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Teaching and learning implications on group experiments and teacher demonstrations to teaching of process skills in biology: A case of two Namibian secondary schools

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The article reports on the teaching and learning implications of teacher demonstrations and group experiments for practical work in biology at Namibian secondary schools. The study involved three teachers and two secondary school centers. Data on were collected using a video observation quoting schedule. The findings showed that teacher demonstrations in biology provide fewer opportunities (if any) to students for acquiring intended process skills (practical skills) compared to group experiments. Teacher demonstrations were found to develop a few process skills, such as making observations, recording observed results, and writing conclusions, whereas group experiments allowed students to acquire variety of process skills. Teacher demonstrations provided little opportunity to students to discuss and negotiate subject content knowledge at the intermental plane