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Evaluating gender differences of attitudes and perceptions toward PowerPoint™ for preservice science teachers.

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Summary: Microsoft PowerPoint™ has become the generic name used when describing slideware applications. This study analyzed the gender differences of participant attitudes and perceptions of various components of PowerPoint™ presentations. Preservice science teachers (none licensed, mostly undergraduates) viewing PowerPoint™ presentations of science content provided the data. The components of the presentations studied were: text, graphics, the combination of text and graphics, narration, and appropriate use of PowerPoint™ for teaching and learning science content. The affect of animations viewed in prior participant PowerPoint™ experiences was also ascertained. A Kruskal-Wallis test was calculated to analyze the differences between genders for the perceived effectiveness of aforementioned components of PowerPoint™. Results showed a significant difference ($H < 0.05$) for the affect of graphics in PowerPoint™ on gender. Females found the integration of graphics in PowerPoint™ to be a more effective approach to learning science than did males.

Classification: R75 Q45

Keywords: multimedia; PowerPoint; eye tracking; preservice; science teachers; attitudes; gender differences; empirical investigations