Zailah Zainudin, PhD

The enhancement of the verbal interaction in physics instruction through reflective teaching – a collaborative action research

This study was an extension of an earlier research relating to the needs of the non-physics teacher (GBO) in Malaysia. This study suggested that an experienced physics teacher could provide hands on assistance needed by the non-option physics teachers. Specifically, this study described the collaborative effort between an experienced physics teacher and a non-option physics teacher in implementing the reflective teaching through collaborative action research. The researcher as an experienced physics teacher, acted as the research consultant and critical friend. This professional partnership was intended for enhancing the process of teaching and learning focusing on verbal interaction in the classroom. GBO was guided to reflect and to self assess the verbal interaction analysis by employing the LISAM (Low Inference Self Assessment Measure) method. Verbal interaction observed included (i) questioning skills, (ii) teacher talk/student talk, (iii) motivating set and closure, (iv) wait time, (v) positive statements, and (vi) the used of student ideas. Data collected was triangulated using three techniques, audio recording, interviewing and observing and the analysed using descriptive statistics (frequency count) and qualitative data analysis. The results indicated that GBO was successfully guided to identify and to overcome the strength and weakness of the verbal behaviour through the integration of both the process of "reflection on action" and the process of "reflection in action" within the process of reflecting teaching. This research helped the researcher in enhancing the understanding of the implementation and the process of collaborative action research. This research also introduced and explained the propose concept of reflective supervision to be implemented in the teaching and learning monitoring system. Finally, two techniques of professional partnership in action research based on reflective teaching were proposed: PERBID technique (Reflective Teaching in Classroom) and PEPKAT technique (Professional Partnership in Action Research) as the basis to implement reflective teaching and reflective supervision in schools.

Zailah, Z. (2005). The enhancement of the verbal interaction in physics instruction through reflective teaching – a collaborative action research (Doctoral dissertation). Universiti Kebangsaan Malaysia