

Key theories and Frameworks (Methods & Methodology)

Here's a breakdown of the underpinning theories and frameworks to the methods and approach I used for this study. These notes are a bit informal but should provide a clear idea of how I went about gathering data and generating insights.

1. Mixed Methods Research: Surveys offered quantitative insights into student attitudes and outcomes (e.g., Likert scale trends). Observations provided qualitative depth, capturing group dynamics and individual behaviours that might not be reflected in self-reported data. Triangulation ensured the findings were robust, integrating multiple perspectives for a fuller understanding.

Theoretical Basis:

- Creswell & Plano Clark (2011) emphasise that combining qualitative and quantitative approaches allows researchers to leverage the strengths of both while minimising their individual limitations.
- This study aligns with the **pragmatic paradigm** in mixed methods research, which focuses on what works to answer a specific research question.

2. Participant Observation: I participated in the session to experience group dynamics firsthand while stepping back to objectively observe broader patterns. This approach helped me capture both the *micro-level interactions* and the *macro-level group behaviours*.

Theoretical Basis:

- Rooted in **ethnographic research** (Geertz, 1973), participant observation is widely used in qualitative studies to immerse the researcher in the environment they are studying.
- Adler and Adler (1994) highlight the importance of balancing active participation and detached observation to gain a nuanced understanding of social interactions.

3. Reflexivity in Research: I remained aware of my dual role as both tutor and researcher, regularly questioning how my presence might affect the students and my interpretation of

their behaviours. This reflexive approach allowed me to mitigate biases while staying conscious of the power dynamics inherent in the classroom setting.

Theoretical Basis:

- Reflexivity is a cornerstone of qualitative research (Finlay, 2002), requiring researchers to critically reflect on their role, biases, and influence throughout the study.
- Bourdieu (1992) suggests that acknowledging one's position in the research process enhances transparency and reliability.

4. Triangulation: I used survey data and observational notes to confirm or challenge insights, ensuring findings were not overly reliant on one perspective.

For instance, alignment between students' survey responses and my observations strengthened confidence in conclusions. Divergences, on the other hand, prompted further reflection.

Theoretical Basis:

- Denzin (1978) outlines triangulation as a means of combining different methods or data sources to enhance the validity and reliability of findings.
- Patton (1999) supports the use of **methodological triangulation** to cross-verify results from multiple approaches.

5. Thematic Analysis: I applied thematic analysis to the open-ended survey responses and observation notes to identify recurring themes, such as confidence-building, group dynamics, and creative engagement.

Theoretical Basis:

- Braun and Clarke (2006) describe thematic analysis as a flexible yet rigorous method for identifying, analysing, and reporting patterns within qualitative data.
- It allows researchers to stay grounded in the data while interpreting underlying themes.

6. Constructivist Learning Theory: The methods aimed to evaluate the effectiveness of a peer-led learning environment, rooted in the idea that students learn best through active participation and shared knowledge-building.

Theoretical Basis:

- Vygotsky (1978) highlights the importance of **social interaction** in learning, where students co-construct knowledge through collaboration and peer feedback.
- Piaget (1973) argues for active engagement in learning, which aligns with the student-led, peer-driven format.

7. Survey Methodology: I used surveys to gather a wide range of insights on students' subjective experiences, preferences, and challenges, ensuring a systematic collection of data.

Theoretical Basis:

- Fowler (2014) emphasises the importance of surveys for collecting self-reported data in a structured, scalable way.
- Likert scales, as discussed by Likert (1932), are effective for measuring attitudes and perceptions.

References

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