The Influence of Cognitive Skills on how Information Literacy Programmes are Delivered and Supported

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The presenters briefly summarised their earlier research that recommended, inter alia, timely and collaborative delivery of teaching, reinforcement in subsequent weeks by the lecturer, and explicit learning outcomes in the assessment to encourage engagement (Colvin & Keene, 2004). It was then explained that this research prompted their interest in analysing why it was easier to engage students in some information literacy activities than others (Colvin & Keene, 2006), leading to their proposing a new model of information literacy and reviewing how different approaches to delivery and post-delivery support are appropriate for different information literacy activities, depending on the cognitive skills that students employ in the respective activities. It was suggested that their model of information literacy is broadly consistent with the concepts expressed in established frameworks, but that it differs from established frameworks in two ways. Firstly, it includes a holistic view that embeds information literacy in the problem solving cycle, rather than trying to deconstruct all aspects of information literacy that an individual may use at different times. Secondly, there is the emphasis that the model places on the relevant cognitive skills exercised by students at each stage in the information cycle, which appears to be virtually unique. Delegates were then asked to analyse the 'Information Needs identification' stage of our model of information literacy, to use Bloom's taxonomy to identify the cognitive skills that students employ in this stage and to suggest how this area of the curriculum could be delivered and supported. One of the delegates noted that it would be interesting to analyse this model and the accompanying recommendations for delivering and supporting information literacy for dyslexic students

The analysis of the cognitive skills exercised by students at the 'Information Needs identification' stage suggested that a range of cognitive skills were employed – Knowledge, Comprehension, Application and Analysis. It was also suggested that different approaches to delivery and post-delivery support are appropriate for different information literacy activities, depending on the cognitive skills that students employ in the respective activities. Firstly, where an activity requires subject domain awareness then delivery and the subsequent support of learning is most effective when carried out by a team that includes subject expertise e.g. specialist subject librarian or academic. Secondly, the delivery of activities that involve higher order cognitive skills is most effective when delivery includes a significant element of student-centred learning activities that exploit the benefits of collaborative learning. Thirdly, where activities oblige students to carry out mechanical steps then employing a mixture of lectures, demonstrations, on-line tutorials and exercise worksheets for delivery and on-line tutorials and worksheets for post-delivery support are effective. Finally, teaching activities that require comprehension are most effective when this includes a substantial element of student-centred activities to enable students to create their own understanding.

References:

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