

Effective teaching approach employed by primary school science teachers

ABSTRACT

Teachers are often urged to use a variety of modes of instruction to ensure that diverse student interests and abilities can be accommodated. Yet teachers can be limited in the instructional modes they can use because of insufficient background or knowledge about a specific instructional mode (Dawson, 2004). Teaching approaches are various in purposes such as to trigger students' interest in science, to discover through inquiry approach, to build students understanding through constructivism approach or to introduce a concept through demonstration approach. Every approach has the strength and weakness in its use. Although inquiry may not be the only way to teach science, many science educators believe that it may be the best way for students to learn science (Audet & Jordan, 2005). According to Woolfolk (2001), constructivism is a mode of instruction that emphasizes the active role of the learner in building, understanding and making sense of information. Demonstrations by teacher can be used with students of all ages and across all subjects. The teacher is not only knowledgeable about the topic but also uses a variety of aids to ensure that students understand what is being demonstrated (Marsh, 2004). By studying their teaching approaches and methods, the actual practices could be analysed and the effectiveness status of their effectiveness could be determined. Specifically, this study aimed to answer these questions in terms of three approaches namely inquiry, constructivism and demonstrations; how far is this approach effective in terms of teaching and learning, and what is the correlation between these three approaches. Data were collected from primary school science teachers (N=239) and the results shown that the teachers were agreeable with the three approaches, inquiry approach (mean=3.74, SD=0.27), demonstration approach (mean=3.61, SD=0.27) and constructivism approach (mean=3.86, SD=0.30). The results also showed that there are significant correlations among inquiry, demonstration and constructivism approach. This finding showed that primary school science teachers not depend only on one type of approach and apply variously in teaching science. There are also positive and significant correlation between that approaches used by primary school science teachers.

Keyword: Effective; Teaching; Science