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FOSTERING IN-DEPTH LEARNING WITH GIFTED STUDENTS

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ABSTRACT

This action research project investigated ways to improve the depth of gifted students' learning. In particular, it sought to identify strategies that could be used to foster deeper understanding and to improve students' learning outcomes. The motivation for this project was sparked by the teacher/researcher's experience in teaching a class of sixteen gifted students aged between 8 and 11 years. She observed highly capable students working below, what she perceived to be, their full potential. This incongruence between her expectations and her students' learning outcomes led to an exploration of ways to improve her teaching practice so that it would have a positive influence on the depth of the students' learning.

A literature review explored the needs for a differentiated curriculum for gifted students that supports in-depth learning. It also examined theory around approaches to learning and their relationship with learning outcomes. How to influence students' approaches to learning, and subsequently their learning outcomes, was also explored. The literature review showed little evidence of studies that explored in-depth learning in a gifted education context.

This project set out to answer the following research questions:

- What strategies can be used with gifted students to effectively foster in-depth learning?
- What influence does the implementation of these strategies have on the depth of gifted students' learning?

The study involved the teacher/researcher working with her class of gifted students to improve the quality of her teaching and their learning. Baseline data on quality of teaching and the depth of students' thinking was gathered. This involved students completing a questionnaire based on sixteen teaching strategies that had been identified as important for fostering in-depth learning.

The questionnaire included Likert scale questions and open-ended responses. The SOLO Taxonomy was used to design an evaluative test to measure the depth of students' understanding around familiar social studies, maths, and reading concepts. Students' feedback from the questionnaire was used to frame an intervention, which focused on the four weakest strategies (as indicated by the baseline data). After a ten-week period, this data gathering process was repeated, which provided comparative data. This was used to measure change over time, and to determine the success of the intervention. During the intervention a detailed research diary was kept. This helped the teacher/researcher to remain focused on the identified strategies.

The discussion of findings focused on two themes: 'Measuring and influencing the depth of students' learning' and 'Improving the quality of teaching'. The study found that before the intervention most students were operating at the quantitative stages of the SOLO Taxonomy, which indicates that they were not demonstrating in-depth thinking. The post-intervention test results showed little improvement, indicating that the intervention had limited impact on improving the depth of the students' learning. However, the study did find that, even before the intervention, the sample group performed at higher levels on the SOLO Taxonomy than their same-aged peers might be expected to perform. The discussion around improving the quality of teaching showed that the teacher/researcher's implementation of the focus strategies aligned with current research to a certain extent, but that her practice could have been better informed. The design of the action research project was critiqued, which highlighted the need for more collaboration with other educators, a longer duration for the intervention, and a stronger content focus. An additional finding from the study was an overlap between how best to meet the learning needs of gifted students and how best to encourage all students to engage in in-depth learning.

Recommendations for future research include further action research cycles, which address the limitations of the present study. Other recommended research includes exploration of realistic expectations for the depth of gifted students' learning, a study into in-depth learning with gifted students in a fulltime gifted programme or in the regular classroom (as opposed to a one-day-school model like the present study), or research around the overlap between teaching gifted students and teaching for in-depth learning.

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