

CHAPTER 12

FACULTY PROFESSIONALIZATION FOR OWI

Rich Rice

Texas Tech University

WPAs can improve faculty professionalization models for OWI to generate dynamic performance support by examining ways in which application frameworks are created for evolving software systems. Design includes creating ideas and assignments; coding includes methods of presenting, responding, assessing, and supporting. Connecting effective design and coding approaches to OWI effective practices, especially faculty professional development, can improve OWI programs.

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Faculty who teach in OWI programs not only need training, as indicated in *A Position Statement of Principles and Example Effective Practices for OWI* (CCCC OWI Committee, 2013) and in Chapter 11 of this book, but they also need ongoing support and professional development opportunities. Given the relative newness of OWI as a disciplinary approach to teaching writing in higher education, professionalization models have yet to be adequately developed in structured ways that may help teachers at a variety of institutional settings, including those that heavily use contingent faculty (see Chapter 7). Yet, professionalization is crucial to developing new OWI teacher pedagogies and also in supporting those who teach in OWCs with fair compensation, including opportunities to remain current with rapidly changing technologies and chances to participate in building programs that use new knowledge and theories being developed for OWI.

In this chapter, I suggest that WPAs and other program administrators can improve faculty professionalization models for OWI to generate dynamic performance support by examining and adopting ways in which application frameworks are created for evolving software systems. The parallel between application frameworks and the work of becoming and remaining up-to-date in OWI suggest a guiding metaphor for professional development. Design in this sense

includes creating ideas and assignments, while coding includes methods of presenting, responding, assessing, and supporting faculty. Connecting effective design and coding approaches to OWI principles and effective practices, especially regarding faculty professional development, can improve OWI programs.

CURRENT FACULTY OWI PROFESSIONALIZATION MODELS

CODE-AND-FIX FACULTY PROFESSIONALIZATION DESIGN

The practice of software design has long followed a *code-and-fix* methodology, building programs or websites on successive, layered, quick decisions. If the computer and project application is small, the approach works quite well. Code-and-fix is a way to get or keep moving on a project. But as systems grow, new features or better approaches invariably become challenging to implement. Bugs abound until they are fixed in long testing phases, taxing human resources and frustrating users. If the fix is too time-consuming and the choice regarding user identity and needs is left to programmers, as Jaron Lanier (2011) suggested in *You Are Not a Gadget*, bugs might simply be considered features of the system: *if it is not a bug, it must be a feature*.

Using the code-and-fix method as an analogy, consider the creation of an OWI faculty development plan. Whether they know it or not, most English or writing departments have likely used a code-and-fix methodology to get their OWI programs started. They usually begin by asking faculty to teach a few courses; then they gather comment cards or end-of-semester evaluations to see what students think, figure out which outcomes are met readily and which need more attention, implement strategies to improve those courses, create additional courses, and pepper everyone with occasional workshops or one-on-one support with a tech savvy person in IT or an in-house geek, to spice. The approach may work well to get started, but it is very problematic if it is the only way WPAs know to develop the OWI program. Professionalization also often follows a code-and-fix method: there is a short-term demand to fill OWCs with teachers, so we hire and train (or not) teachers to construct courses and teach online, perhaps calling the courses “betas” or “pilots,” fixing problems through implementation. Once courses are going, we copy and paste the original, “fix” courses into additional sections, and hire more instructors and let them teach the content.

This chapter argues that to sustain faculty development in more meaningful ways, certainly *more* than a code-and-fix method is needed. WPAs and other administrators in charge of OWI programs need to be savvy and thoughtful about

faculty development and online instruction.

OWI programs evolve. As they evolve, some WPAs may survey faculty and students to prioritize fixing online technology and pedagogical problems, perhaps even creating knowledge bases of frequently-asked questions (FAQs) and solutions. They may ask such questions as:

- How can online teaching enhance pedagogy?
- How should OWI faculty rethink educational approaches and organization overall to better meet online instructional needs?
- How can OWI teachers improve student participation in activities and exercises and discussion?
- How can OWI teachers help students to improve their performance on papers and exams?
- How can OWI teachers give students greater access to the course in terms of flexibility of time and location?
- How can all participants improve their records of interactions between faculty and students and among students?

These more sophisticated questions and the concurrent desire for improved professionalization call for WPAs and OWI teachers alike to move beyond code-and-fix to something more sustainable. At the root of each of these questions and the programmatic development they encourage is access, and access is possible only by conceptualizing accessibility at the level of interface so that our course goals, curriculum, delivery tools, pedagogy, and professionalization also fall in line with this overarching goal.

Chapter 1 shares the rationale for 15 OWI principles for effective OWI practice. The very first principle of *A Position Statement of Principles and Example Effective Practices for OWI* (CCCC OWI Committee, 2013) is an overarching guideline that grounded and supported each of the following 14 principles. OWI Principle 1 strongly suggested that scholars and educators pay close attention to access and inclusivity for students and teachers at every step in the planning and implementing of online classes (pp. 7-11). Code-and-fix approaches to OWI professionalization inadequately follow this principle because universal design for (all) learners and facilitators requires more planning than these approaches allow. Students and teachers should have equal access to content; access to course design; and access to technologies used, assignments prescribed, and assessment measurements planned. It is important to underscore that OWI Principle 1 referred to the access needs of every *teacher* beginning to prepare and teach and assess courses in online environments. The code-and-fix method most likely does not provide such universal access because, as a methodological approach, many potential problems still can remain hidden or unaddressed

as simple features of the ongoing program. When professional development includes quick fixes or none at all, there are systemic problems that end up becoming large, crucial, and potentially damaging to the very education that OWI proposes to provide.

Indeed, a few years down the road, important systematic bugs inevitably will arise. Faculty get squeezed. *Who owns the content?* OWI Principle 5 suggested that faculty should retain reasonable control over the content they produce, and doing so can become challenging in this design model (pp. 15-16). *Who is compensated for new course preparation? If the content already is there, is the instructor of record a teacher or merely a facilitator? Can pay for online teaching even be lower than teaching face-to-face?* OWI Principle 8 suggested that faculty should be fairly compensated for creating online course content (pp. 19-20). *Should class sizes be increased because some instructor workload already has been provided, even though increased numbers limit the potential for productive interaction?* OWI Principle 9 recommended online writing classes be capped at 20, and preferably 15 (pp. 20-21). Without strategic planning, class sizes likely will be increased. It is difficult to plan and justify and fight class-size creep in the code-and-fix design method. *Should asynchronous exchange be prioritized over synchronous communication in order to maximize flexible scheduling?* Doing so is code-and-fix professionalization development and support, putting processes into play and then fixing infrastructural concerns as a program proceeds and grows. While there are short-term benefits, the approach causes significant long-term problems for the professionalization of the field where, again, bugs are just bugs.

What are some of the benefits that better, more systematized faculty professionalization design models could provide, benefits that code-and-fix approaches tend to support insufficiently? WPAs need to consider the value of innovative teaching strategies that are not recognized by those in authority in institutions as worthy of productive effort in promotion and tenure cases. If teaching online can create greater time and locational flexibility, consider strategies a department can use to support or incentivize faculty or to help maximize opportunities like conference travel, extended research trips, study abroad work, interdisciplinary or inter-institutional teaching, and the like. These are “integrated scholar” opportunities where faculty can develop their own research, teaching, and service together. Plans for recognizing efforts to design and create effective pedagogy in new modalities is difficult in code-and-fix approaches. Something more systematic should be put into place, too, if faculty members are to be encouraged to package written course content into books or to customize materials in more targeted ways for students and to address programmatic goals. Improving ped-

agogy and experimenting with new ideas is not encouraged when fixes are too cumbersome to put into place quickly. Faculty who are not supported in smart ways will not innovate and take risks because the cost in terms of human and monetary resources is simply too high.

PREDICTIVE FACULTY PROFESSIONALIZATION DESIGN

There is another approach to software design that works to schedule fixes in more timely ways, saving costs and better supporting system-wide approaches. The goal of this approach is to plan testing and recoding cycles with version updates that are engineered by teams of designers, programmers, and usability testers. Implementing an OWC or set of courses, clearly, will require planned development and growth and support. Predicting the directions that the software should take based on evolving user needs also can be limiting, however. Software, modality, content, access, and other requirements change constantly in effective OWI and not in an easily “scheduled” manner. Design requires much creativity, and prediction for when changes need to be made is difficult, as coding or content construction typically follows design. It often is the case that faculty seek to save time by copying and pasting their course content from one semester to the next without recognizing that student demographics have changed, that content must be updated, and that one size does not fit all—particularly with regard to issues of access and inclusivity. By the time updates or recoding is complete, including a round of design revision, users are likely to demand additional or different features. In this design model, teachers often over-focus on design rather than content, missing the goal of OWI Principle 2, which suggested that the course should not be overburdened by teaching tools (p. 11). The semester already may be under way and content updating becomes superficial. And the move from design to coding to usability often is delayed by more bugs. This model is predictive design, which affords some flexibility for constructing long-term, planned development. For example, it seeks to grow a selection of online courses while planning to upgrade their goals and objectives alongside those of onsite courses.

In terms of using this model as a professionalization analogy, though, this method offers limited recognition for OWI teachers as creative designers and expert pedagogues in online environments. *What are differences in the demands of fully online, hybrid, and face-to-face course deliveries?* OWI Principle 7 called us to focus on adequate training and professional development for OWI specifically (pp. 17-19). *Should different sorts of professional development and support mechanisms be installed and grown based on personnel rather than presumed curricular evolution?* OWI Principles 11, 12, 13, and 14 encouraged us to develop specific

support spaces and tools for teachers' and students' online work that may take significant development, such as media labs or OWLs or other virtual or physical thirdspaces (pp. 23-30; see Grego & Thompson, 2007; Lee & Carpenter, 2013). A *thirdspace* is a commonplace where information senders and receivers can construct and transact ideas: "the study of space offers an answer according to which the social relations of production have a social existence to the extent that they have a spatial existence; they project themselves into a space, becoming inscribed there, and in the process producing the space itself" (LeFevre, 1991, p. 129). Other questions emerge: *Do administrators need to analyze teacher and course evaluation assessments with the same or different learning outcomes in mind? How can predictive coding and content creation aid in student and teacher motivation and retention, getting them literally and figuratively plugged-in* (English, 2014)? Again, OWI Principle 7 addressed the needs for fair and educated assessment of OWCs and their teachers (pp. 17-19), while OWI Principle 5 supported trained instructors in autonomous OWC development that might increase both teacher and student motivation as well as retention (pp. 15-16).

Both code-and-fix and predictive design methods are used commonly in developing online courses and teacher-support systems: build and fix as you go, and schedule fixes in between terms or over the summer or next break for the latest academic "version" or customized edition. The first method makes some sense for small programs in order to get started, and the second makes some sense to continue to improve the quality of faculty professionalization as smaller programs grow. And it is possible to bring these two approaches in line with the OWI principles to a certain degree. We should consider, for instance, OWI Principle 4, which suggested that "*appropriate onsite composition theories, pedagogies, and strategies should be migrated and adapted to the online instructional environment*" (pp. 14-15). Follow the move to OWI with a specific analysis of how the onsite and then the online program measures learning objectives. Indeed, these important principles and guidelines can fit well within online writing faculty professionalization.

While these two software development strategies overlap and can build on one another to great benefit, one thing is clear: Because creative processes are difficult to plan and to build into faculty professionalization and because the demand and supply for online teaching and learning fluctuates, fixing is time-consuming and predictability is extraordinarily challenging, often limiting, and still quite time-consuming. It is not enough to transfer existing face-to-face instruction models to OWC development, delivery, and support. There are many professional development design issues, most notably that of access, which require more significant ongoing review and rethinking.

AGILE FACULTY PROFESSIONALIZATION DESIGN MODEL

What if the design stage could include the coding? That is, what if in designing and in redesigning courses OWI program leaders would code and construct content simultaneously, revising and revamping as we use feedback loops to reflect with teachers, students, and WPAs' assessment measuring requirements? How would this approach help faculty professionalization in terms of equal pay for equal work, faculty development, technological support, fair opportunities for contingent faculty, and evidence to support promotion and tenure cases? These are the goals of OWI Principle 7 (pp. 17-19); namely, WPAs overseeing faculty teaching online courses, as well as the faculty themselves, should receive appropriate training, professional development, and credit through evaluation of online instructing and administration work. We can think about the design and construction of courses and professionalization issues synchronously, wherein the synergies of design and construction and support can improve the system as it grows, reprioritizing teaching and scholarship (O'Meara, Rice, & Edgerton, 2005). To this end, there is a third design method that offers guidance to a more effective approach to OWI faculty professionalization: agile faculty professionalization design.

Many software programmers develop code connecting design and construction using agile software design, a third methodology to which people concerned with professionalization should pay attention. The approach is more adaptive than predictive, and more people-oriented than process-oriented. Adaptive methods of building programs welcome and thrive on change. They offer feedback mechanisms at frequent intervals to mitigate the impact of radical change. Requirements always change; we should be more surprised at the people who find *that* surprising. Ultimately, people-oriented methods recognize individual users more than processes (Fowler, 2005)—just as post-process pedagogies might recognize ways to teach and learn writing and achieve outcomes more than process pedagogies. Metaphorically, people are the drivers—albeit transient—not the hardware or software. Systems for how to design and professionalize the teaching of OWCs can generate exigencies for which students and faculty can create their own effective working spaces and opportunities. They can support faculty professionalization, as well.

Let us consider the potential additional benefits of agile faculty OWI professionalization. One benefit connects to the fact that agile software design uses what is called “iterative refactoring,” which as a concept also serves as a useful metaphor for principles of productive professionalization. Refactoring, for instance, can be connected theoretically to labor costs and compensation schedules

for OWI teachers. The concept is related to problems inherent in providing content-complete course shells rather than enabling instructors to develop unique components that somehow also connect specific learners' needs and teacher expertise. Specifically, code refactoring is a systematic approach to restructuring computer code that alters internal structures without changing external behaviors in order to improve the code's readability, reducing the code's complexity, improving the maintainability, and refining the internal architecture to improve sustainability and future adaptability (Fowler, 2005). Refactoring makes it easier to fix bugs, and the programmers or authors who follow redesigning and recoding more readily can contextualize and shape the code, which is why reducing large routines into concise, well-named, single-sourced processes is important. Although Fowler (2005) does not mention the possibilities of improving access to the software for disabled developers and users, code refactoring can open paths for integrating erstwhile nonexistent accessibility features, and if necessary, can even add interface-level accessibility to the system for users employing adaptive and assistive devices. Using agile faculty OWI professionalization can work to install appropriate online composition teaching and learning strategies (OWI Principle 3, pp. 12-14) without overly focusing on the tools.

Let us also consider the relevance to documenting ongoing authorship of course content that could be used by dozens or hundreds or thousands of students. As Anne Burdick, Johanna Drucker, Peter Lunenfeld, Todd Presner, and Jeffrey Schnapp (2012) pointed out, "The question is no longer 'what is an author?' but what is the author function when reshaped around the plurality of creative design, open compositional practices, and the reality of versioning" (p. 83). With refactoring, comments in the code that may be misleading are removed, and methods that are ambiguous could be moved to a more appropriate class of functions. This is important work that defines much of OWI teachers' processes. It can be likened to single-sourcing, whereby department-critical information is developed, used, and stored for all to reuse and retool. Such work should be documented for professionalization purposes in that individual teachers' knowledge bases can contribute to the entire writing program faculty. It is common lunchroom talk to ask what happens if one person gets hit by a bus and cannot report on or outline the processes of her work or to speculate where the department would be if specific institutional knowledge is lost. WPAs and faculty need to design systems of online courses that capture collective knowledge yet enable and even require unique and personalized content and delivery: converging divergencies. In this way, the potential capabilities of the application are made clear more easily if the "code" or professionalization system is flexible and includes recognizable design patterns that can be replicated or retooled in different ways (Fields et al., 2009). The value of course redesign approaches increases

if what is produced is adaptable and includes scaffolding for others. In effect, improving professionalization through agile software design-like methodology involves constantly deconstructing the grammar of what OWI teachers do.

In *The Language of New Media*, Lev Manovich (2002) described the principles of numerical representation, modularity, automation, variability, and transcoding. Flexible or agile creation of valuable professionalization policies embraces these principles. OWI and the teaching of OWCs, for instance, can be considered data objects (numerical representation) that exist both dependently and independently (modularity) of the larger curriculum. They can be created and modified automatically (automation) once they are developed, but they must exist in multiple versions (variability) in order to maximize teacher expertise and student need and disciplinary contextualization. The convergence of layers of media, technology, and culture in OWCs generate new layers of meaning (transcoding). In his more recent work, *Software Takes Command*, Manovich (2013) suggested that “software has become our interface to the world, to others, to our memory and our imagination—a universal language through which the world speaks, and a universal engine on which the world runs” (Manovich, 2013). Software and the production of software, according to Manovich, is taking control over all types of media and organizations. Faculty teaching online are working in (hybrid/fully online) organizations that rely heavily on software and online content production, and “new media proliferates ‘programmed visions,’ which seek to shape and predict ... a future based on past data. The programmed visions have also made computers, based on metaphor, metaphors for metaphor itself, for a general logic of substitutability” (Chun, 2011, cover). And, as Matt Barton (2008) reasoned in “New Media and the Virtual Workplace” with reference to transcoding and the role of software in virtual organizations and in professionalization, productive virtual workplaces afford room for play and innovation, call attention to space, enable participants to shape identity as creative performance, stimulate simulation opportunities to gain new abilities, and afford meaningful collaboration to work together to solve problems (pp. 389-390). These thirdspaces, which connect the virtual and the real, are situated and contextualized for faculty and students in unique ways, and they require iterative examinations as these spaces or neighborhoods grow and change demographically and experientially. Such online spaces, given time and support, can be optimized for using appropriate onsite composition theories (per OWI Principle 4, pp. 14-15) after experimentation and iterative design (per OWI Principle 6, pp. 16-17).

Our understanding of how online writing faculty professionalization can make effective use of agile design through iterative refactoring becomes clearer by using agile design to newly mediate online learning environments in ev-

er-changing ways, more dynamically responding to plugged-in students and faculty, transcoding cultural and computer layers to maximize play, space, identity, simulation, and collaboration. This new approach is critical and necessary to improve OWI faculty professionalization. In *Because Digital Writing Matters: Improving Student Writing in Online and Multimedia Environments*, Dànielle DeVoss, Elyse Eidman-Aadahl, and Troy Hicks (2010) cited the National Staff Development Council's 2009 standards for professional development: "The kind of high-intensity, job-embedded collaborative learning that is most effective is not a common feature of professional development across most states, districts, and schools in the United States (p. 4)" (p. 116). Their statement is apt, of course. DeVoss et al. related that the "richest conceptions of professional development" must value the idea that people transcend tools, that good praxis transcends technologies, and that designs for learning transcend designs for delivery (p. 118). *A Position Statement of Principles and Example Effective Practices for OWI* (CCCC OWI Committee, 2013) embraced this people-over-technology philosophy. In order to follow OWI Principle 10, students should be prepared for unique technological and pedagogical components of an online class (pp. 21-23). According to OWI Principle 11, personalized and interpersonal online communities can be developed to help foster student and teacher success with online transactional exchange (pp. 23-24). Manipulate the technology to fit the pedagogy, certainly, and at the level of professionalization see where the agile, iterative work and investment behavior of OWI teachers creates value for systems. As the ever-shifting employment structure of college faculty evolves, taking note of investment in the faculty and helping them with stable jobs, promotion, and tenure will be increasingly relevant.

At the center of refactoring is a series of small behavior-preserving transformations wherein each transformation or refactoring does just a little, but together produces significant restructuring, reducing the chances that a system can break during that restructuring (Fowler, 2013). Redesigning classes for hybrid or fully online modalities (see Chapter 2), as well as short- and long-term faculty professionalization and support (see Chapters 7 & 11), should follow a similar approach of micro-assessments while courses are redesigned. Doing so follows OWI Principle 10 (offering student preparation), OWI Principle 11 (providing support communities for teachers and students), OWI Principle 12 (fostering teacher satisfaction as well as programmatic success), OWI Principle 13 (delivering onsite as well as online support mechanisms), and OWI Principle 14 (training for online administrators and tutors) (pp. 21-30). Agile faculty professionalization must include a recursive performance support system, as well, in order to document and recognize the value of that work. It is clear that "because we are in the midst of a transformation in the materiality of information and

in the media technologies of communication, things that were once considered ‘mere’ support systems, transmission media, and conveyance devices are now fundamentally implicated in any meaning-making process” (Burdick et al., 2012, p. 83). Such faculty work should be documented and rewarded.

Before applying a set of refactoring tests and prior to refactoring, software programmers complete unit or smaller module tests to ensure that the behavior of the module is correct. The process involves iterative and recursive testing, and the more the better. Programmers define a number of specific techniques using different amounts of automation, from the abstract to strategies for breaking code into more logical pieces to improving names and code locations. So, too, must effective OWI development engage in refactoring tests in order to support professionalization. What technologies might students see again over multiple online courses? How might instruction be presented over time to teach student populations with differing abilities or learning needs? How might course content be designed in chunks that, together, make a larger picture for students in terms of communication support strategies to help them succeed? Just as students might move from the informal to the formal in their writing, or from one form of expression to another, can they interact in one modality in order to prepare for interaction in another? And in addition to software code refactoring, approaches to hardware refactoring have been used to make complex systems easier to understand in order to increase designer productivity (Fowler, 1999). If software can be likened to teachers designing and constructing course content, hardware can be compared to the administration and infrastructure that enable teachers to work.

We are now rendering a more practical picture of how to build productive and sustainable faculty professionalization. Andrew Hunt and David Thomas’ (1999) wisdom in *The Pragmatic Programmer* regarding building maintainable code in this way can help WPAs better understand how to create useful professionalization performance support systems. Here are key approaches that Hunt and Thomas discussed throughout their book applicable to what administrators should consider in building support systems for OWI professionalization:

- avoid knowledge duplication,
- write flexible and dynamic content,
- avoid programming by coincidence,
- bullet-proof code with exceptions,
- capture real requirements,
- test ruthlessly and effectively,
- delight users, build teams of pragmatic programmers, and
- make developments precise with some planned automation. (Hunt & Thomas, 1999)

To this end, effective faculty professionalization practice includes connecting rhizomically throughout a faculty to:

- share resources rather than duplicate efforts,
- create curricula that somehow can be used in successive semesters yet still move in the flexible directions students and faculty need,
- work to meet goals and objectives on the program by design with multiple assignment sets for student options that meet the same goals and objectives,
- apply principles of universal design for learners to ensure access and understanding throughout curriculum design and process of experiencing a course,
- create spaces for reflective practitioners to interact graciously and productively, and
- create a climate of critical reflective praxis.

Effective professionalization, ultimately, is the creation of dynamic electronic performance support systems (EPSSs), which supports the improvement of performance to avoid duplication, increase quality, connect measurements to goals and objectives, and create more reflective practices.

VALUING DIVERGENT CONVERGENCES IN THE OWI PRINCIPLES AND EFFECTIVE PRACTICES

An EPSS is nothing new. Specifically, it is a support mechanism designed to reduce complexity in order to provide employees with unique directions to make effective decisions, thus improving quality and productivity. It is a support approach in line with agile software design and agile faculty professional development design to offer timely and specific (perhaps *kairotic*) flexibly structured support. Building a better system of professionalization begins with strengthening motivation. In *Electronic Performance Support Systems: How and Why to Re-make the Workplace Through the Strategic Application of Technology*, Gloria J. Gery (1991) suggested that productive professionalization embraces the “performance zone,” a *kairotic*, rhetorical space creating a zone of proximal development between skills and situations. According to Gery, “Individual employees and entire organizations can systematically work and achieve in the performance zone” (p. 13). Further, in *Performance Management Systems: A Global Perspective*, Arup Varma, Pawan S. Budhwar, and Angelo DeNisi (2008) discussed the importance of motivation in project management (PM). “The objective of PM,” according to Varma et al., “is to maximize employees’ contributions to the organization, which means changing employees’ behaviors so that they produce this maxi-

imum contribution” (p. 40). They further reasoned that motivation will be high if and only if people see a strong relationship between the energy they devote to something and the results produced, between the results and the favorableness of evaluations, between the level of evaluations and outcomes, and between the outcomes and anticipated satisfactions (pp. 46-47). This trajectory of motivation as a process can lead to what they called “action-to-results” connections. Agile faculty professionalization is about creating just such connections in responsive, nimble ways.

With OWI, motivation as a process is accomplished through retooling old paradigms and re-envisioning how we justify and resist change. An effective, agile professionalization support system must enable people to perform in a system. Every OWI teacher, for instance, has different skills with the content, with the design provided, with new delivery tools, with managing students in online spaces, and with motivating learners individually and in groups in ways that do not overburden the students or the teacher. The ideal performance zone or set of faculty professionalization practices actualizes situated change just-in-time, and affords sound praxis refactored on-demand at any time and in every place. Good professionalization is flexible and dynamic with full faculty buy-in (Light, Chen, & Ittelson, 2012). In “Employee Performance Management,” Dennis Briscoe and Lisbeth Claus (2008), for instance, defined Performance Management as, “[T]he system through which organizations set work goals, determine performance standards, assign and evaluate work, provide performance feedback, determine training and development needs, and distribute rewards” (p. 15). Newly mediated OWI and professionalization requires dynamic action to results, which is a situated simulation embracing practical theory. As Joel A. English (2014) opened the Preface to *Plugged In: Succeeding as an Online Learner*:

We all know that distance learning has become core to the business model of our institutions and the academic model of our programs. However, we have failed to acknowledge collectively that our online students very often require additional technological skills, critical thinking and communication skills, motivation, scheduling and self-administration tools, learning facilities, and financial savvy in order to be successful online. (p. xii)

The same can be said of *the needs of faculty and WPAs* who are working to plug in.

Indeed, limitations of code-and-fix professionalization, as well as predictive professionalization, can be mitigated through agile refactoring to promote effective action, capture and use collective intelligence, create goal-oriented exchanges between administrators and teachers and students, create productive

cross-functional teams specializing in action to results, make representations of cultural experience, capture and re-tool the knowledge of first-person experts, and develop smart tools to deal with ranges of complexity. Professionalization can be seen as a process of rewriting, reworking, and re-architecting the grammar or code of online courses and online teaching, thus re-assigning what we value to fix the root of the problem as new contexts and situations arise (Hunt & Thomas, 1999). And the first step is in recognizing that design and content creation by multiple authors (i.e., administrators, teachers, students) is an iterative process. Let us consider crowd-sourced professionalization, for instance:

crowd-sourced evaluations of scholarly arguments, not to mention crowd-sourced production models for generating and editing scholarly content, are transforming both the authorship function and conventional knowledge platforms, [creating] a much more dynamic, iterative, and dialogical environment that is predicated on versioning, crowd-sourced models of engagement and peer review, and open-source knowledge and publication platforms. (Burdick et al., 2012, p. 85)

As Daren C. Brabham (2013) wrote in *Crowdsourcing*, “The ability to coordinate and network with one another is at the heart of collective intelligence” (p. 22), and we should move toward professionalization models that value these divergent convergences.

Let us apply some of these ideas about faculty professionalization more directly to the CCCC OWI Committee’s *A Position Statement of Principles and Example Effective Practices for OWI* (CCCC OWI Committee, 2013) recommendations through the lens of agile design and refactoring. The OWI principles are categorized by instruction, faculty, institution, and research, with an overarching principle of inclusivity and accessibility. Access is the foundation to each principle, and agile software design that embraces iterative, refactoring decision-making processes supports universal access in effective OWI faculty professionalization practice. Each OWI principle, clearly, is relevant to professionalization as well as to teaching and learning more generally.

OWI PRINCIPLE 1: THE OVERARCHING PRINCIPLE OF ACCESS AND INCLUSIVITY

With OWI Principle 1 as the overarching guideline, just as OWI should be universally inclusive and accessible (pp. 7-11), faculty working online should retain all of the rights and support and pay structure privileges as onsite faculty,

especially if following an integrated scholar approach to connecting teaching, research, and service in online learning environments. Working with students online both asynchronously and synchronously is just as intensive as working with students in a classroom and during office hours (see Chapters 2, 4, & 11). To understand this intensive work, consider valuing people-oriented adaptive work rather than process-oriented models, recognizing that every student learns how to read critically and write in developed ways uniquely. As such, faculty who support students in a people-oriented paradigm should be rewarded for the quality of interaction in unique spaces they provide students. And just as a variety of modalities and tools should be made available to different types of learners, faculty should be encouraged to teach in onsite, hybrid, and/or fully online environments to maximize their own teaching skills and integrated scholar needs. Enacting OWI Principle 1, universal access, requires enabling our sensibilities to imagine the real-world audiences as a diverse universe of users with highly divergent needs through converging practices and systematic goals and objectives—and that effort must be considered deeply, taught to one another, researched systematically, written about, and published in scholarly venues. No doubt, it should be rewarded appropriately.

OWI PRINCIPLES 2 - 6: INSTRUCTIONAL PRINCIPLES

OWI Principles 2 through 6 covered instructional guidelines (p. 11-17). They detailed why OWCs should focus on writing using unique online instructional tools rather than spending too much time teaching technologies. OWI Principle 2, for instance, suggested that OWCs should focus on the writing and not on technology, which means that faculty should be trained to manipulate technology within their pedagogical philosophies rather than vice-versa. In thinking about how students interact with faculty, with each other, and with content online, faculty pedagogy can develop in productive ways. OWI Principle 3 suggested that appropriate teaching and learning strategies should be developed, which means thinking through such issues as how composition instruction in onsite settings may need to change in online ones, how new approaches in online settings need to be employed, and how outcomes can be augmented when students are increasing their technological literacies. OWI Principle 4, similarly, pointed out that appropriate contemporary composition theories should be integrated into online environments. In terms of faculty professionalization, this principle opens new areas of research and training. Faculty should attend campus-wide, local, and national conferences regarding working with learners online, including developing a better understanding of working with adult and nontraditional and visual learners if the demographics warrant (see Chapters 8, 9, & 10). OWI

Principle 5 suggested online teachers should have *reasonable* control over their own content and teaching techniques, and OWI Principle 6 noted that unique and experimental models themselves should, like all OWCs, be required to follow effective practices principles.

Remember that a primary goal of refactoring is to alter internal structures without changing external behaviors. If a teaching load is 4:4 at an institution, that external requirement should be the same even if internal pedagogical shifts in modality are encouraged. If the number of students per section is capped at 20, which is recommended in OWI Principle 9, then the equivalent online course should be similarly capped (although OWI Principle 9 spoke singularly to OWI course caps without considering onsite courses, this recommendation had its origins in the CCCC's *Statement of Principles and Standards for the Postsecondary Teaching of Writing* (1989) and the CCCC's *Statement on Second Language Writing and Writers* (2009), which were written primarily for onsite courses; pp. 20-21). Ultimately, differences between face-to-face, hybrid, and fully online teaching should be an internal matter of teaching styles that increasingly resemble one another rather than demand or call for different teachers with incredibly different skill sets (see Chapter 18). Doing so reduces the complexity of online courses, improves maintainability by enabling teachers to reinforce effective practices in varied delivery modalities, refines the architecture of writing programs to improve sustainability, and develops a model where changes in curriculum or approach or composition theories can be extended readily to all varied course sections in safe and controlled ways.

A significant danger in online writing faculty professionalization is in spending money and time developing a course and then thinking the course is ready to teach term after term without revision or additional thought. Instead, courses should be developed with iterative design in mind in order to breathe, synchronously, with the developing skills and interests and needs of the teacher as well as the increasingly divergent interests of the students. Creating a shared master course or model syllabus with instructors in a program works well in terms of the new media principles of variability and modularity. However, as the OWI instructional principles indicate, writing courses should focus on well-considered content that can make use of online technologies with teachers who are making specific decisions on conveying, teaching, and assessing student writing practices. Adaptable course shells work well if there is teacher ownership, and that should come from teachers' iteratively refactoring design and content so that they can (re)present and transcode the course in their own situated contexts. This room for play and innovation in online learning spaces creates that third-space unique to every shell that is people-based rather than only process-based, so as help teachers to avoid defining students as stock users of class content term

after term, year after year.

In *Teaching/Writing in Thirdspaces: The Studio Approach*, Rhonda Grego and Nancy S. Thompson (2008) discussed thirdspaces as being “influenced by institutional politics, preferences, and power relations” (p. 5)—emphasizing local needs and how close attention to the everyday lives of students and teachers in specific locations is important. Researchers need tools to measure the knowledge transfer and benefits of spaces like ePortfolios and online learning systems (see also Lee & Carpenter, 2013; Whithaus, 2013). Students and teachers then participate to shape the classroom as a creative text to stimulate ideas and to work together to solve problems. Refactoring course content and delivery of that content must be assessed for reliability and validity across sections by teams of teachers or administrators, which is essential to OWI Principle 6 (pp. 16-17). Embedding appropriate composition theories and core composition teaching techniques in OWI is critical. Online writing teachers should retain reasonable control over their own content and teaching techniques, and experimental or new models of OWI still should be pedagogically sound, entail adequate preparation, and require valuable oversight.

OWI PRINCIPLES 7 - 9: FACULTY PRINCIPLES

OWI Principles 7 through 9 covered faculty guidelines, and these are especially significant when considering faculty professionalization (pp. 17-21). OWI Principle 7, for instance, suggested that administrators must receive appropriate OWI-focused training, development, and support for evaluation and promotion. What determines appropriate training varies from place to place and from person to person. At some institutions, a course release is offered to prepare an OWC for the first time. This support may be similar to the time provided to a developer of any course that is taught for the time. At other institutions, such support entails extra compensation for designing and constructing course content in terms of a stipend, additional support for traveling to a conference to present and learn about OWI, opportunities to present development work on campus for additional pay, incentives in terms of useful tools like a scanner or digital camera, or moving to the top of the list of faculty who need a new office computer, and the like. An iterative, agile framework for faculty is needed to support and then recognize the work that is required to create rigorous thought spaces online for students, motivating faculty in development, action, and then action-to-results process. It is vital to encourage faculty to become integrated scholars, connecting teaching to research and service as well as to a sense of investment in the thirdspace culture of the program.

OWI Principle 8 recommended that online writing teachers receive fair and

equitable compensation for their work. What is fair is obfuscated sometimes by administrative drive and pressure to increase profit, certainly (see Chapters 6 & 7, for example). We often do not recognize the value in working with students at a distance virtually, for instance, in the same ways that we see faculty work with students physically. There often is less “distance,” however, between an on-line student and faculty member than there is between a faculty lecturer and a student in a face-to-face setting. That is, technologies afford opportunities for highly interactive spaces that, if done well to support students, can be intensive and time-consuming to faculty. And, as the best courses are those that change as needed through agile design, the notion that teachers should only be facilitators is problematic in OWCs. Some higher education models include paying highly trained rhetoricians and compositionists, for instance, to design and create curricula, and then paying less trained and therefore “less expensive” teachers to facilitate the content without iterative refactoring. Good teaching must consider design and content synchronously, however, changing dynamically in directions students take the course in. If teachers in onsite, face-to-face environments are provided offices and classrooms and tools to use, teachers using other delivery systems, too, should be provided the resources they need. Resources may include computers and professional opportunities like holding online office hours, but may also include partial reimbursement for Internet access, phone “minutes,” and even more flexible synchronous communication class meeting times.

OWI Principle 9 suggested that OWCs should be capped at 20 students per course with an eye toward 15 if possible. Again, in building an agile design system that highlights interaction and works toward improving types of teacher::student and student::student interaction using available technologies, a system both can motivate and recognize faculty who excel in building and feeding such spaces. With OWCs, we want students and teachers to “inhabit” these transactional spaces in order to maximize opportunities for learning. Some programs cap online courses at 10% lower than face-to-face courses, others work to keep the same enrollment per class numbers as onsite sections, while still others increase the online course cap, possibly seeing it as less work than onsite courses or knowing that a number of students likely will drop the course. Another model is to lift all caps on OWCs but create small peer groups and asking faculty to manage specific numbers of groups.¹ Ultimately, higher course caps begin to limit adequate motivation to interact to a high degree with one another and with content, thereby creating insufficient opportunities for students to receive teacher and peer feedback. Instructors new to online teaching certainly benefit from lower caps as they work to manage interaction online. Similar to the tendency to cut assignments in onsite courses when student numbers increase or when numbers of sections a teacher is required to teach, online writing teachers with higher

course caps may be tempted to cut assignments and to move from synchronous to asynchronous-only models or otherwise to limit interaction or response.

OWI PRINCIPLES 10 - 14: INSTITUTIONAL PRINCIPLES

OWI Principles 10 through 14 cover institutional guidelines (pp. 21-30). OWI Principle 10 suggested that the institution should ensure that both students and teachers are prepared to work using the local tools and approaches employed, which speaks directly to the need for agile training that is revised and updated as newly mediated approaches and tools are put into place. OWI Principle 11 recommended supporting OWI with personalized and interpersonal online communities. For many institutions, such support begins minimally with setting up an FAQ and step-by-step Web page, but this process follows a code-and-fix or predictive design method that leaves many gaps. To create a more useful support mechanism requires generating a knowledge base with feedback offered transactionally by administrators and teachers and students. Institutions and WPAs should enable students and faculty, especially, to create and connect their personal and/or professional identities to this information. OWI Principle 12 suggested that institutions should foster teacher satisfaction with as robust a focus as is given to student satisfaction. To this end, institutions and WPAs should consider designing an electronic performance support system tied to student and programmatic success. OWI Principle 13 suggested that both online and onsite support tools must be in place for students such that online writing students could receive their primary support online and in the modalities and media engaged by their OWCs (see Chapter 5). Creating more media-rich examples, such as screencasts, in addition to text-based keys to success, is important in order to engage divergent learners convergently. Finally, OWI Principle 14 extended support to include OWLs and tutors who must also receive professional development support matching the environment in which they work, which enables OWL administrators and tutors to receive professionalization opportunities in like method and quality as the WPA and online writing teacher.

OWI PRINCIPLE 15: RESEARCH AND EXPLORATION

The final principle, OWI Principle 15, is a research and exploration guideline (p. 31-32). It suggested that administrators and teachers and tutors, as they continue to professionalize their understanding of teaching and learning in online writing environments, must be committed to ongoing action research. That is, again, research requires an agile design refactoring process, where small changes are made and tested in ways that support the larger infrastructure yet make quick,

positive improvement. Such an agilely designed refactored research process can significantly restructure approaches over time without breaking the system. Thus, professionalization becomes a process of contact rethinking, rewriting, reworking, and retooling content and approaches through transactional and dialectical exchanges between teachers, tutors, students, content, research in the field, new technological affordances, new motivation through training, and the like.

CONCLUSION AND RECOMMENDATIONS

These OWI principles for effective practices will, to some extent, become more numerous and more nuanced. They will develop as the field of OWI continues to grow and expand, but they also will grow in our own programs as we continue to develop reflective praxis as integrated scholars. Thus, this chapter ends with some general recommendations that WPAs and other administrators of OWI programs should address for dynamic professional development:

- Consider software development methods as models for strengthening and understanding effective OWI practices in local contexts. Take the best of each method and move forward. For instance, get going with code-and-fix strategies as necessary, but then build in predictive updating and assessment to increase support and meet OWI effective practices principles. At the same time, work to progress toward characteristics of more adaptive and agile, people-oriented professionalization performance support system models and frameworks.
- Recognize that improving the quality of teaching online takes a great deal of time. What seems to be there or what knowledge appears to be transferring may not be and the work may require a sort of triangulation of understanding that may not be necessary in onsite, face-to-face modalities. Be sure of equal access to content, course design, technologies, and tools used in fulfilling assignments for all students.
- Work to meet instructional, institutional, and overarching effective OWI practices through iterative refactoring in order to develop a more flexible allocation of time and talent that can build productive teaching and learning spaces.
- Think though ways to build and sustain a healthy digital economy of proactive attention. Our students have diverse needs, a changing level of experience and comfort with technologies, and a wide range of access. Think *kairotically*.
- In addition to working with students in unique ways, recognize that teachers have an even greater diversity of experience, skill, motivation, and aptitude toward using technology effectively. Our goal should be

“teach-nology”; that is, we should seek to optimize teaching and learning and knowledge transfer with each instructor’s individual teaching situation in mind. Adaptability and scalability can work against one another—and thus need repeated attention—with professional development and principles of numerical representation, modularity, automation, variability, and transcoding.

NOTES

1. Additionally, see the National Center for Academic Transformation’s 6 models for course redesign at http://www.thencat.org/PlanRes/R2R_ModCrsRed.htm.

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