Fertile Ground: The Movement to Build More Effective Assignments

Pat Hutchings, Natasha A. Jankowski & Gianina Baker

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In Short

- The design of the papers, projects, presentations, and exams that faculty require of students, once fairly private work, is increasingly a topic of deliberate, sustained, collaborative effort, as documented by the National Institute for Learning Outcomes Assessment.

- A growing number of programs, campuses, disciplinary societies, and national initiatives are now creating opportunities for faculty to collaborate to make their assignments more effective.

- More effective, intentionally designed assignments can reinforce program and institutional learning outcomes, contribute to meaningful assessment, and, most important, support student success. Additionally, a focus on assignment design encourages robust conversations about teaching and curriculum, and stimulates pedagogical and curricular improvement.

- Emerging directions for work on assignment design include collaboration with additional stakeholder groups, including a more prominent place for students, and forging more fruitful partnerships between assessment and professional development providers.

Pat Hutchings is a senior scholar with the National Institute for Learning Outcomes Assessment (NILOA). Her work has focused on practices that help build a campus culture of teaching and learning, including assessment, the scholarship of teaching and learning, and the peer review of teaching.

Natasha A. Jankowski is Director of the National Institute for Learning Outcomes Assessment (NILOA) and Research Associate Professor at the University of Illinois Urbana-Champaign with the department of education policy, organization and leadership. Her main research interests include assessment of student learning, evidence use, and evidence-based storytelling.

Gianina Baker is Assistant Director of the National Institute for Learning Outcomes Assessment (NILOA), and her main research interests include student learning outcomes assessment at Minority Serving Institutions, access and equity issues for underrepresented administrators and students, and higher education policy.

Designing the tasks that students are required to complete in their courses has always been an essential part of what faculty do as teachers, and many faculty members work hard to shape and reshape those tasks in ways that bring out the best in students. But such work has mostly been done behind the scenes in what former Carnegie Foundation president Lee Shulman (1993) once called "pedagogical solitude." That is changing. Over the last several years, careful work on the design of assignments has become a focus of more deliberate, sustained, and collective attention. As part of our work with the National Institute for Learning Outcomes Assessment (NILOA), the three of us have been watching these developments—and it turns out there's a lot to watch.

Every week, it seems, we come across another campus where faculty are coming together to share, discuss, and refine the assignments that students must complete in order to pass the course or complete the program. These gatherings may be large or small, focused on a single program or on cross-cutting institutional outcomes, one-time events or a series of linked activities that unfold over a year or more. Some bring educators together on a single campus, while others involve multiple sites, for example, within a state system or region or even online.

Many of these gatherings are shaped by findings from a national research project documenting the power of "transparent" assignments to advance student success (Winkelmes, et al., 2016), and many employ the VALUE rubrics developed by the Association of American Colleges and Universities (McConnell & Rhodes, 2017). The use of these rubrics is now supported by the newly established VALUE Institute (see Sullivan & McConnell, 2018). Some campuses and groups are creating local online repositories of assignments to encourage further sharing and to underscore the intellectual work that goes into the design of effective assignments. Several disciplinary and professional associations have also gotten into the act, seeing work on assignment design as a useful and engaging route into more scholarly attention to teaching and learning.

NILOA has had the good fortune to play a role in these efforts (Hutchings, Jankowski, & Ewell, 2014). In 2012, as part of our work tracking campus engagement with the Degree Qualifications Profile (DQP), we began an initiative aimed at supporting and learning from educators seeking to develop assignments that more effectively elicit 21st-century proficiencies and habits of mind. Toward this end, we convened interested educators to review one another's draft assignments, hosting four such occasions over the first several years.

Our model was simple: 4–6 person "charrettes" (a term from architecture education denoting a process of collaborative design) in which participants take turns presenting their draft assignment, hear and respond to questions and comments from peers around the table, and then return home to revise their draft in ways that respond to the feedback they received. The resulting "final" assignments ("final" because assignments are always a work in progress) are now part of

NILOA's searchable online "assignment library" (see www.assignmentlibrary.org). As interest in this work has grown, NILOA has provided guidance and facilitation for 26 different assignment design events, continued to add to the library, and created a toolkit of resources (see www.learningoutcomeassessment.org/assignmenttoolkit.html) to support local efforts.

Our purpose in all of this, given NILOA's mission, has been to advance more authentic, actionable forms of student learning outcomes assessment. In contrast to the prevailing add-on model, which Peter Ewell (2013) has dubbed "exoskeletal" and which can be off-putting to many academics, assessment that draws on carefully designed papers, projects, exams, and presentations that faculty require of their students feels (and is) more organic and integral, closer to the regular work of teaching and learning, and therefore more likely to make a difference.

And this shift is now pretty clearly in evidence. The most recent NILOA survey of provosts reveals that the assessment methods showing the greatest *growth* in use are classroom-based performance tasks, rubrics, and e-portfolios. And when asked what kinds of evidence are most valuable to improve student learning, survey respondents highlighted classroom work (Jankowski, Timmer, Kinzie, & Kuh, 2018).

Moreover, as we are learning and as we report in this article, attention to assignments turns out to be remarkably fertile ground for improvement. Most immediately, it yields more effective assignments—assignments that do a better job of developing and eliciting important learning outcomes for students. But we are now also seeing less immediate but equally consequential benefits from such work—new practices migrating from one course to another, a greater appetite for talking about teaching and learning, more willingness to take pedagogical risks, and a more shared sense of purpose and responsibility for student learning.

Building on an earlier *Change* article (Hutchings, Jankowski, & Schultz, 2016), we begin with a survey of the current landscape, sampling various efforts that focus on the design and use of assignments, and then turn to the effects of that work. We conclude by suggesting three emerging and future directions: inviting additional stakeholder groups (for instance student affairs professionals and local employers) into discussions of assignment design; making a more prominent place for students in this work; and using the energy around assignment design to forge more fruitful partnerships between assessment and professional development centers.

The Lay of the Land

When asked about institutional improvement efforts currently underway on campuses, almost one third of provosts surveyed by NILOA (Jankowski, Timmer, Kinzie, & Kuh, 2018) mentioned work on "designing assignments," and we have been tracking this work—mapping where it's occurring, for what purposes, and in what permutations. As suggested in Figure 1 below, attention to assignments can illuminate various aspects of teaching, learning, curriculum and assessment, offering them up for faculty exploration.

Figure 1. Work on the design of assignments can illuminate various aspects of teaching and learning for faculty exploration
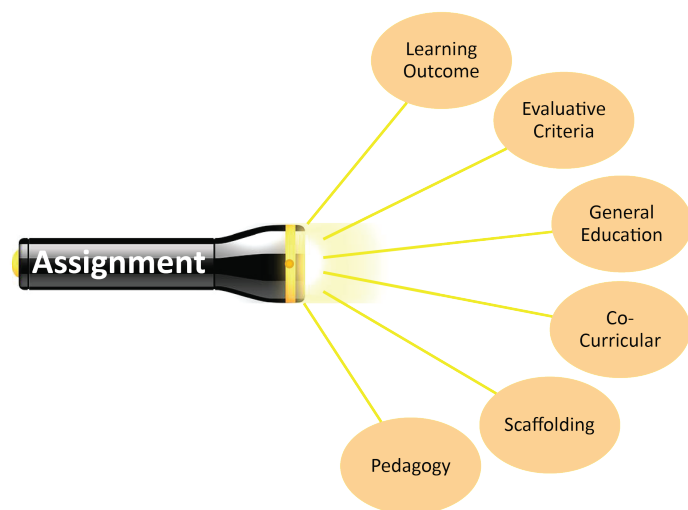
One fairly common starting point is work on general education. Many campuses today are engaged in rethinking their general education program and are looking for better ways to assess its intended outcomes for students. And using evidence from classroom assignments is now prominently in the mix.

For example, at Washington State University (WSU) an initiative on assignment design emerged from a 2012 revision of the general education program, one dimension of which was a capstone course requirement. Over the next several years faculty proposed and the faculty senate approved more than a hundred departmentally-based capstone courses designed to provide experiences in integrative learning. In 2015, with the first cohort of students in the new general education model approaching graduation, a pilot assessment of student performance highlighted the important role that capstones can play in both fostering and assessing integrative learning.

With this in mind, in spring of 2016 WSU's Office of Assessment of Teaching and Learning organized a professional development experience that began with a two-day workshop to explore integrative learning. Thirty faculty participated in the workshop, modeled on NILOA's charrette process, commenting on one another's capstone assignments. By the following September most reported that they had made important improvements to their assignment: making it more transparent (85%), refining the rubric (59%), and providing more intentional activities to advance integrative learning (52%). Since that initial assignment design experience, WSU has organized additional events, including customized sessions on transparent assignment design, related professional development, and a reunion where participants in the original workshop shared their redesigned assignments and reconnected as colleagues (Green & Hutchings, 2018).

The landscape of assignment design also includes work at the department level, as described for instance, by Daniel McInerney, a historian at Utah State University (USU). Though the campus hosted several assignment-design workshops based on the NILOA model (and several history faculty participated in those), the history department's focus on assignments emerged as part of an external program review in which the chair invited faculty to write up a brief reflective review of an assignment they use in one of their courses. Most faculty took her up on the invitation, creating a set of documents that, in McInerney's words, "demonstrate how a thoughtful conversation with assignments can lead to meaningful engagement with assessment." Additionally, this example points to the way that attention to assignments can stem from and enhance larger institutional processes—in this case, program review.

Activity is also expanding beyond individual campuses, encouraged in part by the Multi-State Collaborative (MSC) to Advance Quality Student Learning. This initiative of the State Higher Education Executive Officers (SHEEO) and AAC&U is conducting state-level assessments using student work submitted in response to actual assignments given by faculty as part of regular coursework and scored by trained raters using VALUE rubrics. Through their participation in the MSC, a number of states have organized multi-campus assignment design activities.

Developments in Virginia provide an interesting virtual twist on these efforts. The State Council of Higher Education for Virginia (SCHEV) does not dictate how campuses should assess students learning. Some Virginia schools were already using student work products for program- or institution-level assessment, while others saw the MSC—which included faculty development support from NILOA—as a way to enhance their existing assessment strategies. Jodi Fisler, who joined the SCHEV staff in 2016 and oversees assessment policy, saw potential in this approach and wanted to extend its benefits to all Virginia institutions, including those not directly involved in the MSC. She understood that "We can't criticize students for not demonstrating particular skills if the assignments we ask them to complete are unclear or do not actually require any demonstration of those skills" (Fisler, 2018, p. 1).

Accordingly, Fisler set in motion a train-the-trainers workshop, led by NILOA, to prepare a cohort of educators who could lead assignment design work on their own (or other) campuses. Then, in fall of 2017, to extend the reach of this work, Fisler developed and piloted an online version of the experience. Trained facilitators met with small groups of faculty members online, with each participant submitting a draft assignment and reflective memo in advance.

What quickly became apparent was the high demand for these kinds of opportunities. "Assignments," Fisler says, "are very close to home" for faculty, something "you created and that you care about." Work on assignment design is now gaining traction on Virginia campuses, not only because it provides rich, authentic evidence for assessment, but because faculty see the power of good assignments to improve the quality of their students' learning.

Finally, the idea that assignments are fruitful territory for improvements in teaching and learning has started to

take hold in some disciplines and professional fields. The National Communication Association worked with NILOA early on to organize and run a charrette featured in a special issue of the organization's publication, *Spectra* (November 2015) on learning outcomes in communication. In 2016 the American Historical Association (AHA) brought together a large and enthusiastic group of faculty for an assignment design charrette. According to McInerney (the historian quoted above), their experience has helped to fuel further efforts to treat teaching as scholarly work and to bring that theme to the attention of other disciplinary societies, including the Modern Language Association, which has invited an AHA panel on teaching, learning, and assessment to present at *its* annual meeting.

More recently, the Association of Schools and Programs of Public Health hosted an assignment design workshop for faculty teaching undergraduate public health courses. The event, which drew on the NILOA charrette model, was built around the Degree Qualifications Profile as well as the organization's Recommended Critical Component Elements of an Undergraduate Major in Public Health (Weiner & Albertine, 2018).

As these examples and others suggest, assignment design activity is on the rise and moving in a number of directions. It shows up in surveys of campus leaders, in reports from campuses mounting their own charrette-like events, and in the work of various national organizations and initiatives. The question that follows, and that NILOA is working to understand, concerns impact: What are the fruits of all this activity? Where does it lead?

EXPLORING IMPACT

First, working on the design of assignments yields better assignments, which can in turn result in better student learning (see Figure 2). The most comprehensive evidence in this regard comes from the Transparency in Learning and Teaching (TiLT) project directed by Mary-Ann Winkelmes at the University of Nevada Las Vegas. In brief, what the TiLT team has shown through its work around the country is that assignments that are clear and explicit with students about their purpose, the task and what it requires, and the criteria by which the work will be judged, are assignments that produce significant improvements in student performance. Moreover, those improvements are especially notable for students who have not traditionally been well served by higher education (Winkelmes et al., 2016).

This relatively simple three-part Transparency Framework—purpose, task, criteria—has a kind of natural appeal to faculty, who see it as guidance for changes they can actually make, and that can bring real results for students. And the word is out, with TiLT materials and resources (https://tilthigheredu.com) freely available online and prominently featured at conferences.

Improving student learning is clearly the most important outcome of work on the design of assignments. But occasions that bring educators together to focus on assignment design have other, albeit less immediate and quantifiable, benefits. At Washington State University, for instance,

FIGURE 2. ELEMENTS OF EFFECTIVE ASSIGNMENTS

There is no single formula for what makes an assignment effective, but effective assignments are characterized by some of the following features:	
Transparency	Assignments should be clear and transparent to students, who will benefit from understanding what they are being asked to do and why, and how their work will be evaluated.
Alignment and Intentionality	An effective assignment is aligned with specified learning outcomes at the course, program, general education and/or institution-level as well as evaluative criteria.—intentionally building student learning over time.
Engagement	Effective assignments present what composition scholar John Bean (2011) calls a "Task as Intriguing Problem" (TIP). That is, they engage and motivate students.
A Focus on Equity	Effective assignments respect the different assets that students bring to their work and invite different ways of knowing and demonstrating learning.
Feedback for Improvement	Effective assignments are designed and used in ways that provide students with feedback for improvement, for instance through multiple drafts or opportunities to self-assess.
Scaffolding and Integration	An effective assignment is not an island. It is a part of a larger trajectory of connected assignments, courses, and experiences that prepare students to succeed.

Adapted from the NILOA Assignment Charrette Toolkit (2018).

faculty who participated in assignment design activities reported that examining capstone assignments increased their understanding of integrative learning and deepened their desire to enhance it. It also made them want to increase student independence and agency. Many (86%) reported feeling part of a larger WSU conversation about teaching. Following the workshop, over half sought out other research or sources to inform their assignment design and teaching (Green & Hutchings, 2018).

Similarly, in the history department at USU, McInerney argues that work on assignments has helped faculty see their teaching as scholarly work, contributing to "a context in which people are thinking carefully and creatively about what learning takes place and how they can help to facilitate that learning more effectively." Exploring these and other models for linking assessment with professional development is fertile ground for continuing work on assignment design.

This awareness of how one's own work contributes to the larger arc and meaning of students' learning points to yet another benefit: forging stronger links and alignment between the tasks students are asked to complete in any given course, the pedagogical approaches employed to prepare students for those tasks, course learning goals, goals at the program and institutional level, and evaluative criteria (Jankowski & Marshall, 2017).

Admittedly, this kind of connectedness does not flow inevitably from attention to assignments. What is needed are structures and processes (like curricular mapping and rubrics) that invite educators to look beyond their own assignment and think about how it relates to what others assign and expect in their classrooms (NILOA, 2018). One of the most powerful results from attention to assignments is a shared sense of purpose, where educators are all rowing in the same direction—toward effective and equitable learning for all students.

Indeed, one of the most striking dynamics that emerge when faculty share assignments with one other is how quickly the conversation turns to fundamental pedagogical and curricular questions. What purposes are most important for this group of students at this point in the curriculum and how much support do they need? What kinds of scaffolding will allow students with different levels and types of preparation to succeed on this assignment? What can we expect of our students? What is good enough? To what extent should we guide students to successful performance and to what extent should we expect them to map out their own directions? How does my assignment match up with program and institutional outcomes for student learning? How does it relate to assignments that colleagues are giving in other courses that my students are likely to take? How, in short, does it all add up?

As these questions suggest, discussing assignments with colleagues often leads faculty to realize that their aspirations for students cannot be achieved in a few assignments over a single semester. In this way, attention to assignments is a way into pedagogical and curricular conversations that reinforce collective, intentional development of student learning over time.

EMERGING AND FUTURE DIRECTIONS

More, certainly, needs to be known about the impact and ripple effects of work on assignment design, and, especially, about how to organize and support that work in ways that maximize its most important effects. We propose three directions that have the potential to make such work even more powerful and consequential.

First, attention to the design of assignments can usefully be opened up to include other contexts and stakeholders. One of the most obvious of these is the universe of co-curricular, out-of-class activities typically organized under the aegis of student affairs. Although we do not normally talk about service in student government or a work-study job as an "assignment," research on High-Impact Practices makes it clear that these kinds of out-of-class activities are powerful occasions for student engagement. They may in fact play a critical role in developing "dispositional attributes" such as persistence, reflection, academic self-efficacy, and a better understanding of self (Kuh, Gambino, Bresciani, & O'Donnell, 2018). In short, it would be useful to expand our conception of assignments to include a broader range of activities and stakeholders.

This is beginning to happen. In our role as organizers and observers of occasions for discussion of assignments, we are now seeing efforts to engage student affairs staff in the design of reflective assignments aligned with shared institutional learning outcomes. There is movement, as well, toward opportunities that bring faculty together with representatives of local business and industry to explore the development of assignments that employers value as meaningful demonstrations of student learning. Bringing together diverse partners both within and beyond the institution, such conversations can foster shared understandings about the nature and purpose of higher education.

These kinds of opportunities can be organized locally by a single campus, but there are also several larger efforts worth noting. An initiative supporting the involvement of student affairs in the design of intentional and reflective assignments is the comprehensive learner record project, led by the American Association of Collegiate Registrars and Admissions Officers, NASPA, and the Association of Student Affairs Professionals. A similar effort within the National Association of System Heads has highlighted the possibilities for assignment design in scaling up High-Impact Practices and related learning outcomes. And in cooperation with the U.S. Chamber of Commerce Foundation, work is unfolding to bring employers and faculty together around the review of assignments and the development of externally-facing "innovation challenges" that address the transferable skills in demand by employers today (Jankowski & Tyszko, 2017).

A second direction for future work is to give students a more prominent place at the assignment design table. As Winkelmes reports from her TiLT research, which includes surveys of 1500 students who have experience with transparent assignments, "Students are the ultimate experts on how teachers can make an assignment transparent to them, and discussing assignments with students before they begin working can ensure that the students spend the bulk of their time working efficiently and meeting the criteria for their work" (in press, p. 45).

Moreover, bringing students into discussions of teaching and learning presents them with occasions to reflect on their own educational experiences, to "go meta," and more actively shape their own learning experiences (Hutchings, in press). A growing number of campuses today are including students in campus assessment work—not as objects of assessment but as active contributors in shaping the questions that get asked, helping to analyze findings, speaking out about possible paths to improvement, and, along the way, becoming more thoughtful about their own learning (Cain & Hutchings, 2015; Damiano, 2018; Truncale, Chalk, Pelligrino, & Kemmerling, 2018). Involving students in discussions of assignments can offer similar benefits.

Third, and finally, assignment design work can be a context for moving assessment and faculty development toward more collaborative work. Historically, campus leaders of teaching and learning centers were wary of assessment, not wanting to be seen as "the teaching police." And student learning outcomes assessment was largely focused on instruments and methods, often externally developed and scored. But provosts today point to the need for more professional development as a key ingredient in their institution's work on assessment (Jankowski, Timmer, Kinzie, & Kuh, 2018), and a recent survey of faculty development professionals (Beach, Sorcinelli, Austin, & Rivard, 2016) points to the imperative for greater attention to assessment. In short, the time is right for assessment and professional development to pull together, and many of the examples noted in this essay speak to that possibility and its promise.

An Invitation

Some observers may say (*have* in fact said to the three of us) that assignments represent a very small "bite"—that real improvement needs to bring into play a much larger range of strategies and a more comprehensive approach to change and improvement. That's right. But what we have seen is that assignments are an especially inviting doorway into that kind of larger thinking. In short, as educators work together on assignments, the focus quickly opens onto issues about the purposes of education, curriculum design, commitments to equity, institutional culture, and improvement.

Accordingly, as NILOA concludes its tenth year as a research and resource center, assignment design will continue to be a central theme as we learn from those who are leading, supporting, and participating in this work. Earlier in this essay we referred to NILOA's toolkit of resources to support campuses and other groups in their work on assignments. Some of the examples we discuss here are drawn from the toolkit, but we encourage readers to explore contributions from additional campuses and organizations that have generously shared their experience.

Attention to assignment design is a work in progress, building momentum and taking new and different directions we could not have foreseen when we ventured into this territory. So, we end here with an open invitation: If this is territory that *you* are exploring in your context, if you see it, as we do, as fertile ground for improvement, we would love to hear from you—about what you're doing and learning and also about what further resources and supports would be helpful to you. C

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