

Predictors of performance: Instructional modes vs. preferred learning styles

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This study sought to investigate the link between preferred learning styles, performance, and cognitive load. After determining learning styles (visual or auditory), undergraduate students were assigned to three instructional formats, namely: Listen Only, Read Only, and Read + Listen. A pretest was administered to assess students' prior knowledge on lightning. During acquisition, students received instructions specific to the instructional format they were assigned to. For example, students in the Read Only group received written materials only while those in the Listen Only group received auditory materials only. The acquisition phase was followed by a posttest phase. Based on cognitive load theory, it was hypothesized that different instructional formats will result in differences in student performances. It was also hypothesized that there would be no significant link between student preferred learning style, performance, and mental effort ratings. The two-way between-groups ANOVA results confirm the hypotheses. Educational implications and limitation are also discussed.