

THE IMPACT A WORLD CAFÉ APPROACH HAS ON LEARNING OUTCOMES IN A QUANTITATIVE CLASS

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Abstract

Action research stems from engagement, which involves forming collaborative relationships and dialogue among participants. Conducting a World Café provides an opportunity for increased engagement in collaborative group discussions. The BSc Applied Economics programme is a new programme that combines the theory and application of economics with personal and professional development. The development of interpersonal skills in tandem with discipline-specific knowledge and skills supports students' awareness, understanding and knowledge of the subject. Generally, economics students tend to have a negative attitude towards quantitative techniques. Therefore, this study examines the impact the World Café approach has on student learning outcomes in a quantitative class. For this research, a World Café was delivered to first-year economics students in EC1112 Economic Data as Evidence (n=15) at the end of semester 2 (January to May) 2024. The research design adopted a qualitative approach to capture the impact the World Café event had on learning outcomes. A World Café fosters collaborative learning, sharing ideas, discussion and collective learning around a pre-arranged structured set of questions or a case study. The case study was a hypothetical grant application for a small village to upgrade local services and amenities. Incorporating case studies using real-life applications is a recommended pedagogical tool. Students were assigned three tasks at each table based on the module learning outcomes. These tasks included: the construction and development of a survey for the collection of primary data, analysis of secondary data sources and application of different types of methodologies to the data. Learning outcomes were evident in the qualitative feedback. Reassuringly, students highlighted project-specific learning outcomes. "*Conveying and displaying figures and data to represent the economic state of the market*", "*I understand economic data as evidence, as using economics to gather relevant datawhich can be used to advance understanding of the discipline*". They recognised the importance of evidence, but the link with economic decision-making was not as evident "*I realised I knew more than I learnt,There is a benefit of looking back on what you've learnt*". Feedback was positive, but an enquiry-based pedagogy with 'real world' relevance is needed, as it ensures 'buy-in' from students. The inclusion of an action research approach, complemented with a case study in a quantitative class, supports the development of well-rounded business graduates by linking quantitative analysis with practical decision-making and applied learning.

Keywords: *Action research, learning outcomes. economics of education.*

1. Introduction

Becker and Greene (2001) identified that little emphasis is made on 'real-life' applications and proposed active learning strategies. 'Learning is not a spectator sport. Students do not learn much just by sitting in class listening to teachers, memorising prepackaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves' (Chickering & Gamson 1987). Therefore, the World Café (WC) approach was adopted as a scaffold to enhance the active learning experience. A WC is a version of communities in practice, in which an environment is provided to develop expertise and foster collaboration while sharing knowledge (Lave and Wenger 1998). This style of teaching could be described as constructivist, as knowledge is constructed through social interaction (Mann, 2011).

Autonomous learning or student-centred learning is based on constructivist theory, where students use their prior knowledge and experiences to guide their understanding (Kember 1997). How students learn, the way they learn does not require the student to be passive. This method provides an opportunity to shift the roles from the teacher 'doing' to the student 'doing'. When the student is 'doing', there is a need to bring the students with you collectively, to allow them to embrace the experience, and engage their senses while eliciting verbal and cognitive responses collaboratively and cooperatively.

The WC is a methodology that supports collaborative dialogue around a question or questions that matter. Within a discussion, there is an opportunity for learning and understanding as students move from one conversation to another, where each table is a conversation around one topic, which is the core process of sharing and collecting knowledge. This approach has knock-on effects with increased engagement in the classroom. A WC is face-to-face and intimate, creating a unique environment.

Within the discipline of economics, this approach to teaching contributes to the knowledge economy. Applying knowledge of a topic or problem to produce learning outcomes and developing transversal skills contributes to and advances innovative thinking, which adds to the knowledge economy. Specific skills and traits have been identified by employers as important attributes. Institutions recognise the importance of developing these skills, offering work placements with work-integrated learning, integrated modules, professional development and a careers office.

2. Methods

A qualitative approach was adopted. The WC event facilitated the collection of qualitative data from first-year students enrolled in the BSc in Applied Economics in semester 2 (n=15). Within the programme, the module 'EC1112: Economic Data as Evidence' explores basic statistical techniques used to formulate and test research questions. For the purpose of this research, a WC was used to facilitate the delivery of a case study where students were asked to identify and apply data as evidence on a hypothetical grant application for amenities in a local rural community.

There are several design principles applied, which include making sure that the participants are familiar with the topic and understand the purpose of the meeting, while also creating a hospitable space. Every WC emphasises the importance of the environment and the impact it has on creative thinking, speaking and listening. The opportunity to move around to different tables and meet new people or hear other tables' opinions and thoughts is important to widen a person's thinking around the idea. Exchanging ideas, perspectives and understanding is important and needs to be encouraged. In addition, the facilitator must encourage participation within the group while also listening and encouraging participants.

The remit for the WC included an opening presentation outlining the café etiquette (active listening, open-mindedness, and respect), the role of students in contributing collective intelligence through dialogue, the case study tasks for each table, the final group presentation, and the role of the graphic recorder in summarising key learning outcomes. Facilitators were also introduced and briefed in advance to guide discussions and update rotating guests on insights generated for each task at each table. There were three tables (all circular), each with an assigned task. An inquiry-based learning approach in which structured questions were provided, and facilitators were present to ensure progression toward the learning outcomes was adopted. Inquiry-based learning is a form of active learning that poses a question or problem grounded in a problematic situation to stimulate a search for a solution. Within this project and in line with Bell and Banchi (2008) the level of the inquiry was more structured and guided with questions given and facilitators present to ensure progression in the learning outcomes.

Conversations around questions and issues were discussed for a period, and then participants moved to the next task. Posters were also available at each table, providing an opportunity to set down ideas and thoughts. The facilitator stayed at each table to outline the task and progress. Providing opportunities for students to move from table to table widens students' perspectives and encourages new ideas. A graphic recorder helped to capture the students' thoughts and conversations.

To capture learning outcomes Fink's (2003) taxonomy of significant learning was used to guide and construct the questions included in the tasks. Appropriate learning outcomes need to align with skills, knowledge and attitudes. The goal in the BSc Applied Economics is to develop graduates who can analyse, question, communicate and think independently. Given the inclusion of open questions, a thematic analysis (Braun and Clarke 2006) was applied to determine the main themes emerging from the responses. Ethical approval was granted by the Social Research Ethics Committee (SREC) in UCC.

3. Discussion

The focus was then narrowed to determine the students' understanding of the content within the module EC1112. Before the event at the end of the semester, students' understanding of the module "Economic data as Evidence" was assessed, with a 60% response rate. Their understanding of the learning outcomes was evident with statements from respondents (R1-9) such as R1 "*conveying and displaying figures and data to represent the economic state of the market*", R2 "*i understand economic data as evidence as using economics to gather relevant data and analyse it to generate useful information which can be used to advance understanding of the discipline*". With these statements, although they recognised the importance of data and what it represented, the link with economic decision-making was not as evident. Some concentrated more on the quantitative techniques that can be applied rather than how economic data can be used as evidence in decision-making, quoting R4 "*using statistical analysis to analyse the significance of doing something*". Only two students recognised the importance of economic data and the role it played in providing evidence to make economic decisions - R8 "*using data and economic theory to come to a conclusion*" and R9 "*data to help analyse the economic trends and help understand the economy*".

After the World Café event, students were asked what they learnt most from the World Café experience. Learning outcomes related to the material were cited, such as learning about secondary sources and the type of analysis that can be applied. The importance of the material was also highlighted, focusing on how "*development projects impact local communities*" and the "*importance of different amenities*".

The World Café supports collaborative dialogue and student engagement in action research. Within a discussion, there is an opportunity for learning and understanding as students move from one conversation to another, sharing ideas, perspectives and understanding. This approach develops a knowledge economy by providing an opportunity to develop thinking and foster collaboration while sharing knowledge.

3.1. Future implications

What worked/did not work with the World Café experience?

- A different person delivering the World Café to the class. Did it make a difference?
- Self-selection into groups
- Giving the slides and questions in advance to the facilitators worked better
- More time needed at the end to tease out the responses

Perhaps on the continuum of learning, exploring and increasing awareness of their skills and abilities needs to be integrated even more across modules and formalised to demonstrate to students how their transversal skills and learning connect and build upon their personal identity. The challenge is to write questions that encourage and facilitate learning. The theory emphasises the need to identify real-life concerns or real-life applications that harness interest and attract cohesion and the collective thought process. Therefore, ensuring there is listening and participation while creating opportunities for exchanging perspectives and understanding is important.

4. Conclusion

This approach supported an organic growth in learning, demonstrated not only in what students learnt, but also in how they learn, thereby showing evidence of cognitive progression. They recognised the importance of evidence and data, but the integration of it into economic decision-making was less evident. In the future, students need to compare ideas to build understanding and help strengthen economic decision-making. This supports a movement towards a more human-centric approach, supporting a more rounded and well-equipped business graduate while futureproofing the workforce.

References

- Anthony, G. (1996). Active Learning in a Constructivist Framework. *Educational Studies in Mathematics*, 31, 349-369. <https://doi.org/10.1007/BF00369153>
- Beard, D., Schweiger, D. & Surendran, K. (2008). Integrating soft skills assessment through university, college, and programmatic efforts at an AACSB accredited institution. *Journal of Information Systems Education*, 19(2), 229-240.
- Becker, W. E., & Greene, W. H. (2001). Teaching Statistics and Econometrics to Undergraduates. *Journal of Economic Perspectives*, 15(4), 169-182.
- Banchi, H., & Bell, R. (2008). The many levels of inquiry. *Science & Children*, 46(2).

- Brown, J., & Isaacs, D. (2005). *The World Café: Shaping Our Future through Conversations that Matter*. San Francisco: Berrett-Koehler.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 3-7.
- Fink, L. D. (2013) [first ed 2003]. *Creating significant learning experiences revised and updated: An integrated approach to designing college courses* (Rev. and updated). Jossey-Bass.
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences USA*, 111(23), 8410-8415.
- Kember, D. & Leung, D. (2009). Development of a questionnaire for assessing students' perceptions of the teaching and learning environment and its use in quality assurance. *Learning Environments Research*, 12, 15-29.
- Lave, J., & Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.
- Mann, K. V. (2011). Theoretical perspectives in medical education: past experience and future possibilities. *Medical Education*, 45(1), 60-68.
- Noah, J. B. & Aziz, A. B. A. (2020). A case study on the development of soft skills among TESL graduates in a university. *Universal Journal of Educational Research*, 8(10), 4610-4617.
- Reason, P. & Bradbury, H. (2001). Introduction: Inquiry and participation in search of a world worthy of human participation. In P. Reason, & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 1-14). London: Sage Publications.