

Title of Research Project: Adult Learners' Experiences of a Flipped Mathematics Classroom in a VTOS Leaving Certificate Class

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Relevant key words: Mathematics Anxiety; Adult Learners; Further Education and Training; The Flipped Classroom

Summary:

The issue of empowering adults to learn mathematics is well recognised, particularly those with low mathematical performance and negative experiences (Larsen, 2015, p50). Adult Learners who hold negative experiences in mathematics find it very difficult to move past these experiences (Boaler, 2016). Furthermore, the negative learning experiences of mathematics that learners hold develop into fear and avoidance of the subject (Langpaap, 2005; Wilder, 2013). Adults who avoid mathematics limit the career options available to them (Hembree, 1990). This raises the question of what supports or interventions are required in addressing mathematics anxiety? According to Klinger (2011), traditional teaching methods do not work for adults who have had negative experiences in learning mathematics.

The research objectives for this study included:

1. To discover what level of mathematics anxiety, if any, exists amongst a cohort of adult learners.
2. To investigate how the pedagogical intervention of the Flipped Classroom affects Further Education adult learners' experiences of mathematics anxiety.
3. To explore the perceptions/feedback of Further Education adult learners' experiences of the Flipped Classroom model as a pedagogical intervention.

The outcomes for this study were:

- The Flipped Classroom had a positive impact on learners' mathematics anxiety

- Primary research validated best practice to keep videos within six minutes
- The student-centred approach was conducive towards engagement and addressing mathematics anxiety.

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