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TEACHER INVOLVEMENT IN DEVELOPING STUDENTS' SCIENCE PROCESS SKILLS OF ADVANCED LEVEL BIOLOGY TEACHING IN KURUNEGALA DISTRICT, SRI LANKA

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Science Process Skills (SPS) are special skills that simplify learning science, encourage students in their own learning and practice them in scientific method. The teacher should play a crucial role in developing students' SPS. It is well-known that the teacher should have the required knowledge, perceptions and the ability to teach SPS. Thus, this study was focused on investigating the teacher involvement in developing students' SPS in advanced level biology teaching in Kurunegala District. The objectives of the present study were to find out the level of awareness and level of perception of teachers towards SPS, the issues and problems faced by the teachers when developing SPS, and how the teachers develop students' SPS in the real classroom settings. Convenient data sampling technique was used to select 30 biology teachers from 16 selected 1AB schools in Kurunegala District. The mixed-methods approach was used. Quantitative data were collected using a questionnaire and analyzed for descriptive statistics using MS Excel. Qualitative data collected through interviews and classroom observations were analyzed using the Thematic Analysis Technique. Results confirmed that 73% of the teachers were unaware about the SPS. It was found that most of the teachers had positive perceptions towards improving the students' SPS. However, the teachers preferred to improve basic SPS rather than improving integrated SPS. There was a relationship between the gender and the perception of the teachers towards SPS (p > 0.05), and there was no relationship between seniority and the perception towards SPS (p < 0.05). Moreover, the teachers did not use suitable teaching methods to develop students' SPS in the real classroom settings. There were many problems that badly affected for development of the students' SPS, such as examination oriented heavy load of biology syllabus, requirement of sound knowledge, and lack of resources in the schools. Hence, biology teachers were unable to provide a conducive environment to develop the students' SPS at the desired level in Kurunegala District.

Keywords: Basic science process skills, Biology teaching, Integrated science process skills, Science process skills