Supplementary File 2-Facilitator Survey

Student and Facilitator experiences of Enquiry/ Problem-based learning in digital spaces

Introduction

FACiLiTATE, the National Enquiry/Problem Based Learning network, are seeking your experiences in participating in Enquiry Based Learning (EBL) / Problem Based Learning (PBL) in digital spaces.

This refers to E/PBL undertaken online synchronously on digital platforms.

E/PBL is a student-centred approach to learning in which student knowledge is developed through the process of studying problems or real-life scenarios through group discussion.

The **purpose** of this study is to **explore student and staff perspectives** of how **individuals engage in E/PBL online** and their **overall perception.**

The survey will explore:

1. Your overall experience of engaging in E/PBL online

2. How technology supports the experience.

3. Your future plans for E/ PBL online.

The survey will take 15 minutes of your time and you can withdraw at any stage during the survey. Note participation is entirely voluntary and all responses are anonymous.

What will we use it for?

The data from the survey will be combined with that of the other participants in this study and used to form the findings section of this research, thus individual participant or institutional data will not be revealed. The research may be published in journals or disseminated at conferences. Individual quotes from open-ended questions may be used in reporting of data. However, no participant will be identifiable from this data whereby anonymity will be assured.

Ethical clearance has been granted and all ethical procedures will be adhered to. If you have any questions or concerns with regards to the ethical issues about this survey, click on the logo of your institution below.

MIC MARY IMMACULATE COLLEGE COLÁISTE MHUIRE GAN SMÁL	DUNDALK INSTITUTE OF TECHNOLOGY
UNIVERSITY OF LIMERICK OLLSCOIL LUIMNIGH	UCC Coláiste na hOllscoile Corcaigh, Éire University College Cork, Ireland

Consent Form

Please select all

☐ I have read and understood the participant information sheet

☐ I understand what the project is about, and what the results will be used for.

☐ I know my participation is voluntary and I can withdraw from survey at any stage without giving any reason.

☐ I am aware that my data will be kept confidential, and that anonymity will be guaranteed in the generation of data pertaining to me personally or my institution in this study.

Section 1: Background information

1.Please select in which University or Institute of Technology you currently work.

[Participants will select from dropdown list of options]

(a) University College Cork

(b) Dundalk Institute of

Technology

(c) University of Limerick

(d) Mary Immaculate College

(e) Maynooth University

2.In which discipline do you use Enquiry-Based or Problem-Based Learning (E/PBL)?

[Participants will select from a standard dropdown list of higher education subject areas]

(a) Art & Design

(b) Business/Finance

(c) Computing/IT

(d) Education

(e) Engineering

(f) Medical/ Health

(g) Health & Social Care

(h) Humanities

(i) Science

Section 2: E/PBL experiences online

1. **How many years of experience do you have of facilitating E/PBL?**
    1. <5 years
    2. 5-10 years
    3. >10 years

2. **How many years of experience do you have of facilitating E/PBL online?**

3. **How would you rate yourself in terms of confidence in facilitating E/PBL?**

   Not confident at all 1   2   3   4   5 Very confident

4. **To what extent would you normally use E/PBL approaches in your teaching?**
    a. Less than 25% of my teaching
    b. Less than 50% of my teaching
    c. Less than 75% of my teaching
    d. More than 76% of my teaching

5. **Did you conduct your E/PBL teaching online prior to the 2020/2021 academic year?**
    a) Yes
    b) No

6. **What was the extent of your pivot of E/PBL online during the 2020/2021 academic year?**
    a. Less than 25% of my teaching
    b. Less than 50% of my teaching
    c. Less than 75% of my teaching
    d. More than 76% of my teaching

7. **Please select the option which best describes your undertaking of E/PBL online during the 2021/2022 academic year.**

    a. I am currently facilitating E/PBL
    b. I am planning to facilitate E/PBL later in this academic year not am not yet doing so.
    c. I am currently and do not plan to facilitate E/PBL online in the 2021/2022 academic year.

8. **Please select the percentage which best describes the extent of the time which you propose to undertake E/PBL online during the 2021/2022 academic year?**
    a. Less than 25% of my teaching
    b. Less than 50% of my teaching
    c. Less than 75% of my teaching
    d. More than 76% of my teaching

9. **What is your experience of this pivot?** (on a scale of 1-5 where 1 is 'very difficult' and 5 is 'very easy')

    Very difficult 1   2   3   4   5 Very easy

10. **What are the biggest <u>challenge</u>s in transitioning to E/PBL online?** (Select 3 of the following)
    a. scaffolding the E/PBL process
    a. student engagement with the discipline
    b. student engagement with each other
    c. student engagement with you the facilitator
    d. organising teamwork
    e. ensuring student acquisition of transferable skills/graduate attributes
    f. obtaining feedback about progress (evaluation)
    g. assessment
    h. time to fully integrate the E/PBL into the curriculum.
    i. Institutional support
    j. individual responsibilities (taking ownership of their work within the group)

11. What are the <u>opportunities</u> in transitioning your E/PBL to online? (Select 3 of the following)

- a. scaffolding the E/PBL process
- b. student engagement with the discipline
- c. student engagement with each other
- d. student engagement with you the facilitator
- e. organizing teamwork
- f. ensuring student acquisition of transferable skills/graduate attributes
- g. obtaining feedback about progress (evaluation)
- h. assessment
- i. time to fully integrate the E/PBL into the curriculum
- j. Institutional support
- k. individual responsibilities (taking ownership of their work within the group)

Section 2: The use of technology in supporting E/PBL

12. What learning platform is currently being used to deliver E/PBL online at your university/ Institute of Technology?

[Select from standard dropdown list of applications]

> (a) Blackboard ®
> (b) Canvas ®
> (c) Microsoft Teams ®
> (d) Moodle ®
> (e) Zoom ®
> (f) Other ®

13. What do you think of the applications that make up the learning platform you use?

14. What digital tools of online E/PBL were most helpful for students learning?

[Select from standard dropdown list of digital tools]

> (a) Breakout rooms
> (b) Chat function
> (c) Discussion forum
> (d) Hands-up function
> (e) Live polls
> (f) Recording
> (g) Screenshare
> (h) Sharepoint
> (i) Other (please specify)

15. What digital tools of online E/PBL were least helpful for students learning?

[Select from standard dropdown list of digital tools]

(a) Breakout rooms
(b) Chat function
(c) Discussion forum
(d) Hands-up function
(e) Live polls
(f) Recording
(g) Screenshare
(h) Sharepoint
(i) Other (please specify)

16. How could this online platform be used more effectively to promote learning during E/PBL online?

17. Please comment on the suitability of the platform to support learning during E/PBL online.

Section 3: Impact of technology on the E/PBL online experience

Collaboration

Please rate the following statements with 1=strongly disagree and 5=strongly agree.

18. During E/PBL online, students had no difficulty in questioning and seeking clarification from my tutorial group when discussing a problem case.

Strongly disagree 1   2   3   4   5 Strongly agree

19. I believe E/PBL online leads to a more challenging experience of establishing group dynamics.
Strongly disagree 1   2   3   4   5 Strongly agree

20. I believe E/PBL online leads to more balanced contributions from all group members.

Strongly disagree   1   2   3   4   5 Strongly agree

Learner Autonomy

Please rate the following statements with 1=strongly disagree and 5=strongly agree.

21. Students took less responsibility for self-directed learning during E/PBL online.
Strongly disagree 1   2   3   4   5 Strongly agree

22. During E/PBL online, students seemed confident in sourcing relevant learning resources to acquire knowledge and understanding of my group's learning goals during independent study time.

Strongly disagree   1   2   3   4   5 Strongly agree

Metacognitive Adaptation

Please rate the following statements with 1=strongly disagree and 5=strongly agree.

23. Students' ability to deeply process content was enhanced during E/PBL online compared to in-person E/PBL.
    Strongly disagree 1   2   3   4   5 Strongly agree

24. Students play a more active role in the process during E/PBL online.
    Strongly disagree 1   2   3   4   5 Strongly agree

25. The learning outcomes of the problem case are met during E/PBL online.
    Strongly disagree 1   2   3   4   5 Strongly agree

26. E/PBL online is an effective method of learning for students

    Strongly disagree 1   2   3   4   5 Strongly agree

27. Please select your preference

a. E/PBL face-to-face
b. E/PBL online
c. E/PBL in blended format

28.Please add any other comments you would wish to make regarding your experience of E/PBL here.

This survey is the first phase of a mixed methods study and will be followed up with interviews to further explore Higher Education staff experiences delivering E/PBL online. You are invited to participate in focus group interviews to be conducted shortly. **Please enter your email address if you are interested in partaking in the interviews.**

Thank you for partaking in the survey. Your response has been recorded.