

Stakeholders' Perceptions about Effective Use and Challenges of Hands-on Activities on Secondary Science Education

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Abstract

Purpose The purpose of the study is to identify Stakeholders' perceptions about use and challenges on hands-on activities. This study is focused on three central phenomena namely, 'stakeholders' explanation about implementation of hands-on activities in the science classrooms, stakeholders' views on it as a source of increasing students' critical and logical thinking and challenges to practice hands-on activities in the classroom'.

Method A qualitative approach has been followed to find answers of the research questions. Data has been collected through convenient sampling from two schools of Narayanganj. Two open-ended questionnaires and semi-structured interviews with stakeholders were used in the data collection process. Data analysis was done by cross-case analysis.

Findings This study found that teachers were unaware about conducting the science classes practicing hands-on activities. Guardians and school authority found hands-on activities as time consuming unnecessary deeds. Teachers having a high sense of self-efficacy are more creative in their work.

Significance These findings have implications on teachers' manual and teachers' training program. Policy makers can be aware about the barriers of implementing hands-on activities and increase their awareness about making the process more effective.

Keywords: Hands-on Activity, Critical and Logical thinking, Implementing Teachers' Content Knowledge, Self-efficacy.