

Designing Teaching: Scaling up the SIMPLE Design Framework for Interactive Teaching Development

This WIDER Institutional Implementation project investigates and implements a teaching development process, the SIMPLE Design Framework, for creating design-based small groups to support faculty as they implement interactive teaching strategies. The project includes faculty from George Mason University's College of Science, Volgenau School of Engineering, and College of Education and Human Development in an interdisciplinary partnership that encourages discussion of disciplinary differences in teaching. The hypothesis is that by participating in support networks to attempt small changes, faculty will be able to make larger changes over time. The project uses strategies suggested by Rogers' (2003) Diffusion of Innovations as the theory of change.

In the SIMPLE model, faculty at different levels of experience in interactive teaching practices engage in discipline-based small groups that meet regularly and provide mentoring around common needs and interests. This provides faculty with limited teaching innovation experience to participate in the Teaching Development Groups and supports more experienced faculty in the scholarship of teaching in the Teaching Inquiry Group. A key component to teaching development is the design memo, which is used to document and share interactive teaching experiences and serves as a starting point for the group discussions. The project also is collecting qualitative data to document how the teaching development or inquiry groups work together, the strategies instructors use, and the impact on teaching in STEM departments.

The broader impacts of this project include the creation of a transferable framework for institutions of higher education to use to facilitate the use of research-based and evidence-based teaching practices focused on student interaction. The principles of the framework give guidance as to group organization but allow flexibility across contexts, institutions and departments. The implementation of interactive teaching practices has been demonstrated to improve student learning particularly by groups of students who have historically lacked representation in STEM disciplines. The sharing of the design memos and teaching resources through the SIMPLE project website (<http://simple.onmason.com/>) will allow data collected to be shared with a broad audience.

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