



Enjoyable Mathematics Lessons can be Contagious

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Mathematics lessons can be structured to begin with teacher directed explanation and discussion, followed by students independently solving tasks (teach-first). A lesson can also begin with independent student exploration followed by discovering key mathematical ideas as the lesson unfolds (task-first). It has been suggested that enthusiastic teaching behaviours are displayed verbally and nonverbally when teachers feel enjoyment, and that such behaviours are contagious (Frenzel et al., 2017). This study aimed to answer the following research questions: *Do students prefer one lesson structure over another? If so, why? Are students' preferences for a task-first or teach-first lesson structure influenced by their perception of their teacher's preferences? If so, what aspects of the teachers' behaviours do they perceive?*

To answer these research questions, this study used Pekrun's (2000) control-value theory of achievement emotions to design the data collection instruments. Eighteen students from two composite Year 3 and 4 classes (aged 8-10 years) completed a post-lesson drawing task and participated in a semi-structured interview following a series of teach-first and task-first lessons. An inductive thematic analysis (Braun & Clarke, 2006) was used to identify patterns of meaning for students' reasoning towards their preference for the lesson structure.

Overall, the results suggest that students preferred either the teach-first or task-first lesson structure for various reasons relating to perceived benefits to their learning. Most students (11 out of 18) reported noticing aspects of the teacher's behaviour during instruction (e.g., smiling, appeared interested, relaxed) that they perceived as an indication of her own enjoyment of and preference for a particular type of lesson structure. Students' perceptions were categorised as either relating to teacher enjoyment or teacher work related preferences resulting from a particular lesson structure component. There seemed to be a positive reciprocal relationship between the lesson structure the students enjoyed and what they perceived their teacher enjoyed. The results have implications for the way teachers inadvertently influence their students' enjoyment of mathematics lessons and their instructional preferences.

References

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