Anglia Ruskin University

Adapting the Jigsaw Technique

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The aim

The Jigsaw Technique is an Active Learning strategy, increasingly advocated within HE for its potential to enhance engagement and inclusivity, for example by the Harvard ABLconnect initiative. This project explored how the technique could be adapted for our specific context at ARU, with the following aims:

1. To evaluate the possible impact of the Jigsaw and jigsaw-based techniques on the development of Pedagogical Literacies for ARU students as part of the Active Curriculum

2. To compare and contrast the impact of the Jigsaw Technique on developing Pedagogical Literacies for ARU staff across all Faculties

Benefits

- Students across all Faculties developed insights into pedagogic practices, evaluating the Jigsaw technique in their learning context.
- Students had opportunities to reflect on their own learning preferences in relation to Active Learning tasks and activities.
- Participant lecturers gained further insight into adapting this pedagogic technique for their own teaching context, with planning support where needed.
- The technique was also successfully applied in training sessions for professional services staff, in this case the University Library.

The approach

The project consisted of five mentoring cycles in which one member of the research team worked with a participant lecturer from each of the four Faculties, and the University Library. The participant staff were approached at the suggestion of Faculty DLTAs with the aim of selecting participants who had shown an interest in Active Learning but had not yet implemented the Jigsaw technique. Based on an insider action research framework designed for organizational settings, each mentoring cycle had the following structure:

1. Planning Action: (i) Structured pre-session interviews were conducted with participant to explore existing perceptions of Active Learning, awareness of Jigsaw Technique, and reflections on how it could be applied in subject-specific setting. (ii) Support was provided in designing one teaching session using the Jigsaw technique.
2. Taking Action: Each Jigsaw session was observed by a member of the research team.
3. Evaluating Action: (i) After each session, students completed a feedback questionnaire comprising Likert scales and free comments. (ii) Participant lecturers provided post-session reflections in a written questionnaire, comprising Likert scales and free comments.

A wide range of session topics was observed, including a CSI scenario (FSE); consultancy on marketing strategies for Debenhams (FBL); a care plan for a patient with Parkinson's (HEMS); a selection of case studies for an essay on social theory (AHSS); training in learning technology (University Library).

The data from the interviews and questionnaires (both quantitative and qualitative) was entered into the JISC Survey tool for analysis. Further, the qualitative data was coded using the same approach as a recent study from the HE literature on Active Learning under the overall categories 'pedagogical advantage' and 'pedagogical disadvantage'. This allowed comparison between student and staff responses to the technique.

Findings and insights into the technique were shared with the student participants in a student-facing presentation; the overall findings were presented at the ARU Engage conference and further disseminated at the Advance HE 2019 Conference at Northumbria University. Bespoke follow-up training sessions were conducted, based on demand, within individual Faculties, so that the technique could be shared with more staff members across the University.

The outcome(s)

There was clear evidence in the data that the Jigsaw technique has a positive impact on pedagogic literacies for both students and staff across ARU. For example:

- 91.6% of student participants either agreed or strongly agreed that the Jigsaw activity had helped them to learn about the topic.
- 85.6% that either agreed or strongly agreed that the activity had encouraged all students to get involved in the session.
- In the free comments, 49 out of the 83 student participants mentioned the pedagogic advantage of 'Students working together/involvement'; 41 out of 83 remarked that the session had been 'interesting/stimulating/engaging'.
- These two key themes were echoed in the staff data, with 4 out of 5 staff participants identifying the same two pedagogic advantages.

There was also clear evidence that students are aware of pedagogic practice and how this links to employability. For example, different individual participants commented that the approach was 'similar to what I expect to do in the future working in the field'; 'useful for my future career'; 'preparing us better for real situations'.

In smaller numbers, there were points for reflection from students on the challenges of working in larger groups; the possibility of 'free riding', i.e. some group members not contributing sufficiently; or the possibility of incorrect information from peers. Staff members reflected on session organisation and logistics, and the increased amount of preparation required when a session is delivered in Jigsaw format.

Profile

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Future Development

- Given the positive findings above, it is hoped that participants will continue to use and adapt this flexible technique for teaching delivery across ARU.
- Some participants have already found ways to adapt the technique further, for example by integrating technology, combining the technique with a concluding plenary, and providing peer-mentoring opportunities for students who are participating in Jigsaw sessions for the first time.
- Further bespoke training sessions can be offered to any Faculty-based teams who wish to undertake further training in the Technique. Please contact david.jay@anglia.ac.uk to arrange this.
- As a follow-up step in disseminating the project beyond ARU, the participant lecturers will be invited to submit their Jigsaw session outlines to the Harvard ABLconnect Activity Database.

Recommendations

- Based on the findings above, we would strongly encourage colleagues to continue to experiment with this flexible technique for delivery across ARU.
- When using the technique, it is important to bear in mind that not all students find it easy to participate. We recommend providing support, for example by explaining the pedagogical principles which underpin the technique, alongside training in how to participate successfully and/or a small scale 'trial run' before a full session.
- Based on the findings about logistical challenges, particularly when working with larger groups in lecture theatres, we would recommend maintaining, and increasing, access to Active Learning spaces such as those in Compass House and LAB, which are likely to have a positive impact on the successful implementation of the technique.