

Introduction

As practitioners working in an FE College in the North East of England, we often encounter students with very low-levels of attainment in literacy and numeracy. Many students report personal issues which impact upon all other areas of their study. Such issues include, drug and alcohol misuse, personal abuse, domestic violence and anxiety and often manifest themselves in terms of anger towards the system, negative attitudes towards teachers, anxiety and low thresholds of tolerance. The work of Freire (1970, p.34) highlights how students “realise that the educational system today-from Kindergarten to University- is their enemy.” Fifty years on Freire’s assertion still holds, reflecting the views of disadvantaged learners today with alarming accuracy. This offers an explanation for the views and behaviours of the learners we encounter everyday as practitioners delivering maths and English GCSE re-sit programmes.

The overarching aim of this research is to improve the literacy and numeracy levels of students resitting maths and or English GCSE, through implementing pedagogical interventions designed to enable students to develop strategies to overcome their educational challenges. The study also aims to highlight that challenge and struggle can be positive experiences by emphasising how we can learn best from challenge. Drawing upon the work of Blackwell, Trzesniewski & Dweck (2007), we have planned and delivered a series of five taught sessions focusing on learning how to learn.

Methodology

Students were taken from their usual study class of either maths or English and took part in 5 meta-learning sessions. Each session had a clear objective. Students completed a preintervention survey at the beginning of the first session and then another survey at the end of the final session.

Session 1: The brain, meta-learning & active learning

Session 2: Neuroplasticity

Session 3: Mindset, mistakes and the power of repetition

Session 4: The learning pit and the role of feedback

Session 5: Review and revision techniques



Key Literature

Blackwell, L., Trzesniewski, K., and Dweck, C., (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development*, 78(1), pp. 246-263.

Freire, P., (1970). *Pedagogy Of The Oppressed*.

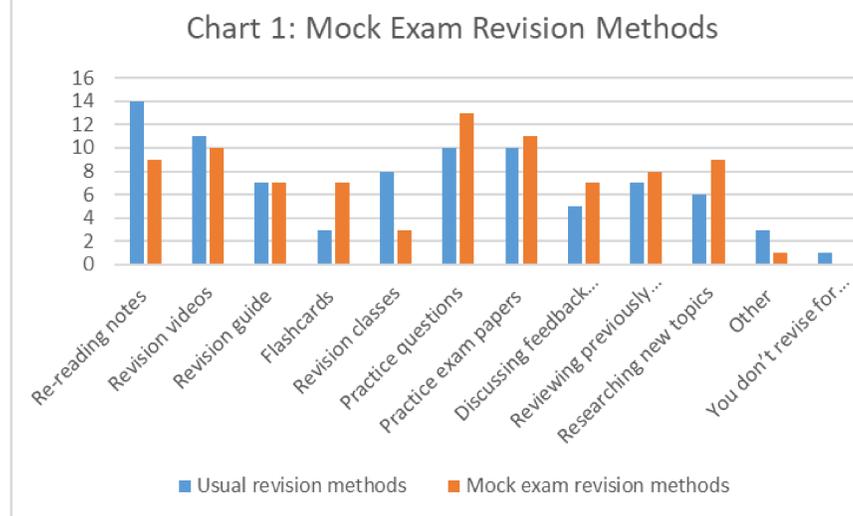
Vitale, P. and Exley, B., (2015). *Pedagogic Rights And Democratic Education: Bernsteinian Explorations Of Curriculum, Pedagogy And Assessment*.

Key Findings

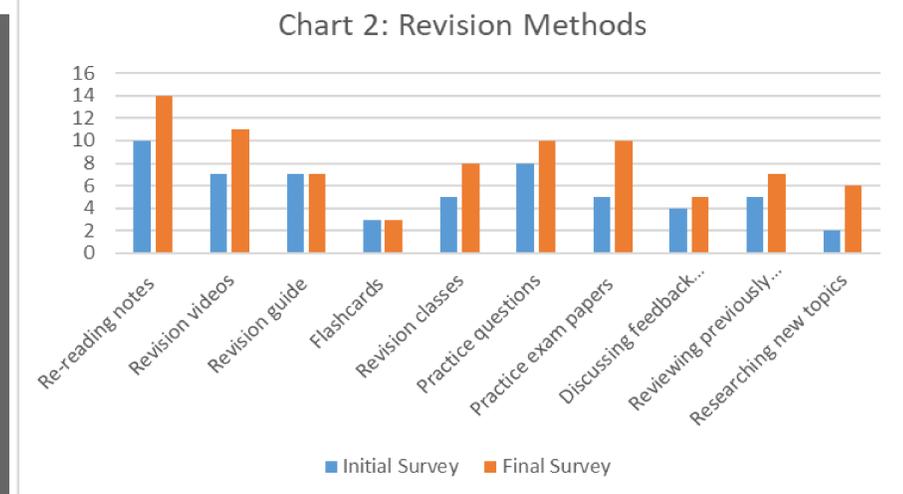
A group of 15 maths and English re-sit students participated in the full research project. A minimum of 13 of these students anonymously declared at least one of the following personal circumstances at the beginning of the study: learning difficulties; mental health difficulties; alcohol or drug use; young carer; young parent or looked after child.

Revision Methods

In the final survey, students were first asked how they normally revise for exams and then what they were planning to do the following week to prepare for their mock exams. The results indicate clear changes in the students’ approaches to their revision. More students considered active study methods such as, making flashcards and researching topics that are new to them or that they do not understand. The results are summarised below in Chart 1. The drop-in ‘attend revision classes’ may be because we had not planned any specific mock exam revision classes for the following week.



Comparisons between initial and final surveys also indicate that the students increased the variety of techniques they were using for their independent study. The results are shown in Chart 2. Due to the different number of students taking each survey some of the changes were not great enough to determine whether there had been a change in the students’ responses. However, there are some clear positive changes. In the final survey, out of the 15 students who completed both surveys: at least 2 more selected reading class notes, at least 2 more watched revision videos, at least 1 more attended revision classes, at least 3 more completed practice exam papers and at least 2 more researched new topics.



Attitudes and Behaviours

Throughout the project positive changes to some students’ attitudes and behaviours were observed. For example, students handing in additional work booklets completed outside of class, attending additional intervention sessions and improved work ethic in class. Student comments included:

“I might actually do some maths over half-term”

“I did a whole hour of maths last night”

“I added a load of sophisticated vocabulary to my creative writing”

Conclusion

Although this research was conducted on a small-scale, a positive effect was observed. This highlights the potential benefits of approaching the GCSE re-sit curriculum holistically, with a greater focus on areas such as study skills, motivation and meta-learning, especially for learners who may be considered disadvantaged. There may be benefits of this within vocational curricula, or for school-aged learners across all GCSE subjects. All of which warrants further research and investigation, particularly to determine whether this approach impacts positively upon students’ attitudes and behaviours in the longer term.

Recommendations

- Embed meta-learning, study skills and learning through mistakes within the delivery of GCSE maths and English re-sit programmes.
- Provide CPD programmes and resources for teaching staff on aspects of meta-learning, active learning and neuroplasticity.