



AN CHOMHAIRLE MHÚINTEOIREACHTA
The Teaching Council

An Investigation into the Effects of Cooperative Learning on English Spelling and Comprehension in a Second Level Gaelscoil

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Overview of Research

This research focussed on the implementation of Cooperative Learning (CL) in a second year English class in a Gaelscoil. The investigation focussed specifically on the effects on comprehension and spellings. The attitudes of the students to learning groups as opposed to whole class teaching were also examined.

Rationale and Aims

Two distinct concerns gave rise to the study:

- 1) Concerns about teaching mixed ability classes using whole class teaching methodologies and
- 2) Weaknesses in spelling identified by Inspectors' reports in the English Department of the school.

A desire to reduce the emphasis on “teacher talk” and introduce a wider variety of active teaching methodologies as recommended by the Inspectorate also motivated this study. The paucity of research into CL in Irish schools was also a concern. The study aimed to answer questions regarding the effects, if any, of CL on spellings and comprehension and on students' attitudes and subject-specific self-perception.

Design and Methodology

This research involved implementation of CL in a second year mixed ability, mixed gender classroom in a Gaelscoil. It sought to identify changes, if any, in academic achievement and student and teacher attitudes and perceptions. The results were then compared with a control group of students who were taught by traditional means.

An action research approach was taken with the teacher acting as teacher/researcher. As he implemented CL in the classroom he used a number of research instruments to evaluate its effects. Two standardised tests – The Hodder Group Reading Test (2nd Ed) and The British Spelling Test Series – were employed to measure reading comprehension and spellings respectively. A pre and post intervention questionnaire was used to assess perceptions and attitudes. This was piloted first and used the Likert scale format. These research instruments were supplemented by the researcher's use of observation and a reflexive diary to ensure triangulation. Two CL methodologies were used in the main – the Learning Together Model which is flexible and allows for many variations and Student Teams Achievement Divisions (STAD), a more rigid model.

The tests and questionnaires were analysed using descriptive statistics and non parametric tests (Wilcoxon Signed Ranks Test) for statistical significance. The reflexive diary was analysed using content analysis and the observation sheets by using frequency of occurrence of behaviours.

Findings

Quantitative Results

Findings from the study showed improvements in spellings for the experimental group and the control group so the researcher could not conclude that the gains were due to CL. There were no significant gains in reading comprehension but the experimental group had considerably better overall scores than the control group. The study indicated that engaging in CL was not detrimental to the experimental group.

Findings from international research would indicate that CL improves achievement in complex/higher order learning tasks, e.g., comprehension while tasks of a simple structure, e.g., spellings can be learned well alone. The findings in this research are in line with this.

Qualitative Results

Findings in the experimental group showed an increase in positive and supportive social interactions. On task behaviour, helping interactions and participation also increased. Students' attitudes to working in groups were found to be positive with a significant number reporting that they learned more. Students reported help in thinking skills, idea generation and social skills.

Findings from the teacher researcher were that CL was a very enjoyable method of teaching. The teacher's ability to reach and motivate all students was enhanced and his attitude became less controlling. His sense of self-efficacy in motivating students was enhanced and teaching became easier with a "calm good-humoured class".