

QUBES InTeGrate FMN Survey Qualitative data summary

1. Outcomes for participants

Overall benefits of participating in FMN: Participants discussed empowerment, motivation for teaching, and knowledge of InTeGrate materials as lasting benefits to participating in the FMN. One participant reported that “this is very **empowering** going forward as I keep improving and modifying my class activities.” Another stated that they were “very much looking forward to see how these and other **InTeGrate materials** can be used in other courses I teach.”

Learning from experience: Situated learning theory posits that learning takes place through action and “is an integral part of generative social practice in the lived-in world” (Lave & Wenger, 1991, p. 35). Taking this view, we identified instances where participants described insights into teaching that they gained through the experience of teaching with the InTeGrate materials.

“The two things that I really took home and am going to keep emphasizing **is how well the students respond to place-based teaching, to student-led teaching models**. I will work to incorporate activities and modules to that effect more fully in the class.”

“As the exercise was unfolding, I thought most students understood the intent of the activity; however, **grading the assessments revealed some confusion**. I took another lecture session to resolve this confusion before our exam. Without this formative assessment, student performance on the exam would have suffered.”

“In many regards, the FMN helped me to **break through concerns about the limited scope of student capabilities** to undertake the large scale analysis required of systems thinking ... Part of these limitations was my own lack of learning activities that guided students to these goals...the student learning resources modules are both elegant and highly effective.”

2. Beneficial FMN Characteristics

Group dynamics and mentor approach: Participants appreciated the “informal, friendly style of our gatherings” and the collaborative approach taken by the mentors, noting that it was “not top-down.” They also were pleased with the safe space that was created by the group, with one participant reporting that they were “very comfortable, no judgment, just honest valuable sharing.”

Support in planning process: One of the primary functions of the FMN was to help with implementation of InTeGrate materials into participants’ classes. They noted multiple aspects of support they received in the planning process, such as: feedback on lesson plans, assessment planning, clear timeline, and help and guidance from mentors.

Learning from others: Consistent with Lave & Wenger's (1991) framing of learning as a social endeavor, participants reported that they valued peer contributions to their planning process. They also discussed learning from the experience of others, with one participant stating "it really helped to see how we were adapting the modules to our classes and students needs."

Joint enterprise: Wenger (1998) identified "joint enterprise," in which members are working towards a common goal, as one of the fundamental characteristics of a community of practice. This idea was expressed by a number of participants as they reflected on their participation in the FMN.

"It was really great to **collaborate around teaching**"

"I think it was great to see **we were all experimenting together**, it makes the whole process less scary."

"It was really great to have a group to do this with. I do not think I would have been able to do this on my own"

3. Advice to colleagues

As part of Survey 1, participants were asked what advice they would give to colleagues before using the same InTeGrate materials. This was not explicitly reported in the Instructor Stories, so responses are provided in their entirety here to inform future work:

"In the face-to-face environment of a non-majors course, I would recommend more time for the activities than suggested in the tips for faculty and for the faculty member to be ready to fill-in voids in the students' knowledge base. From my experience many students have insufficiently developed acuity for linking facts into conceptual frameworks."

"In a biology class, these materials are not quite "turnkey". It will take time to adapt them and add in the "life", but the pedagogical structure that is built into the modules makes them a big hit in classrooms - so go for it!"

"Be flexible and willing to change the course mid-module if things do not seem to work out. I was honest with the students about the challenges of implementing the module as we were going through it, and I think their feedback ultimately made it a successful effort."

"My advice to colleagues would be to really sit down with the materials and see where they fit best in the class rather than trying to put them in just where there seems to be time. It may take some rethinking/planning of the course but it is worth it. Feel free to choose materials and assessments that best fit the goals of your class and leave plenty of class time for any in-class activities, more than they think they will need!"

"Set aside time to edit the content for your purposes. Most exercises were designed for geology courses, but can be adapted for intro biology."

References

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate peripheral participation*. New York: Cambridge University Press.

Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. New York: Cambridge University Press.