

Faculty and Student Perspectives on Facilitating the IE Learning Goals: Weaving Reflection and Integrative Thinking Across the Learning Experience

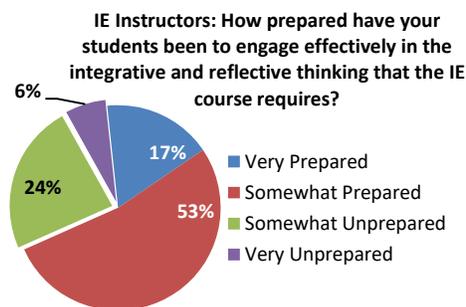
Anne Herrington, Emerita Professor of English & Martha L. A. Stassen, Assistant Provost

Introduction

The University of Massachusetts Amherst instituted its Integrative Experience (IE) General Education requirement in fall 2012 and just graduated its first class that entered under that requirement. With support from the Davis Educational Foundation, the campus has conducted substantial formative research into IE implementation and early impact, seeking the perspectives of both faculty and students. Among the questions guiding this research, is how to improve student preparation for the integrative and reflective learning emphasized in the IE. One of the themes that has emerged is the value of introducing reflection and integrative thinking earlier in students' years at UMass, both through the curriculum and advising. In this research brief, drawing from a range of evidence sources¹, we focus on our analysis of both the rationale and suggestions for weaving reflection and integrative thinking across the undergraduate experience.

Rationale

IE Instructors were asked to rate students' preparation to engage in the integrative and reflective learning at the heart of the IE requirement. Only 17 percent of instructors said students were "Very Prepared" for this kind of thinking, and almost a third said students were "Very" (6%) or "Somewhat" (24%) Unprepared. (See graph at right.) In their open-ended explanations for their responses, instructors who felt students were unprepared pointed to students' lack of experience with integrative thinking and with reflection on one's own learning. Some also indicated the need for further improvement in students' critical thinking and writing skills. To better prepare students, faculty pointed to the need for more attention to these skills in all courses and the resources to enable smaller classes for these purposes.



From the student and faculty responses, two primary rationales arose for weaving integration and reflection throughout students' years of study: 1) to help students make more informed choices when selecting courses, and 2) to help them think more throughout their education about how their courses and experiences relate to one another—both in terms of cross-disciplinary connections and their own personal development.

Granted, a minority of faculty and students' expressed the view that the overall goals of IE were already being achieved in other ways. Specifically, some students indicated that building connections across their experiences was something they "already do" and, as one student said, "I feel like I can make these connections myself and I do not need a class to do this for me." While this may be true for some students, and for some non-IE course, the above-referenced survey item on student preparation indicates students indicate a gap in preparation. The instructor survey also indicates that IE instructors' pay less attention to specific IE objectives in their non-IE courses, including having students reflect on their own learning, make connections between Gen Ed and their majors, and consider how their learning relates to future goals.

Faculty who value both the goals of IE and the IE requirement, viewed non-IE course connections to IE objectives as something to strengthen, but not as a replacement for IE. That is, these instructors spoke of the importance of providing *multiple* opportunities for students to reflect regularly on how their courses relate to one other and plan future courses, beginning with the first year. As one wrote on the survey, "Catch them early and regularly." Some respondents also spoke of this as "scaffolding": having students *practice* integrative thinking in a number of courses in order to internalize it as a way of thinking post-college. One faculty survey respondent said:

¹These sources of evidence include: an IE Instructor Survey (n=214); IE Student Survey (N=4449); interviews with IE instructors (N=8) and with IE students (N=11); and 9 focus groups with sophomores (3 groups), juniors (3 groups), and seniors (3 groups) (N=63).

“Individuals learn best when they are able to construct a mental framework into which they can incorporate new knowledge. I feel that undergraduates need practice in making connections and constructing these frameworks; otherwise, students tend to view their classes as separate from each other—discrete, semester-long units that can be completed and left behind. Because life-long learning and critical thinking skills are essential for professional success, as well as good decision-making in everyday life, I believe a college education should enable students to learn independently and think for themselves.

Another faculty respondent voiced a similar rationale:

“The reflection that occurs and the connection between different types of knowledge and different experiences needs to be integrated throughout the curriculum.”

Students also valued this kind of “connection making.” Referring to their IE course, one student said:

“I think it integrated the material I learned at UMass and the UMass experience extremely well. It also provided a comprehensive closure to my undergraduate career. It also reminded me of the wealth of knowledge I obtained at UMass.”

Another, speaking more generally about the IE integration and reflection objectives:

“I think it’s great to make connections among classes, across topics and readings; we should be critical of if and how and why what we learn in our university classes applies to our lives in a deeper and larger way.”

For students, another rationale was that if integrative reflection doesn’t occur until their senior year, they have difficulty even remembering their courses. One student expressed this predicament well when given a transcript of courses s/he had taken:

I think it's kind of difficult to place all of the--I don't know what the word I'm trying to find here is--but trying to place all the pressure on this one course in your senior year. Because if we want to promote integrative thinking, we should start freshman year because I took all these classes freshman year. I'm like looking at them; I'm like I don't even remember that. Like I couldn't even tell you a single thing that I learned or where the class was or who taught it. I like can't even tell you, you know. So I feel like if I was thinking about that when I was taking the class, maybe I would remember it more. And maybe I would be able to be like, “oh wow I learned that freshman year in a Gen Ed. I thought it was like pointless, but I remember that.” You know we read that book or we talked about that thing or we had that lecture, and it maybe would have come up again. You know? But because I wasn't thinking about it I kind of just pushed it back, in the back of my mind, and it never came up again.

A primary rationale for students was also the need and value of having more information about courses and the overall curriculum and being encouraged to think more intentionally about course selection. Some seniors bemoaned their not having taken more care in course selection. As one said, “I think if it [the IE] had been earlier, it would have been more helpful—because, like I realized, I took a lot of Gen Eds just to take them.” Another who also advocated some means to prompt intentional planning earlier mentioned hearing other students in the IE course talk about courses they had taken and thinking, “it would almost make you look back and be like, ‘well, why didn’t I do that?’”

Suggestions for Curriculum, Pedagogy, and Advising

Both faculty and student respondents suggested ways to weave integration and reflection throughout students' studies, culminating with the IE course. Specific suggestions:

- Introduce integrative and reflecting thinking to students early on and incorporate throughout the curriculum. As one faculty commented: "I wish there could be something at the START of students' college careers that got them thinking intentionally about their overall personal Gen Ed 'package' of courses, and that explained the logic of WHY we think they need these classes in their undergrad. education."
- Be more explicit in Gen Ed courses in explaining to students the purpose of the course and how it addresses specific objectives of General Education. As one explained, "there needs to be a meta-discourse part of every course: "why are we doing this? how are we doing it? why is it useful to think scientifically when you're an English major? Why is it useful to think about human stories when you're an engineer?"
- Provide better information to students to guide their course selection, not only about the content of a course, but also the skills that will be emphasized.
- Use advising as a vehicle for explaining the rationale for General Education, encouraging students to reflect on their learning and their goals and to be purposeful in selecting their courses.
- Provide more opportunities for students to engage in skills of writing, oral communication, critical and creative thinking.
- Give students more opportunities to practice the IE learning objectives of making real world connections, and involve them more actively in their learning, including through hands-on experiences and group work.
- Recognize that in order to provide students with the opportunity to effectively practice these learning objectives, , classes need to be small enough or offer sufficient TA support to provide students with the feedback necessary to improve their work.

Also mentioned by a few faculty members and students were the following:

- Add a first year course that introduces the broad rationale for the undergraduate curriculum to students, encourages them to be purposeful in selecting their courses, and introduces the kind of reflection and integration that they should practice throughout their education.
- Structure occasions throughout courses in each major for students to reflect on what they are learning, how it "ties together," and think toward their futures. Begin with a foundation course and weave into one or two other courses throughout their studies, culminating with the IE.
- Use portfolios as means for students to collect their work from courses across the curriculum and their years of study and to reflect on that work