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Teachers and testing: an investigation into teachers' perceptions of formative assessment.

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Background

Research evidence conducted within the past decade contributes much to an understanding of the role and potential value of formative assessment in learning. Reviews undertaken by researchers such as Black, Harrison, Lee, Marshall and Wiliam (2005) demonstrate that when formative assessment is part of classroom practice, substantial learning gains can be achieved. However, this research also suggests that there is considerable potential for improvement in formative assessment practices in schools.

Formative assessment is depicted here as an informal and continuous process, embedded in teaching and learning and conducted by teachers as an integral part of everyday classroom work. Placed firmly within the social constructivist paradigm, it forms a direct contrast with a behaviourist model of learning where knowledge is seen as 'politically and socially neutral' (Rubin and Rubin, 2005: 23) and achieved by clear specification, implementation and measurement. Torrance and Pryor (1998) identified a tension and anxiety among teachers, who often saw such assessment practices as 'antithetical to their values andtheories of teaching and learning'. Thus a conflict was identified between teachers' perceptions of government requirements and their own values and practices.

As a Learning Support Advisory Teacher the author was interested in exploring further such views and perceptions of teachers. An opportunity sample was taken to investigate the perceptions of teachers working in lower and middle schools in one local authority. It was hoped that this would complement earlier research undertaken in secondary schools (Black et al, 2005), and facilitate recommendations for future policy and practice.

Research Questions

1. What are teachers' perceptions of formative assessment?

2. Do relationships exist between teachers' perceptions and factors such as school phase and length of experience and if so, what is the nature of such relationships?

3. Which aspects of formative assessment emerge as important to teachers?

Methods

The study employed a mixed method non-experimental design. The sample was drawn from teachers working in 24 lower and middle schools and the research was conducted in two phases. During Phase 1, data was drawn from a questionnaire survey which elicited both quantitative and qualitative responses from 67 teachers. This data was coded and analysed using SPSS, providing answers to the first two research questions. Salient aspects of this evidence were then incorporated into an interview schedule used during Phase 2 of the research with a sample of three teachers. This aimed to probe teachers' perceptions in more depth and was based on a 'responsive interview' model (Rubin and Rubin, 2005). Qualitative thematic analysis of this data (Hayes, 2000) set out to provide some answers to the third research question. Further in-depth analysis was undertaken on all aspects of the evidence in relation to the conceptual framework.

Frame

A conceptual framework was devised to inform, clarify and interpret the research process.

Much of the thinking behind the concept of formative assessment is derived from psychological theories of attribution, achievement motivation and the nature of pedagogical knowledge. The work of Weiner (1990) suggests that it is not the experience of success or failure in learning which counts so much as the individual's attributions about it. Educational research undertaken within the UK and the USA by Pollard (1996) and Dweck (2000), suggests that there is a strong relationship between teachers' perceptions and classroom practices.

Model to show conceptual framework for research (diagram) .

This model depicts the 'think tank' as the area where such psychological theories and educational research are developed. It is also the area where government initiatives originate. The classroom is the context where teachers and pupils interact to achieve learning within the zone of proximal development (Vygotsky, 1978). Formative assessment is seen as arising within the 'think tank' to become embedded as an intrinsic part of the learning process within the classroom. The model is cyclic, recognising that research and practice are mutually dependent, each impacting on the other.

Research findings

1. What are teachers' perceptions of formative assessment?

A broad range and diversity of views were expressed about the concept, value and practical implications of formative assessment. The highest level of agreement (98.5 per cent) from teachers was with the statement that 'all children can make progress in their learning. In contrast, the majority of teachers disagreed with statements associated with children's understanding of their own learning processes.

2. Do relationships exist between teachers' perceptions and factors such as school phase and length of experience and if so, what is the nature of such relationships?

Relationships were identified between some perceptions and variables such as school phase and length of experience. For example, within school phase a discrepancy between the two groups of teachers (lower and middle) was identified in relation to perception statement 13: Formative assessment practices are frequently shared among staff at my school. Possible reasons for such differences were explored during Phase 2.

3. Which aspects of formative assessment emerge as important to teachers?

Five key aspects of formative assessment emerged as important to teachers. These were: accountability; prescription and ownership; school context, culture and collaboration; leadership and management; the complexity of teaching and learning. Further analysis of this evidence suggests that conflicts and tensions in schools may indeed be inhibiting the development of formative assessment practices. Incorporating formative assessment into classroom learning contexts is therefore not straightforward, as the arrow suggests (see conceptual model). Instead, this study supports Bruner's (1996) claim that the process is both complex and difficult.

Contribution to knowledge.

One clear message which emerges from this study is that teachers' perceptions are important to the understanding and implementation of formative assessment. Some key implications for pedagogical practice were identified. These include recognising the need for teachers to have an in-depth pedagogical knowledge of how children learn and allowing pupils to share responsibility for their own learning. Some of these findings could now be used as starting point for further educational and psychological research, as the conceptual model suggests. This research demonstrates that, in order to bring about real and lasting improvements to children's learning, teachers' voices do need to be heard.