With every new audience, every new genre, every new context, writers have more to learn; past success does not guarantee an immediate ability to write well in a new context. The talented fifth-grader may feel unable to write the descriptive essay required in middle school; the high school senior with top grades and AP scores may feel daunted by the demands of a first-year college writing course; the accomplished graduate student may feel incapable of writing a prospectus, much less a dissertation; the highly successful poet may feel challenged if asked to write a grant proposal. Even with a solid record of effective writing, every writer faces challenging situations that call for further learning, because writing, unlike, say, learning to follow a routine procedure, can never be entirely mastered. Despite some educators’ efforts to present writing instruction in sequences of defined levels—learning, for instance, to write sentences before proceeding to paragraphs or paragraphs before essays—there is no series of steps by which instructors can lead students to learn everything they will need to know about writing.

To be sure, more accomplished writers often have a repertoire of rituals, strategies, and other resources to call on as they move from one rhetorical context to another. These approaches can become habitual practices. For example, a writer who knows she works best in the morning in a coffee shop, who ends in the middle of a section so it’s easier to continue the next time, and who switches comfortably to another project if she gets stuck on the first will find it much easier to write in a variety of circumstances. The writer who knows how to consider the needs of a given audience, to identify features of various genres, to strategically use the various conventions of written English, and to call on and use advice from other writers for revising will be better able to write effectively in new contexts. It is also true that writers—and instructors—can learn a lot from failure. As Collin Brooke and Allison Carr say, “One of the most important thing students can learn is that failure is an opportunity for growth” (62). Brooke and Carr also call for “pedagogies
of failure, or ways of teaching that seek to illuminate the myriad ways writing gets done by examining all the ways it doesn’t” (62), which suggests that all students and their writing teachers have more to learn, especially from failure. Anna Knutson’s chapter in this section explores how Grace saw herself as failing according to her own criteria, and also how she learned to move past that failure and adopt a novice status that gave her space to develop as a writer. While they did not categorize themselves as failing, students such as Ayanna, Celeste, and Samantha in Naomi Silver’s chapter fail to see the value in the eportfolios they created, thereby missing an opportunity to further their writerly development.

The designation of failure presumes some form of assessment, and assessment is, as Peggy O’Neill observes, an essential part of every writer’s learning. Assessment in the form of feedback, whether from peers or an instructor, provides writers with guidance throughout the processes of writing. Getting another person’s view on an approach to an assignment, receiving responses to a draft, sharing a nearly finished piece with a colleague who has copyediting skills, receiving suggestions for revision from an instructor or a journal editor, and of course, getting a grade are all forms of assessment from which writers can learn. Part of dealing with assessment includes evaluating the assessment. Not every suggestion is worthwhile; peers, instructors, and editors can be wrong. Part of the continued learning of writers involves becoming able to discern which feedback or assessment is most valuable. One of the capacities that marked the development of a number of students in our study was a willingness to disagree with an instructor, to decide that a given bit of feedback or advice was not useful.

With time and practice writers can become better at assessing their own work, determining which will be the most effective approach, identifying the sections that need further development, or developing a revision plan. Still, however, some form of assessment from others enables the continued learning of writers.

Assessment can also provide an indication of writerly development, and the assessment embedded in our study attempted to discern the patterns of learning traced by student participants. Statistical analysis of student responses to entry and exit survey questions provided one way to assess student learning and development in areas including rhetorical ability/dexterity, genre awareness, and the integration of multiple sources. To probe rhetorical ability/dexterity we used this two-part question: “When you need to do a kind of writing task you’ve never done before, how prepared do you feel to decide: (a) What the writing task is asking you to do; (b) What kind of examples or evidence you should use.” All students showed statistically significant growth in this area (p-value of 0.0001), but minors showed greater growth in both numbers and statistical significance. This difference can be
attributed, in part, to a curriculum that exposed students to a wide range of genres and devoted explicit attention to the requirements of various types of writing experienced by writing minors.

Another difference in rhetorical dexterity emerged when we looked at disciplinary subgroups. For example, we found that students in science, technology, engineering, and math (STEM) were at the same level of response as their non-STEM peers in the entry survey, but while non-STEM students showed a positive change on this question in the exit survey, the mean of STEM students was actually lower than it had been two years earlier. Although we cannot be certain of the cause, it is clear that the learning of STEM student writers did not include much growth in the area of rhetorical ability/dexterity.

A survey question closely related to rhetorical ability/dexterity asked students to look back at their college career and indicate how frequently they had (a) made an argument and supported it with evidence, (b) expressed a personal opinion on an issue, and (c) written a personal narrative. Results showed no appreciable differences between non-STEM and STEM students in writing argument or personal opinion. Neither group indicated that they wrote a great deal of either, and the non-STEM students indicated slightly more personal opinion writing than their STEM peers. The only statistically significant difference appeared in response to the question about personal narrative, where non-STEM students showed a much more positive response than STEM students. The relatively low response on use of argument is surprising given the campus-wide claims by professors that evidence-based argument is the most important genre for college writers. It is even more surprising given that in response to a survey question about how much they learned about specific genres, all students indicated that they learned to “produce well-supported academic arguments.” In the entry survey STEM students showed a lower level than non-STEM for this question, but in the exit survey that difference disappeared. Even though they apparently felt they were not called on to write arguments frequently, all students seemed confident that they had learned how to write in that genre, or it may be that students develop self-awareness but may not be accurate in assessing their own performance.

An area of significant learning for all students was integration of multiple sources, as measured by this question: “In your experience at your institution during the current year, about how often have you worked on a paper or project that required integrating ideas or information from various sources?” Student responses showed statistically significant growth for all students here, but while the minor and non-minor responses were essentially the same in the first year, minors claimed a statistically significant greater ability to do this sort of integration. Yet in response to a
question about critical evaluation of arguments, only nonminors showed significant gains. The question “During the current school year, how much has your coursework emphasized making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions?” points directly at evidence-based argument, a genre highly valued in disciplines across the entire university. These data suggest that minors may not have been as adept at discriminating among sources, even though they felt comfortable with the process of integrating them. This raises a question about the overall effect of requiring minors to produce eportfolios, a genre that is, as Naomi Silver notes, “comprised of multiple artifacts” (p. 232). As Silver makes clear, eportfolios require more than simply collecting a set of materials and putting them next to one another; the relationships between and among artifacts need to be made visible, the eportfolio itself needs to be composed. Students’ ability to do this sort of composing varies, as is visible in digital projects where “some are largely ‘digitizations of print-based material’ with hyperlinks, images, and possibly video or audio included here and there . . . . and show little evidence of the three dimensions of multimodal writing development” while others are truly web-sensible (pp. 233–34). From our perspective, the ability to create a web-sensible eportfolio offers another marker of writerly development, but students who merely lined up artifacts may well have thought of themselves as adept at integrating multiple sources when they were merely putting materials next to one another. Even if students did not achieve the goal of creating web-sensible eportfolios, minors indicated that they had learned to write in a range of media, and their survey response in this area showed a strong statistical difference from the nonminors.

Taken together these statistical data show student writers’ irregular patterns of learning and development, patterns shaped partly by curricular offerings and students’ choices, partly by differences between knowing about and actually producing specified forms of writing, and partly by technologies of writing. Yet some groups of students learned in spite of rather than necessarily as a result of their curricular offerings, as statistically similar responses of STEM and non-STEM students regarding evidence-based arguments suggest. Furthermore, the statistically significant differences between nonminors and minors on the question about critical evaluation of arguments suggest that a curriculum that emphasizes rhetorical analysis like that experienced by minors may not result in the desired student learning. While it is clear that participants in this study could identify areas where they developed as writers, it is equally clear that all of these student writers have, as the threshold concept claims, more to learn.

Similarly, irregular patterns become visible in the closer examination offered
by Naomi Silver’s and Anna Knutson’s chapters. Each shows how students excel in some areas while making less progress in others. Initially Grace, the subject of Knutson’s chapter, experiences failure as she struggles with a fixed mindset about writing and her abilities as a writer, both of which impede her learning and development. Relying on writing practices developed in high school, she falls into unproductive routines and finds it difficult to move beyond them to take up the genres and practices expected by her college instructors. The turning point for Grace comes with a shift away from the environmental science major to German. In this new language, Grace is finally able to move away from her fixed mindset and deepen her learning. The very unfamiliarity of the German language made it possible for Grace to transform herself into a learner. In her words, “I think I just know English so much better, that I also notice the flaws when I write. . . . Whereas [in] German, it’s just, ‘Well, I’ll fix all the grammar stuff later’ . . . it frees me to think about what I want to talk about instead of how I’m saying it” (p. 210). With this turn, Grace learns from her earlier failures and becomes able to learn more about various genres, even though she continues to resist some forms of academic writing.

Assessment loomed large in Grace’s learning and her writerly development. Evaluative comments from her high school AP English teacher rang in her ears well into her college career, leading her to struggle for the creativity that teachers valued while also addressing the expectation of her college instructors. Seemingly, the high school English teacher’s views led Grace to devalue her ability to produce writing that was well organized and logically sequenced because she felt it was more important to produce creative writing valued by that teacher. Although its source remains unclear, Grace internalized an equation of good thinking with good writing, and this too shaped her assessment of her own writing: “You need to be organized. You need to have good ideas. You have to be a good thinker. . . . If you’re a good thinker, then you’re a good writer” (p. 203). This evaluative equation hobbled Grace’s writerly development, especially because she coupled it with the self-direction to “Just think creatively” (p. 203). Grace’s move to major in German was also shaped by assessment. She described instructors in this department, saying all they “want you to do is use the language and not worry about how perfect you’re being.” With this instructor-authorized freedom, Grace moved past her fixed mindset, past the negative assessment tapes running in her head, and embraced the assessment of her German instructor, who said “It was good” (p. 212).

The criteria for terms like “good,” “stupid,” or “creative” that shaped Grace’s self-assessment and that of her instructors remain undefined. Even though they wielded great power over Grace’s learning and writerly development, the meanings attached to these evaluative terms remain obscure. For Silver, the central project
is to define and describe the writing development associated with composing in
digital, multimodal rhetorical situations. Drawing on the more professional criteria
of *Kairos’s* Style Guide along with rhetorical design principles, and web-sensible
composition, Silver shows how variously student writers develop. There are, first,
the developmental differences between what students say and do. In her exam-
ination of Susanne, Ariana, and Abby, Silver shows how their assessment of their
own eportfolios remains anchored in alphabetic writing, making it impossible for
them to see any relationship between their writing development and the digital
dimension of their eportfolios, even when such relationships may be visible. As Sil-
ver explains, their evaluation of their eportfolios separates design from argument
because these students do not see themselves as multimodal writers.

A related developmental difference lies in the variability of student achievement
in alphabetic writing as opposed to the digital aspects of the eportfolio. As Silver
explains, “Eportfolios can offer insight into the differential development of student
composers who may exhibit highly developed rhetorical awareness and flexibility
in one mode, while demonstrating fairly early stages of rhetorical command and
metacognitive awareness and regulation in another” (p. 233). Ayanna, for instance,
organizes her eportfolio in linear fashion and incorporates “very few hyperlinks
or images” (p. 234). This limited repertoire in the digital features of her eportfolio
contrasts sharply with the sophistication and rich variety of genre and style evident
in her writing, a pattern that is repeated in the eportfolios of a number of other
students. Such contrasts make visible the uneven progress students make during
their undergraduate years and show how much more even relatively accomplished
writers still have to learn.

One of the most important insights in Silver’s chapter emerges from her analysis
of Kaitlin’s eportfolio. Kaitlin’s Gateway and Capstone eportfolios show develop-
ment from a collection she herself describes as a “paperless, online equivalent of a
printed portfolio that gives you samples of my writing from my different academic
concentrations” (p. 236) to a web-sensible project “that was created online and lives
online. The content was made for that form” (p. 240). Silver identifies three criteria
that can be used to define students’ development as multimodal composers: “(1)
the extent to which they see themselves as composing truly ‘born digital’ texts, (2)
the extent to which their integration of these affordances explicitly supports their
rhetorical exigency, and (3) the degree to which they are able to demonstrate meta-
cognitive awareness and regulation of their multimodal compositional choices”
(p. 240). By meeting all of these criteria, Kaitlin can be described as a multimodal
composer, but of greater import is her awareness of the importance of the rhetorical
context when composing in any media. As Silver notes, “It is rhetorical instruction,
not technical instruction, that enabled her to grow as a multimodal composer, and it is worth asking if a more thoroughgoing attention to digital rhetorical instruction might help shift the value judgments of study participants like Ariana, Susanne, and Abby, who seemed to view design rhetoric as little more than fiddling with technology” (p. 242).

Silver’s insight about the value of rhetorical instruction speaks directly to the kind of learning that developing writers may need to become effective multimodal composers. Just as Grace’s learning about writing was enhanced by taking up a different language, one that freed her into a more process-focused writing, so aspiring multimodal writers can benefit from a deeper learning of rhetorical principles. Like many of their peers, these students have more to learn, and thoughtfully planned curricula may guide them toward that learning.

WORKS CITED