Supplementary Material

# Supplementary Figures and Tables

## Supplementary Figures

Chart, pie chart

Description automatically generated

**Figure 1.** Composition of students (n=26).

## Supplementary Tables

**Table 1** Students responses (N=26)

|  |  |  |  |
| --- | --- | --- | --- |
| Items/statements | Disagree\* | Neutral\*\* | Agree\*\*\* |
| 1. I increased substantive and methodological knowledge in my main field of study. | 6 | 9 | 11 |
| 2. I increased my ability to formulate complex problems in a critical and independent way. | 6 | 6 | 14 |
| 3. I increased my ability in planning, conducting and finalising a research project. | 6 | 1 | 19 |
| 4. I appreciated that we could address grand challenges of concern for the global society. | 1 | 1 | 24 |
| 5. I found my main field of study allowed me to fully grasp the topics addressed in lectures and workshops I attended. | 5 | 5 | 16 |
| 6. Lectures, workshops, and our research project mostly used tools and knowledge from fields different from my main area of study. | 7 | 6 | 13 |
| 7. I think my field of study does address current societal and environmental problems | 4 | 2 | 20 |
| 8. The research/project I worked on can actually have an impact in a real-world scenario. | 2 | 5 | 19 |
| 9. Information and ideas provided by non-academics (experts, speakers, stakeholders, etc) were important for the development of our research project. | 3 | 6 | 17 |
| 10. The findings of our research pushed me to question some attitudes/ideas I had prior to starting the project. | 7 | 5 | 14 |
| 11. The most relevant feature in this learning experience was lectures and related discussions. | 11 | 7 | 7 |
| 12. The most relevant feature in this learning experience was applying and developing research and development tools – software and apps, internet-based tools, etc. | 5 | 9 | 11 |
| 13. The most relevant feature in this learning experience was interacting with my peers from other universities’ research groups. | 6 | 7 | 13 |
| 14. What I most appreciated was learning and applying research methods and procedures. | 3 | 7 | 16 |
| 15. Our research project could not have been realised without input from all team members. | 8 | 3 | 15 |
| 16. I enjoyed working with colleagues in my group. | 2 | 5 | 19 |
| 17. I enjoyed working in English in most activities. | 1 | 2 | 22 |
| 18. I enjoyed drafting and editing the final research output. | 5 | 6 | 15 |
| 19. I have greater confidence in doing scientific research. | 6 | 4 | 16 |
| 20. I feel I could lead a team in similar situations. | 1 | 4 | 21 |
| 21. I feel complex issues like climate change and environmental degradation can be tackled in a constructive way. | 1 | 0 | 25 |

\*Disagree = the number of respondents who selected 1 (I totally disagree) and 2 (I disagree).  
\*\*Neutral = the number of respondents who selected 3 (I am neutral).  
\*\*\*Agree = the number of respondents who selected 4 (I agree) and 5 (I totally agree).

**Table 2** Measuring the reception of CBL features in the 2021 Arqus Collaboratory Programme (max=26)

|  |  |  |
| --- | --- | --- |
| CBL characteristics | Negative score | Positive score |
| 1. Tackling societal challenges | 2.3 | 21.9 |
| 2. Inter-disciplinarity | 9.9 | 11 |
| 3. Engaging stakeholders | 3 | 17 |
| 4. Internationalisation | 4 | 16.6 |
| 5. Applying research skills | 4.5 | 16.8 |
| 6. Teamworking and interpersonal skills | 4.6 | 16.2 |
| 7. Active learning approach | 6.3 | 12.9 |
| 8. Technology | 5 | 12.6 |