



Balancing disciplinary and integrated learning: How exemplary STEM teachers negotiate tensions of practice

Article Summary

Integrated STEM education within North America has become a popular pedagogy; however, teachers identify challenges that arise when planning for and implementing integrated STEM education. These challenges may threaten STEM teachers' capacity to balance disciplinary and integrated learning, a core feature of effective STEM education. The purpose of this study was to investigate how exemplary STEM teachers navigate tensions of practice to balance disciplinary and integrated learning. Through an in-depth qualitative methodology, drawing on interview and artifact data from 14 purposefully selected exemplary secondary and elementary integrated STEM teachers, this study identified tensions that teachers faced as they navigated planning for and implementing integrated STEM education: (a) curriculum content versus skills; (b) guided instruction versus inquiry and play; (c) process versus task completion; and (d) collaboration versus individual needs. In line with a Worldly Perspective (Rennie et al., 2020), balancing these tensions leads to enhanced integration.

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Dubek, M., Rickey, N. H., & DeLuca, C. (2024). Balancing disciplinary and integrated learning: How exemplary STEM teachers negotiate tensions of practice. *School Science and Mathematics*, 1–17. doi.org/10.1111/ssm.12645



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