsibility, showing that collective action at the international level was essential to protecting the world's oceans and marine life from the ongoing threat of plastic waste.

Following the educational sessions, participants exhibited a greater awareness of international efforts to tackle plastic pollution and showed a deeper appreciation for the role of global agreements. They became more informed about the significance of international collaboration in addressing environmental challenges and demonstrated increased support for global initiatives aimed at reducing plastic waste. This improvement reflected that the sessions had successfully broadened their understanding of global environmental efforts and motivated them to advocate for and engage in international actions to combat plastic pollution.



C2 Pre Quiz Results of 14th Question

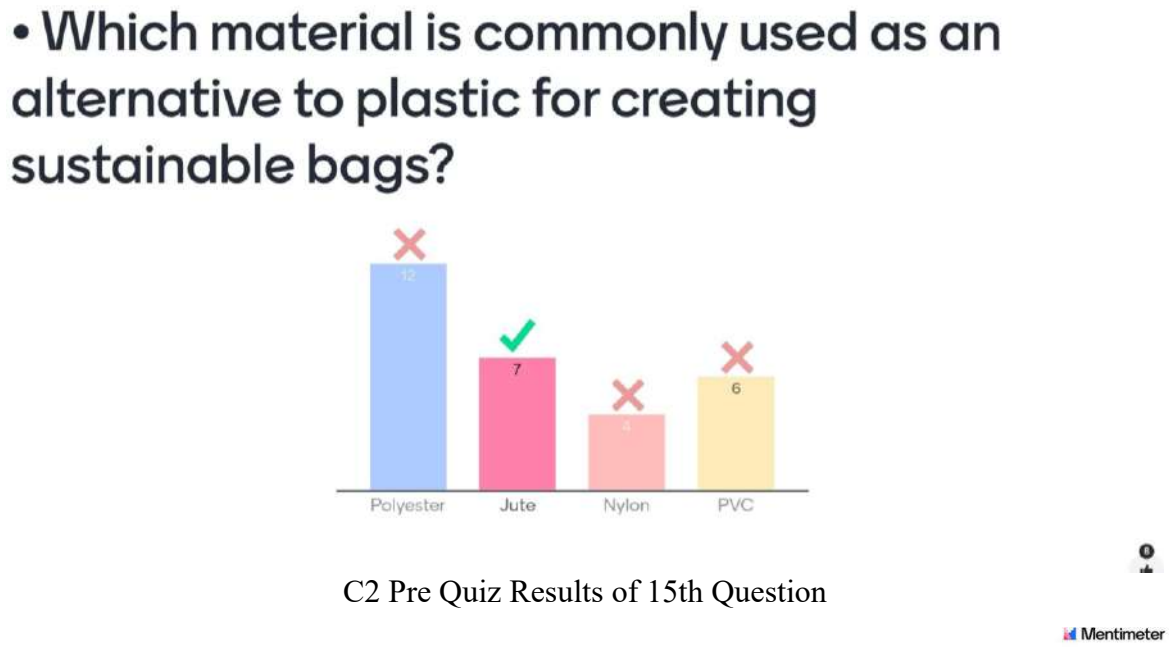


C2 Post Quiz Results of 14th Question

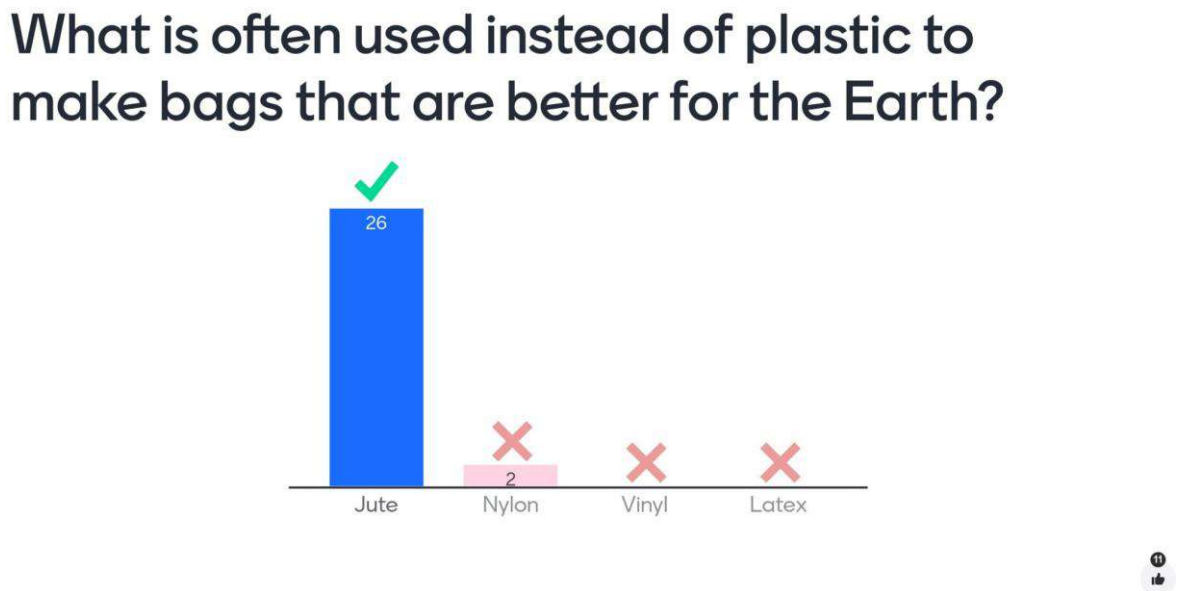
This question provided insight into consumer attitudes towards sustainability, revealing that a significant percentage of consumers were willing to pay a premium for products with eco-friendly packaging. Understanding this trend was important because it highlighted the growing demand for environmentally conscious products and the role of consumer behavior in driving market change. This knowledge was valuable for participants as it emphasized the power of consumer choice in influencing corporate practices and encouraging businesses to adopt more sustainable packaging solutions. By recognizing the willingness of global consumers to prioritize eco-friendly products, participants were inspired to make more sustainable purchasing decisions and to advocate for greener alternatives in their own communities. This awareness

also reinforced the idea that small changes in individual behavior could collectively lead to significant environmental progress.

Following the educational sessions, participants demonstrated increased awareness of consumer trends in sustainability and showed a greater understanding of their role in influencing market practices. They exhibited a stronger commitment to making eco-friendly purchasing decisions and expressed a more proactive attitude toward advocating for sustainable alternatives. This progress indicated that the sessions had effectively deepened their understanding of consumer impact on environmental practices and motivated them to support and promote greener options in their communities.



C2 Pre Quiz Results of 15th Question

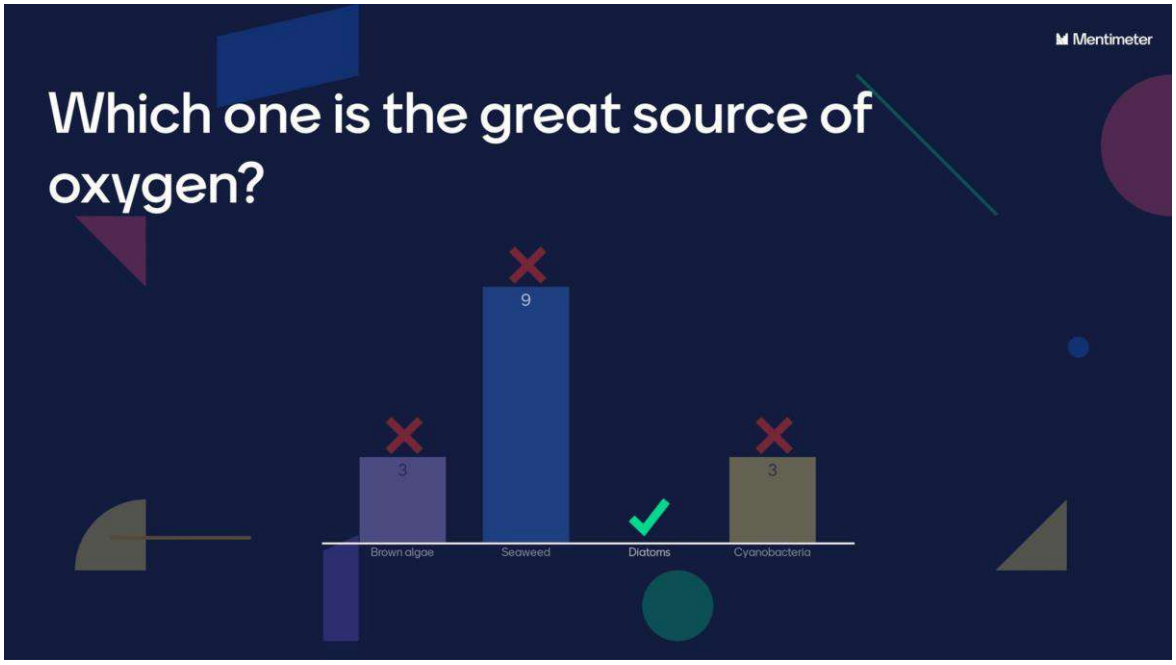


C2 Post Quiz Results of 15th Question

This question informed participants about sustainable alternatives to plastic bags, such as those made from cotton, jute, or recycled paper. Understanding these eco-friendly options was crucial as it provided practical knowledge on how to reduce plastic use in daily activities. This insight encouraged participants to choose reusable and biodegradable bags over single-use plastic ones when shopping or carrying items. Additionally, learning about alternative materials inspired participants to support sustainable design innovations and advocate for policies that favor eco-friendly products. Such awareness promoted a culture of sustainability, emphasizing the collective goal of reducing plastic waste through both personal choices and broader societal practices.

Following the educational sessions, participants showed an enhanced awareness of sustainable bag alternatives and demonstrated a more informed approach to reducing plastic use. They exhibited a greater inclination to choose eco-friendly bags and voiced stronger support for sustainable practices and policies. This shift reflected that the sessions had effectively deepened their understanding of practical solutions to plastic waste and motivated them to integrate these practices into their daily lives, contributing to a broader movement towards environmental sustainability.

C3 Quizzes



C3 Quiz Results of 1st Question

Understanding the primary sources of oxygen is crucial for comprehending the balance of ecosystems and the sustainability of life on Earth. Knowing that phytoplankton, especially

microalgae, are significant producers of oxygen can highlight the importance of maintaining aquatic environments. This information underscores the role of these microorganisms in regulating atmospheric oxygen levels and their contribution to supporting various life forms, including humans.

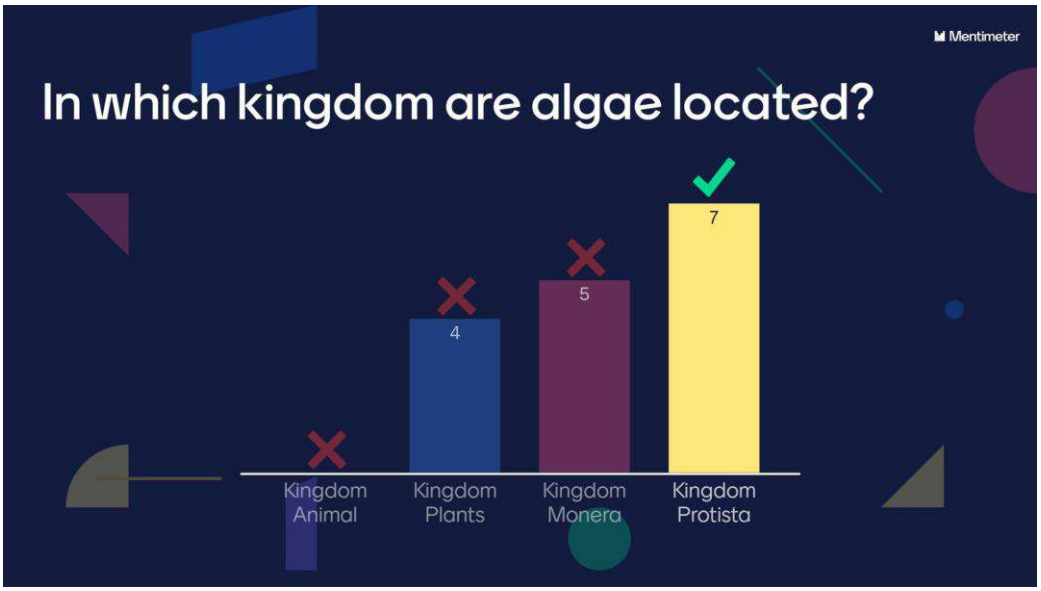
After the educational session, participants demonstrated noticeable progress in their understanding of environmental processes. They were able to better appreciate the role of microalgae in oxygen production and its implications for ecological health, as evidenced by their improved responses in subsequent quizzes and discussions.



C3 Quiz Results of 2nd Question

Identifying blue-green microalgae, such as cyanobacteria, is important for recognizing their ecological roles and their impact on aquatic environments. This knowledge helps in understanding their functions in nutrient cycling and their potential effects on water quality and ecosystem health. It also emphasizes the significance of these organisms in various environmental and biotechnological applications.

Following the educational activities, participants showed clear advancement in their comprehension of microalgae types and their functions. This was reflected in their enhanced ability to accurately identify blue-green microalgae in quizzes and discussions, demonstrating a deeper grasp of their biological and ecological importance.



C3 Quiz Results of 3rd Question

Understanding the classification of algae within the biological kingdoms is essential for grasping the diversity and evolutionary relationships among different organisms. This knowledge helps in categorizing algae correctly and recognizing their unique characteristics, contributing to a more comprehensive understanding of biodiversity and ecological interactions.

Post-education, participants exhibited significant growth in their knowledge of biological classification. They successfully identified the kingdom of algae and could articulate the relevance of this classification in understanding ecological roles and relationships, as evidenced by their improved performance in quizzes and discussions.

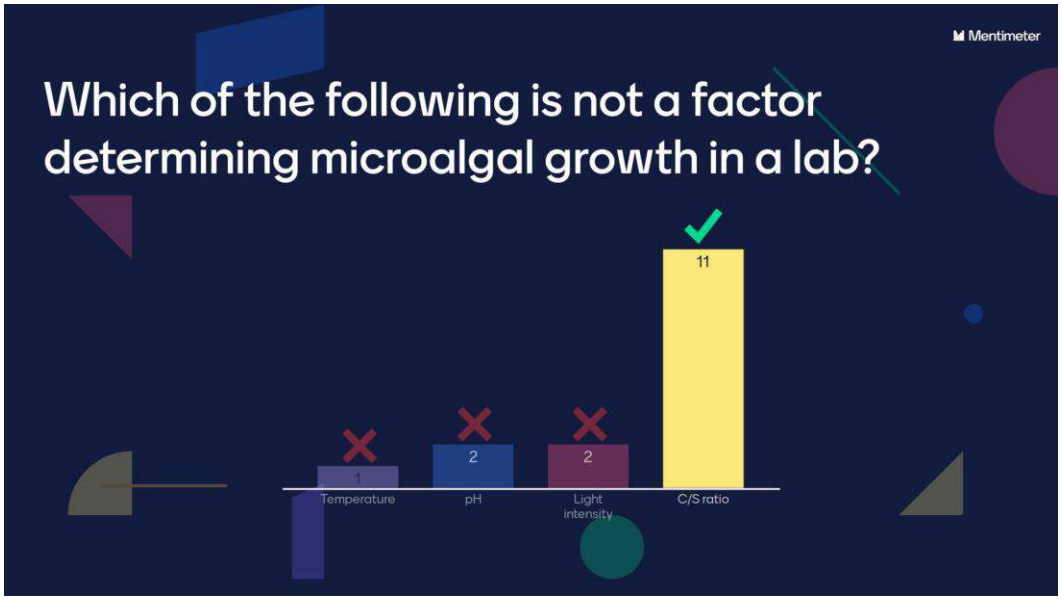


C3 Quiz Results of 4th Question

Identifying false statements about microalgae and algae helps clarify misconceptions and ensure accurate understanding of their biological roles and environmental impacts. Microalgae

are not a kind of microscopic bacteria; they are photosynthetic eukaryotic organisms. Additionally, while algae can sometimes cause human health issues, they do not directly attack human tissues in the way that pathogenic bacteria or viruses might. They also do not break down harmful ammonia from water; rather, certain types of algae can help in nutrient cycling and may indirectly influence ammonia levels. Understanding these distinctions is crucial for accurate scientific knowledge and application.

Following the educational session, participants showed improved critical thinking skills and a better grasp of the facts regarding algae. They were able to identify and correct false statements about microalgae and algae, reflecting a deeper understanding of their biological characteristics and ecological roles, as demonstrated by their enhanced performance in quizzes and discussions.



C3 Quiz Results of 5th Question

Identifying factors that influence microalgal growth in a laboratory setting is essential for optimizing culture conditions and achieving desired experimental outcomes. Understanding which factors, such as light, temperature, nutrients, and CO2 levels, impact microalgal growth helps in designing effective growth protocols and improving the efficiency of microalgae-based applications, including biofuel production and wastewater treatment.

Following the educational sessions, participants showed a marked improvement in their ability to distinguish relevant growth factors from those that are not significant. This was evident in their enhanced performance on quizzes, where they accurately identified which factors are crucial for microalgal growth and which are not, reflecting a deeper understanding of laboratory cultivation conditions.



C3 Quiz Results of 6th Question

Knowing the correct list of fermentative products is important for understanding the biochemical processes involved in fermentation. This knowledge is crucial for applications in food production, biotechnology, and waste management. It helps in recognizing the types of byproducts generated through fermentation and their potential uses or impacts, such as ethanol, lactic acid, and methane.

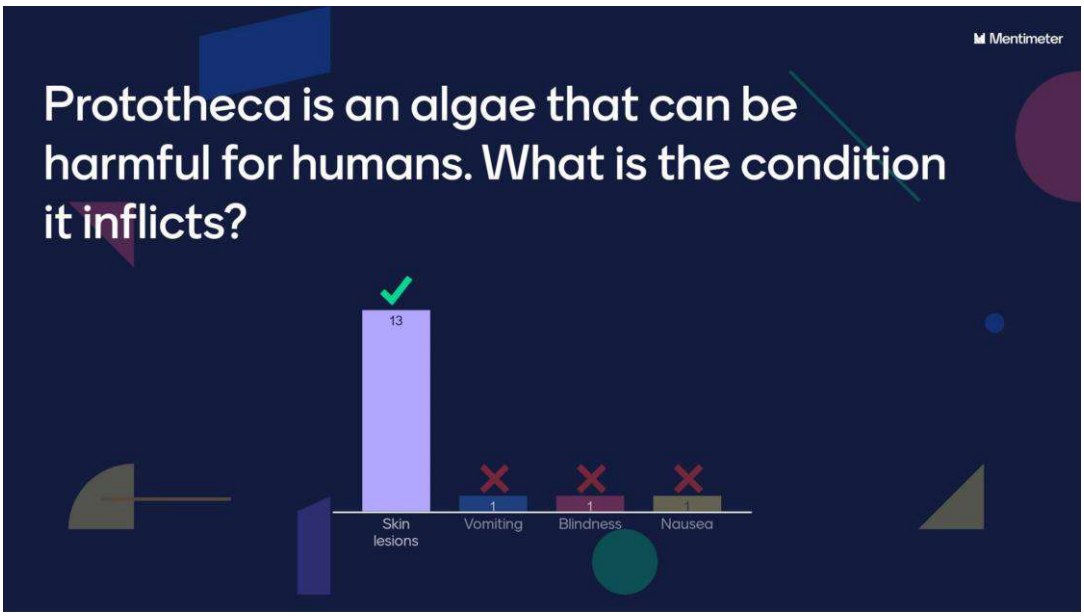
After the educational intervention, participants demonstrated clear progress in their knowledge of fermentative products. They were able to correctly identify and list various products of fermentation in quizzes and discussions, indicating a better grasp of fermentation processes and their practical applications.



C3 Quiz Results of 7th Question

Understanding which fuels are classified as second-generation is crucial for evaluating their potential as sustainable energy sources. Second-generation fuels are derived from non-food biomass and are considered more environmentally friendly compared to first-generation fuels. Knowledge of these fuels supports informed decisions in energy production and sustainability practices.

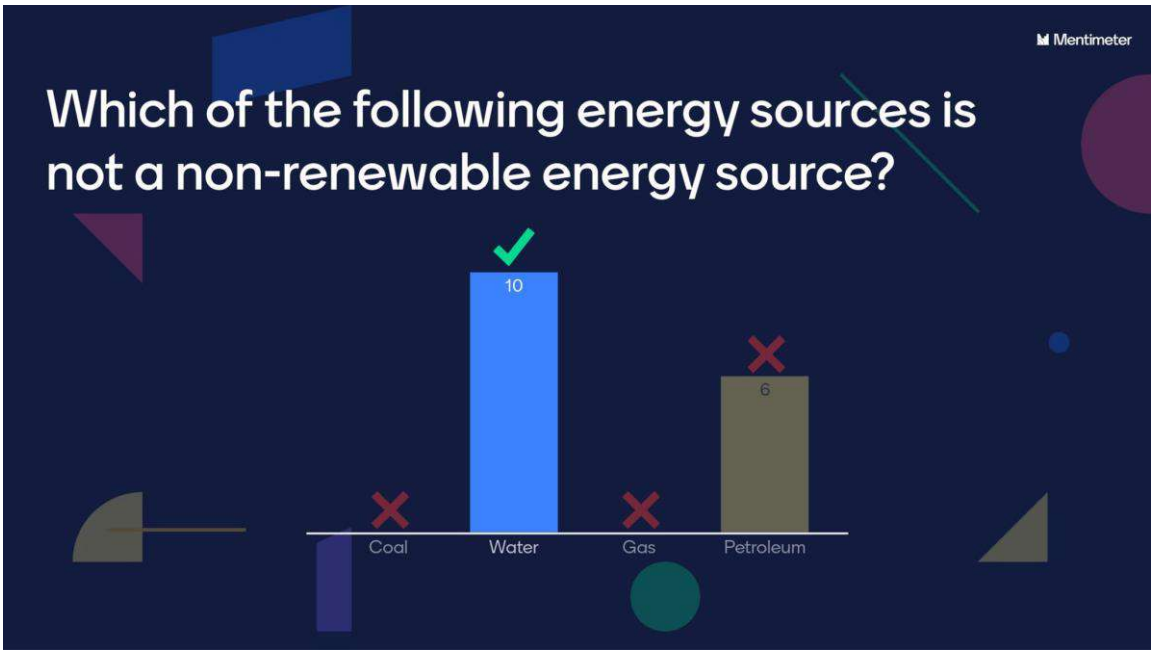
Post-education, participants showed significant improvement in their understanding of different fuel generations. They were able to accurately classify and describe second-generation fuels, reflecting a better grasp of renewable energy sources and their advantages over conventional fuels, as demonstrated by their improved responses in quizzes and discussions.



C3 Quiz Results of 8th Question

Understanding the pathogenic potential of certain algae, such as Prototheca, is important for recognizing and mitigating health risks associated with exposure to these microorganisms. Prototheca can cause infections in humans, particularly in immunocompromised individuals, and knowledge of these conditions helps in implementing preventive measures and treatment protocols.

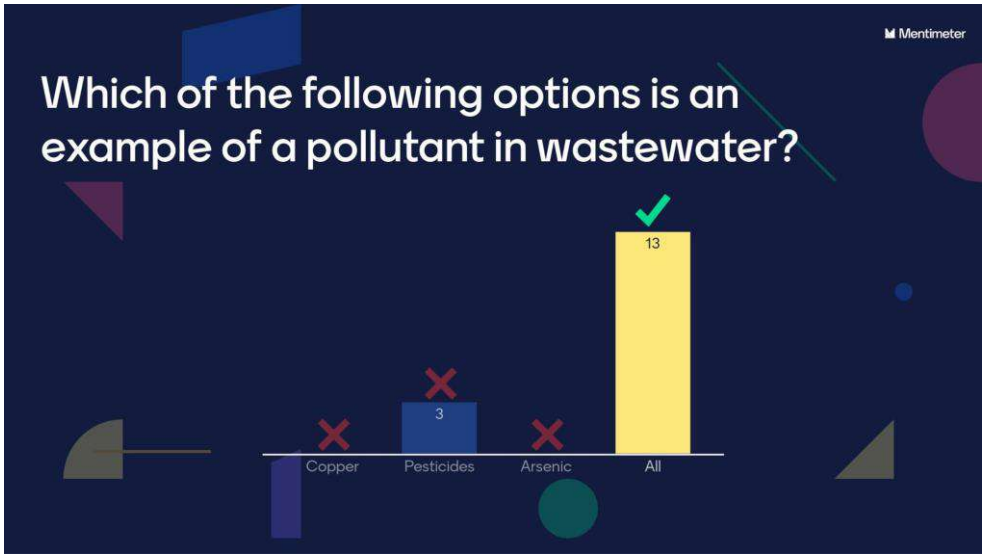
Following the educational training, participants showed notable advancement in their awareness of algae-related health issues. They were able to correctly identify the conditions caused by Prototheca infections and understand their implications, as reflected in their improved performance on quizzes and discussions about the impact of harmful algae on human health.



C3 Quiz Results of 9th Question

Understanding the distinction between renewable and non-renewable energy sources is fundamental for addressing energy sustainability and environmental impact. Non-renewable energy sources, such as coal, oil, and natural gas, are finite and contribute to environmental degradation, while renewable sources, like solar and wind energy, offer sustainable alternatives. Recognizing which energy sources are renewable helps in promoting and implementing more sustainable energy practices.

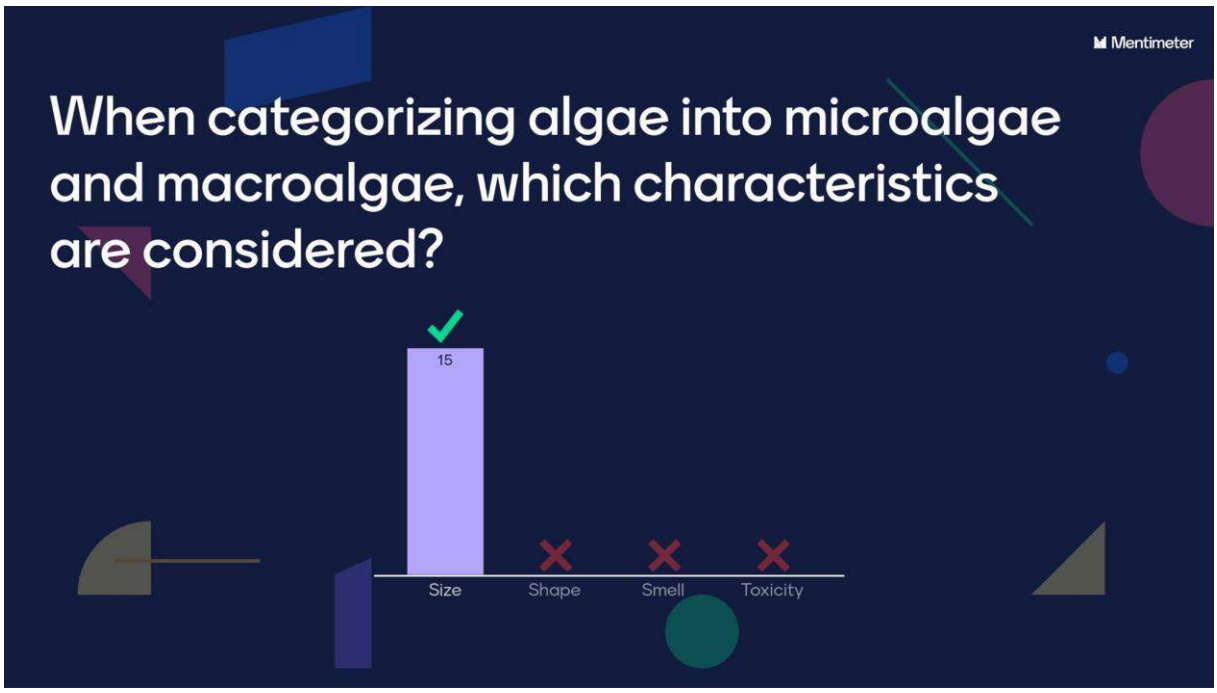
Following the educational session, participants demonstrated improved knowledge of energy sources and their classifications. They were able to accurately identify which energy sources are non-renewable and which are renewable, reflecting a better understanding of sustainable energy solutions, as seen in their enhanced quiz performance.



C3 Quiz Results of 10th Question

Identifying pollutants in wastewater is crucial for managing and treating water to protect environmental and human health. Common wastewater pollutants include organic matter, heavy metals, and pathogens, and understanding these helps in developing effective treatment methods and regulatory measures. Recognizing specific pollutants enables better design and implementation of wastewater management practices.

After the educational training, participants showed significant progress in their ability to identify various pollutants in wastewater. They could correctly specify examples of contaminants and understand their impact on water quality, as evidenced by their improved quiz results and discussions on effective wastewater treatment strategies.



C3 Quiz Results of 11th Question

Categorizing algae into microalgae and macroalgae is essential for understanding their biological and ecological roles. Characteristics such as size, structure, and habitat are key factors in this classification. Microalgae are typically microscopic and single-celled, while macroalgae are larger and often multicellular. This classification helps in studying their functions, applications, and environmental impacts.

Following the educational session, participants showed notable improvement in their understanding of algae classification. They were able to correctly describe the characteristics used to differentiate microalgae from macroalgae, reflecting a deeper grasp of algal biology and its implications, as demonstrated by their enhanced performance in related quizzes and discussions.



C3 Quiz Results of 12th Question

Identifying incorrect information about algae is crucial for accurate understanding and application in various fields. While algae are indeed classified by size into microalgae and macroalgae, and can be used to produce clean energy and obtain ingredients for sunscreen, it is incorrect to state that algae do not have toxic properties. Some algae produce toxins that can be harmful to humans and marine life, known as harmful algal blooms or algal toxins. Recognizing this helps in managing risks associated with algae and ensuring safe use in various applications.

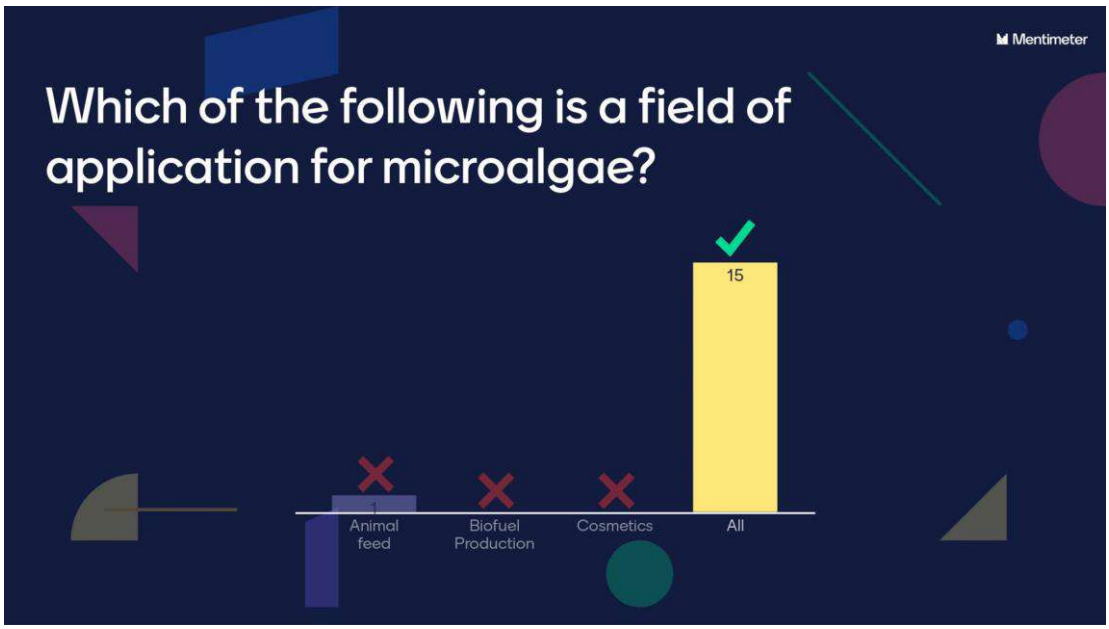
Following the educational session, participants demonstrated a better understanding of the diverse aspects of algae, including their potential risks. They were able to correctly identify the incorrect statement about algae and comprehend the implications of algal toxins, as reflected in their improved quiz performance and discussions on the subject.



C3 Quiz Results of 13th Question

Understanding the cellular compartments responsible for color in algae is key to comprehending their classification and photosynthetic processes. The color of algae is determined by pigments located in specialized cellular compartments such as plastids. For instance, chloroplasts contain chlorophyll, giving green algae their color, while other pigments like phycobilins in cyanobacteria contribute to their blue-green hue. Recognizing these compartments helps in studying algae's functional roles and their adaptation to different environments.

After the educational training, participants showed clear advancement in their knowledge of algal pigmentation. They were able to accurately identify the cellular compartments responsible for the various colors in algae and understand their significance in photosynthesis and classification, as reflected in their improved quiz results and discussions.

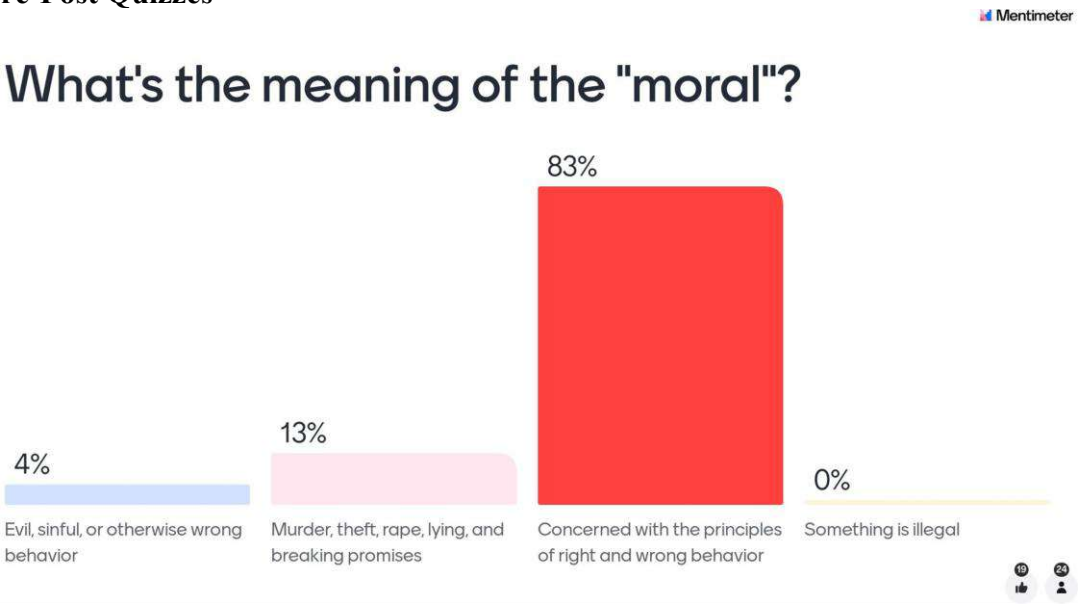


C3 Quiz Results of 14th Question

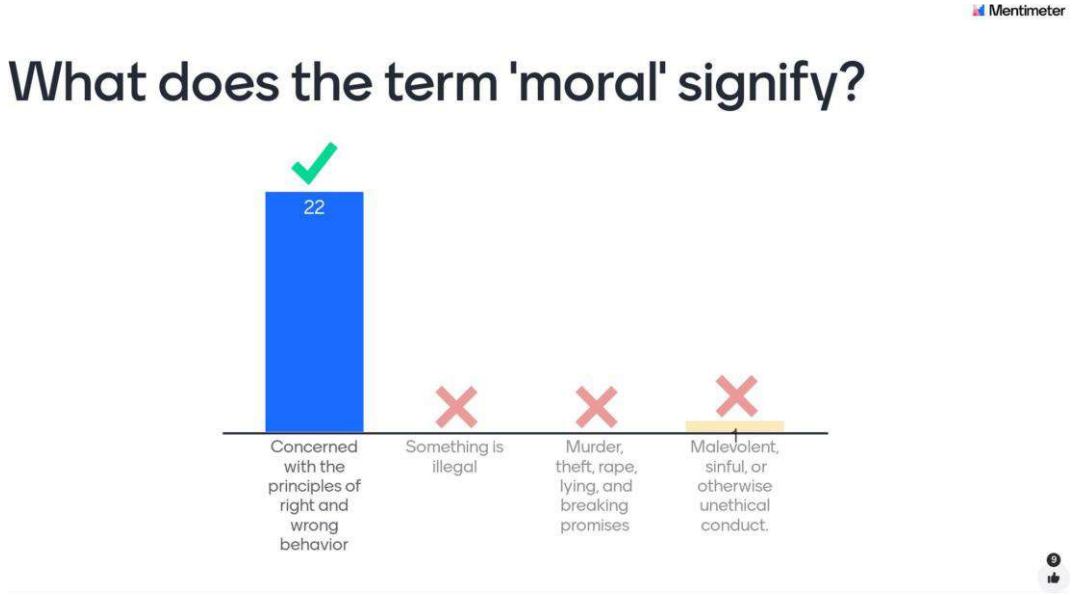
Identifying fields of application for microalgae highlights their versatility and potential in various industries. Microalgae are used in areas such as biofuel production, wastewater treatment, and nutritional supplements due to their high growth rates and valuable biochemical compounds. Understanding these applications is crucial for leveraging microalgae in sustainable solutions and innovative technologies.

Following the educational session, participants demonstrated improved awareness of the diverse applications of microalgae. They could effectively list and explain various uses of microalgae, such as in biofuels and environmental management, as evidenced by their enhanced performance in quizzes and discussions on the subject.

C4 Pre-Post Quizzes



C4 Pre Quiz Results of 1st Question

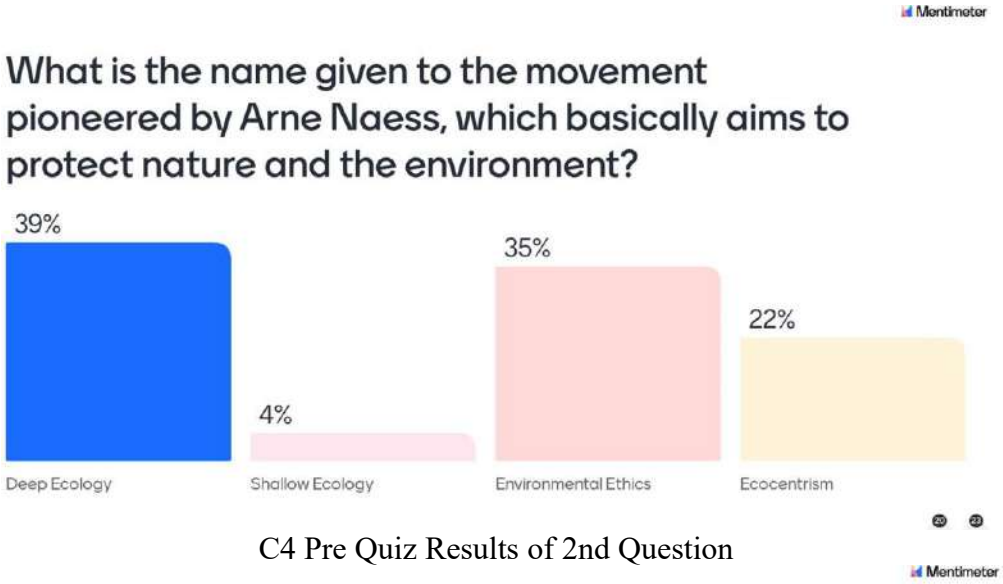


C4 Post Quiz Results of 1st Question

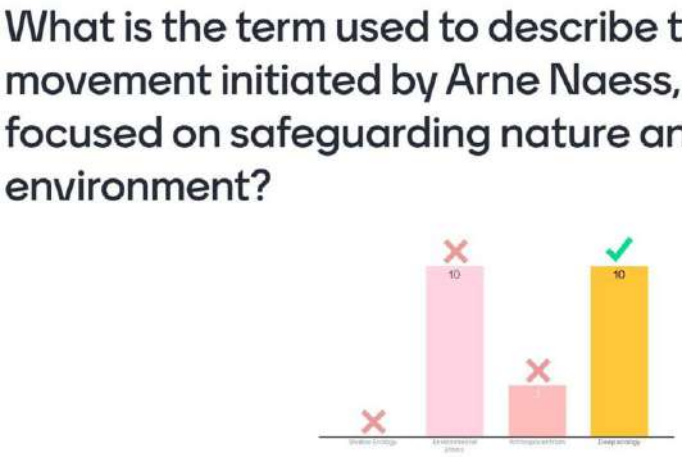
This question seeks to clarify the concept of "moral," which refers to the principles of right and wrong behavior and the goodness or badness of human character. Understanding morality is fundamental to making ethical decisions, both in personal life and in broader societal contexts, including environmental stewardship. By comprehending the concept of morality, participants can better engage in discussions about ethical responsibilities toward the environment and other living beings.

In the pre-quiz phase, participants generally had a basic understanding of the term "moral." However, after the educational sessions, the post-quiz results indicated a more refined understanding of morality in various contexts, particularly in relation to environmental ethics.

This demonstrated that the training effectively deepened participants' grasp of moral concepts and their applications.



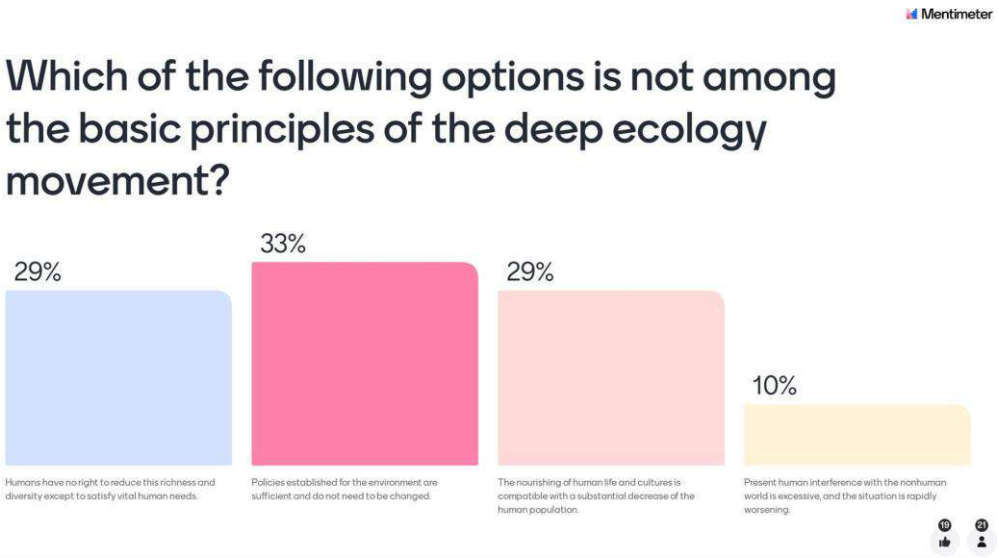
C4 Pre Quiz Results of 2nd Question



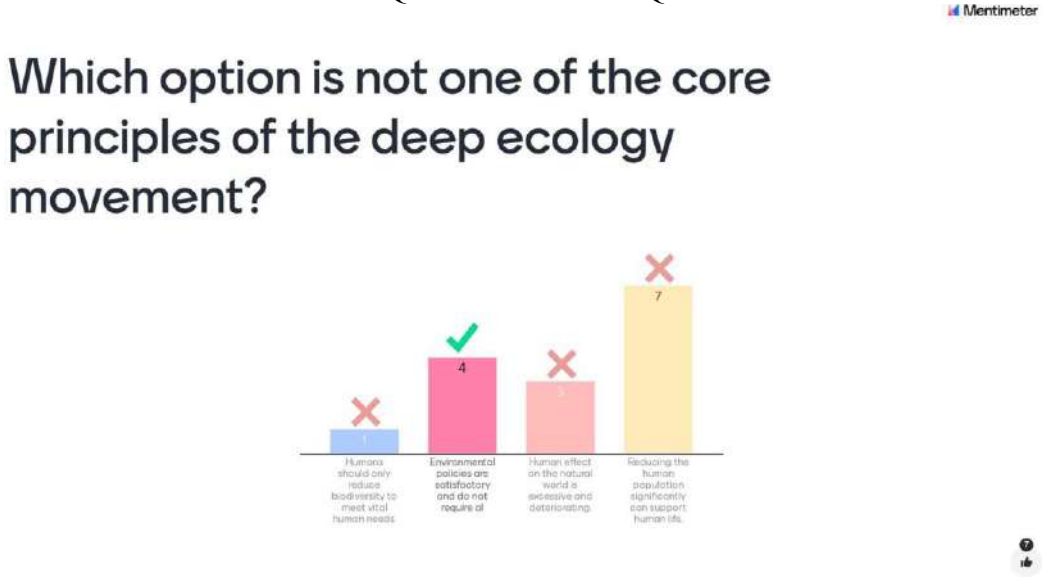
C4 Post Quiz Results of 2nd Question

This question focuses on participants' knowledge of the deep ecology movement, pioneered by Norwegian philosopher Arne Naess, which advocates for the intrinsic value of all living beings and the preservation of the natural environment. Understanding this movement helps participants appreciate the philosophical underpinnings of modern environmental activism and emphasizes the need for a holistic approach to environmental protection. This knowledge is crucial for fostering a deeper commitment to sustainability.

Before the educational sessions, participants had limited awareness of the deep ecology movement. However, the post-quiz results showed significant improvement, with participants being able to identify and explain the principles of deep ecology. This progress highlighted the training's effectiveness in raising awareness about environmental philosophies.



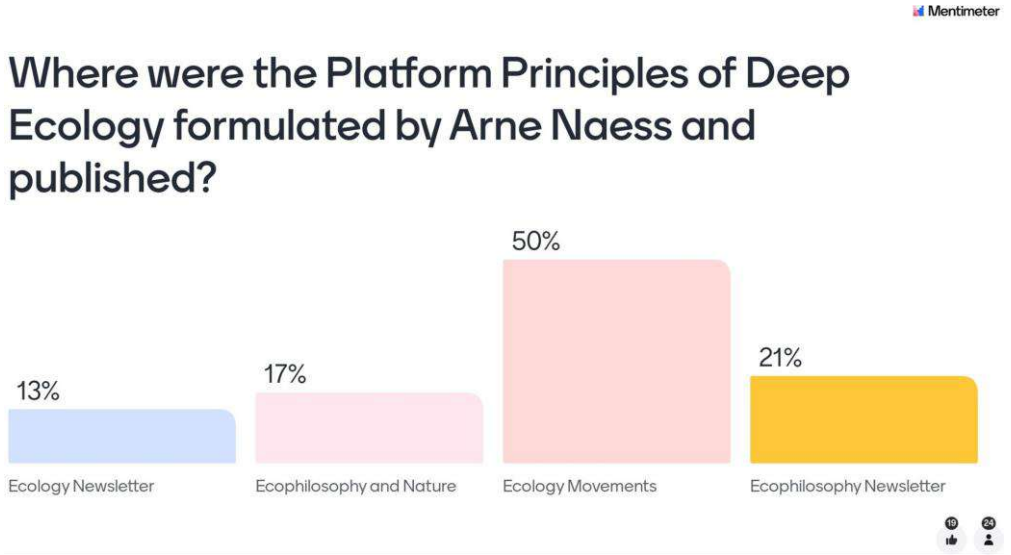
C4 Pre Quiz Results of 3rd Question



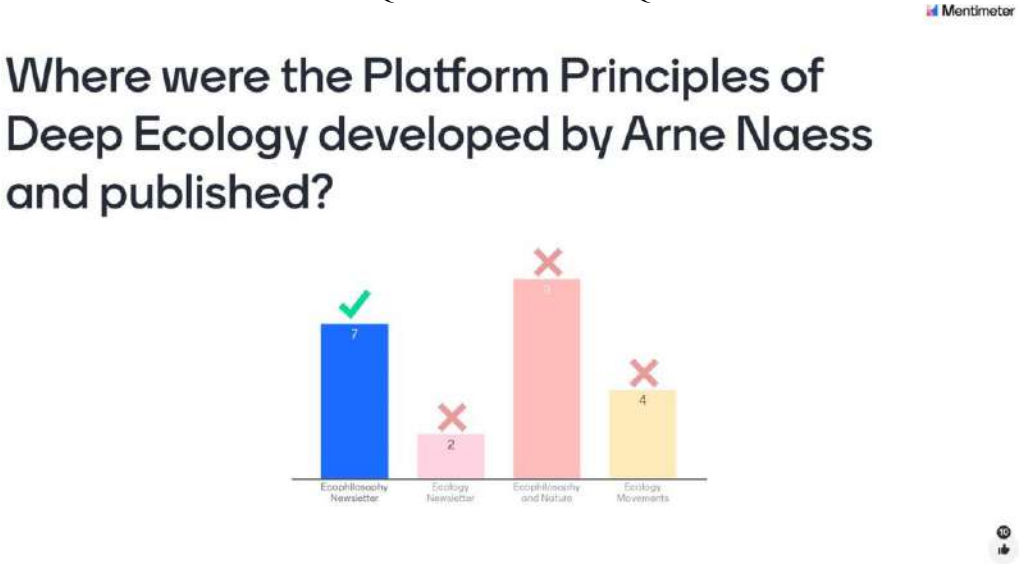
C4 Post Quiz Results of 3rd Question

This question aims to assess participants' familiarity with the core principles of the deep ecology movement, such as the intrinsic value of nature, the reduction of human interference, and the commitment to biodiversity. By recognizing which options are not part of this framework, participants can better understand the movement's key tenets and their implications for environmental action. This knowledge is valuable for those advocating for deep ecological approaches to sustainability.

The pre-quiz results indicated that participants had a general understanding of deep ecology but were unsure about its specific principles. After the educational sessions, the post-quiz responses demonstrated that participants had gained a clearer and more precise understanding of the deep ecology movement, underscoring the positive impact of the training.



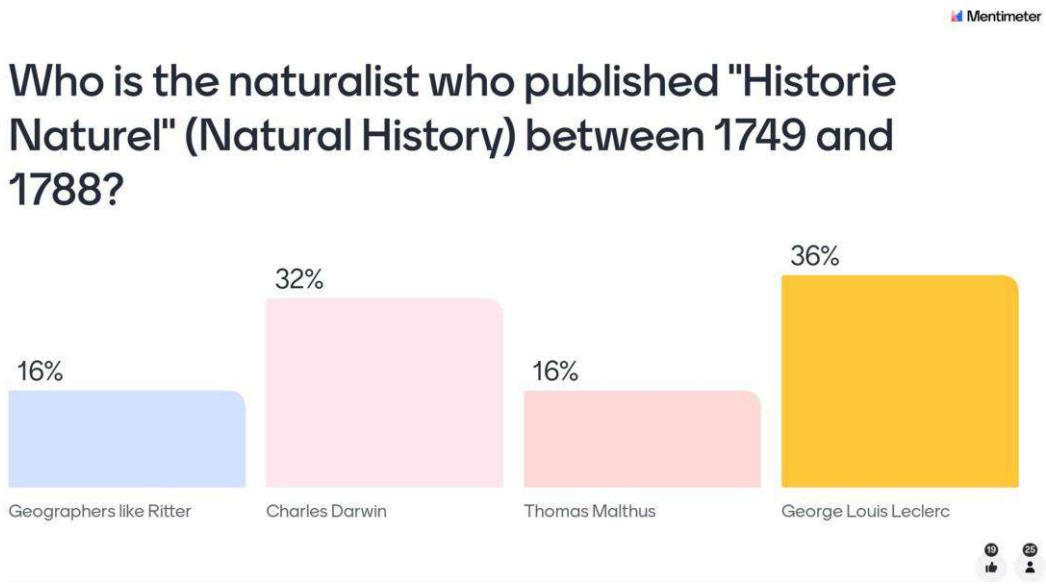
C4 Pre Quiz Results of 4th Question



C4 Post Quiz Results of 4th Question

This question explores the historical context of the deep ecology movement by asking participants to identify where Arne Naess formulated and published the Platform Principles of Deep Ecology. Understanding the origins of these principles provides participants with insight into the development of ecological philosophy and its influence on contemporary environmental thought. This knowledge is important for grasping the global reach of environmental philosophy.

Before the educational sessions, participants were generally unfamiliar with the specific details regarding the publication of the Platform Principles of Deep Ecology. However, after the training, they demonstrated a stronger grasp of this historical information in the post-quiz results, reflecting the effectiveness of the educational material.



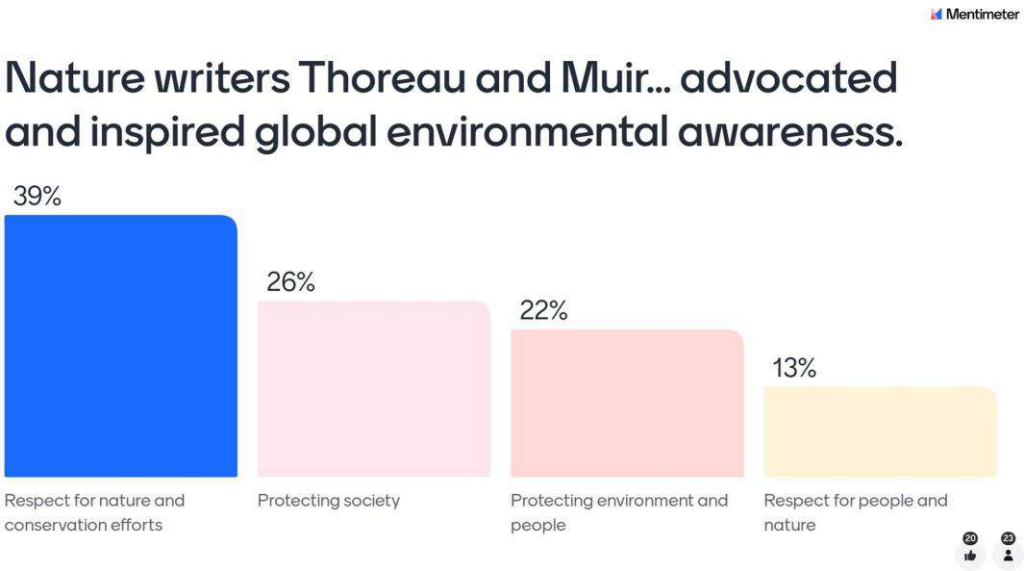
C4 Pre Quiz Results of 5th Question



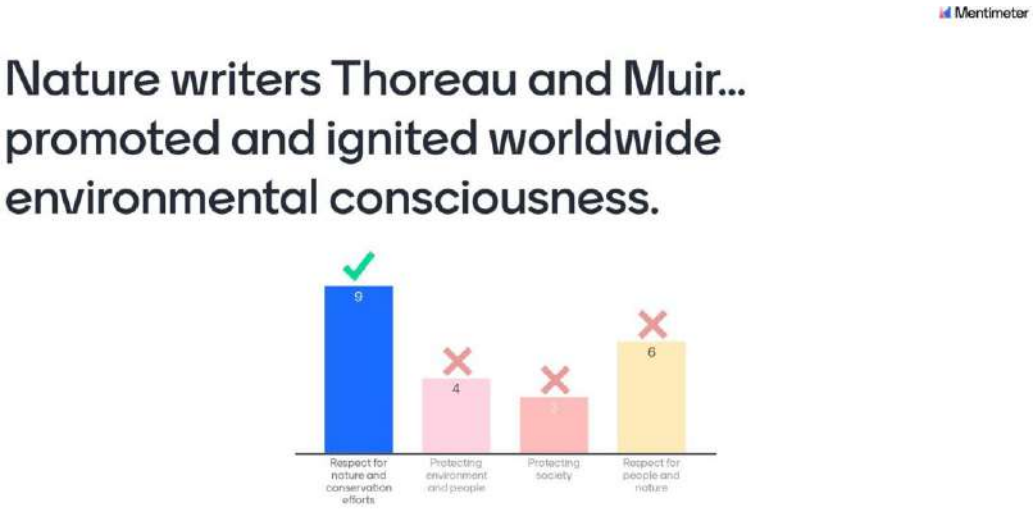
C4 Post Quiz Results of 5th Question

This question highlights the contributions of naturalist Georges-Louis Leclerc, Comte de Buffon, who published "Historie Naturelle" (Natural History). Understanding the works of early naturalists like Buffon helps participants appreciate the historical development of natural science and its role in shaping modern ecological and environmental studies. This knowledge is essential for those interested in the history of science and environmental thought.

The pre-quiz responses showed that participants had limited knowledge of Buffon and his contributions to natural science. After the educational sessions, the post-quiz results indicated significant improvement, with participants gaining a deeper understanding of Buffon's work and its importance. This demonstrated that the training successfully enhanced participants' awareness of the history of natural science.



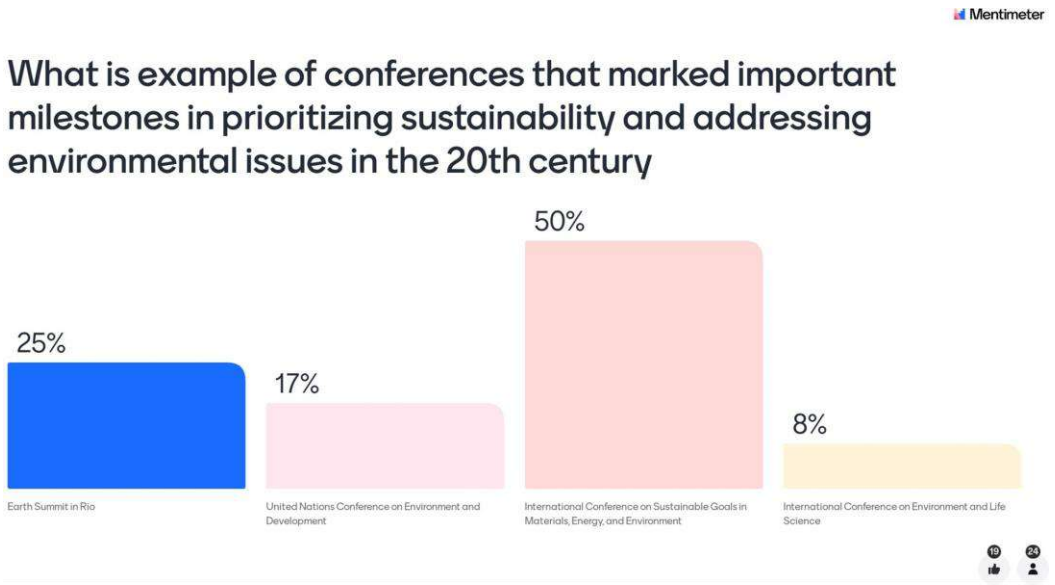
C4 Pre Quiz Results of 6th Question



C4 Post Quiz Results of 6th Question

This question aims to assess participants' knowledge of the contributions of nature writers like Henry David Thoreau and John Muir, who played a crucial role in advocating for environmental conservation and inspiring global environmental awareness. Understanding their work helps participants appreciate the cultural and literary roots of modern environmentalism and the power of writing in promoting ecological consciousness. This knowledge is valuable for anyone interested in environmental advocacy and education.

Before the educational sessions, participants were generally aware of Thoreau and Muir but lacked detailed knowledge of their contributions. The post-quiz results showed that participants had developed a more comprehensive understanding of these nature writers and their influence on global environmental movements, reflecting the training's success in deepening their appreciation of environmental literature.



C4 Pre Quiz Results of 7th Question

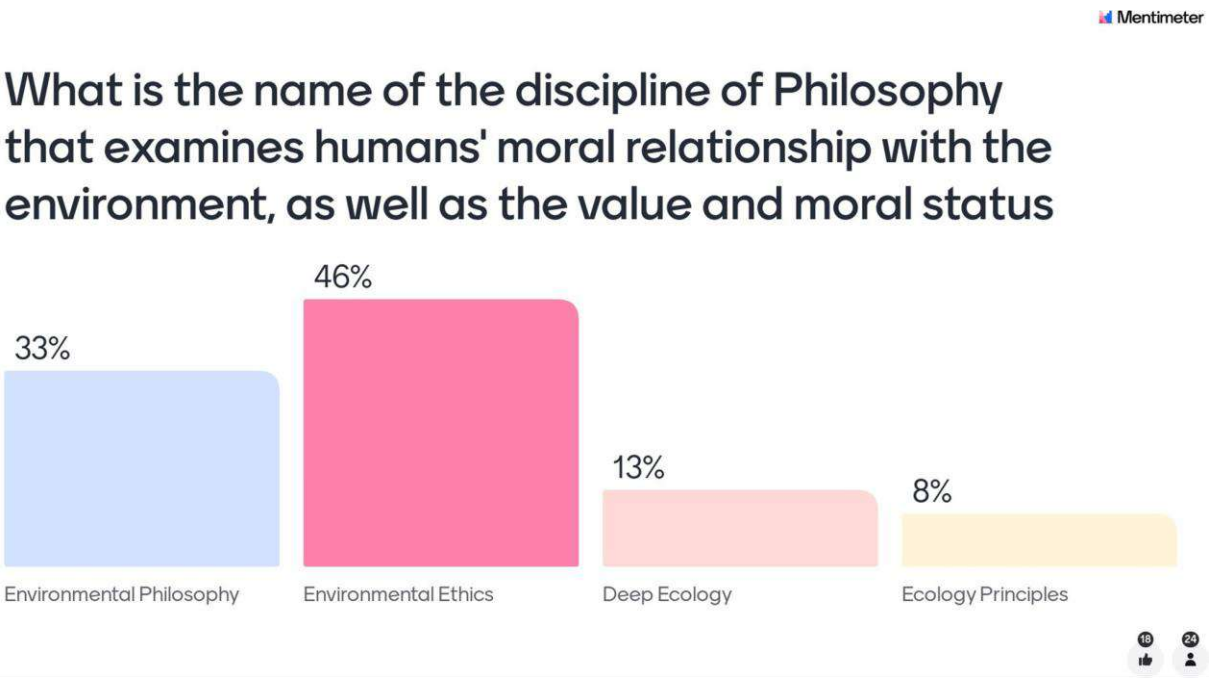


C4 Post Quiz Results of 7th Question

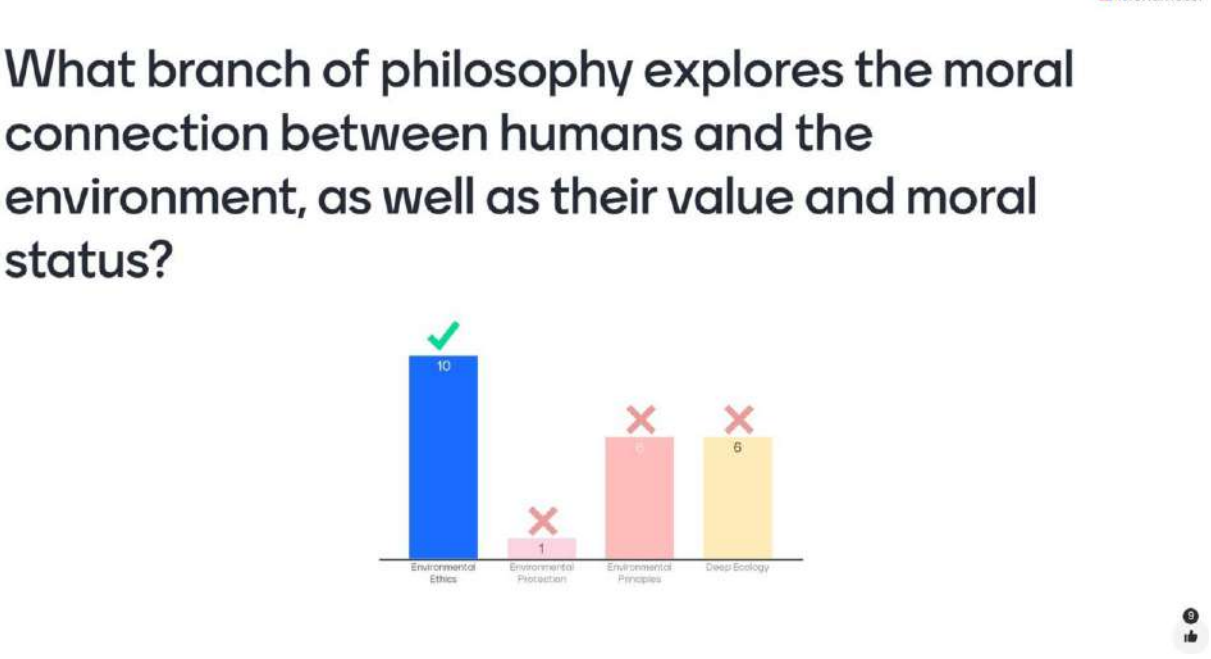
This question highlights key environmental conferences, such as the United Nations Conference on the Human Environment in 1972 and the Earth Summit in 1992, which marked significant milestones in global efforts to prioritize sustainability and address environmental issues. Understanding these conferences helps participants recognize the role of international collaboration in environmental governance and the importance of setting global environmental agendas. This knowledge is crucial for those engaged in environmental policy and international relations.

The pre-quiz results indicated that participants had some awareness of environmental conferences but were unsure about their specific importance. After the educational sessions, the post-quiz responses demonstrated that participants had gained a clearer understanding of these

conferences and their impact on global environmental efforts, showing the training's effectiveness in raising awareness of international environmental milestones.



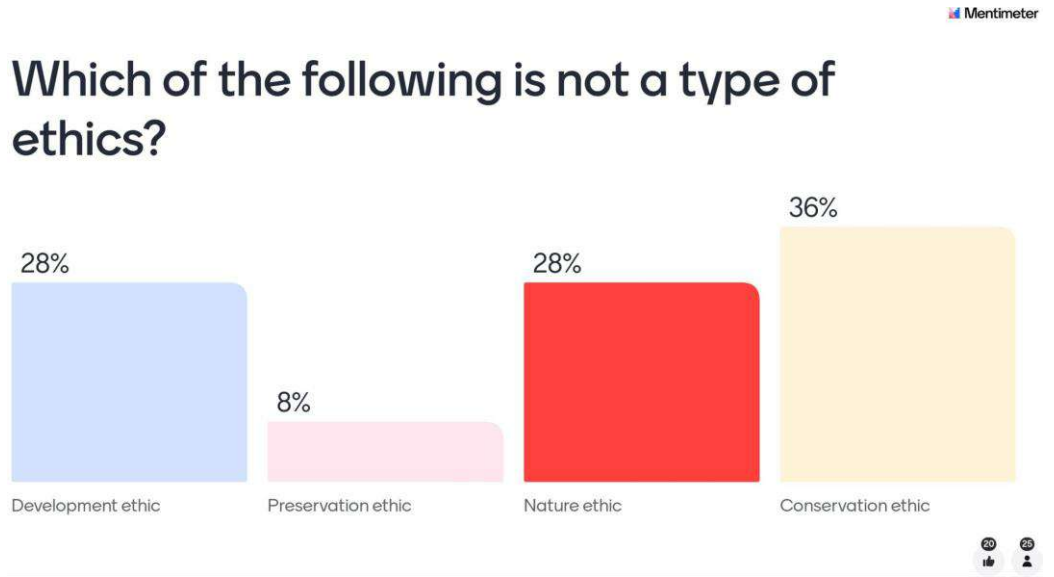
C4 Pre Quiz Results of 8th Question



C4 Post Quiz Results of 8th Question

This question assesses participants' knowledge of environmental ethics, a branch of philosophy that examines humans' moral relationship with the environment and the value and moral status of the natural world. Understanding environmental ethics is essential for developing a deeper sense of responsibility toward the environment and for guiding ethical decision-making in environmental policy and conservation. This knowledge is important for those involved in environmental advocacy, law, and education.

Before the educational sessions, participants had a basic understanding of environmental ethics but lacked a more detailed comprehension of its principles. The post-quiz results showed that participants had significantly improved their understanding of environmental ethics, indicating the success of the training in enhancing their knowledge of this philosophical discipline.



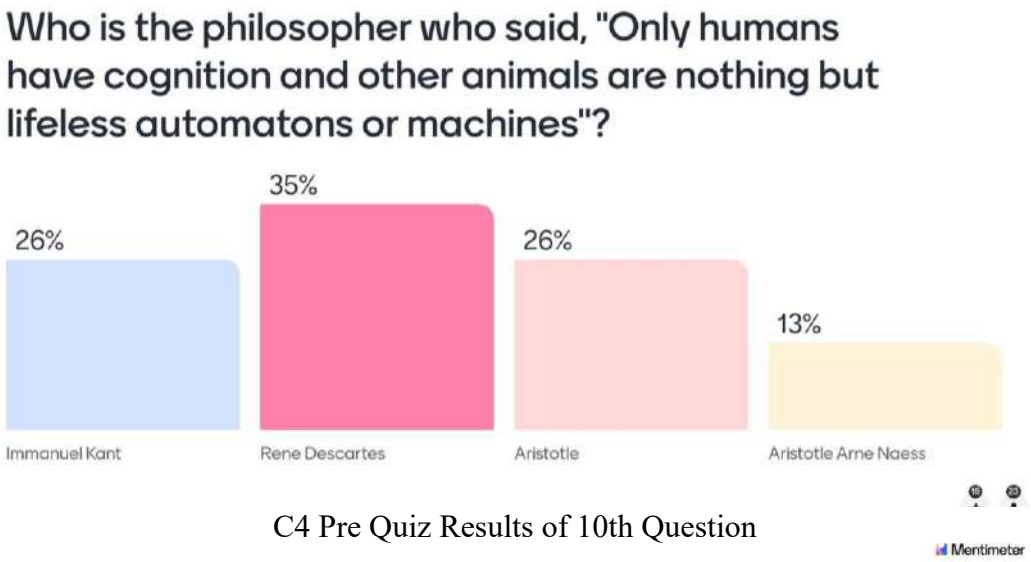
C4 Pre Quiz Results of 9th Question



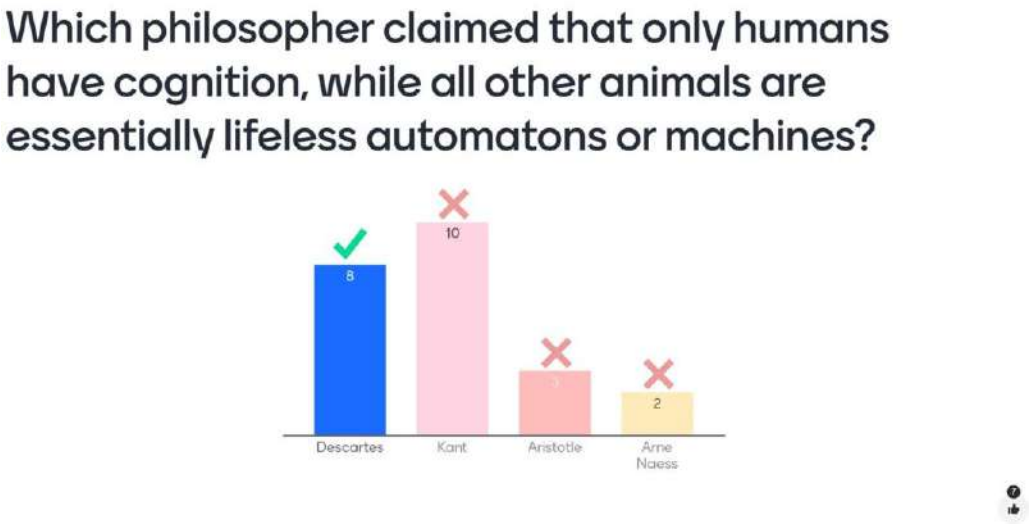
C4 Post Quiz Results of 9th Question

This question aims to help participants differentiate between various types of ethics, such as deontological ethics, utilitarian ethics, and virtue ethics, by asking them to identify which option does not belong. Understanding the different ethical frameworks allows participants to approach environmental issues from multiple philosophical perspectives and make informed ethical decisions. This knowledge is valuable for fostering critical thinking and ethical reasoning in environmental contexts.

The pre-quiz results showed that participants were familiar with a few types of ethics but were unsure about their distinctions. After the educational sessions, the post-quiz responses demonstrated that participants had gained a clearer understanding of different ethical frameworks and could accurately identify which one was not relevant, reflecting the training's success in broadening their ethical knowledge.



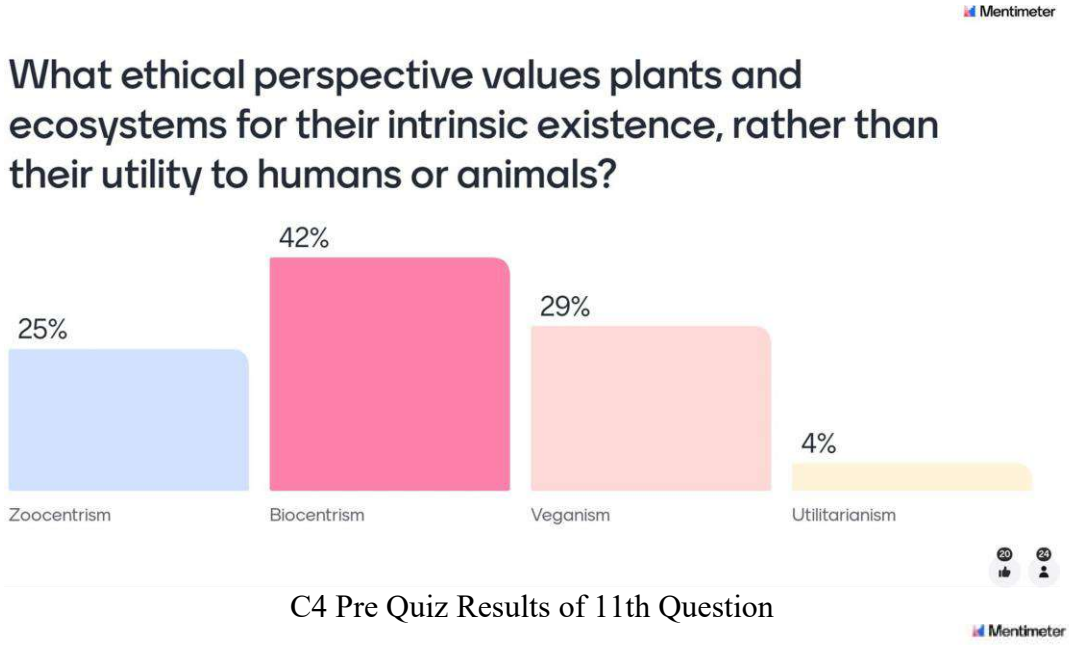
C4 Pre Quiz Results of 10th Question



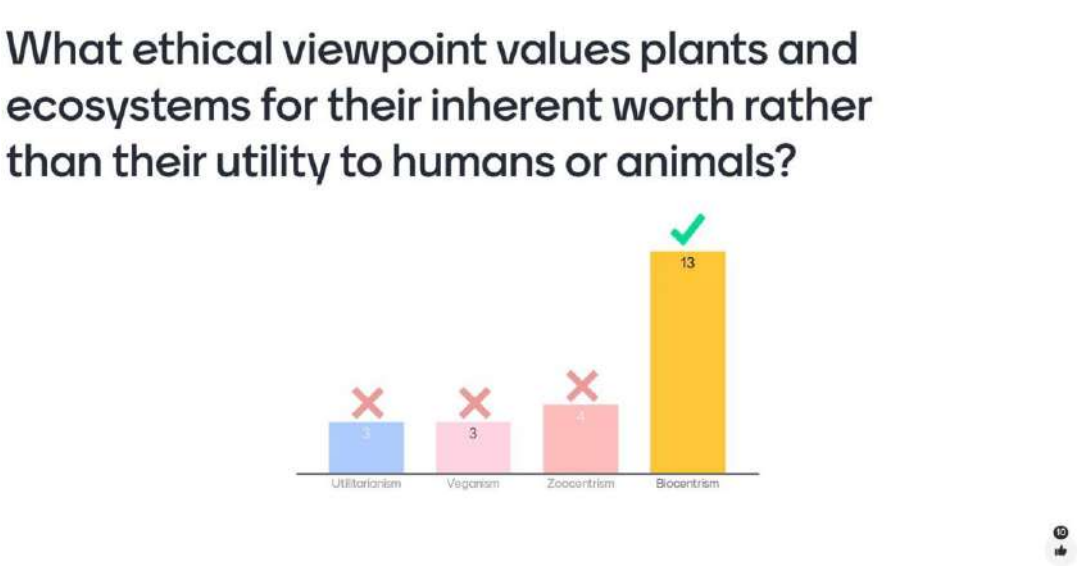
C4 Post Quiz Results of 10th Question

This question explores participants' knowledge of philosopher René Descartes, who famously argued that only humans possess cognition and that other animals are mere automatons. Understanding Descartes' views on animals helps participants appreciate the historical context of human-animal relations and how philosophical ideas have shaped contemporary debates on animal rights and environmental ethics. This knowledge is important for anyone interested in the intersection of philosophy, ethics, and environmental studies.

Before the educational sessions, participants were generally unfamiliar with Descartes' specific views on animals and cognition. The post-quiz results showed that participants had gained a clearer understanding of Descartes' philosophy and its relevance to environmental ethics, demonstrating the training's effectiveness in deepening their philosophical knowledge.



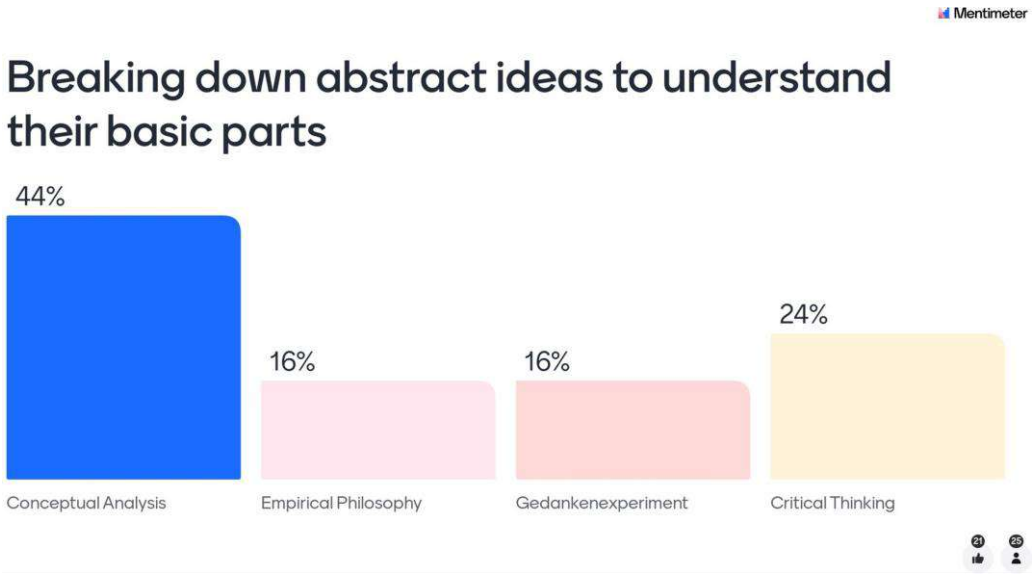
C4 Pre Quiz Results of 11th Question



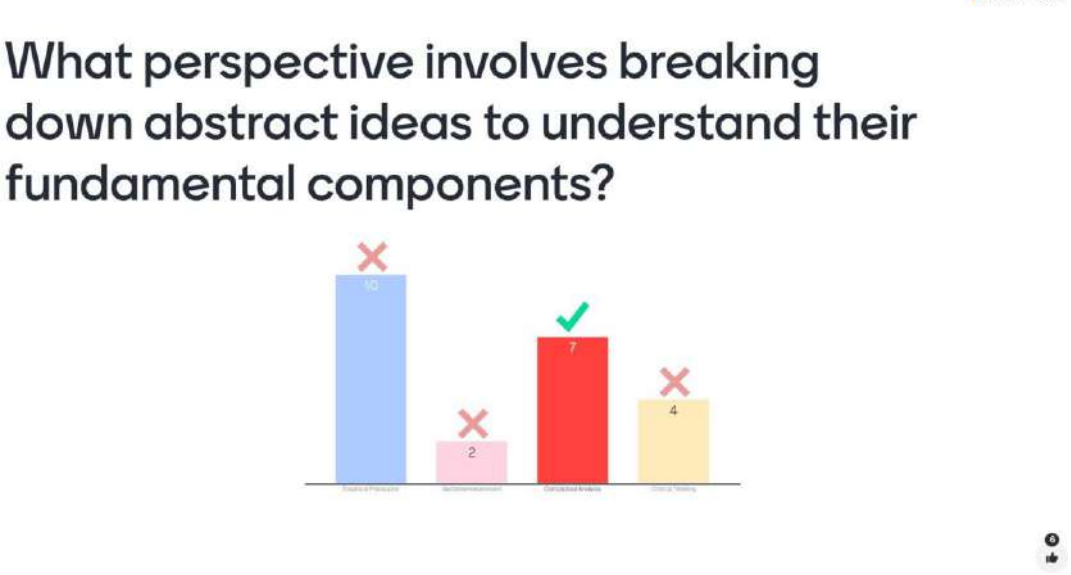
C4 Post Quiz Results of 11th Question

This question focuses on the ethical perspective of deep ecology, which values plants and ecosystems for their intrinsic worth rather than their usefulness to humans or animals. Understanding deep ecology is crucial for appreciating the ethical arguments that advocate for the protection of nature based on its inherent value. This perspective challenges anthropocentric views and promotes a more holistic approach to environmental ethics, emphasizing the importance of preserving natural systems for their own sake.

Before the educational sessions, participants had limited familiarity with deep ecology and its ethical stance. The post-quiz results showed a notable improvement in their understanding of how deep ecology values nature intrinsically, reflecting the training's effectiveness in enhancing their grasp of environmental ethics.



C4 Pre Quiz Results of 12th Question

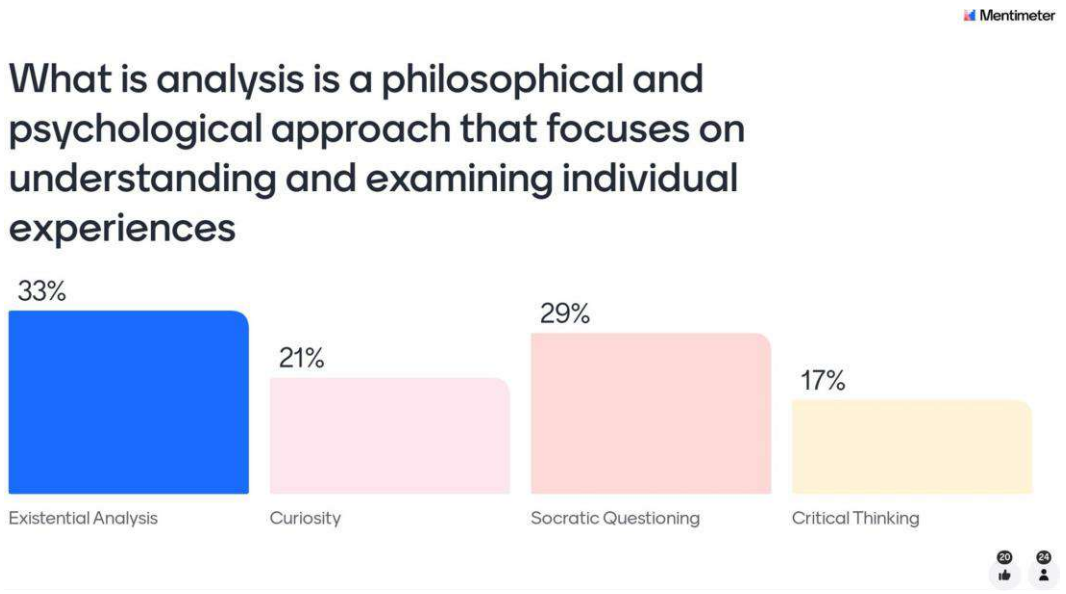


C4 Post Quiz Results of 12th Question

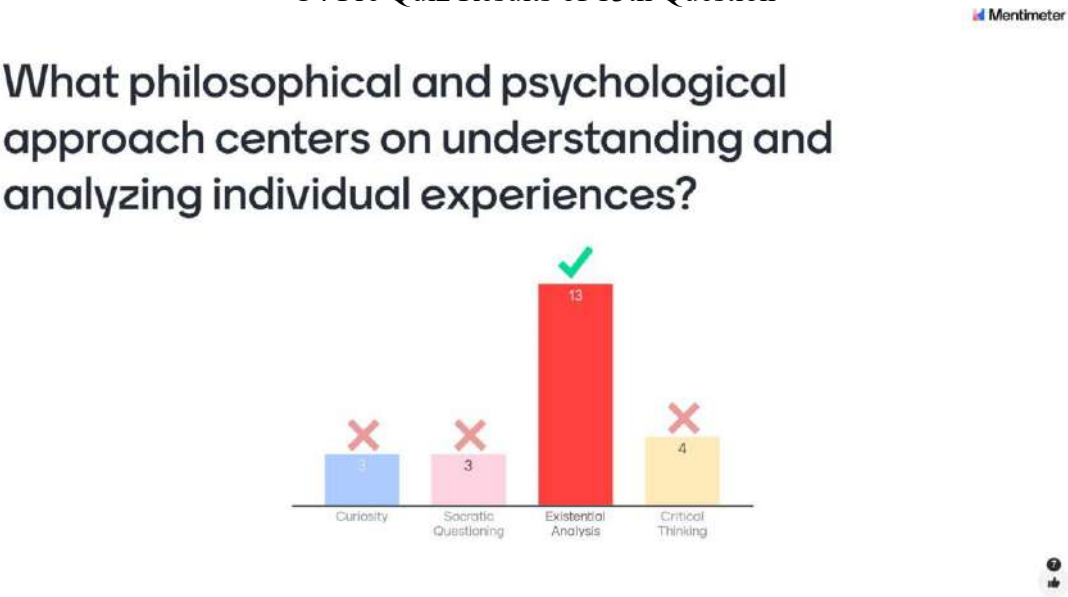
This question addresses the process of analysis, which involves dissecting complex or abstract ideas into their fundamental components to better understand and interpret them. Analysis is a critical skill in both philosophy and psychology, helping individuals to comprehend intricate concepts and apply them effectively in various contexts, including environmental studies and ethical discussions.

The pre-quiz responses indicated that participants were aware of analysis as a general concept but lacked specific insights into its application in understanding abstract ideas. After the

educational sessions, the post-quiz results demonstrated a deeper understanding of how analysis can be used to break down and interpret complex concepts, highlighting the training's success in enhancing participants' analytical skills.



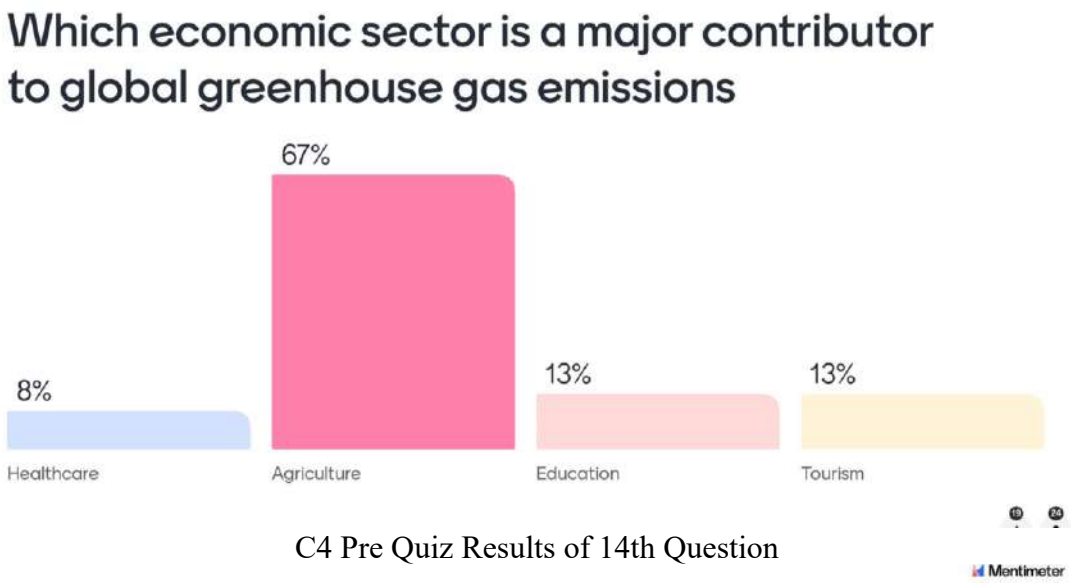
C4 Pre Quiz Results of 13th Question



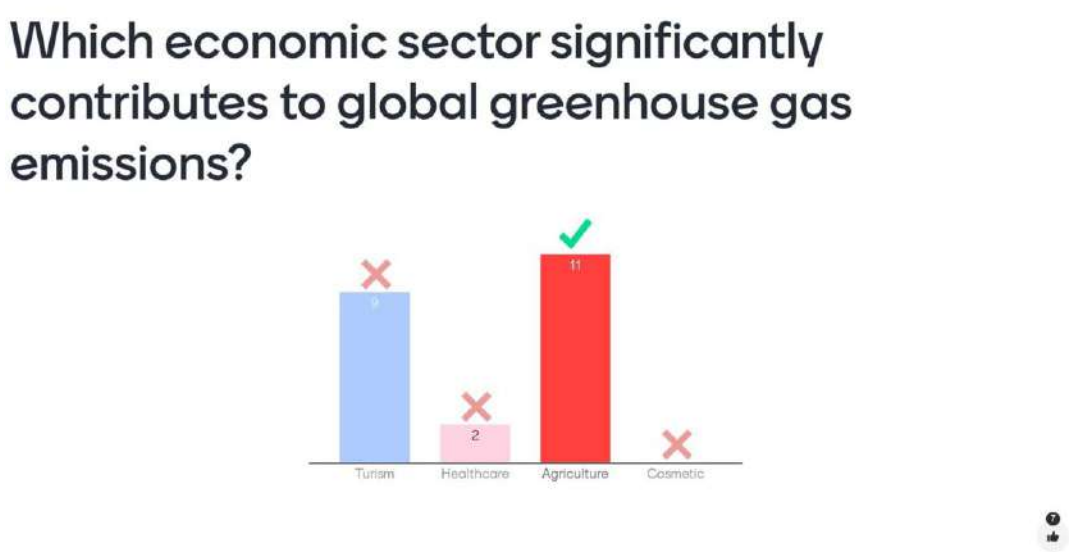
C4 Post Quiz Results of 13th Question

This question aims to clarify the concept of phenomenology, which is a philosophical and psychological approach dedicated to exploring and examining individual experiences and perceptions. Phenomenology is important for understanding how people experience and interpret the world around them, including environmental phenomena and ethical issues. This knowledge helps participants appreciate the subjective aspects of human experience and its relevance to environmental philosophy.

Initially, participants had a general understanding of phenomenology but were often unsure about its specific focus on individual experiences. After the educational sessions, the post-quiz results showed that participants had a clearer grasp of phenomenology's role in analyzing personal experiences, reflecting the effectiveness of the training in deepening their knowledge of this philosophical approach.



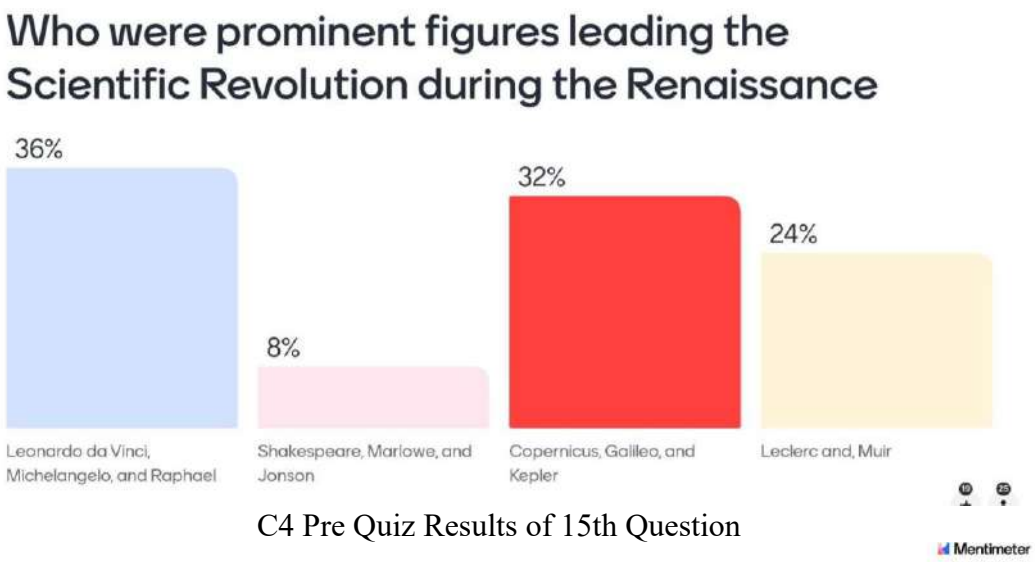
C4 Pre Quiz Results of 14th Question



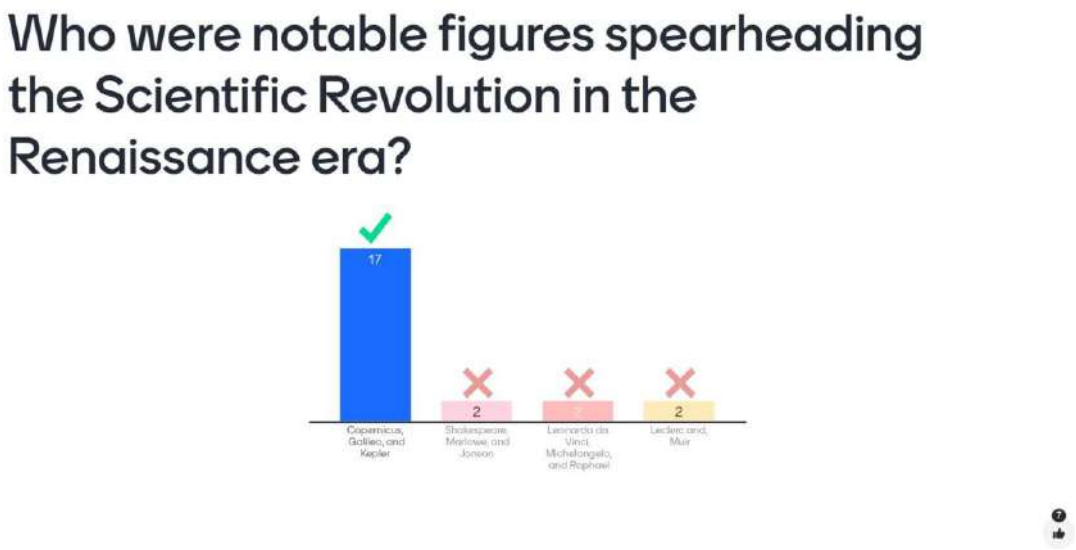
C4 Post Quiz Results of 14th Question

This question highlights the major economic sector of the energy industry, which is a significant contributor to global greenhouse gas emissions due to the burning of fossil fuels. Understanding the impact of this sector is crucial for identifying key areas for intervention and policy development to address climate change. This knowledge helps participants recognize the importance of transitioning to sustainable energy sources and reducing emissions.

The pre-quiz responses showed that participants had a general awareness of greenhouse gas emissions but lacked specific knowledge about the major contributing sectors. After the educational sessions, the post-quiz results indicated a significant improvement in understanding the energy sector's role in emissions, demonstrating the training's success in raising awareness about climate change.



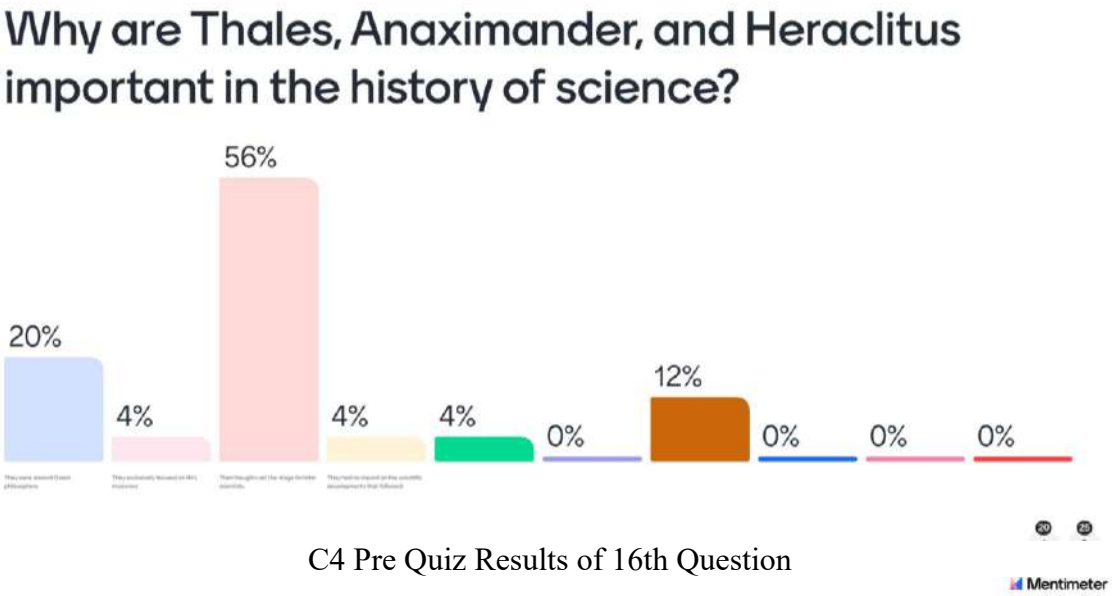
C4 Pre Quiz Results of 15th Question



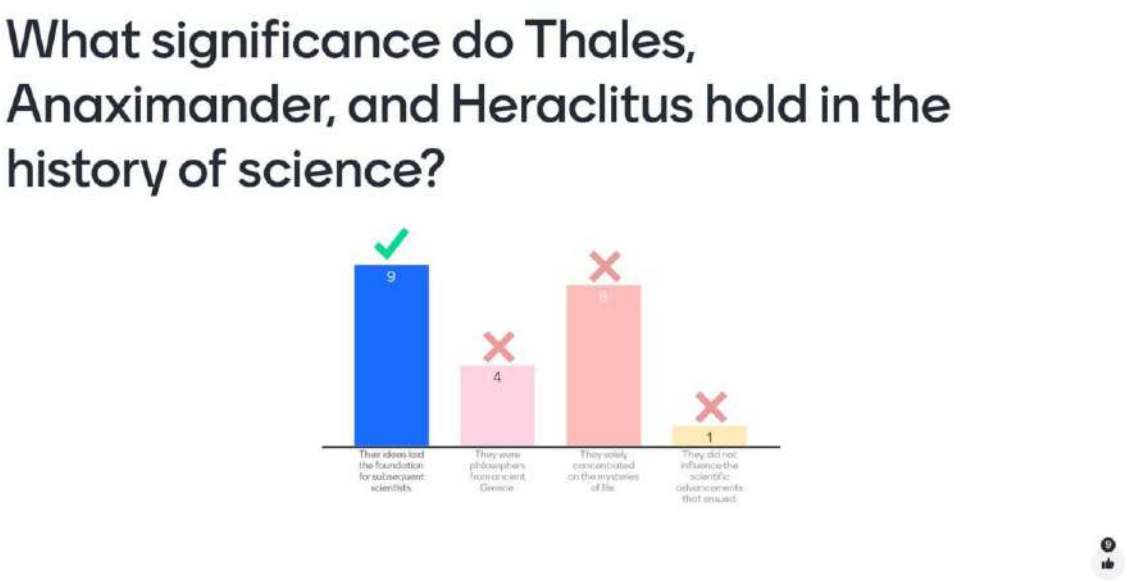
C4 Post Quiz Results of 15th Question

This question focuses on key figures such as Nicolaus Copernicus, Galileo Galilei, and Johannes Kepler, who were instrumental in advancing scientific knowledge during the Scientific Revolution. Understanding their contributions helps participants appreciate the historical development of scientific methods and the foundations of modern science. This knowledge is important for recognizing how scientific advancements have shaped contemporary understanding of the natural world and environmental issues.

Before the educational sessions, participants had a basic awareness of the Scientific Revolution but limited knowledge of specific figures. The post-quiz results showed a clearer understanding of the contributions of prominent scientists during this period, reflecting the training's effectiveness in enhancing historical and scientific knowledge.



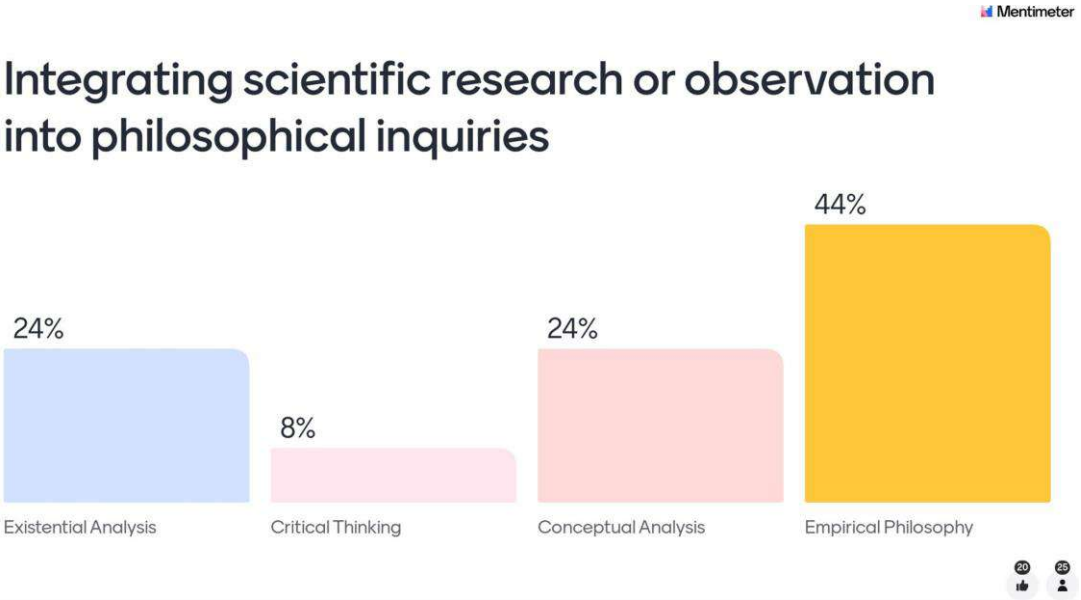
C4 Pre Quiz Results of 16th Question



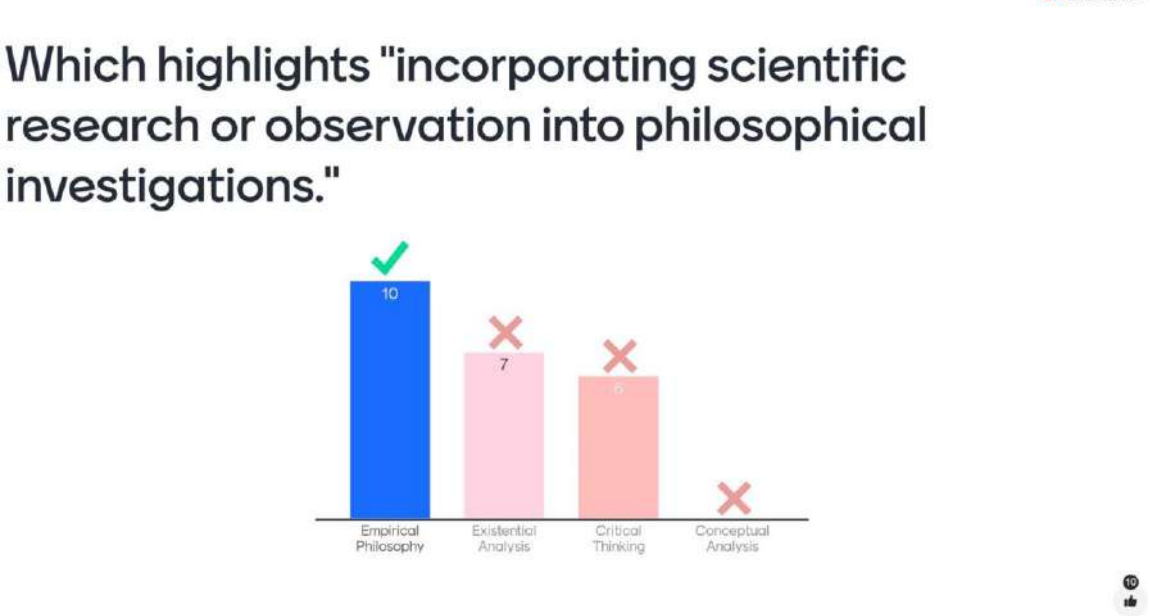
C4 Post Quiz Results of 16th Question

This question highlights the significance of early philosophers such as Thales, Anaximander, and Heraclitus, who made foundational contributions to science and natural philosophy. Their work laid the groundwork for scientific inquiry by exploring the nature of the cosmos, matter, and change. Understanding their contributions helps participants appreciate the origins of scientific thought and the development of early scientific theories.

The pre-quiz responses indicated that participants had limited knowledge of these early philosophers and their impact on science. After the educational sessions, the post-quiz results demonstrated a better understanding of their historical significance, showing that the training successfully enhanced participants' awareness of the early roots of scientific thought.



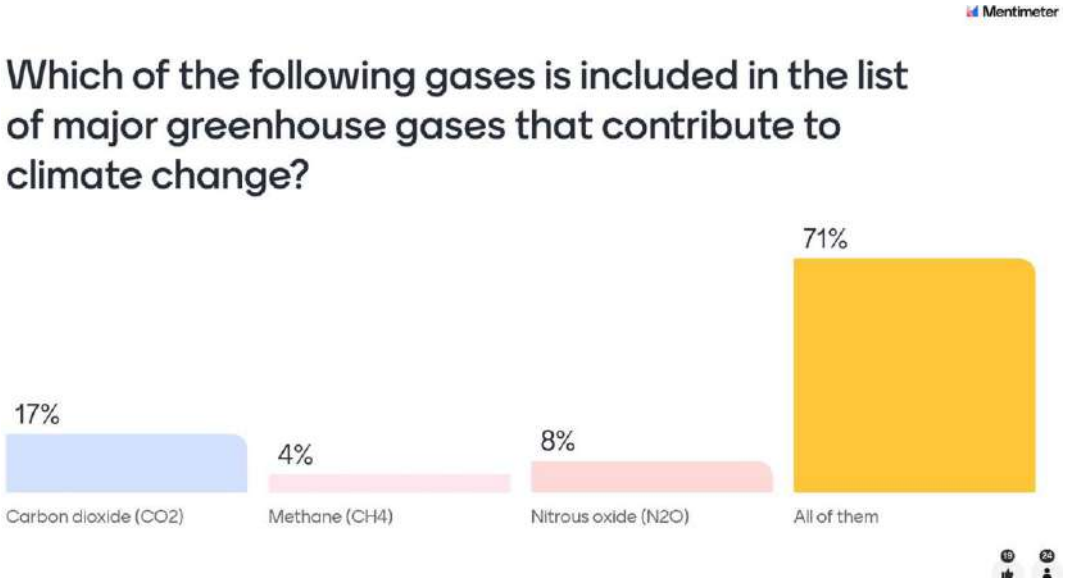
C4 Pre Quiz Results of 17th Question



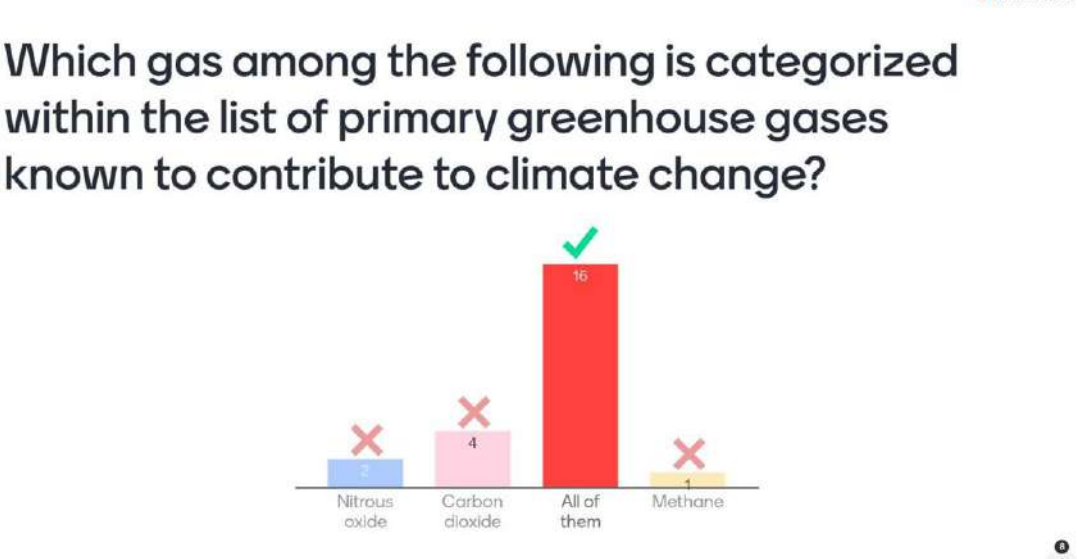
C4 Post Quiz Results of 17th Question

This question refers to the interdisciplinary approach of scientific philosophy, which involves incorporating scientific findings into philosophical questions and theories. Integrating scientific research into philosophy helps to develop more comprehensive and informed perspectives on various issues, including environmental and ethical concerns. This approach is valuable for bridging the gap between empirical evidence and philosophical inquiry.

Initially, participants had a basic understanding of the relationship between science and philosophy but were less familiar with how scientific research can be integrated into philosophical discussions. After the educational sessions, the post-quiz responses showed a deeper appreciation for the integration of science and philosophy, reflecting the training's effectiveness in broadening participants' interdisciplinary knowledge.



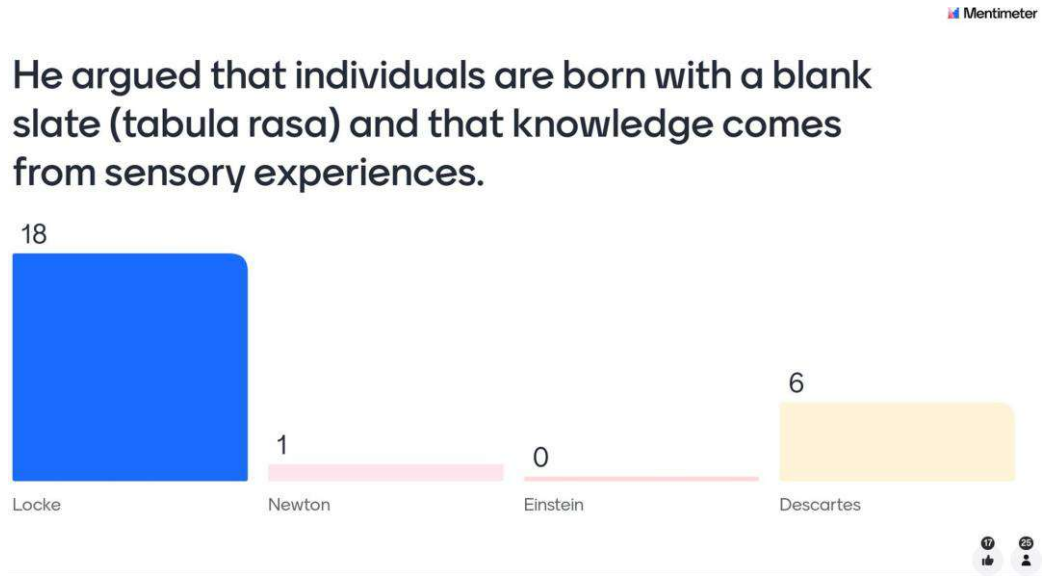
C4 Pre Quiz Results of 18th Question



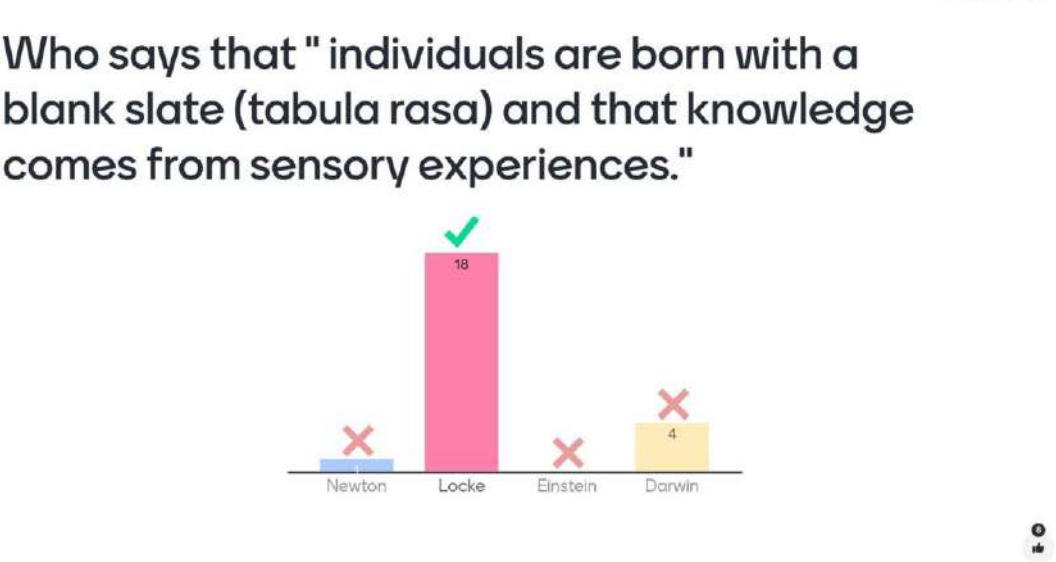
C4 Post Quiz Results of 18th Question

This question focuses on identifying major greenhouse gases, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), which significantly contribute to climate change. Recognizing these gases is crucial for understanding their impact on global warming and developing strategies to mitigate their effects. This knowledge is essential for participants involved in climate science and environmental policy.

Before the educational sessions, participants had some awareness of greenhouse gases but may not have been familiar with the specific gases and their impacts. The post-quiz results indicated a clearer understanding of the major greenhouse gases and their role in climate change, demonstrating the success of the training in enhancing participants' knowledge of environmental science.



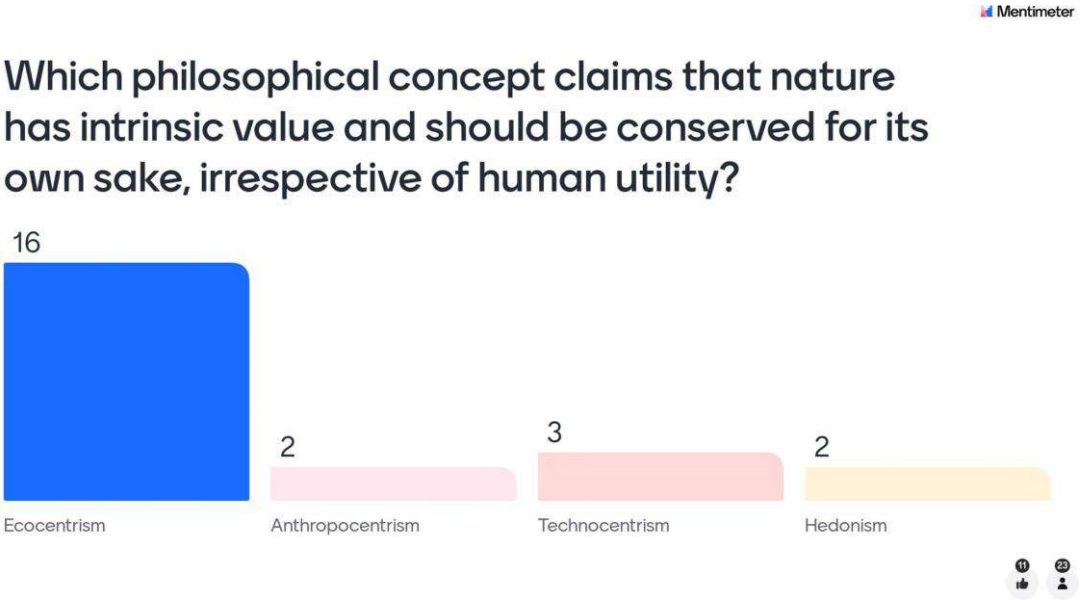
C4 Pre Quiz Results of 19th Question



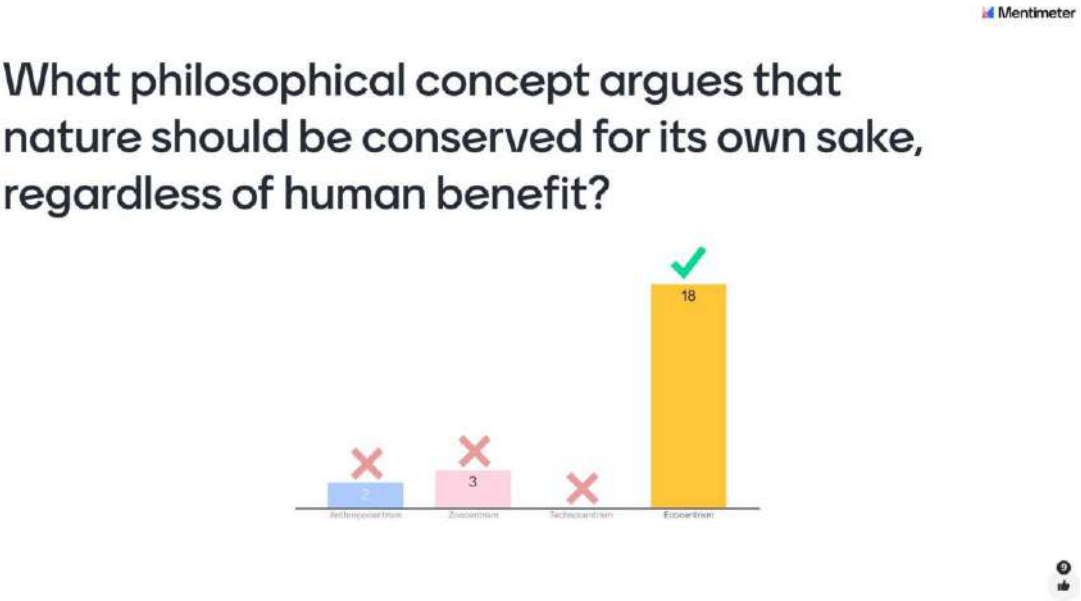
C4 Post Quiz Results of 19th Question

This question refers to philosopher John Locke's theory of tabula rasa, which posits that individuals are born without pre-existing ideas and that knowledge is acquired through sensory experiences and interactions with the world. Understanding Locke's theory helps participants appreciate the philosophical foundations of empiricism and its implications for learning and development.

Initially, participants were generally aware of the concept of tabula rasa but may not have known its origin or implications. After the educational sessions, the post-quiz results showed an improved understanding of Locke's theory and its relevance to epistemology, reflecting the training's success in enhancing participants' philosophical knowledge.



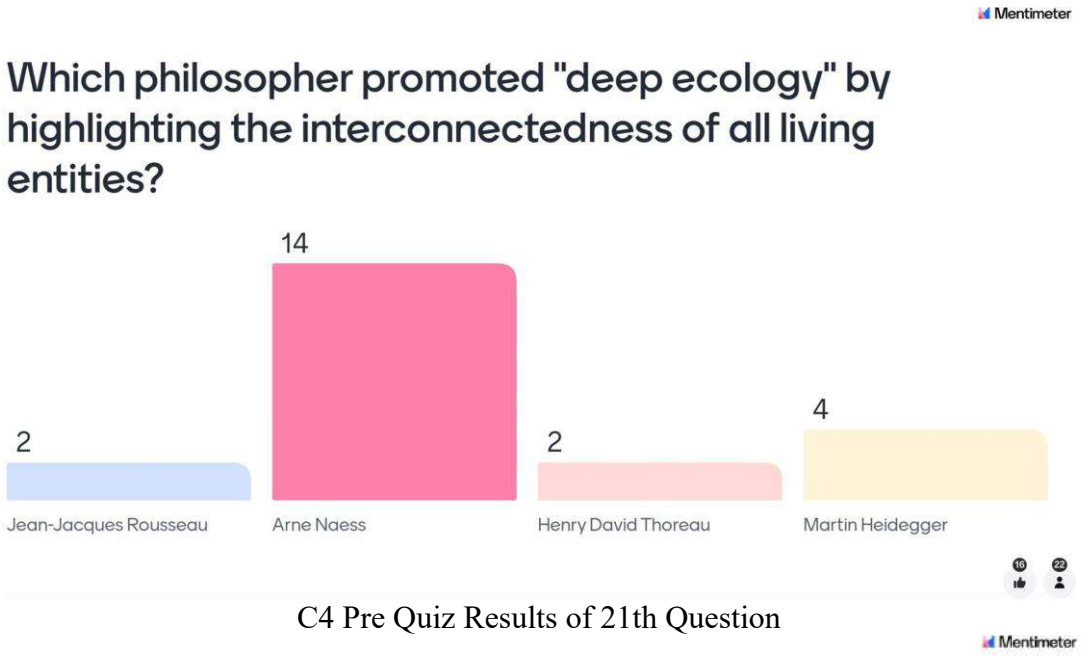
C4 Pre Quiz Results of 20th Question



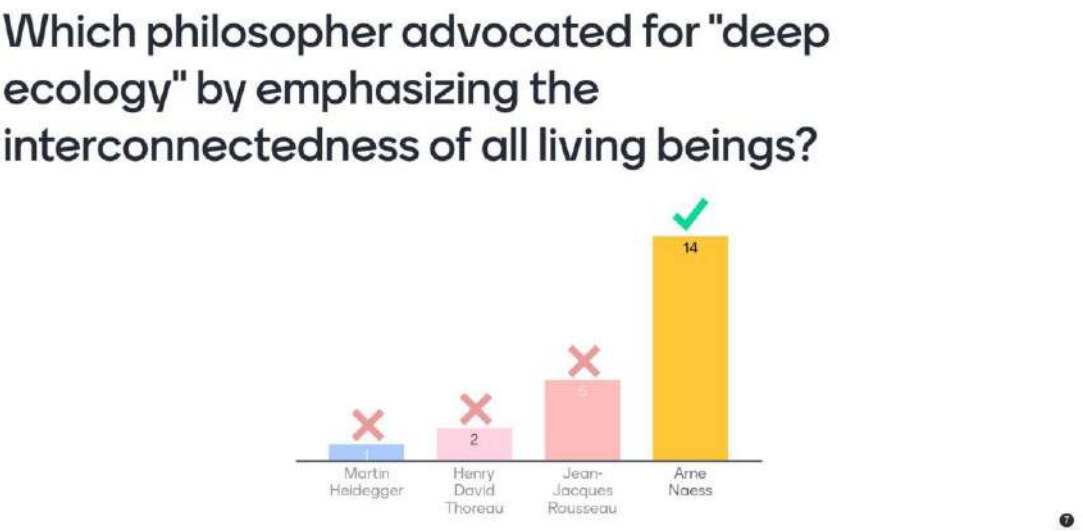
C4 Post Quiz Results of 20th Question

This question pertains to the concept of intrinsic value in environmental ethics, which argues that nature has value independent of its usefulness to humans. This concept is central to various ethical frameworks that advocate for the preservation of natural environments based on their inherent worth rather than their instrumental value. Understanding this concept is important for participants who are engaged in environmental advocacy and policy-making.

Before the educational sessions, participants had a basic understanding of intrinsic value but may not have fully grasped its implications for environmental ethics. The post-quiz results demonstrated a clearer understanding of the concept and its application to environmental conservation, indicating the training's effectiveness in deepening participants' grasp of ethical principles.



C4 Pre Quiz Results of 21th Question



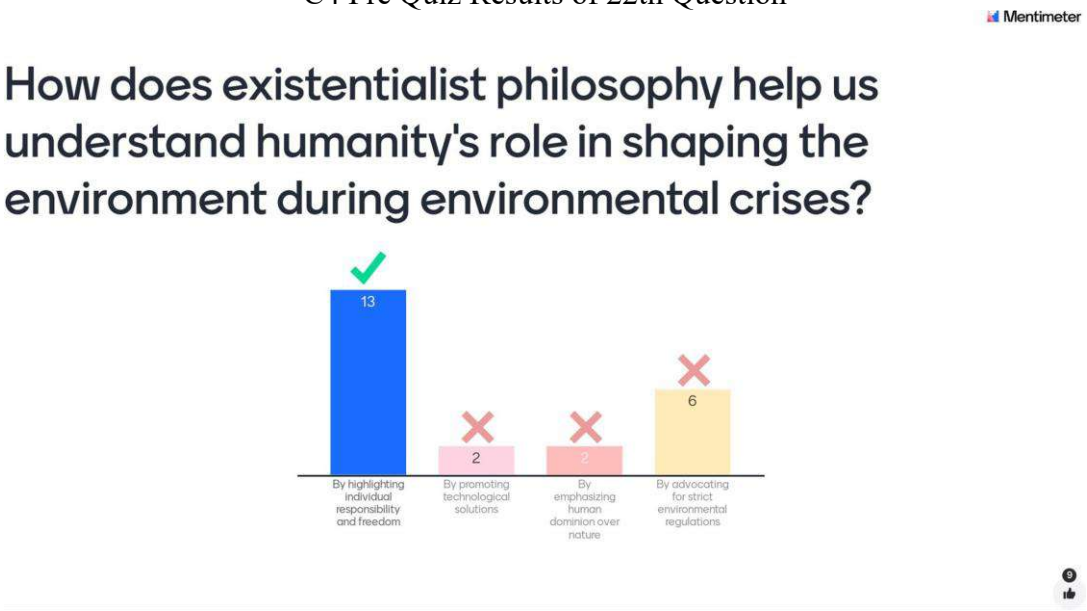
C4 Post Quiz Results of 21th Question

This question refers to philosopher Arne Naess, who developed the concept of deep ecology and emphasized the interconnectedness of all living beings. Understanding Naess's contributions helps participants appreciate the philosophical foundations of deep ecology and its impact on environmental thought. This knowledge is valuable for those involved in ecological philosophy and environmental advocacy.

The pre-quiz responses showed that participants had limited knowledge of Arne Naess and his role in promoting deep ecology. After the educational sessions, the post-quiz results indicated a significant improvement in understanding Naess's contributions and the principles of deep ecology, reflecting the training's success in enhancing their knowledge of environmental philosophy.



C4 Pre Quiz Results of 22th Question



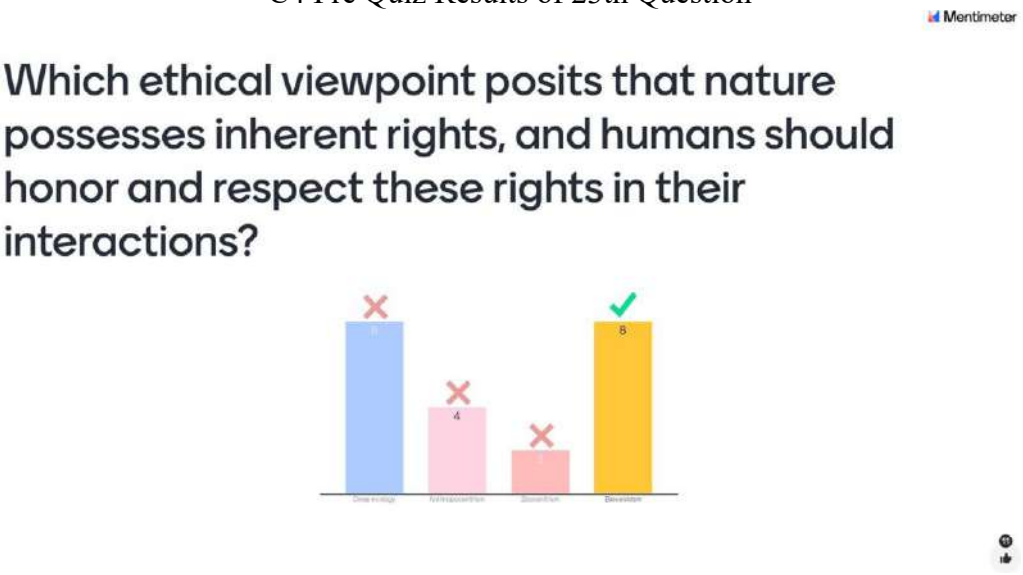
C4 Post Quiz Results of 22th Question

This question explores how existentialist philosophy, with its focus on individual freedom, responsibility, and meaning, can contribute to understanding and addressing environmental crises. Existentialism encourages individuals to confront their responsibilities and make meaningful choices in the face of environmental challenges. This perspective helps participants consider the ethical and philosophical dimensions of their actions in relation to environmental issues.

Before the educational sessions, participants had a basic understanding of existentialist philosophy but may not have fully connected it to environmental issues. The post-quiz results showed an enhanced understanding of how existentialist ideas can inform responses to environmental crises, demonstrating the training's effectiveness in linking philosophical concepts with practical environmental concerns.



C4 Pre Quiz Results of 23th Question

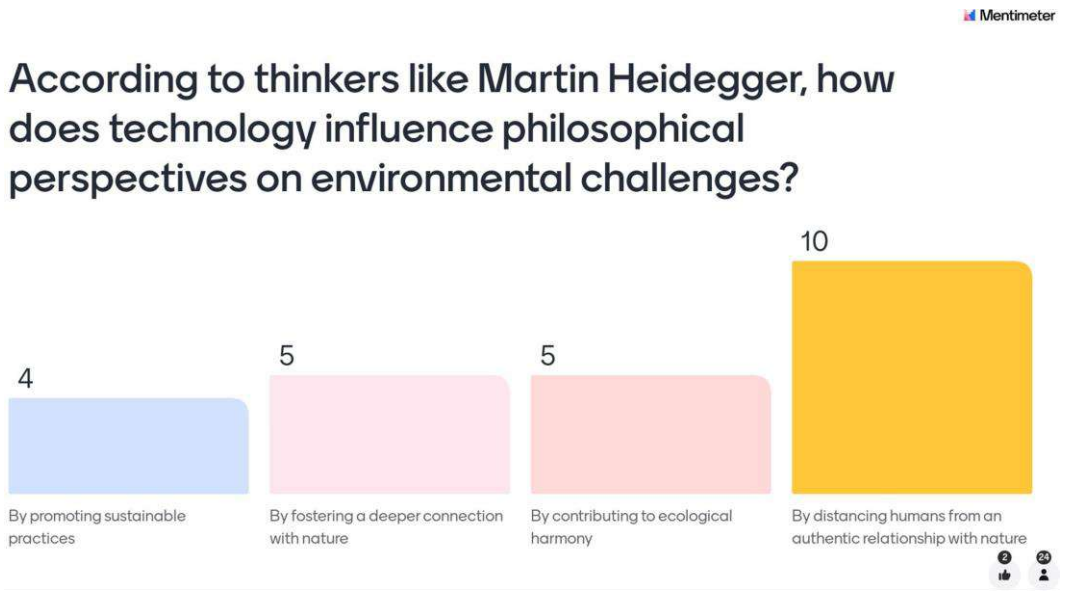


C4 Post Quiz Results of 23th Question

This question refers to the concept of rights-based environmental ethics, which argues that nature possesses inherent rights that should be respected and protected by humans. This ethical framework emphasizes the moral obligation to honor the rights of natural entities and ecosystems. Understanding this concept is important for developing ethical guidelines and policies that promote environmental justice and conservation.

Initially, participants had a general awareness of environmental ethics but may not have been familiar with the specific concept of rights-based ethics. After the educational sessions, the

post-quiz results demonstrated a clearer understanding of how nature's rights are integrated into ethical discussions, reflecting the training's success in enhancing participants' knowledge of environmental ethics.



C4 Pre Quiz Results of 24th Question



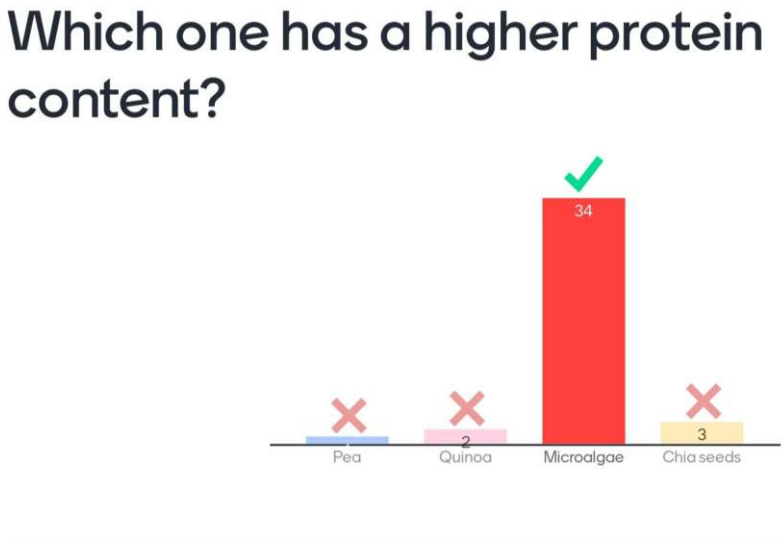
C4 Post Quiz Results of 24th Question

This question examines Martin Heidegger's views on technology, which he believed shapes our understanding of the world and our relationship with nature. Heidegger argued that technology can lead to a reductionist view of nature and a detachment from its intrinsic value. Understanding Heidegger's perspective helps participants explore the philosophical implications of technological advancements and their impact on environmental thought.

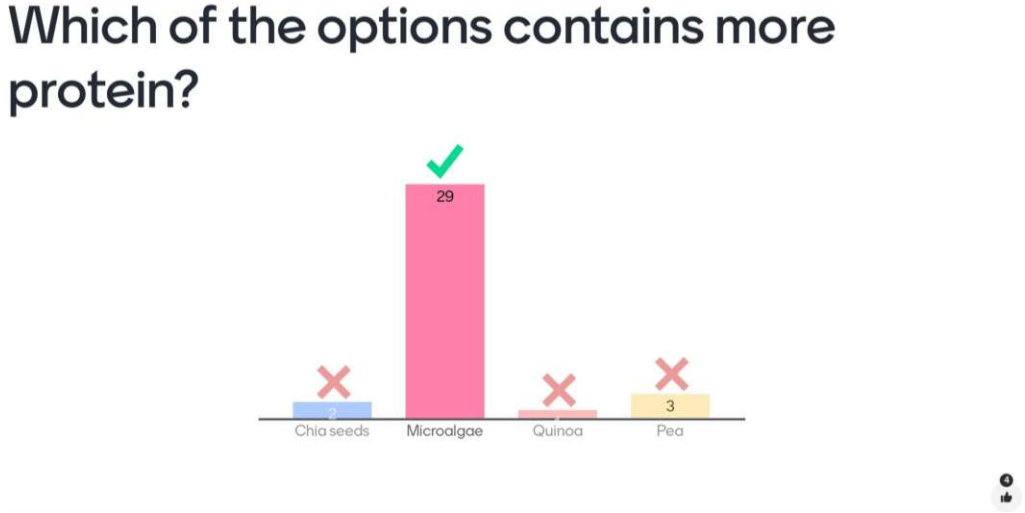
Before the educational sessions, participants had a basic understanding of Heidegger's philosophy but limited knowledge of its implications for environmental challenges. The post-quiz results showed an improved understanding of how Heidegger's ideas on technology

influence philosophical perspectives on environmental issues, indicating the training's effectiveness in deepening participants' comprehension of philosophical and environmental themes.

Multiplier Event Pre-Post Quizzes



Multiplier Event Pre Quiz Results of 1st Question

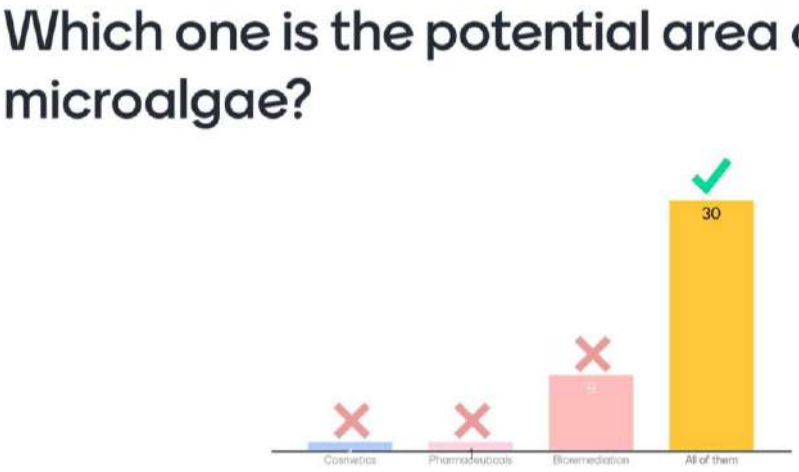


Multiplier Event Post Quiz Results of 1st Question

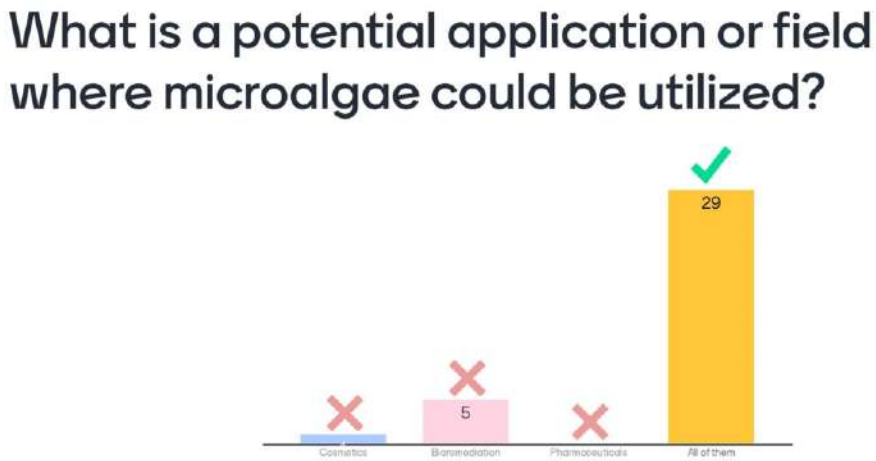
This question aims to raise awareness about the nutritional potential of microalgae, particularly its high protein content compared to other food sources. Understanding which microalgae species offer higher protein levels can guide participants in recognizing microalgae as a sustainable alternative to traditional protein sources, especially in the context of global food security and environmental conservation. This knowledge is essential as it highlights the potential role of microalgae in addressing food shortages and promoting sustainable agriculture.

The quiz, conducted both before and after the educational sessions, revealed that participants initially had limited awareness of the protein content in microalgae. However, after the training, there was a significant improvement in their understanding of microalgae's nutritional benefits.

This progress demonstrated the effectiveness of the educational sessions in enhancing participants' knowledge of sustainable food sources like microalgae.



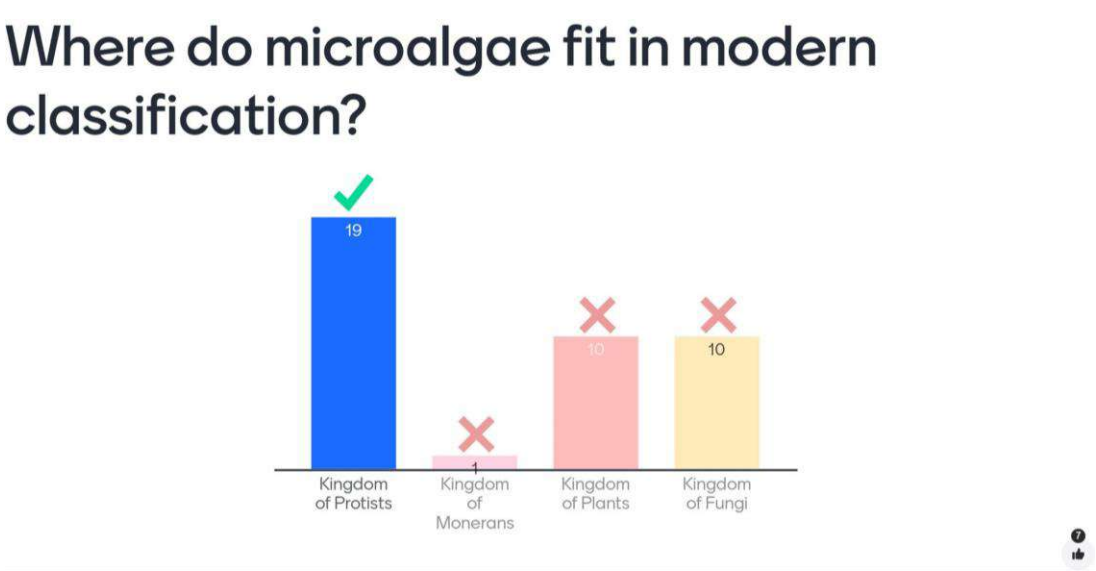
Multiplier Event Pre Quiz Results of 2nd Question



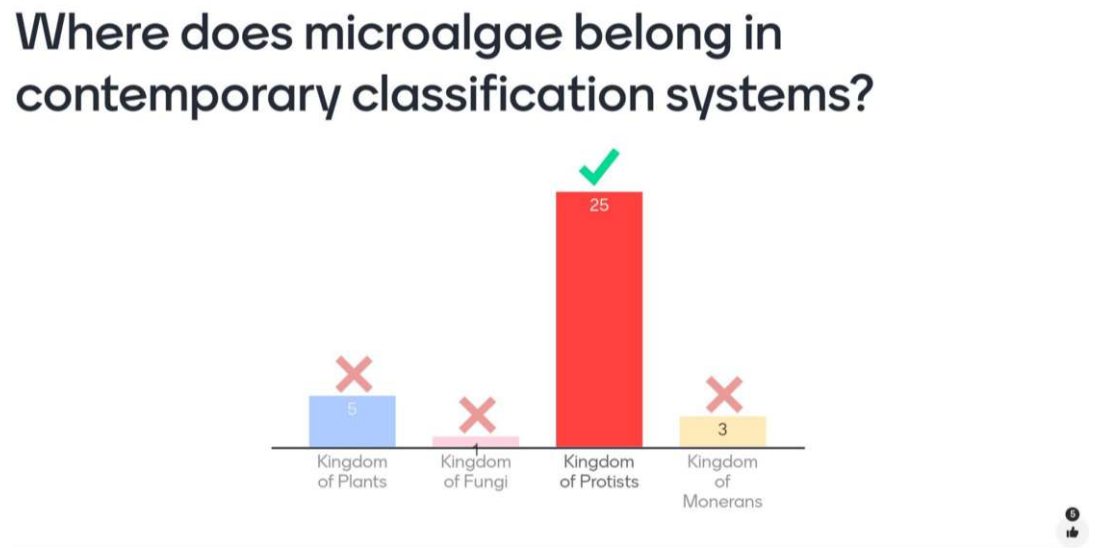
Multiplier Event Post Quiz Results of 2nd Question

This question seeks to identify the participants' understanding of the various applications and potential areas where microalgae can be utilized, such as biofuels, pharmaceuticals, and wastewater treatment. Recognizing the versatile applications of microalgae helps participants appreciate its importance in diverse industries, promoting innovation and sustainability. By understanding the potential of microalgae, participants can explore new avenues for research and development that contribute to environmental and economic sustainability.

Before the educational sessions, participants' knowledge of the potential areas of microalgae application was limited to a few fields. However, the post-quiz results indicated that they had significantly expanded their understanding, recognizing the broader potential of microalgae in various sectors. This demonstrated the positive impact of the training sessions in broadening participants' perspectives on the uses of microalgae.



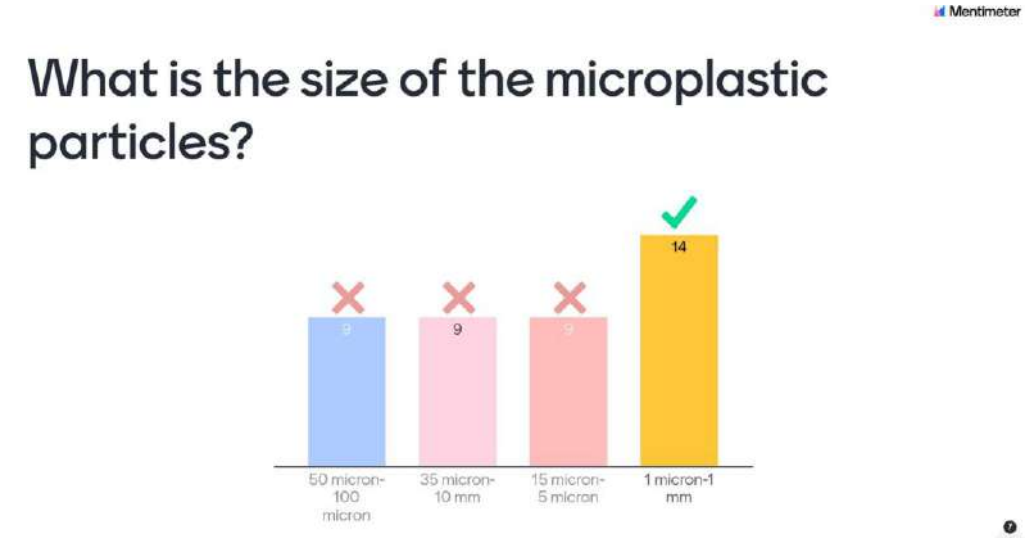
Multiplier Event Pre Quiz Results of 3rd Question



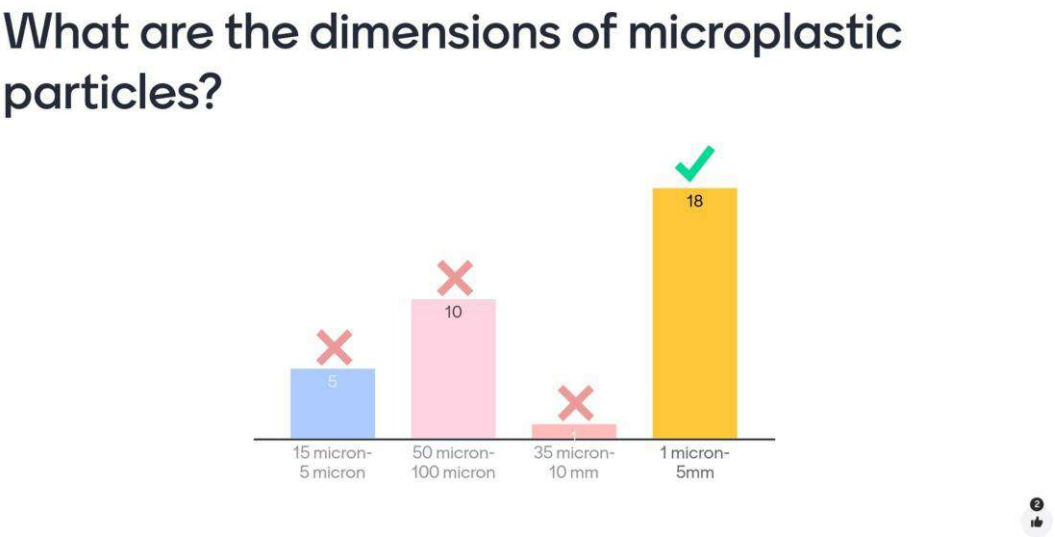
Multiplier Event Post Quiz Results of 3rd Question

This question aims to help participants understand the taxonomic classification of microalgae and their place in the biological hierarchy. By learning where microalgae fit in modern classification, participants gain a clearer understanding of the diversity and complexity of life forms, which is crucial for scientific research, environmental management, and conservation efforts. This knowledge is particularly valuable for those working in fields related to biology, ecology, and environmental science.

The pre-quiz results showed that participants had a basic understanding of the classification of microalgae. However, after the educational sessions, they demonstrated a more comprehensive grasp of the subject, reflecting improved knowledge of taxonomy and classification. This improvement underscored the effectiveness of the training in deepening participants' understanding of biological diversity.



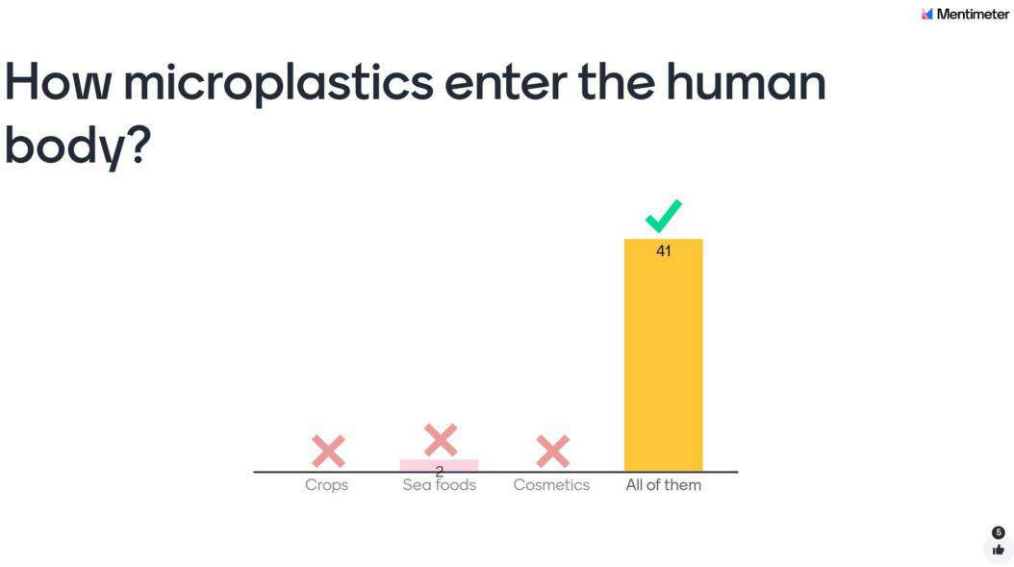
Multiplier Event Pre Quiz Results of 4th Question



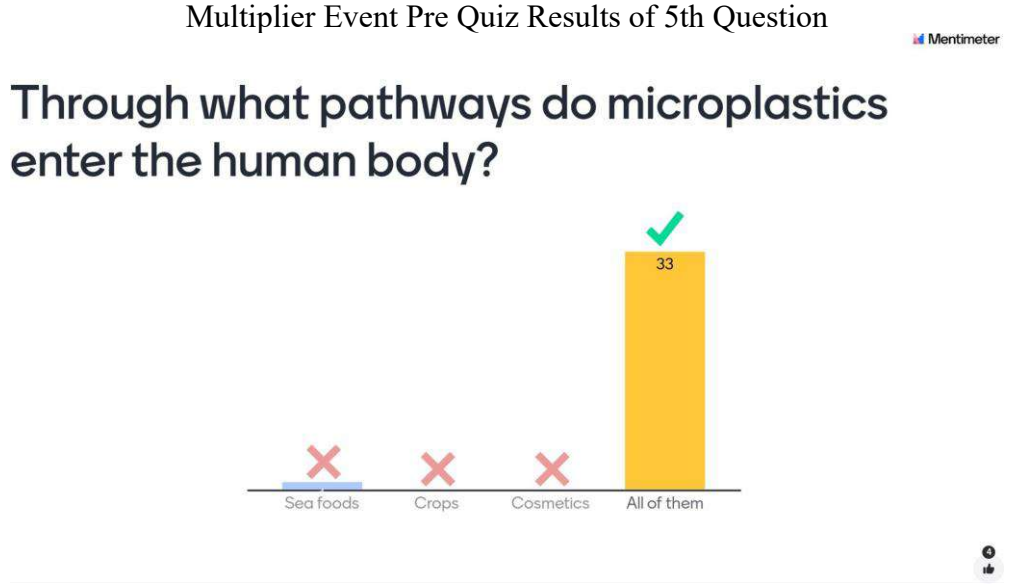
Multiplier Event Post Quiz Results of 4th Question

This question is designed to assess participants' knowledge of microplastic pollution, specifically the size of microplastic particles, which is a key factor in understanding their environmental impact. By knowing the size of microplastic particles, participants can better grasp the challenges of microplastic pollution and the ways it affects ecosystems and human health. This information is vital for developing strategies to reduce microplastic pollution and mitigate its effects.

Initially, participants had a general awareness of microplastic pollution but lacked detailed knowledge about the size of microplastic particles. After the educational sessions, the post-quiz results showed that participants had gained a clearer understanding of the specific characteristics of microplastics, which is crucial for addressing environmental challenges related to plastic pollution.



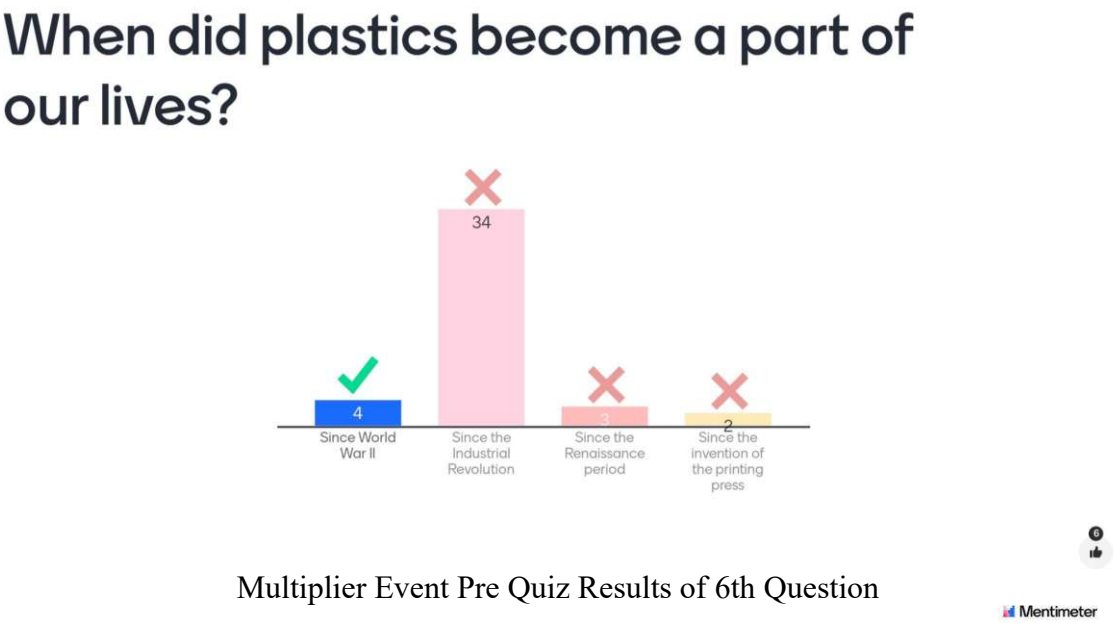
Multiplier Event Pre Quiz Results of 5th Question



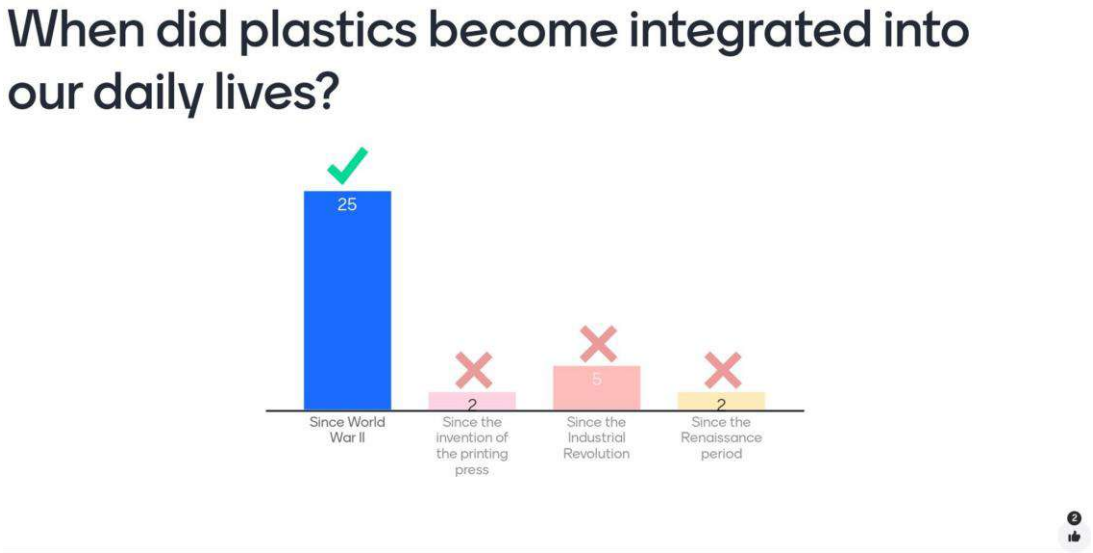
Multiplier Event Post Quiz Results of 5th Question

This question aims to educate participants on the various pathways through which microplastics can enter the human body, such as ingestion, inhalation, and dermal absorption. Understanding these pathways is important for raising awareness about the health risks associated with microplastic pollution and the need for policies and practices to reduce human exposure. This knowledge empowers participants to make informed decisions about reducing their own exposure to microplastics and advocating for environmental health.

Before the educational sessions, participants had limited knowledge of how microplastics enter the human body. However, the post-quiz results indicated a significant increase in their understanding of this issue, demonstrating that the training sessions effectively raised awareness about the health risks associated with microplastic pollution.



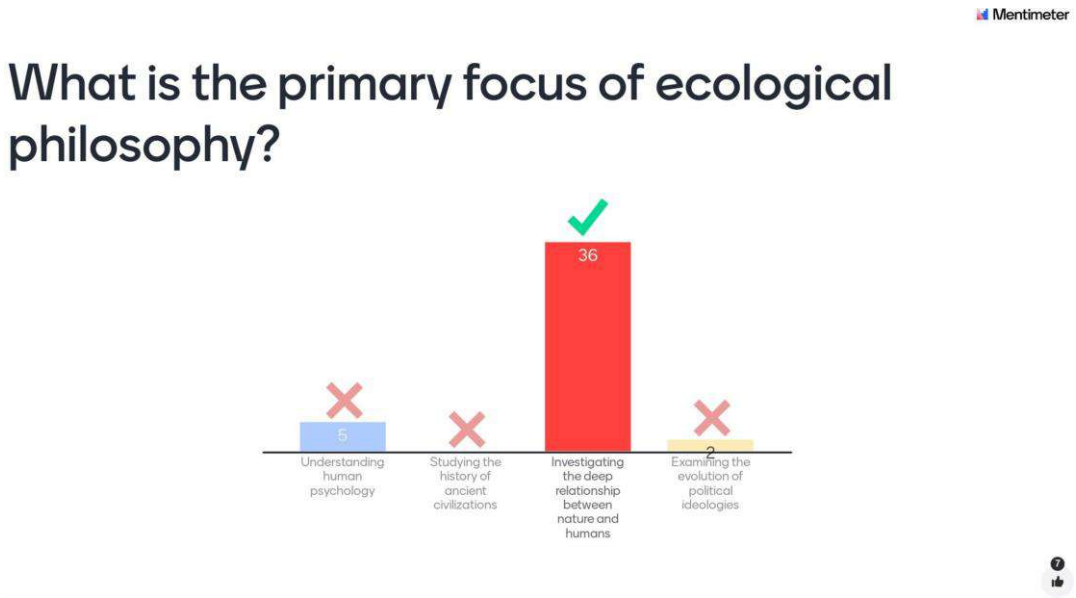
Multiplier Event Pre Quiz Results of 6th Question



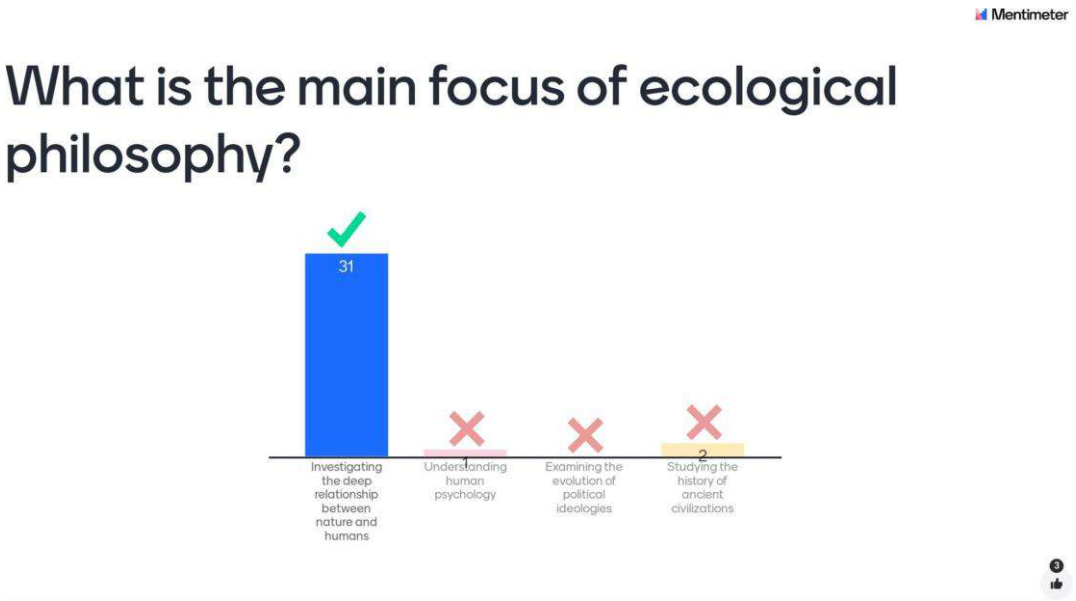
Multiplier Event Post Quiz Results of 6th Question

This question is intended to provide participants with historical context on the introduction of plastics into daily life and the resulting environmental impact. Understanding the timeline of plastic production and consumption helps participants recognize the long-term effects of plastic pollution and the urgent need for sustainable alternatives. This knowledge is crucial for anyone engaged in environmental advocacy, policy-making, or waste management.

The pre-quiz responses indicated that participants had a general awareness of the historical development of plastics but lacked specific details. After the educational sessions, their post-quiz results showed a deeper understanding of the timeline and its significance in relation to environmental issues, reflecting the positive impact of the training.



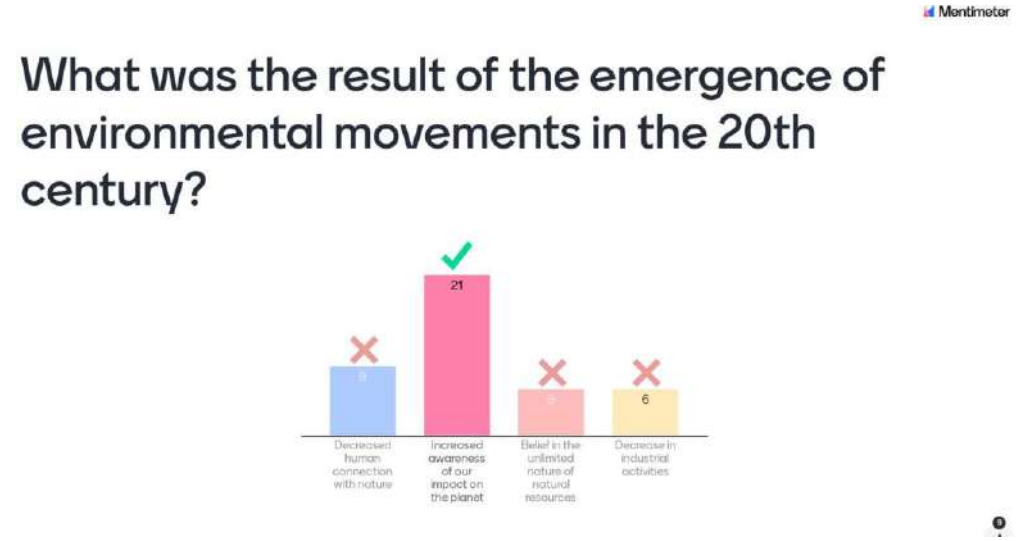
Multiplier Event Pre Quiz Results of 7th Question



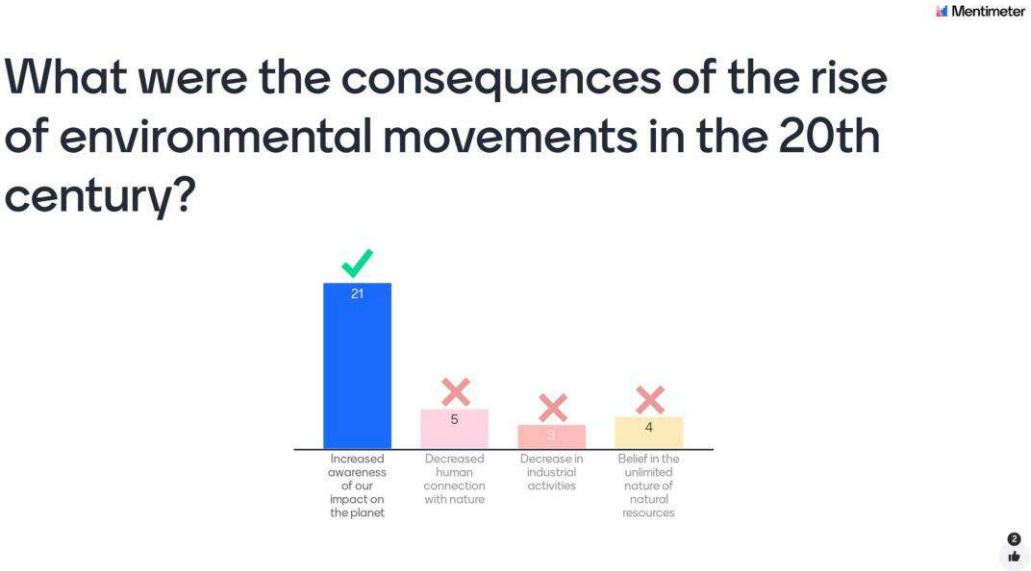
Multiplier Event Post Quiz Results of 7th Question

This question explores the participants' understanding of ecological philosophy, which emphasizes the relationship between humans and the natural world. By delving into ecological philosophy, participants can develop a more profound appreciation for environmental ethics and the moral responsibilities humans have toward nature. This knowledge is important for fostering a culture of environmental stewardship and promoting ethical decision-making in relation to ecological issues.

Initially, participants had a basic understanding of ecological philosophy, but their knowledge was often limited to broad concepts. After the educational sessions, the post-quiz results showed that participants had gained a more nuanced understanding of ecological philosophy and its implications for environmental action, highlighting the effectiveness of the training.



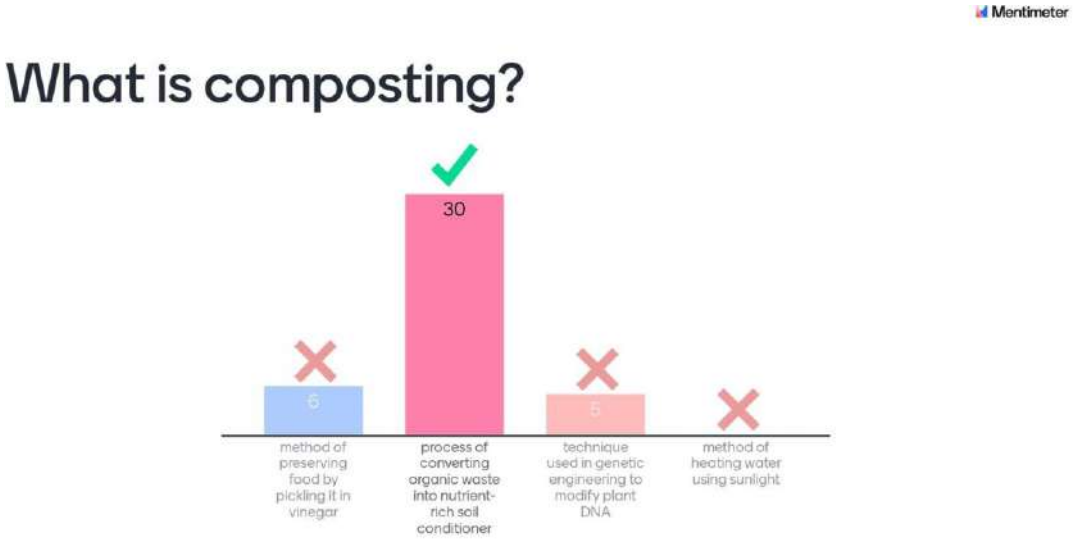
Multiplier Event Pre Quiz Results of 8th Question



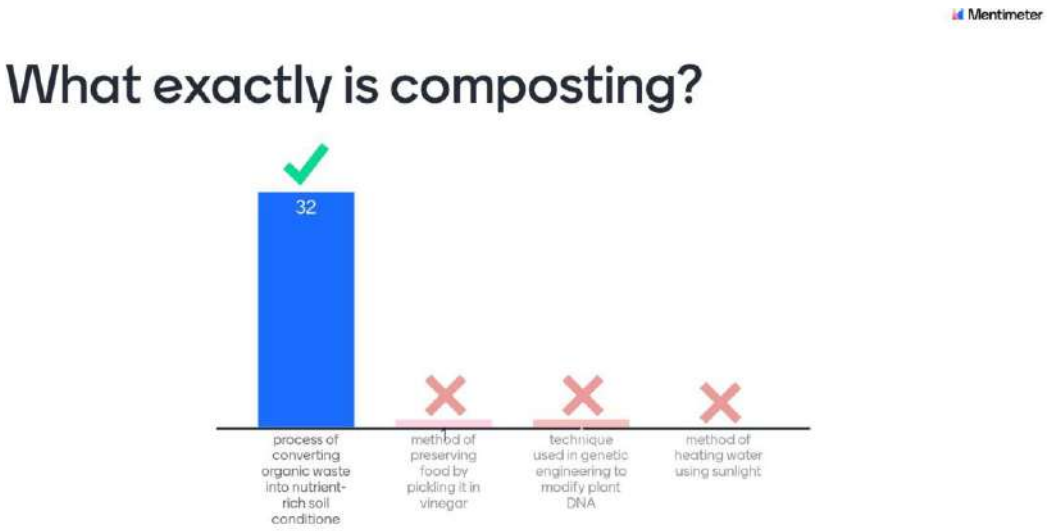
Multiplier Event Post Quiz Results of 8th Question

This question aims to assess participants' knowledge of the historical outcomes of environmental movements that emerged in the 20th century, such as the establishment of environmental regulations and the growth of global awareness about environmental issues. Understanding these outcomes helps participants appreciate the importance of activism and policy in driving positive environmental change. This knowledge is valuable for those interested in environmental advocacy and policy-making.

Before the educational sessions, participants had a general awareness of environmental movements but lacked detailed knowledge of their specific outcomes. The post-quiz results showed that participants had gained a clearer understanding of the historical impact of these movements, demonstrating the training's success in enhancing their knowledge of environmental history.



Multiplier Event Pre Quiz Results of 9th Question



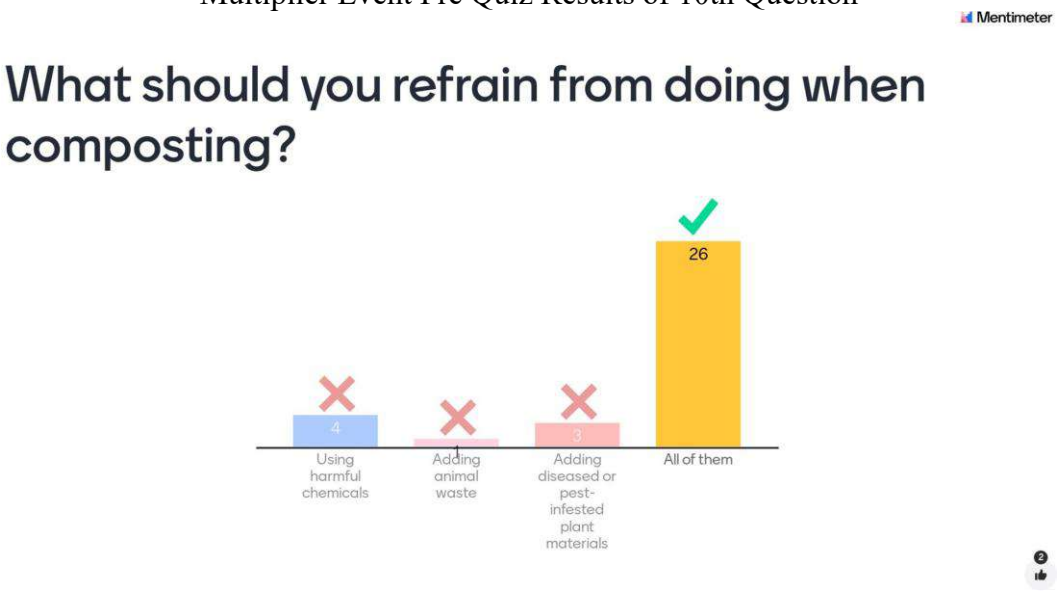
Multiplier Event Post Quiz Results of 9th Question

This question is designed to assess participants' understanding of composting as a natural process of recycling organic matter into nutrient-rich soil. By learning about composting, participants can adopt more sustainable practices in waste management and contribute to reducing landfill waste and greenhouse gas emissions. This knowledge is crucial for promoting environmental sustainability at the individual and community levels.

The pre-quiz results indicated that participants had a basic understanding of composting but were unfamiliar with its broader environmental benefits. After the educational sessions, their post-quiz responses reflected a deeper comprehension of composting's role in sustainable waste management, showing the positive impact of the training on their environmental awareness.



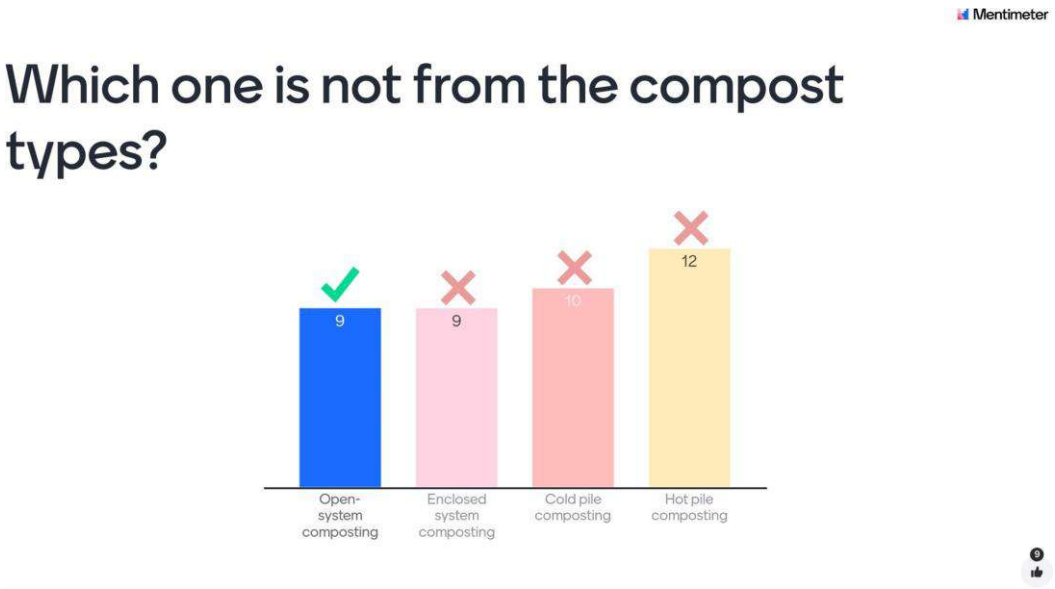
Multiplier Event Pre Quiz Results of 10th Question



Multiplier Event Post Quiz Results of 10th Question

This question highlights the importance of proper composting techniques by asking participants to identify actions that should be avoided, such as adding non-biodegradable materials or certain chemicals to the compost. Understanding what to avoid in composting helps participants ensure that their composting efforts are effective and environmentally friendly. This knowledge is valuable for anyone interested in sustainable gardening and waste reduction.

Before the educational sessions, participants were aware of basic composting practices but lacked knowledge about what actions could negatively impact the composting process. The post-quiz results showed that they had gained a more comprehensive understanding of proper composting techniques, indicating the training's success in enhancing their composting skills.



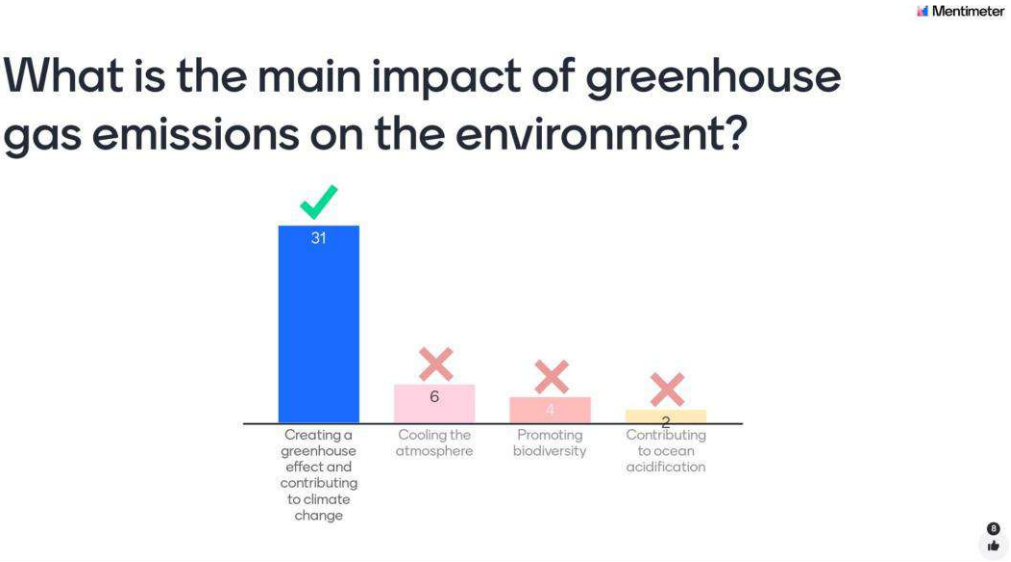
Multiplier Event Pre Quiz Results of 11th Question



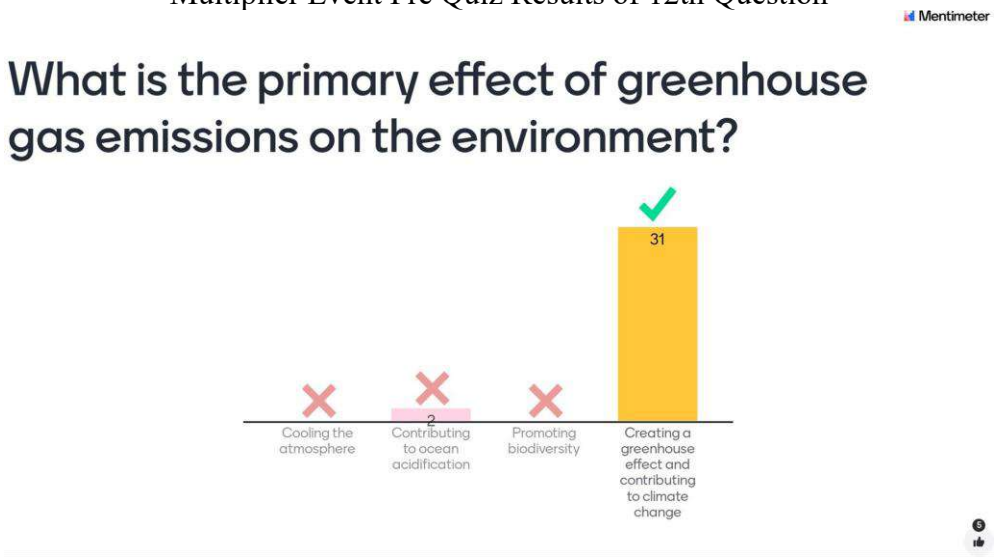
Multiplier Event Post Quiz Results of 11th Question

This question assesses participants' knowledge of the different types of compost, such as vermicompost, hot compost, and cold compost, by asking them to identify which option does not belong. Understanding the various composting methods allows participants to choose the most suitable technique for their needs and promotes better waste management practices. This knowledge is important for anyone interested in contributing to a more sustainable environment through composting.

The pre-quiz responses showed that participants were familiar with a few composting methods but were unsure about the distinctions between them. After the educational sessions, the post-quiz results indicated that participants had a clearer understanding of the different compost types, reflecting the training's effectiveness in expanding their composting knowledge.



Multiplier Event Pre Quiz Results of 12th Question



Multiplier Event Post Quiz Results of 12th Question

This question aims to assess participants' understanding of the primary effects of greenhouse gas emissions, such as global warming, climate change, and the disruption of natural ecosystems. By learning about the impact of greenhouse gas emissions, participants can better grasp the urgency of addressing climate change and the importance of reducing carbon footprints. This knowledge is critical for promoting environmental responsibility and advocating for sustainable policies.

Before the educational sessions, participants had a general awareness of greenhouse gas emissions but lacked a deep understanding of their environmental impact. The post-quiz results showed that participants had gained a more detailed understanding of the consequences of greenhouse gas emissions, demonstrating the success of the training in raising awareness about climate change.

QR Code Report

This report outlines the findings from the QR code study conducted during the C4 learning, teaching, and training activity of the GreAT project, which took place in Madrid, Spain, from March 11-15, 2024. The event was attended by partners from Istanbul University (Türkiye), Adefis Juventud Internacional (Spain), The Association Centre for Rural Development – SEE (North Macedonia), and the International Center for Development of Education and Training (Bulgaria). The primary objective of this activity was to engage participants in educational sessions that utilized QR codes in a game-based format. These sessions focused on key themes such as environmental consciousness, philosophical perspectives on the environmental crisis, the relationship between humans and nature, and practical strategies for addressing environmental challenges. The holistic approach of the C4 activity aimed to blend educational gaming techniques with thoughtful discussions, enhancing participants' understanding and commitment to environmental sustainability.

In presenting this report, our goal is to emphasize both the successes and the areas where improvements can be made within the GreAT project's program. By doing so, we aim to ensure that future iterations of the GreAT project can build on these insights, leading to even more impactful educational outcomes.

Overview of the QR Code Activity

On March 14, 2024, a key QR code activity was initiated as part of the learning and educational components of the C4 activity, conducted in an ecological park. The choice of this setting was intentional, as it aligned with the theme of connecting with nature, thereby reinforcing the importance of environmental consciousness in a real-world context. The outdoor experience was followed by a discussion session at the main C4 activity venue, where participants could reflect on their experiences and share insights.

This activity was meticulously designed to achieve several core objectives:

Enhancing Environmental Awareness

The activity aimed to deepen participants' understanding of a range of environmental issues, emphasizing their impacts on both local and global scales. By experiencing nature firsthand and engaging with the content via QR codes, participants were encouraged to develop a more profound awareness of environmental challenges and the importance of sustainability.

Encouraging Reflective Thinking

Beyond just awareness, the activity sought to provoke thoughtful reflection on the philosophical and ethical dimensions of environmental stewardship. By prompting participants to consider their personal roles and responsibilities in protecting the environment, the activity fostered a deeper connection to the broader themes of the GreAT project.

Promoting Active Engagement

A key objective was to inspire young participants to move beyond reflection and take tangible action toward environmental sustainability. The game-based approach, combined with interactive discussions, was designed to motivate participants to commit to personal and collective initiatives that contribute to a more sustainable future.

Structure of the Q&A Session

The Q&A session was a crucial component of the QR code activity, structured to maximize participant interaction and the exchange of ideas. Participants were divided into three mixed groups, with each group including members from the different country partners: Spain, Bulgaria, and North Macedonia. This multicultural mix was intentional, ensuring a diversity of perspectives and experiences, which enriched the discussions.

The session was divided into three distinct thematic sections, each focusing on a different aspect of environmental sustainability. Each section was associated with a unique QR code, which participants scanned to access a set of tailored questions. These questions were carefully crafted to encourage participants to share their personal insights, experiences, and perspectives on the following themes:

1. The Human-Nature Relationship: Questions in this section explored participants' personal connections with nature, their understanding of how human actions affect the environment, and their views on the reciprocal relationship between humans and the natural world.

2.Philosophical Perspectives on Environmental Crisis: This section delved into the deeper philosophical and ethical considerations of environmental issues. Participants were asked to reflect on the moral responsibilities of individuals and societies in addressing environmental degradation and to discuss the potential consequences of inaction.

3.Practical Approaches to Environmental Problems: The final section focused on practical solutions and strategies for mitigating environmental challenges. Participants shared their ideas on effective practices for promoting sustainability, both at the individual level and within their communities.

Each group's discussions were facilitated by moderators, who ensured that the conversations remained focused and that all participants had the opportunity to contribute. The insights gathered from these discussions were not only valuable for the participants' learning experiences but also provided critical feedback for the ongoing development of the GreAT project.

Reflections and Recommendations

The QR code activity, coupled with the structured Q&A session, proved to be an effective educational tool within the C4 learning, teaching, and training activity. Participants reported increased awareness of environmental issues, a greater appreciation for the philosophical aspects of sustainability, and a stronger commitment to taking action.

However, the session also highlighted areas for improvement. Some participants expressed a desire for more time to delve deeper into each thematic section, suggesting that future activities could benefit from a more extended schedule. Additionally, while the QR code format was engaging, a few technical challenges were noted, such as difficulties with scanning codes in certain environments. Addressing these issues in future activities will help ensure a smoother and more impactful learning experienc

In conclusion, the QR code activity within the C4 event was a valuable component of the GreAT project, contributing significantly to the participants' educational journey. By reflecting on the successes and challenges of this activity, we can continue to refine our approach, ensuring that future events within the GreAT project are even more effective in fostering environmental awareness, reflective thinking, and active engagement among participants.

QR Code I - "Earth"

The responses gathered through this QR Code offer a profound exploration into individuals' connections with nature, revealing both personal reflections and broader cultural insights. Participants displayed a deep-seated appreciation for their natural surroundings and an acute awareness of how these environments influence their mental health and overall well-being. This



personal connection to nature is not merely a source of aesthetic pleasure; it significantly impacts their mood and mental health, underscoring the therapeutic benefits of natural settings.

A notable example of this connection is the reverence participants have for their hometown's famous Lake Ohrid. This natural landmark is more than just a scenic location; it represents a crucial element of their cultural and natural heritage. Participants express a strong sense of responsibility toward preserving such natural treasures, recognizing them as vital components of ecological balance and life support systems.

Urbanization and modern lifestyles are seen as significant factors contributing to a growing disconnection from nature. Participants voiced concerns about how technology and the fast pace of urban life are distancing people from the natural world. This disconnection is viewed as a potential threat to environmental awareness and conservation efforts, making the preservation of natural spaces all the more critical.

In their responses, participants emphasized the importance of nature as a source of wonder and learning. Nature is not only a backdrop for human life but a dynamic and interactive teacher. Engaging with the natural world fosters a sense of curiosity and respect, which is crucial for nurturing a culture of environmental stewardship. This learning experience, they argue, is essential for fostering a collective sense of responsibility towards environmental care.

Cultural attitudes toward nature, as noted by participants, vary widely. This diversity in perspectives can be a strength, offering a richer, more nuanced approach to environmental issues. Understanding and integrating different cultural attitudes can enhance collective efforts to address environmental challenges and promote sustainability.

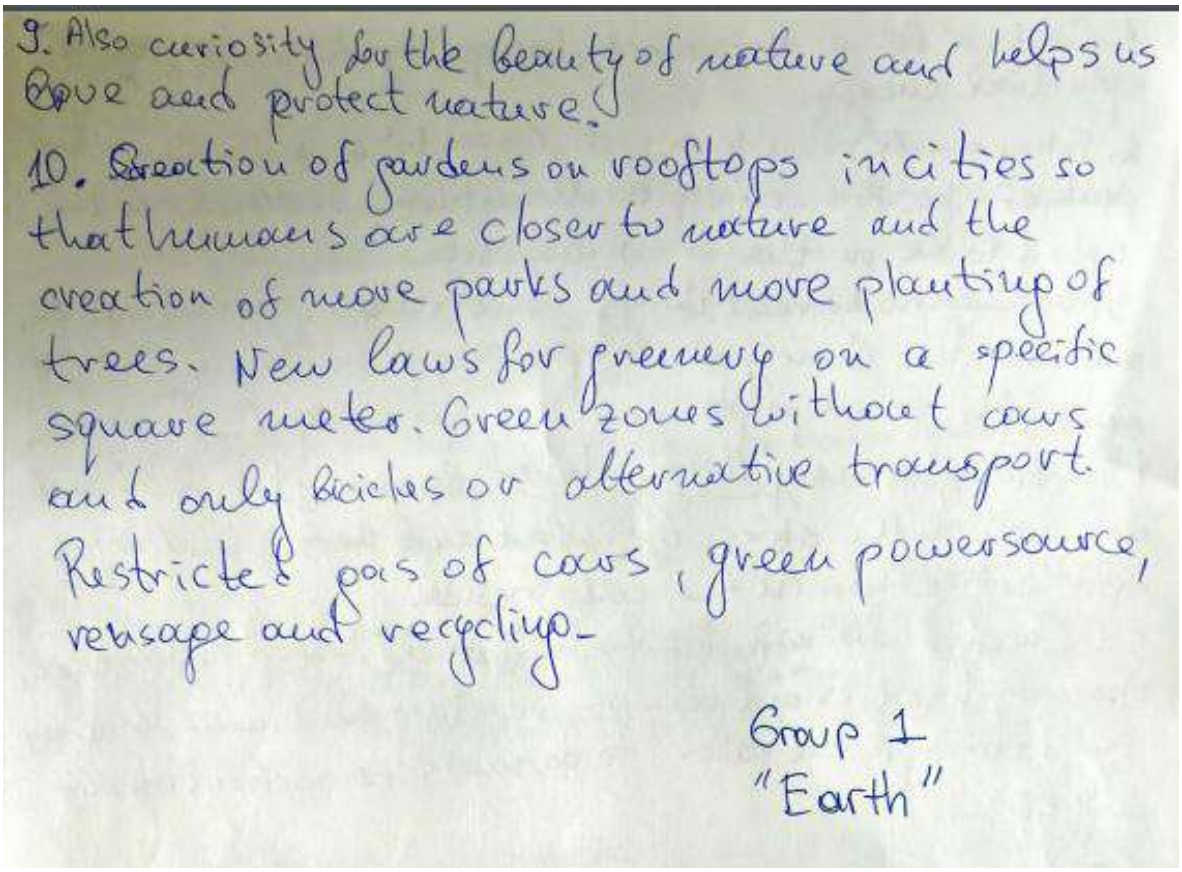
Following a week of activities and discussions, participants have come to a unified conclusion about the deep interconnection between humans and natural systems. They recognize that humans are not separate from nature but are fundamentally intertwined with it. This interconnectedness underscores the urgency of environmental protection and the need for a holistic approach to conservation that incorporates diverse perspectives and knowledge.

Traditional and indigenous wisdom emerged as a significant theme in the responses. Participants value this knowledge for its deep insights into ecological balance and sustainable practices. Such wisdom often includes practices and understandings that have been refined over centuries and can offer valuable guidance in modern conservation efforts.

In summary, the responses to QR Code I highlight a profound recognition of the importance of nature in personal well-being, cultural heritage, and ecological balance. They also stress the need for continued engagement with and protection of natural environments, advocating for a multifaceted approach that respects and incorporates diverse cultural perspectives and traditional knowledge. This collective understanding underscores the urgency of addressing environmental issues and the vital role of preserving our natural world for future generations.

1. Creates a feeling of comfort, tranquility and recharging of spiritual energy.
2. Taking a walk in our town park „Ayazmoto" and climbing the peak of the Rila or Rodopite Mountains. In Macedonia the Orhid lake or the Presponso lake.
3. We all imagine different things: some see security and wealth, some see the beauty of the greenery and the beauty of animals, some people see the space and the oceans.
4. It affects so many things: stress, because it is gray and not green in the cities, life is fast and the food and oxygen are dirtier than in the countryside.
5. We need to have more activities in nature, like planting trees, cleaning the cities and oceans, recycling and more exercise in nature in the parks, to do more eco actions in our daily lives.
6. In some cultures the nature is more important than the human's, in other cultures people are more technology oriented and they try to control it in a wrong way. There must be a balance in the human ways. We must coexist with nature in a healty way.
7. Experience camping to get closer with the nature during a trip like near the sea and to relax in a natural habitat. Also picnics are a great way to get closer to the nature and enjoy your time.
8. In the past we were more dependant on nature and reconnecting with these traditions will help us to understand the value of nature.
9. In literature since being a child we learn to cherish and love the nature in our countries.





Answers of Group 1 For QR Code I - "Earth"

THE BILLS! -

1. Spending time in nature help in isolating ourself from the digital world that we live in, the chaos from everyday life, it recharges batteries and makes us feel calm and present.

2. Looking up at the night sky, makes me feel lost, and inspired, it makes me appreciate the beauty around us given by nature. Ex.

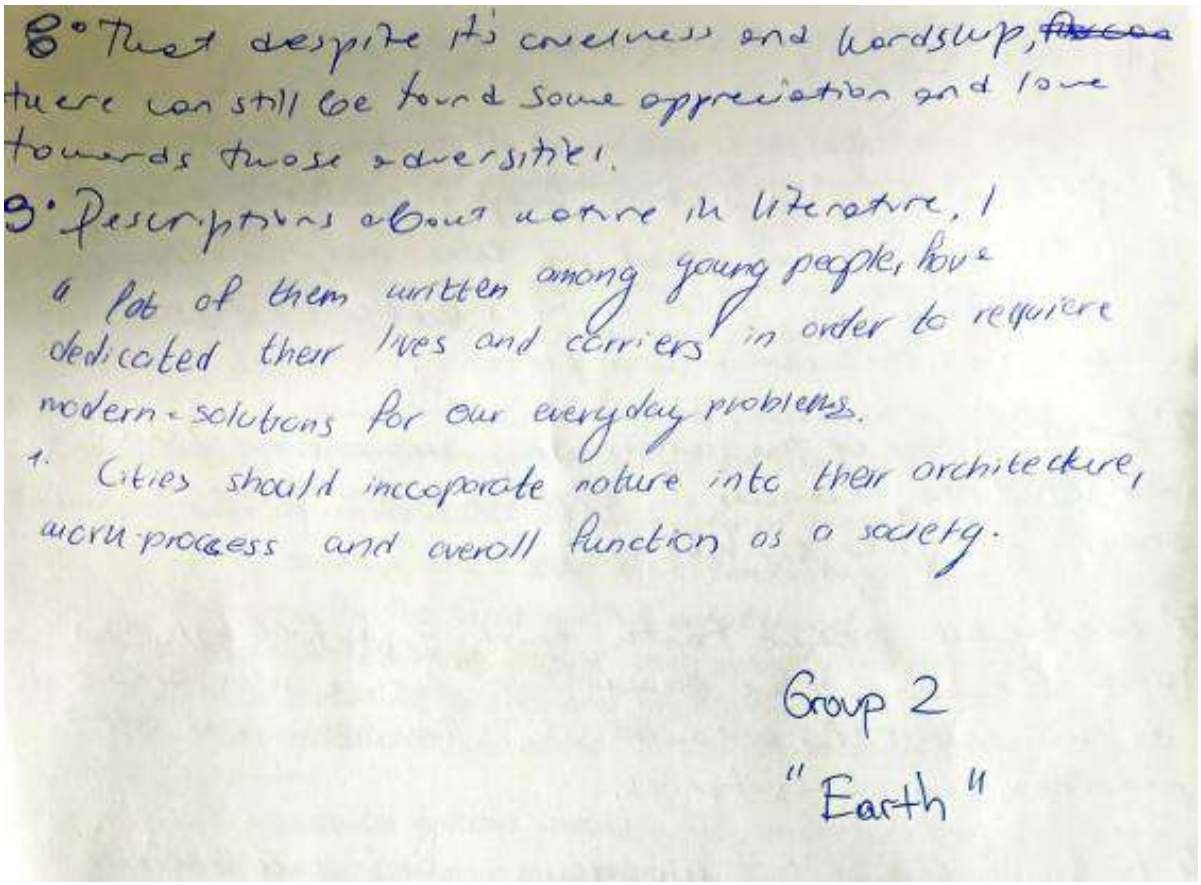
3. We recall peace, faith, trust, gratefulness, and love because the beautiful nature who created all the beauties around us, is the same one who provides and cares for us.

4. Many beautiful meadows, rivers, and valleys are being destroyed in order to accomodate ~~people's~~ people's needs.

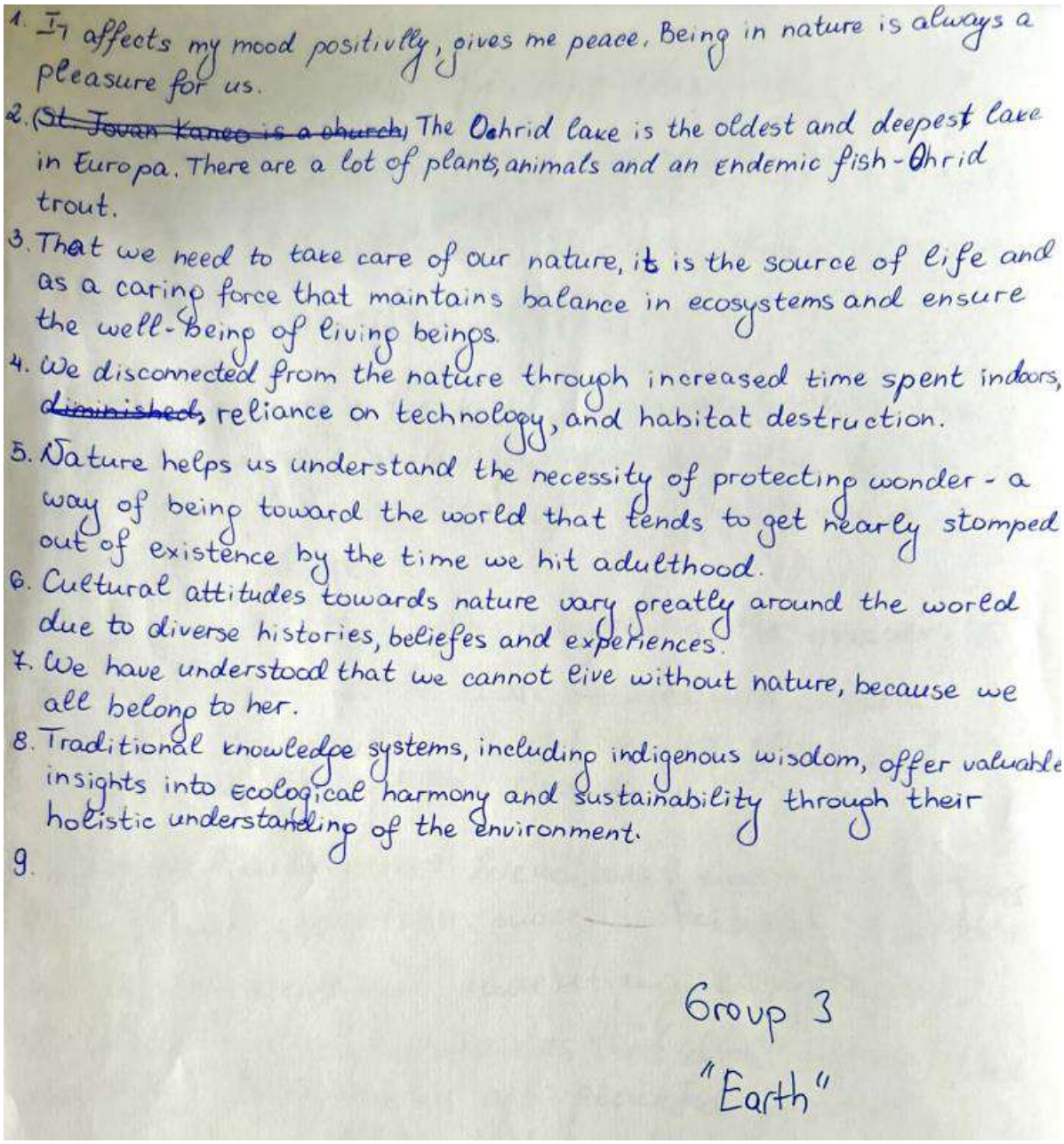
5. As we connect on a deeper level with nature, we seek the best solutions to provide in these modern days for us and for her.

6. While some cultures are distant from ~~the~~ native, others are centered around it, appreciating and living in harmony with it, often connecting parts of their life with the ~~natural~~ environmental ~~day~~ cycle.

7. The short life span of Japanese cherry blossoms, mixed seasons, reminds me of the briefness of life, and teaches me how to be appreciative of the ~~beauty~~ short but beautiful existence.



Answers of Group 2 For QR Code I - "Earth"



Answers of Group 3 For QR Code I- "Earth"

This section presents an analysis of the responses collected from the QR Code labeled "Earth," which included a set of 10 questions. Each group provided their insights, and the following paragraphs summarize the key themes and findings derived from their answers. The questions were designed to explore participants' personal experiences with nature, their perceptions of environmental issues, and the cultural and traditional knowledge that influences their views on sustainability. By examining the responses from each group, we gain a deeper understanding of how individuals connect with the natural world and their perspectives on the importance of environmental stewardship.

QR CODE – “EARTH”; Questions and Group Response Analysis

1. How does spending time in nature personally affect your mood and perspective on the world around you?

Participants consistently reported that spending time in nature has a profound positive effect on their mood and overall well-being. They described experiences of feeling significantly more relaxed and less stressed after immersing themselves in natural environments. Nature was often viewed as a sanctuary that provides a respite from the pressures of daily life, allowing individuals to gain a clearer, more expansive perspective on their surroundings. This connection to nature was associated with increased feelings of grounding and contentment, contributing to a more balanced and appreciative view of the world.

2. Can you remember a specific memory or experience in nature that significantly impacted your appreciation for the Earth's beauty and importance?

Participants shared evocative memories of moments in nature that deeply influenced their appreciation for the Earth’s beauty. One notable example was the experience of visiting Lake Ohrid, which many described as a moment of awe and inspiration. These experiences often highlighted the extraordinary beauty and complexity of natural landscapes, leading to a heightened sense of responsibility to protect and preserve such environments. These personal encounters reinforced their commitment to environmental conservation, emphasizing the importance of preserving natural wonders for future generations.

3. When you think about the term "Mother Nature," what emotions or thoughts come to mind, and why?

The term "Mother Nature" evoked strong emotions of reverence, gratitude, and a sense of duty among participants. They perceived nature as a nurturing, life-sustaining force that deserves protection and care. This anthropomorphic view of nature as a mother figure fostered a deep sense of responsibility to safeguard the environment, recognizing its vital role in supporting life and sustaining ecosystems. The term inspired a collective commitment to environmental stewardship and the importance of respecting and caring for the natural world.

4. In what ways do you believe urbanization and modern lifestyles have disconnected people from the natural world, and what are the consequences of this disconnection?

Participants identified urbanization and modern lifestyles as major factors contributing to a growing disconnect from nature. They noted that the fast-paced, technology-driven nature of city life often results in reduced opportunities for direct engagement with natural environments. This disconnection was seen as detrimental to environmental awareness and appreciation, leading to a diminished sense of responsibility towards conservation efforts. Participants

expressed concern that the detachment from nature could weaken the motivation to protect the environment and exacerbate ecological problems.

5. How can fostering a sense of wonder and curiosity about the natural world lead to a deeper sense of connection and responsibility towards protecting the Earth?

Participants believed that fostering a sense of wonder and curiosity about the natural world is crucial for developing a deeper connection with the environment. They argued that engaging with nature in a meaningful way can enhance appreciation and instill a sense of responsibility for its protection. By encouraging exploration and learning about natural processes and ecosystems, individuals are more likely to feel a personal stake in environmental preservation. This curiosity-driven connection helps to cultivate a lasting commitment to protecting the Earth and promoting sustainable practices.

6. How do you think cultural attitudes towards nature vary around the world, and what can we learn from diverse perspectives on our relationship with the Earth?

Participants acknowledged that cultural attitudes towards nature vary significantly across the globe, and this diversity offers valuable insights into environmental stewardship. They recognized that different cultures approach nature with varying philosophies and practices, which can enrich our understanding of ecological balance and sustainability. By integrating diverse cultural perspectives, we can gain a more comprehensive approach to environmental conservation, incorporating traditional wisdom and innovative solutions. This cross-cultural exchange enhances our collective efforts to address environmental challenges and fosters a more inclusive approach to sustainability.

7. Can you describe a time when you felt a profound sense of connection with the natural world, and how did that experience influence your outlook on life?

Many participants recounted profound experiences in nature that significantly impacted their outlook on life. These moments of connection often led to a greater awareness of the interdependence between humans and the environment. Participants described how these experiences fostered a sense of unity with nature and encouraged them to adopt more environmentally conscious lifestyles. The deep emotional connection with natural settings prompted a commitment to sustainability and a desire to advocate for environmental protection, reflecting a broader shift in their values and behaviors towards the natural world.

8. In what ways do you believe traditional knowledge systems, such as indigenous wisdom, can enrich our understanding of ecological harmony and sustainability?

Participants highly valued traditional knowledge systems, including indigenous wisdom, for their insights into ecological harmony and sustainability. They noted that these knowledge systems offer profound understanding of how to live in balance with nature, often reflecting practices developed over centuries of close interaction with the environment. Indigenous wisdom was seen as a rich source of guidance for contemporary environmental conservation efforts, providing strategies for sustainable living and fostering respect for natural systems. Integrating these traditional practices with modern approaches was viewed as a way to enhance our environmental stewardship and achieve greater ecological balance.

9. What role do you think art and literature play in shaping our perception of the Earth, and how can creative expression inspire environmental action?

Participants viewed art and literature as powerful mediums for shaping perceptions of the Earth and inspiring environmental action. They believed that creative expression can evoke strong emotional responses and foster a deeper appreciation for the natural world. Art and literature have the ability to capture the beauty and complexity of nature, raising awareness and motivating individuals to engage in environmental conservation. By highlighting environmental issues and celebrating nature's wonders, creative works can inspire people to take action and support sustainable practices, making them essential tools in the environmental movement.

10. How do you envision cities of the future integrating nature into urban landscapes to promote both human well-being and ecological balance?

Participants envisioned future cities where nature is seamlessly integrated into urban landscapes, creating environments that promote both human well-being and ecological balance. They emphasized the importance of incorporating green spaces, such as parks, urban forests, and green roofs, into city planning. This integration was seen as crucial for enhancing quality of life, reducing urban heat islands, and supporting biodiversity. Participants highlighted that designing cities with nature in mind can lead to healthier, more sustainable living environments, ensuring that urban development aligns with ecological principles and fosters a harmonious coexistence between people and the natural world.

QR Code II- "Environmental Problems"

This section of the activity was dedicated to exploring participants' perceptions of environmental challenges, the responsibilities of governments and corporations, the impact of



grassroots activism, and the potential of technology and education in tackling these issues. The discussions triggered by the QR code questions in this segment unveiled profound emotional responses and a nuanced understanding of the complexities surrounding environmental problems. Participants expressed a strong sense of urgency and collective responsibility, highlighting both the limitations and the transformative potential of current efforts. They also emphasized the need for a multifaceted approach that integrates policy changes, innovative technologies, and community-driven initiatives to effectively address and mitigate environmental challenges.

Participants expressed a deep sense of sadness and disappointment over the widespread neglect of environmental issues, particularly the tendency of both individuals and institutions to take nature for granted. This emotional response was not just a passive feeling but rather a reflection of their heightened awareness of the ongoing environmental degradation and its long-term implications. The participants voiced significant concerns about the alarming rise in global temperatures each year, which they observed as having direct and detrimental effects on agriculture, food security, and overall ecological stability. This acute awareness of climate change's tangible impacts demonstrated that the participants were not merely aware of abstract environmental concepts but were deeply cognizant of how these issues manifest in their everyday lives and communities.

The emotional tone of the responses was characterized by a blend of sadness and disappointment, rooted in the perception that society at large seems to lack the necessary empathy and concern for the environment. Participants pointed out that while there is growing awareness of environmental issues, this awareness has not yet translated into the widespread behavioral changes needed to address these problems effectively. They criticized the inertia of societal institutions, including governments and corporations, which they felt often prioritize short-term economic gains over long-term environmental sustainability. This critique extended to the perceived failures of global leadership in taking decisive action to mitigate environmental risks, highlighting a frustration with the slow pace of policy change and the often superficial commitments made by those in power.

Despite these frustrations, participants also expressed hope and belief in the potential of technological advancements to play a crucial role in addressing environmental challenges. They

highlighted how innovations in renewable energy, sustainable agriculture, waste management, and environmental monitoring could offer solutions to some of the most pressing ecological problems. The discussions underscored a recognition that while technology alone cannot solve these issues, it can significantly enhance our ability to reduce environmental harm and create more sustainable systems. Participants called for greater investment in and support for green technologies, emphasizing that such innovations should be accessible and equitable, ensuring that all communities, especially those most vulnerable to environmental changes, can benefit from them.

In parallel with their focus on technology, participants underscored the vital role of education in combating environmental degradation. They recognized education as a fundamental tool in empowering individuals to become proactive agents of change. This perspective was not limited to formal education but extended to informal learning opportunities, community outreach, and public awareness campaigns. Participants advocated for educational programs that are not only informative but also transformative—programs that inspire critical thinking, foster a deep connection to nature, and encourage active participation in environmental stewardship. They emphasized that such education should begin at an early age and continue throughout life, helping to cultivate a generation that is not only aware of environmental issues but also equipped with the skills and motivation to make meaningful contributions to sustainability efforts.

Moreover, participants acknowledged the importance of grassroots activism in driving environmental change. They shared examples of how local communities and youth-led movements have successfully advocated for environmental protection, often leading to significant policy shifts and increased public awareness. This recognition of grassroots efforts highlighted a belief in the power of collective action, where individuals and communities can make a substantial impact by working together towards common environmental goals. Participants called for more support for grassroots initiatives, including funding, training, and platforms for these movements to amplify their voices and reach broader audiences.

Ultimately, the responses from this session conveyed a sense of urgency in addressing environmental problems, coupled with a belief in the promising roles of technology, education, and grassroots activism. The discussions made it clear that while the youth are deeply concerned about the current state of the environment, they are also hopeful about the potential for positive change. They emphasized that overcoming environmental challenges requires a comprehensive approach that integrates technological innovation, widespread education, active civic

engagement, and, crucially, a shift in societal values towards greater environmental empathy and responsibility.

The insights gathered from this session highlight the critical importance of empowering young people to lead the charge in environmental sustainability. Their deep concern, coupled with their innovative ideas and commitment to action, underscores the potential of the youth to drive significant progress in the fight against environmental degradation. As the GreAT project moves forward, it will be essential to continue fostering these perspectives, ensuring that young voices are not only heard but also actively engaged in shaping the future of our planet.

1. News just lay the statistics and bare facts. It rarely inspites people to act. It just creates unrest, and people lose de motivation. Maybe they should show more positive examples instead.

2. Many changes in the local environment can be the climate change, the missing greenery, the death of the animals because of the poletions or climate change.

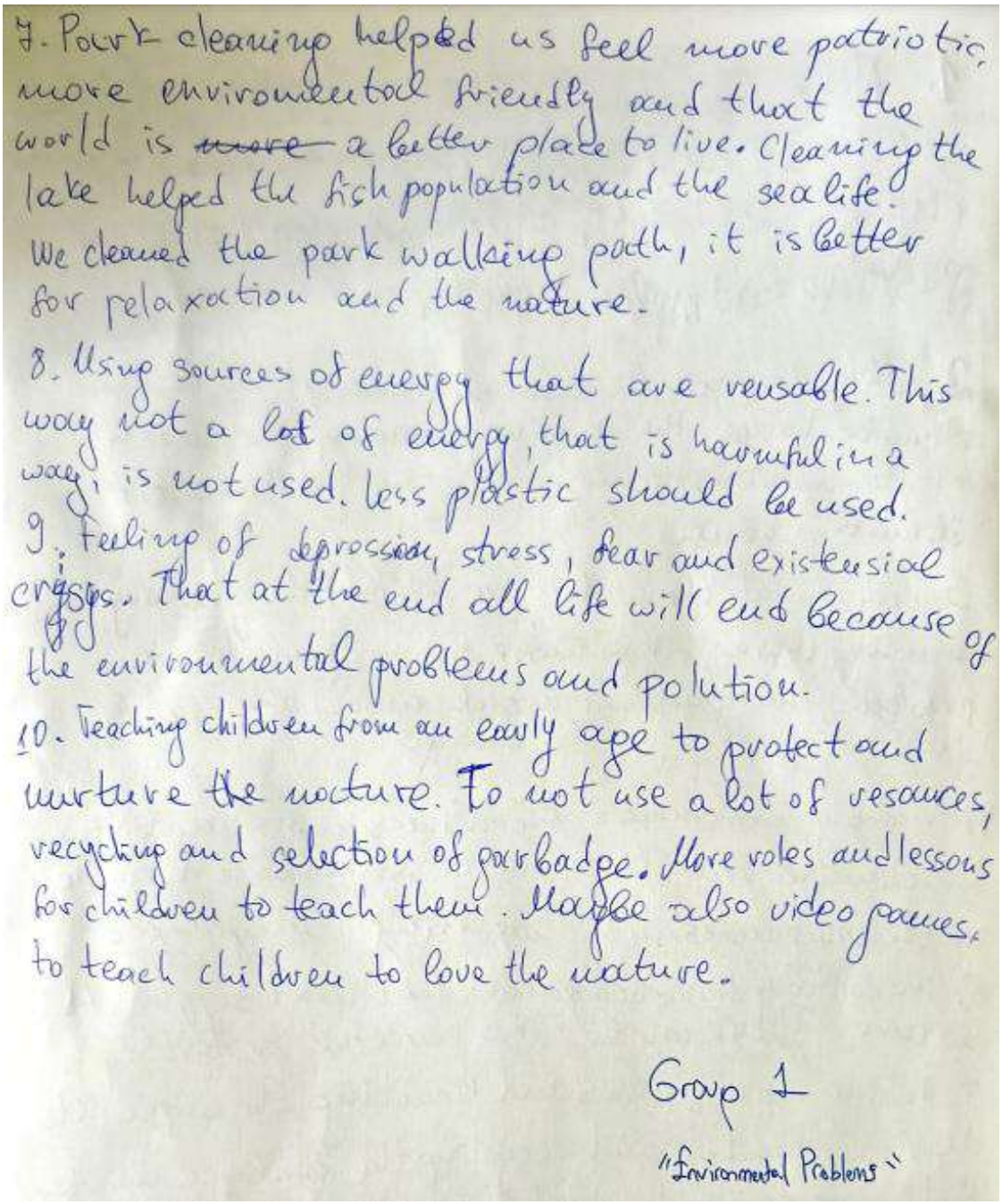
3. Very awful, the waters are poluted, the greenery is missing, there will be more diseases and climate problems, humans will be sick more often and people's physiology could change.

4. Promoting environment friendliness, more initiatives for climate protection, more sustainable activities in the companies and marketing campaigns.

5. We don't buy from companies that don't support the nature. There can be also peaceful protests.

5. Reusing more plastics and limiting the usage. Cleaning their surrounding and recycling the garbage waste. Not using so much plastic bags and selection of specific garbage resources. Also more cleaning of parks and streets for voulenteering.

6. We check sources of information, avoid fake news outlets or websites. Respect other people's viewpoints and speak with professionals when you are not sure.


7. Park cleaning helped us feel more patriotic, more environmental friendly and that the world is ~~more~~ a better place to live. Cleaning the lake helped the fish population and the sea life. We cleaned the park walking path, it is better for relaxation and the nature.

8. Using sources of energy that are reusable. This way not a lot of energy, that is harmful in a way, is not used. less plastic should be used.

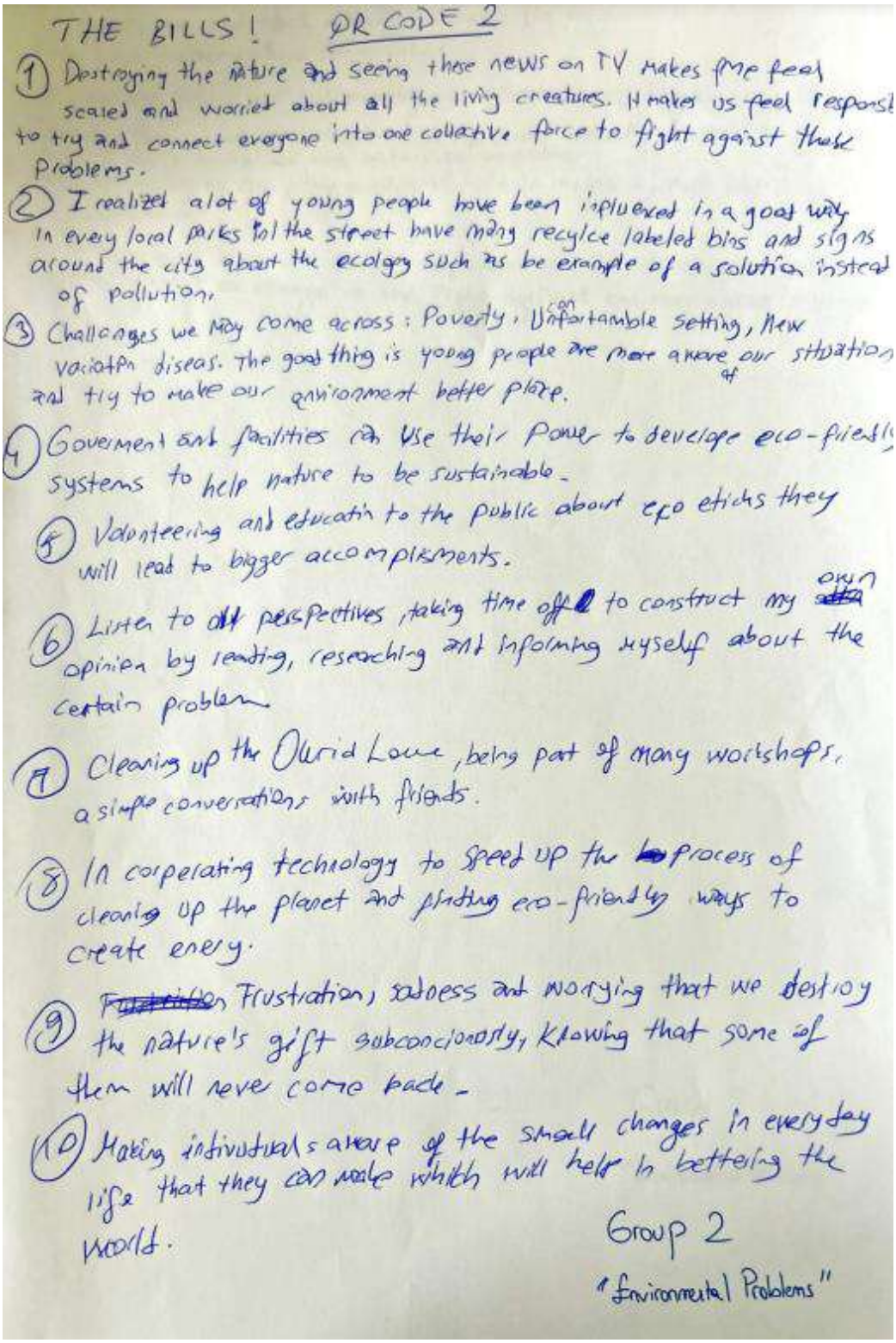
9. Feeling of depression, stress, fear and existensial crysis. That at the end all life will end because of the environmental problems and polution.

10. Teaching children from an early age to protect and nurture the nature. To not use a lot of resources, recycling and selection of garbage. More roles and lessons for children to teach them. Maybe also video games. to teach children to love the nature.

Grup 1

"Environmental Problems"

Answers of Group 1 For QR Code II- "Environmental Problems"


THE BILLS! QR CODE 2

(1) Destroying the nature and seeing those news on TV makes me feel scared and worried about all the living creatures. It makes us feel responsi to try and connect everyone into one collective force to fight against those problems.

(2) I realized alot of young people have been influenced in a good way In every local parks to the street have many recylce labeled bins and signs around the city about the ecology such as be example of a solution instead of pollution.

(3) Challenges we may come across: Poverty, Unfortunable setting, New variatin diseas. The good thing is young people are more aware our situation and try to make our environment better place.

(4) Goverment and facilities can use their Power to develope eco-friendly systems to help nature to be sustainable.

(5) Volunteering and educatin to the public about eco ethics they will lead to bigger accomplishments.

(6) Listen to all perspectives, taking time off to construct my own opinion by reading, researching and informing myself about the certain problem.

(7) Cleaning up the World Love, being pat of many workshops, a simple conversations with friends.

(8) In corperating technology to speed up the process of cleaning up the planet and finding eco-friendly ways to create energy.

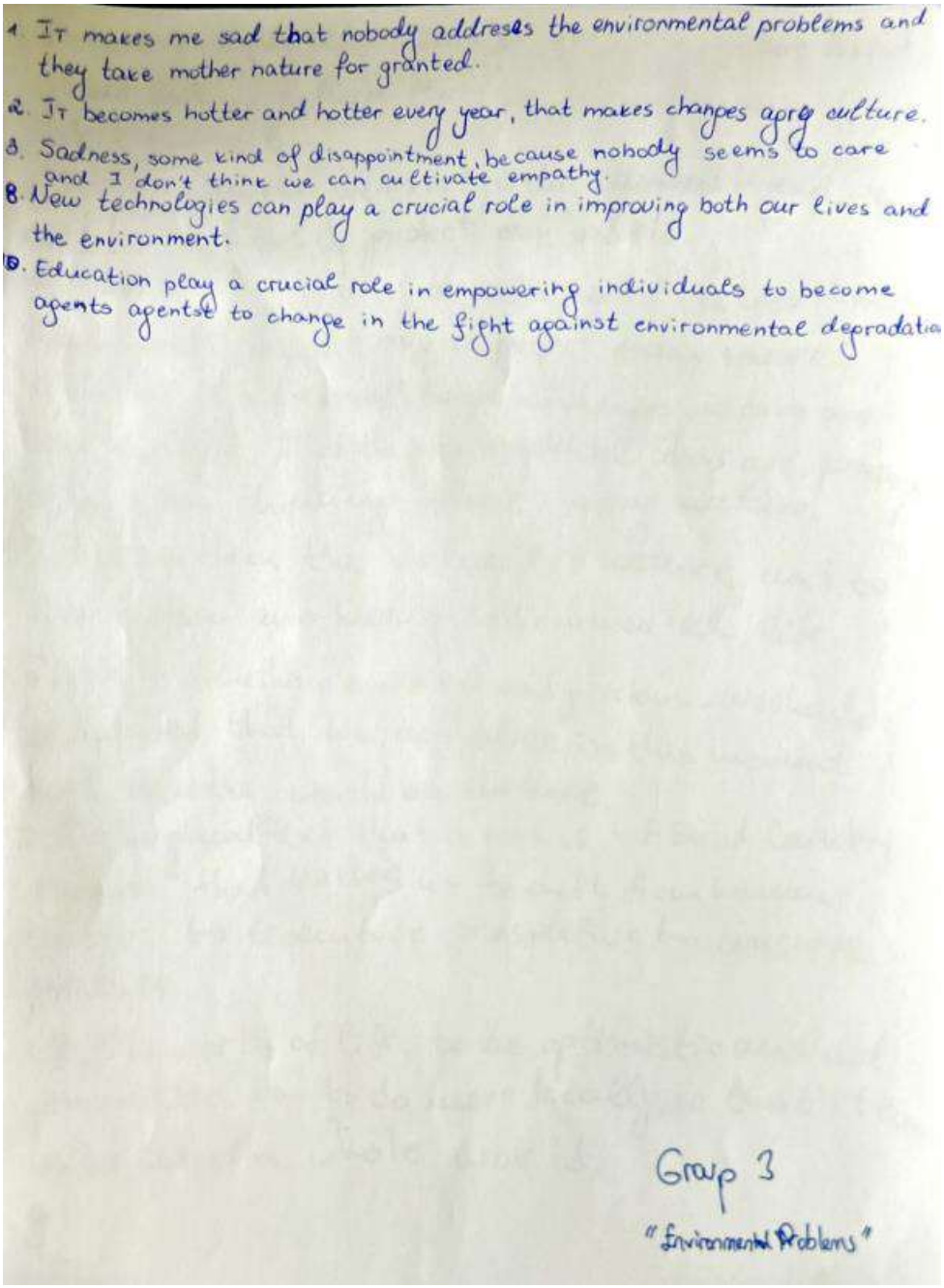
(9) Frustration, sadness and worrying that we destroy the nature's gift subconciously, knowing that some of them will never come back.

(10) Making individuals aware of the small changes in everyday life that they can make which will help in bettering the world.

Group 2

"Environmental Problems"

Answers of Group 2 For QR Code II- "Environmental Problems"



Answers of Group 3 For QR Code II- "Environmental Problems"

QR CODE – "ENVIRONMENTAL PROBLEMS": Questions and Group Response Analysis

1.When you hear about environmental issues in the news, how does it make you feel, and what thoughts come to mind about our collective responsibility to address these problems?

Participants reported a range of emotions when confronted with environmental issues in the news, including sadness, frustration, and anxiety. These feelings were often accompanied by a heightened sense of urgency regarding our collective responsibility to tackle these challenges. Many expressed that addressing environmental problems requires a unified effort from

individuals, communities, governments, and corporations. They emphasized the need for collaborative actions and collective accountability to mitigate the impact of these issues. The recognition of a shared responsibility reflects an awareness of the interconnected nature of environmental problems and the importance of working together to find solutions.

2. Have you noticed any changes in your local environment over the years, and if so, what do you attribute these changes to?

Participants observed various changes in their local environments, such as increased pollution, loss of natural green spaces, altered wildlife behaviors, and degraded water quality. They attributed these changes to several factors, including rapid urbanization, industrial activities, deforestation, and the effects of climate change. Urban expansion and industrial growth were frequently mentioned as primary contributors to environmental degradation. Participants expressed concern over these developments and their implications for local ecosystems, highlighting the need for more sustainable practices and policies to address these environmental shifts.

3. How do you think future generations will be impacted by the environmental challenges we face today, and what legacy do you hope to leave for them?

Participants were deeply concerned about the long-term impacts of current environmental challenges on future generations. They foresaw potential consequences such as more severe climate conditions, resource depletion, and diminished quality of life. Many expressed a strong desire to leave a positive legacy by advocating for and implementing sustainable practices and policies that will benefit future generations. This includes efforts to reduce carbon footprints, protect natural resources, and promote environmental conservation. Participants hoped that their actions would contribute to a more resilient and sustainable world for those who come after them, emphasizing the importance of proactive measures to prevent long-term damage.

4. In your opinion, what role should governments and corporations play in addressing environmental problems, and how can individuals hold them accountable?

Participants viewed governments and corporations as having crucial roles in addressing environmental problems. They believed that governments should implement and enforce regulations that prioritize sustainability and environmental protection. Corporations, on the other hand, should adopt sustainable practices and corporate social responsibility initiatives. Individuals can hold these entities accountable by advocating for stricter regulations, participating in public consultations, voting for environmentally-conscious leaders, and supporting businesses that demonstrate a commitment to sustainability. There was a consensus

that transparency and accountability are essential to ensuring that governments and corporations fulfill their environmental responsibilities.

5. What small changes do you think individuals and communities can make in their daily lives to contribute to a healthier planet, and why do you think these changes are important?

Participants identified a variety of small changes that individuals and communities can make to support a healthier planet. These include reducing waste, conserving energy, recycling, using sustainable products, and supporting local and organic agriculture. They emphasized that these changes are important because they collectively contribute to reducing environmental impacts and can drive broader systemic shifts. Small actions, when aggregated, can lead to significant improvements in environmental sustainability. Participants also noted that these changes help raise awareness and set an example for others, fostering a culture of environmental responsibility.

6.When faced with conflicting information about environmental issues, how do you navigate the complexities of the debate and form your own opinions?

Participants reported using a multi-faceted approach to navigate conflicting information about environmental issues. They emphasized the importance of critical thinking, thorough research, and consulting trusted sources. Evaluating evidence from credible experts, considering various perspectives, and assessing the reliability of information sources were key strategies mentioned. Participants also noted the value of staying informed through reputable news outlets, scientific reports, and expert analyses to form well-rounded and informed opinions. This approach helps them navigate the complexities of environmental debates and make informed decisions based on accurate information.

7. Have you ever been involved in grassroots activism or community initiatives related to environmental causes, and if so, what was your experience like?

Many participants shared positive experiences with grassroots activism and community initiatives. They highlighted how such involvement often led to meaningful changes and increased awareness within their communities. Participants described feeling empowered by their engagement in local environmental actions, such as clean-up drives, advocacy campaigns, and educational workshops. These experiences fostered a sense of community and collective effort, illustrating how grassroots movements can drive progress and inspire others to participate in environmental causes.

8. How do you think advancements in technology and science can be harnessed to address environmental challenges without perpetuating environmental harm?

Participants recognized the potential of technology and science to address environmental challenges, such as through innovations in renewable energy, waste management, and sustainable agriculture. However, they also emphasized the need for a careful evaluation of the potential negative impacts of new technologies. They advocated for a balanced approach that maximizes benefits while minimizing harm, such as implementing rigorous environmental assessments and promoting eco-friendly technologies. Participants stressed that advancements should be pursued with a focus on sustainability and long-term environmental health.

9. What emotions arise for you when you consider the potential loss of biodiversity and ecosystem degradation, and how can we cultivate empathy towards non-human beings?

The potential loss of biodiversity and ecosystem degradation evoked strong emotions of sadness, concern, and urgency among participants. They highlighted the importance of cultivating empathy towards non-human beings by fostering a deeper connection with nature and recognizing the intrinsic value of all life forms. Participants suggested that promoting education about the interconnectedness of ecosystems and the impacts of human activities on wildlife can help build empathy. Additionally, engaging in conservation efforts and supporting organizations dedicated to protecting biodiversity were seen as ways to translate empathy into action.

10. In your opinion, what role does education play in empowering individuals to become agents of change in the fight against environmental degradation?

Participants viewed education as a critical tool for empowering individuals to address environmental degradation. They emphasized the importance of educational programs that promote environmental literacy, critical thinking, and active participation in sustainability efforts. Education was seen as essential for developing informed and motivated individuals who understand the complexities of environmental issues and are equipped to drive positive change. Participants highlighted that education not only informs individuals about environmental challenges but also inspires them to take actionable steps toward creating a more sustainable future.

QR Code III- "Philosophy - Crisis"

The discussions prompted by QR Code III provided a deep and reflective exploration into the philosophical dimensions of environmental crises. This section of the inquiry focused on



existential reflections, ethical responsibilities, and the role of spirituality and mindfulness in strengthening our connection to nature. The responses reveal a nuanced understanding of how philosophical thinking can influence both our perception of environmental issues and our responses to them. Participants articulated how existential questions about humanity's place in the universe can inspire a deeper commitment to ecological stewardship. They also highlighted the ways in which integrating mindfulness and spiritual practices can foster a more profound and sustainable connection with the natural world..

Participants engaged thoughtfully with the tension between human progress and environmental preservation. They advocated for a balanced approach that respects both development and conservation. This balance is seen as essential for ensuring that technological and economic advancements do not come at the expense of environmental health. The participants' reflections suggest that sustainable practices must be deeply integrated into human progress to achieve a harmonious coexistence between development and ecological stewardship.

Existential reflections about humanity's place in the universe emerged as a significant theme. Participants pondered the fragility and interconnectedness of life on Earth, recognizing that our actions have far-reaching implications for the planet. This awareness shapes their views on environmental stewardship, highlighting the importance of seeing ourselves as part of a larger ecological system. Philosophical inquiry, they believe, can inspire meaningful action by encouraging critical thinking and ethical reflection, thus fostering a deeper understanding of humanity's relationship with the natural world.

The enormity of the environmental crisis can be daunting, yet participants find hope and motivation through collective action and resilience. They emphasize the importance of working together and maintaining optimism about the potential for positive change. This sense of hope is crucial in sustaining long-term commitment to environmental protection and in overcoming the challenges posed by ecological crises.

Ethical responsibilities toward future generations are a central concern. Participants stressed the need for responsible stewardship of natural resources, addressing climate change impacts, and ensuring intergenerational equity. They recognize that current actions will significantly influence the quality of life for future generations, underscoring the moral obligation to act with foresight and care.

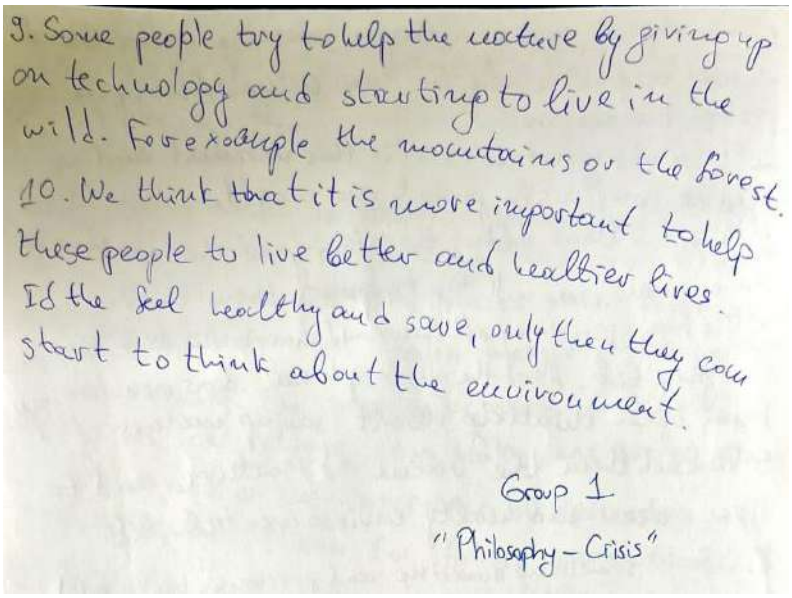
Aldo Leopold's concept of a land ethic, introduced during the educational sessions, significantly influenced participants' understanding of environmental ethics. Leopold's idea that ethical relationships should extend beyond human interactions to include the land and all living things resonates strongly with the participants. This land ethic advocates for a respectful and caring approach to the environment, aligning with the philosophical and practical considerations discussed.

The integration of philosophical inquiry into environmental discourse emerged as a powerful tool for fostering critical thinking and ethical reflection. Participants found that philosophical approaches not only deepen their understanding of environmental issues but also inspire them to consider the broader implications of their actions. This perspective is essential for motivating proactive and sustainable behaviors that can address ecological challenges effectively.

In summary, the responses collected through QR Code III reveal a profound appreciation for the role of philosophical reflection in addressing environmental crises. Participants demonstrated a clear understanding of the need for sustainable practices that harmonize human progress with environmental preservation. They acknowledged the benefits of nature for mental health, the importance of protecting natural heritage, and the impact of modern lifestyles on our connection to the environment.

The integration of philosophical inquiry with practical action was highlighted as crucial for addressing environmental issues. Discussions emphasized the value of traditional knowledge systems, such as Aldo Leopold's land ethic, and the necessity of balancing ethical considerations with practical measures. Overall, the QR Code III activity successfully engaged participants from diverse backgrounds in a meaningful dialogue, fostering a holistic understanding of environmental challenges and inspiring a commitment to sustainable practices.

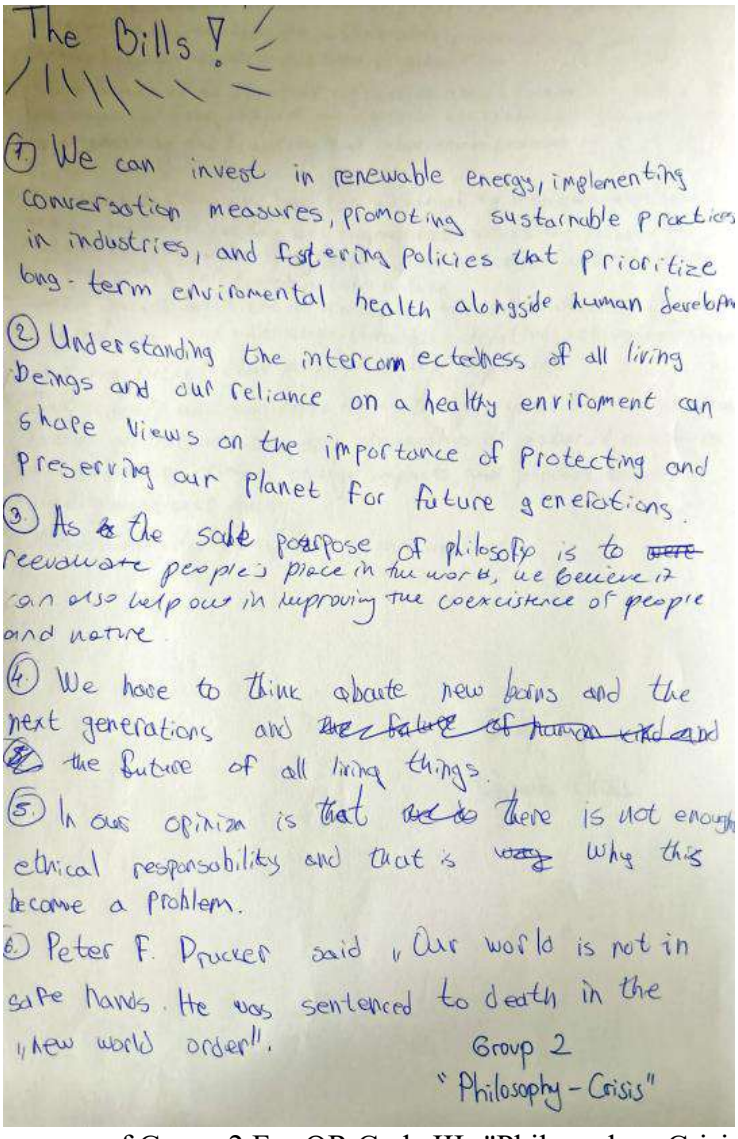
1. The techological progress makes us leave the nature behind. We need balance betweee the two. Using tehnology to protect the nature.
2. It is amazing that we exist in this moment and we need to consciously protect our world.
3. When we think about the suffering of the world and the animals, we will try to protect them more.
4. The hope is in the small things and changes we do in our everyday life. All of the phylosophical ideas are coming from open thinking about saving nature.
5. To teach them the value of nature and to live a clean and healty environmental life.
6. Life is something amazing and precious. We should be amazed that we are alive in this moment and love the world an nature.
6. Phylosophical text that is good is "A Sand Country Almanac" that teaches us to shift from humean-centric to biocentric perspective to conserve nature.
8. The worth of life, to be optimistic and not pessimistic. How to do more locally so that it can also help the whole world.



9. Some people try to help the nature by giving up on technology and starting to live in the wild. For example the mountains or the forest.
10. We think that it is more important to help these people to live better and healthier lives. If the feel healthy and save, only then they can start to think about the environment.

Group 1
"Philosophy – Crisis"

Answers of Group 1 For QR Code III- "Philosophy - Crisis"



The Bills !

(1) We can invest in renewable energy, implementing conversation measures, promoting sustainable practices in industries, and fostering policies that prioritize long-term environmental health alongside human development.

(2) Understanding the intercomectedness of all living beings and our reliance on a healthy enviroment can shape views on the importance of protecting and preserving our planet for future generations.

(3) As the sole porpose of philosofy is to ~~revaluate~~ people's place in the world, we believe it can also help ous in improving the coexistence of people and nature.

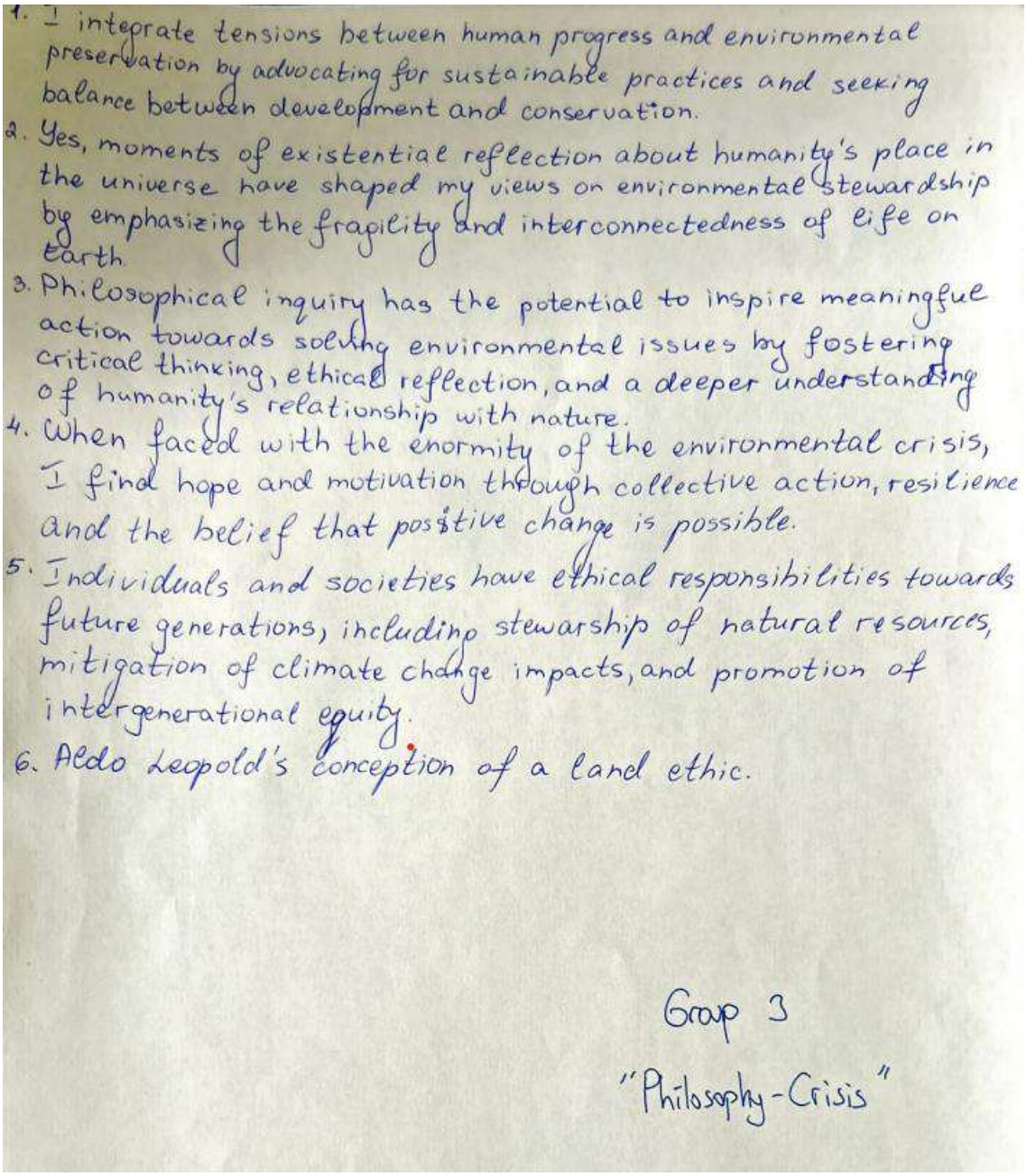
(4) We have to think about new borns and the next generations and ~~the future of human kind and~~ the future of all living things.

(5) In our opinion is that ~~we do~~ there is not enough ethical responsability and that is ~~very~~ why this became a problem.

(6) Peter F. Drucker said „Our world is not in safe hands. He was sentenced to death in the „New world order".

Group 2
"Philosophy – Crisis"

Answers of Group 2 For QR Code III- "Philosophy - Crisis"



Answers of Group 3 For QR Code III- "Philosophy - Crisis"

QR CODE – "PHILOSOPHY- CRISIS" Questions and Group Response Analysis

1. How do you personally integrate the tensions between human progress and environmental preservation?

Participants expressed a keen awareness of the ongoing tension between technological and economic advancement and the imperative to protect the environment. They stressed the importance of adopting sustainable practices that allow for development without compromising environmental health. Many suggested that the integration of green technologies, such as renewable energy and sustainable materials, is essential. They advocated for a holistic approach that considers the long-term ecological impacts of development projects, arguing that it is

possible to achieve progress while maintaining ecological balance through thoughtful planning and innovative solutions.

2. Have you ever experienced a moment of existential reflection about humanity's place within the vastness of the universe, and if so, how did it shape your views on environmental stewardship?

Participants recounted profound moments of existential reflection that led them to contemplate humanity's role within the broader context of the universe. These reflections often resulted in a heightened sense of responsibility toward environmental stewardship. The realization of our interconnectedness with the Earth and the impact of our actions on the planet deepened their commitment to protecting natural resources. Such experiences fostered a perspective that emphasizes the importance of respecting and nurturing the environment as a fundamental aspect of our existence and legacy.

3. Do you believe that philosophical inquiry has the potential to inspire meaningful action towards solving environmental issues, and if yes, how?

Participants affirmed that philosophical inquiry can indeed inspire meaningful action toward environmental issues by fostering deeper ethical considerations and critical thinking. They noted that engaging with philosophical questions about humanity's relationship with nature, ethical obligations, and the moral implications of our actions can motivate individuals to adopt more sustainable behaviors and advocate for systemic changes. Philosophical discussions can encourage people to reflect on their values and responsibilities, leading to more informed and committed environmental actions.

4. When faced with the greatness of the environmental crisis, how do you find hope and motivation to continue advocating for change, and do philosophical ideas play a role in this process?

Participants indicated that they find hope and motivation through a combination of collective action, resilience, and philosophical perspectives. They highlighted that philosophical ideas about interconnectedness, the moral imperative to protect the environment, and the potential for positive change provide a sense of purpose. This philosophical grounding helps sustain their commitment to advocacy, enabling them to persevere despite the enormity of the crisis. The integration of philosophical insights into their approach reinforces their determination to address environmental challenges.

5. In your opinion, what ethical responsibilities do individuals and societies have towards future generations, and how does philosophy inform your understanding of these responsibilities?

Participants emphasized the ethical responsibility to ensure that future generations inherit a livable and healthy environment. They drew on philosophical concepts such as intergenerational justice, the duty to act responsibly, and fairness to inform their understanding of these responsibilities. They recognized that current actions have far-reaching implications for the well-being of future generations, underscoring the moral obligation to make decisions that do not compromise the planet's health and resources for those who will come after us.

6. Can you remember a philosophical text or idea that profoundly influenced your understanding of humanity's relationship with nature, and how did it shape your perspective?

Many participants referenced influential philosophical texts or ideas, such as Aldo Leopold's concept of the land ethic, which had a profound impact on their understanding of humanity's relationship with nature. These ideas helped them appreciate the intrinsic value of the natural world and the need for an ethical approach to environmental stewardship. The concept of the land ethic, which promotes a respectful and caring relationship with the environment, shaped their perspective on how to engage with and protect the natural world.

7. How do existential questions about the fragility of life and the impermanence of human existence intersect with your concerns about environmental sustainability?

Participants found that existential questions about the fragility and impermanence of life reinforce their concerns about environmental sustainability. They reflected on how acknowledging the temporary nature of human existence heightens the urgency of protecting the planet. This perspective underscores the need for a sustainable approach that recognizes the interconnectedness of life and the importance of safeguarding the environment as a vital aspect of our collective existence.

8. What do you think are the most pressing philosophical questions that need to be addressed in order to effectively tackle the environmental crisis?

Participants identified several pressing philosophical questions crucial for addressing the environmental crisis. These include the nature of our ethical obligations to other species, the balance between human progress and environmental preservation, and the role of human values in shaping environmental policies. They emphasized that addressing these questions is essential

for developing a nuanced and effective approach to environmental challenges, integrating ethical considerations with practical solutions.

9. Do you believe that spirituality and mindfulness practices have a role to play in fostering a deeper connection with nature and motivating environmental action? Why or why not?

Participants generally agreed that spirituality and mindfulness practices play a significant role in fostering a deeper connection with nature and motivating environmental action. They noted that such practices can enhance a sense of reverence and personal responsibility toward the environment. By cultivating empathy and a profound appreciation for the natural world, spirituality and mindfulness can inspire individuals to engage more deeply with environmental issues and take proactive steps to protect the planet.

10. How can we ensure that philosophical discussions about the environment are inclusive and accessible to people from diverse cultural and socioeconomic backgrounds?

Participants suggested that to ensure philosophical discussions about the environment are inclusive and accessible, efforts should focus on engaging diverse perspectives and making discussions accessible to various cultural and socioeconomic backgrounds. This includes translating complex philosophical concepts into practical language, incorporating a range of cultural viewpoints, and creating platforms that facilitate dialogue across different communities. Ensuring inclusivity broadens the impact of philosophical inquiry, fostering a more comprehensive approach to addressing environmental issues and promoting sustainable practices.

Impact of the Activity on Young Participants

The activity, encompassing thirty thoughtfully crafted questions across different QR Codes, profoundly engaged young participants in reflecting on environmental issues, philosophical dimensions, and their personal connections with nature. This comprehensive exploration encouraged them to critically examine their roles and responsibilities in addressing environmental challenges.

Through discussions, participants experienced a heightened awareness of their individual and collective impact on the environment. The questions prompted them to consider the balance between human progress and environmental preservation, fostering a sense of urgency and responsibility. Personal reflections on nature's beauty and their existential place within the universe deepened their commitment to ecological stewardship.

The philosophical inquiries stimulated meaningful dialogue about ethical obligations to future generations and the integration of mindfulness and spirituality in fostering a deeper connection with the natural world. Participants recognized the importance of traditional knowledge and diverse cultural perspectives, enhancing their understanding of sustainable practices.

Overall, the activity effectively inspired young people to engage more actively in environmental conservation and to appreciate the broader implications of their actions. It empowered them with the tools to advocate for change, integrate sustainability into their lives, and contribute to a more harmonious relationship with the Earth.