Evaluating a Curriculum Innovation Using an Implementation Rubric

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The rapid development of information technology (IT) had led to a surge of using technology in learning and teaching among different education sectors in the past decade. In the light of this, different institutions had established their own policy in implementing IT in learning and teaching.

This study regarded IT in learning and teaching as a curriculum innovation and explored how the innovation was implemented by teachers in a vocational education institute. Due to the special context of the institution, an 'Implementation Rubric' (the rubric) was designed to evaluate how the curriculum innovation was implemented. The rubric was devised with reference to frameworks advocated by Hall and Hord (2006), Harmon and Jones (1999), Leithwood and Montgomery (1987) and Reeves and Reeves (1997).

Presented in a matrix format, the rubric consisted of three dimensions:
(i)   Policy in context - teachers' knowledge of the institution's policy that is expected of them.
(ii) Perceptions of learning and teaching - teachers' perception of learning and teaching and their roles in using IT.
(iii) Teachers' practice - the expectations of teachers' practice in using IT.

Each dimension of the rubric was characterised by its degree of implementation with five levels of use:
(i)   Zero Use
(ii) Informational Use
(iii) Supplemental Use
(iv) Intensive Use
(v) Constructive Use

These levels of use varied from 'the state in which teachers had no/limited knowledge of the innovation, no involvement with the innovation, and was doing nothing towards becoming involved (Zero Use)' to 'the state in which teachers constructed their own knowledge of using IT for learning and teaching, and were able to provide advice in using IT for learning and teaching (Constructive Use)'. By adopting these levels, the actual state of implementation of the innovation could be measured.

The rubric facilitated the design of a questionnaire for surveying 1,096 vocational education teachers (Koo, 2009). The survey result indicated that, in general, the innovation was implemented by frontline teachers, although the degree of implementation of individual dimensions varied. Issues encountered by teachers during the implementation such as: lack of support given to teachers; heavy workload; students' motivation in using IT; teachers' knowledge of using IT; teachers' incentives; and lacking a well-defined policy for using IT, were revealed. Recommendations for improving the curriculum implementation were also proposed in this study.

This study not only evaluated the implementation of the curriculum innovation, but most importantly, established a tool (the implementation rubric) for evaluating the innovation. The rubric designed could be used for evaluating curriculum innovation of similar context. With appropriate adjustment, the rubric could also be used for evaluating other educational innovations in different contexts.

References:

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