Chapter 12. Electronic Portfolios: Scaling Up from Programmatic to Inter-Institutional Articulation and Assessment

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Electronic portfolios are widely regarded as a high impact practice (Eynon & Gambino, 2017; Kahn & Scott, 2013) that helps students integrate their assignments, courses, and co-curricular experiences, as well as to write the story of how they learned and how they developed a professional identity. In so doing, ePortfolios help students to make a meta-cognitive move (Kinsman et al., 2014; Reynolds & Patton, 2014; Rickards & Guilbault, 2009) that has been demonstrated to lead to transferable written communication (Bowman, 2016; Whithaus, 2013; Yancey, 2017), critical thinking (Reynolds & Patton, 2014), and information literacy skills (Whithaus, 2013) needed for integrated lifelong learning (Chen, 2009; Eynon & Gambino, 2017; Reynolds & Patton, 2014), reflective practice as career professionals (Eynon & Gambino, 2017; Reynolds & Patton, 2014), and engaged citizenship (Johnson & Kahn, 2013).

This chapter tells the story of one first-year composition (FYComp) program's 15-year development of an electronic portfolio *assessment* to show how a single program can cooperate with other campus stakeholders to "scale up" to a meaningful, outcomes-based general education assessment (Day, 2009, 2015). The FYComp portfolio has been used not only for instructors' assessment of individual student progress in meeting FYComp outcomes, but also for programmatic assessment and institutional assessment of written communication, critical thinking, and information literacy general education outcomes (see Carpenter & Labissiere, this collection).

Like other U.S. universities, Northern Illinois University has been responding to the need to make general education requirements more relevant. Over the past several years, our electronic portfolio has been evolving into a longitudinal learning record that students can work on every semester of their college experience, allowing them to understand how courses that make use of our ePortfolio system are helping them learn and grow. Not only can they collect *artifacts* of their learning, select those artifacts that demonstrate their achievement of baccalaureate outcomes, and reflect in detail to discover the trajectory and pattern of their learning, they can also connect the artifacts and *reflections* to their co-curricular, life, and job experiences (see Coleman et al., this collection). Finally, through a professional *showcase electronic portfolio* that they can use to apply for graduate school or jobs, the students can project from their undergraduate experiences to

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a professional identity that will emerge toward the end of their college career (see Polly et al., this collection).

To provide context for scaling up, I will first review models and strategies for scaling up at the national level. I will then describe the process and outcomes of Northern Illinois University's (NIU's) first-year composition electronic portfolio and discuss the intra-university consensus-building and stakeholder analysis needed to move to the next level: scaling up to a longitudinal general education electronic portfolio that requires students to demonstrate written communication, critical thinking, and information literacy skills, among others, at every level from first-year to capstone experiences. Further, I will sketch the outlines of a regional community college and university partnership based on sharing electronic portfolio practices, with the goal of making it easier for students to transfer among area higher educational institutions. Finally, I will discuss the opportunities and roadblocks to our process of scaling up, suggesting that we add three dispositions—collaboration, persistence, and *kairos*—to the Catalyst for Learning's excellent Core Strategies for Scaling Up.

Scaling Up Models and Examples: What is Scaling Up and Why Do It?

Some champions of ePortfolio at colleges and universities—excited and encouraged by smaller-scale success with their ePortfolio efforts and becoming increasingly aware of implementations on other campuses that are changing the culture of learning—want to share what they are doing with colleagues across their campuses, pooling their efforts to create more relevant learning environments for their students. They are aware of external demands for assessment, accreditation, and accountability, and want to be pro-active, perhaps pushing back against the culture of standardized, high-stakes testing (see Carpenter & Labissiere, this collection). These are just a few of the reasons that stakeholders may want to scale up.

To provide context for this local-regional story of scaling up, I rely upon two sources of information: the international dialogue on scaling up with ePortfolios so carefully framed by the Connect to Learning (C2L) Project, and relevant models of scaling up provided by other institutions.

The Catalyst for Learning Project

The Catalyst for Learning website (http://c2l.mcnrc.org/) created by 24 universities with ePortfolio programs that collaborated in the Connect to Learning Network to "advance the transformative capacities of ePortfolio for teaching, learning, and assessment," outlines the scaling up practice and provides a set of ten "Core Strategies for Scaling Up." Bret Eynon and his co-authors (2014a) explain: "By Scaling Up, we mean the strategies and approaches by which ePortfolio projects begin within small segments of an institution and then expand, as additional faculty, courses, and programs begin to work with ePortfolio" (p. 1). As such, scaling up' refers to the process of bringing together isolated pockets of ePortfolio use to make ePortfolio—along with the processes of engaged, integrated learning it implies—a more integral part of an institutional culture.

The previous paragraph defines the "what" of scaling up, but for more about the "why," we can look to Randall Bass's "Scaling Strategies and ePortfolio as a Catalyst for Change" (2014). Bass (2014) sees scaling up in the context of an emerging paradigm of higher education, that is, how, in the current climate of educational research and socioeconomic change, higher education must move from a paradigm of "curricular design that is generally atomistic, linear, and built on inputs" to a paradigm that "comprehends the importance of both curriculum and co-curriculum, focuses on student learning as an outcome, and understands learning to be fundamentally integrative and iterative" (p. 1) (see Terry & Whillock, this collection). To Bass and proponents of Catalyst for Learning, ePortfolios can provide a bridge from one paradigm to the other, by providing

> a network of connections—among students and faculty, and programs and majors, and integrating with institutional initiatives, such as General Education, outcomes assessment, and high-impact practices. Through these connections, ePortfolio initiatives inform and deepen emerging pedagogical practices and introduce increasingly rich views of student learning into the everyday flow of teaching, assessment, and curriculum design. (Bass, 2014, p. 1) (see Summers et al., this collection)

To provide a backdrop for this paradigm shift, Bass (2014) describes a few of the larger changes in the higher education landscape in the last few decades, including "online learning, adaptive learning systems, learning analytics and granular certification," all of which value "access to learning, alignment of outcomes and personalization of learning," but "threaten to advance the paradigm in disintegrative ways, unbundling education into a series of disparate and disconnected experiences" (p. 1). This unbundling "creates challenges for efforts to advance local institutional value, the impact of community on learning, and the holistic dimensions of education" (Bass 2014, pp. 1-2). In Bass's view, ePortfolio can catalyze change and growth by helping institutions "shape a more intentional and integrative strategy for negotiating the potential disruptions of the higher education landscape" (2014, p. 2).

These ePortfolio scaling up strategies usually involve moving "beyond knowledge areas to skills and dispositions" (Bass, 2014, p. 2), broadening the view of student success through first-year experiences and increasing opportunities for

^{1.} More recently, Eynon and Gambino (2017) use "scaling" and "scaling up" to refer to the same process. Since I am specifically referring to expansion, I prefer to use "scaling up."

integrative and experiential learning. According to Bass (2014), they also foster intra-institutional connections, by providing "a context for bringing together stakeholders from across boundaries, creating a network of connections that respond to the ecosystemic nature of institutions" (p. 2). This notion of an institutional ecosystem, in which stakeholders reflect on the relationships between the pieces and players with an eye toward coherence and complementarity, provides the background for the scaling up case study I present in this chapter. Bass (2014) notes that "on some campuses, ePortfolio provides the apparatus that links First-Year Experiences, General Education programs, and outcomes assessment," and, "by providing data and *authentic* evidence of student learning, [helps ePortfolio proponents] leverage support from allies in administration, the faculty governance structure, or the strategic planning process" (p. 3) (see Carpenter & Labassiere, this collection). As we shall see, the NIU scaling up story fits this model well, but the institution still struggles to develop the "network of reinforcing connections" through ePortfolio that "helps to create and catalyze an institutional ethos of learning" (Bass, 2014, p. 3).

Relevant Core Strategies

After members of C₂L submitted their 2011–2012 Activity Reports, the "Core Strategies for Scaling Up" emerged as a way of summarizing and comparing scaling up approaches from various campuses. These ten core strategies are available on the Catalyst for Learning website, but there are four that stand out as most relevant to the process of scaling up at NIU:

- #1 Developing an Effective Campus ePortfolio Team
- #2 Connecting to Programs
- #6 Building Strategic Connections to Outcomes Assessment
- #9 Aligning with Institutional Planning

After providing a few scaling up examples from other institutions, I will show how, without knowledge of the Catalyst for Learning Core Strategies, stakeholders at NIU made use of a different but related set of strategies.

Setting the Context: Examples of Scaling Up

In the 1990s, when the World Wide Web became widely available, several universities, such as Indiana University-Purdue University Indianapolis (IUPUI), the University of Minnesota, Portland State University, and Alverno College, among others, began piloting ePortfolio programs. Encouraged by the visionary work of early adopters and theorists such as Helen Barrett, Trent Batson, Barbara Cambridge, Darren Cambridge, Helen Chen, Peg Syverson, and Kathleen Blake Yancey, groups of collaborators—many of whom would later form such organizations as the Open Source Portfolio (OSP) initiative, Sakai, the Inter/National Coalition for Electronic Portfolio Research (I/NCEPR), and the Association for Authentic, Experiential, and Evidence-Based Learning (AAEEBL)—began to compare notes. Emerging from their work, as well as important new findings in assessment and faculty development research, ePortfolio programs of varying scale and design began to pop up at the institutions mentioned earlier. NIU learned much from the challenges and successes of these early models for scaling up.

Indiana University-Purdue University Indianapolis (IUPUI)

According to Susan Kahn and Susan Scott (2013), IUPUI was "an early adopter of ePortfolios"; it "began its ePortfolio initiative without a roadmap or example to follow. Enthusiastic leaders were not enough; early efforts fell short. [They] retrenched and revamped, listening carefully to the needs of [their] campus stakeholders and attuning [their] strategy to the variety of disciplinary cultures." It is important to note that instead of a single "ePortfolio initiative with a unified approach," IUPUI has had over 40 different ePortfolio projects, ranging from professional accreditation portfolios to capstone projects, but involving only about 15% of the student body. What unites the projects is the focus on high impact practices facilitated by ePortfolios—practices such as *integrative learning* and reflective learning that deepen student engagement. Further, the ePortfolio projects have multiple aims, and each project "defines success in its own terms."

Starting in about 2000, IUPUI developed new outcomes, their Principles of Undergraduate Learning (PUL) (Kahn & Scott, 2013). A faculty committee endorsed by the executive vice chancellor decided to implement an ePortfolio "spanning the undergraduate experience," using the Open Source Portfolio (OSP), which had just merged with the Sakai Project. They also created a set of First-Year Seminars (FYS) within Themed Learning Communities (TLC) in which to introduce the OSP ePortfolio, beginning in 2004 (see Terry & Whillock, this collection). What they discovered, however, was that they had underestimated the "magnitude of the paradigm shift that ePortfolios represented," and, as a result, they had not prepared adequately with faculty development and other support needs. Therefore, many instructors "did not understand the rationale for the portfolio and treated it as an add-on rather than as an integral part of the FYS [see Dellinger & Hanger, this collection]. Not surprisingly, these faculty members experienced the ePortfolio as time-consuming, and students perceived it as busy work." Moreover, the OSP software was not ready for launch, and did not live up the grand claims made about its functionality. Consequently, from auspicious beginnings in an energized faculty committee, within a year or so, the FYC/TLC ePortfolio pilot was viewed as a failed, topdown imposed initiative.

Despite these difficulties, however, ePortfolio proponents at IUPUI, including a very supportive upper administration, did not give up. They recognized that

learning from mistakes and regrouping would allow them to fine-tune their efforts. As they regrouped and moved ahead, they spent much more time "working with programs to help them chart their own course with ePortfolio," listening to stakeholders' needs, offering incentives to departments and programs, and strengthening faculty development through collaboration with the Center for Teaching and Learning. These scaling up strategies—1) listening to stakeholder needs and 2) reflecting on discoveries—allowed proponents to conduct a kind of grounded research in which the categories and approaches were generated from the data, not predetermined. By this time, IUPUI had already participated in the first cohort (2003-2006) of the National Coalition for Electronic Portfolio Research (NCEPR, now I/NCEPR to reflect its international growth), and had both learned about grounded ePortfolio research from other schools (such as Alverno College) and participated in such research through the coalition's study of reflection in the context of ePortfolio learning. After another key step-hiring an ePortfolio coordinator in 2009—IUPUI ePortfolio proponents returned to I/ NCEPR for Cohort VI in 2010, deepening their collaboration with other institutions and improving their ability to learn from stakeholders and pilot projects. Kahn and Scott (2013) note that their work with I/NCEPR and AAEEBL (which had its first conference that year in 2010) were crucial steps in scaling up: "These developments . . . allowed us to engage a larger group of IUPUI faculty, staff, and students in intensive ePortfolio inquiry and work, while helping us validate the importance of this work with internal constituencies." As other researchers have noted, the convergence of local institutional needs with higher-level concerns in educational research can be a strong motivator for ePortfolio researchers and practitioners (CCCC, 2015; Day, 2009; Yancey et al., 2009), and therefore can provide a catalyst for scaling up.

There is no single recipe for scaling up, since all institutions are different, but Kahn and Scott (2013) conclude their IUPUI scaling up story with these helpful tips, which have been instructive to NIU and should be helpful to other institutions interested in scaling up:

- Start small.
- Attune your strategy to your institutional context and culture(s).
- Start with the needs your faculty, administration, and student stakeholders perceive now; once they begin with ePortfolio, approaches and uses will broaden and deepen.
- Understand that ePortfolios represent and require a paradigm shift.
- Develop advocates in key areas of the institution.
- Give the people who will use the technology as much control as possible over selection of a platform. (see Richardson et al., this collection)
- Expect to provide professional development assistance and resources.
- Expose instructors and others to national and international ePortfolio work.

• Align with your campus' strategic goals: most campuses are seeking to improve student success and to generate meaningful assessment information. (see Carpenter & Labissiere, this collection)

Clemson University

Gail Ring and Barbara Ramirez (2012) note similar challenges and opportunities with scaling up to a university ePortfolio requirement at Clemson University. Clemson initiated its ePortfolio program in 2006 "out of a need to evaluate [its] recently revised general education program," requiring all undergraduates to "create and submit a digital portfolio as a record of academic and experiential mastery" (p. 87) of the general education competencies. In 2003–2006, under the leadership of I/NCEPR leader Kathleen Blake Yancey, Clemson was a host institution for several meetings of I/NCEPR. To some degree, the design of their ePortfolio program reveals the careful thinking about reflection, integrative learning, Yancey's concept of "making learning visible" (Ring & Ramirez, 2012), and student-centered assessment that went on in I/NCEPR research meetings.

After the first year, Clemson hired a director (Ring) to oversee the ePortfolio program, and, through surveys and interviews, the director discovered "issues that needed to be addressed, including: 1. Overall confusion and misunderstandings regarding the ePortfolio Program; 2. Limited support available to students; 3. A lack of exemplars . . .; 4. A lack of [student] motivation . . .; and 5. Uneven integration of the ePortfolio throughout the undergraduate curriculum" (Ring & Ramirez, 2012, p. 89). Over the last decade, proponents of the ePortfolio at Clemson have used this analysis of shortcomings to redesign the program into an iterative process that has included more and more stakeholders and focuses on the ePortfolio's support system, evaluation, reflection, and improvement (Ring & Ramirez, 2012). Further, like many other institutions, Clemson discovered that faculty development, exemplars, awards, and surveys helped to "deepen faculty understanding and buy-in" (Ring & Ramirez, 2012, p. 90) in the process of redefining goals and scaling up to greater campus involvement (see Richardson et al. and Summers et al., this collection).

Far more than a simple assessment tool, ePortfolio at Clemson has become a focal point for campus discussion and qualitative evaluation of larger institutional goals: "using the ePortfolio as a catalyst for dialogue contributes to new ideas, new learning and broader thinking" (Ring & Ramirez, 2012, p. 91). That focus on campus-wide reflection and dialogue, observe Ring and Ramirez (2012), is critical to Clemson's success in scaling up. They hope that "the University community will see ePortfolios as a forum through which expertise may be developed during the undergraduate years, providing the 'value–added' experiences found only in the university setting" (2012, p. 94). Ring and Ramirez (2012) remind us that ePortfolio assessment is most valuable when it is formative, not just summative, and agree with Margaret Heritage (2007) that this sort of ePortfolio assessment then "becomes a moving picture—a video stream of achievement, rather than a periodic snapshot" (p. 94; Heritage, 2007, p. 141).

Other institutions report similar experiences with scaling up. The University of Iowa has had marked success—particularly in the area of helping newly certified teachers from all disciplines get jobs—with its now over 20-year-old Iowa ePortfolio in the College of Education (Achrazoglou et al., 2002). Portland State University, LaGuardia Community College, Boston University, and many others among the Catalyst for Learning scaling up model institutions report steady progress in the move to university-wide ePortfolio initiatives. As will become evident in the next section, NIU has made some progress scaling up from individual and class ePortfolios to programmatic assessment, but, like many other schools (Donahue, 2017; Thurman, 2017), has struggled to take scaling up to the next level: a university-wide general education initiative.

The Northern Illinois University (NIU) FYComp ePortfolio

Course and Program-based ePortfolios and I/NCEPR

As a composition teacher, I have always been a fan of the authentic assessment opportunities afforded by portfolios (see Carpenter & Labissiere, this collection), and, as a digital rhetorician, I saw great possibilities for putting those portfolios online and making use of the linking power of hypertext to create online learning records and professional showcase portfolios (see Summers et al. and Polly et al., this collection). In the year 2000, I had teacher certification students creating online portfolios, and in 2001 I hosted a regional faculty development workshop on ePortfolios at my university and supervised two undergraduate teacher certification candidates in creating an informational web page on ePortfolios. In 2002, I was asked to become the director of first-year composition, but it took me some time to figure out how I would address the "elephant in the room" of any large college program: assessment. From what I knew about ePortfolios, they seemed like the best option, but, within the program, all stakeholders had to come together to define what we value in writing-encoding these values in a set of outcomes based on the Council of Writing Program Administrators' Outcomes Statement. We managed to accomplish that goal in my first year as program director, and by 2003 I was working with my FYComp colleagues to develop the ePortfolio pilot. When I saw the call for participants in the first cohort of the National Coalition for Electronic Portfolio Research that year, I was so excited that I contacted my chair, dean, and provost in charge of assessment almost immediately, and with their support, sent in a proposal.

Designing the FYComp ePortfolio

Once the proposal was accepted, the ten schools in Cohort I began working on our research questions about reflection, comparing notes, and, most importantly, designing and/or refining our own ePortfolio implementations. Predictably, my project was to work with my two NIU colleagues to develop a robust pilot assessment for FYComp (see Terry & Whillock, this collection). With guidance from the coalition leaders, we put the pilot into motion in fall 2004 by requiring certain sections of FYComp to create ePortfolios in Mozilla Composer. By and large, those sections were the ones taught by a "captive audience": the new teaching assistants who were required to take my Seminar in the Teaching of College Writing class. Eric Hoffman, the co-instructor of that class, happened to be the coordinator of Networked Writing and Research (NWR), a digital teaching support center for FYComp, and was also a member of the NCEPR Cohort I team. As a result, we had ample technology support for ePortfolios through the staff, hardware, and software in the NWR.

The NIU FYComp Electronic Portfolio in Practice

At NIU, we break our ePortfolio assessment process into five stages: Preparation, Calibration, Scoring, Leader Debriefing, and Closing the Feedback Loop (see Figure 12.1). As part of the Preparation stage, the assessment office prepares a student profile that reflects the diverse demographics of NIU students. They send us between 100 and 300 student identification numbers. We send these numbers to the instructors, who collect the student ePortfolios electronically.



Figure 12.1. The FYComp ePortfolio assessment process.

Calibration involves two steps. First the 10 or so group leaders read two student ePortfolios (chosen because they exemplify different performance levels and a number of traits that might need to be discussed), score the ePortfolios individually on the computer, then discuss why each reader assigned particular scores, and other features they noticed, in terms of the *rubric* (see Figure 12.2) and program outcomes. Each of the group leaders repeats this process with their group (of about 10), and, in both cases, the scores are projected on an overhead screen so that everyone can see the relative agreement and qualitative comments. This process helps group members give consistent scores when they read other ePortfolios, because they have come to a better agreement on what each rubric category means and the level of performance being measured in each category. Group leaders must encourage discussion, as the discussion sometimes is a more valuable assessment activity than any of the numbers (see Carpenter & Labissiere, this collection).

In the Scoring process, group members use a template, pre-populated with NIU's FYComp rubric, to read, score, and comment on their assigned ePortfolios. Instructors do not read ePortfolios from their own classes (they evaluate each of their students separately for the class grade), and each ePortfolio is scored by at least two different readers. Groups debrief at the end of the session, discussing strengths and weaknesses they noticed in the ePortfolios they scored, as well as strengths and weaknesses in the overall process (see Carpenter & Labissiere and Sanborn & Ramírez, this collection).

Group leaders also meet after the final scoring session to debrief and record their observations about the ePortfolios, the calibration session, and the scoring process. They take detailed notes on strengths, weaknesses, and the overall process. These notes become part of the qualitative report on that semester's assessment.

To close the feedback loop, we aggregate and graph all the scores to show change between semesters and achievement by categories of student and types of instruction. We use both the qualitative and quantitative reports to plan future assessments, curricular changes, textbook selection, and faculty development activities, among many other program improvement activities. Mindful of external pressures for assessment and accountability inside and outside of our university, we also report regularly to the Office of Assessment Services and the University Assessment Panel, so that our data can be part of the larger institutional picture. Our program assessment was featured as an exemplar at the NIU 2014 Assessment Expo, and has been presented as a model at the 2015 Conference on College Composition and Communication (CCCC), the 2015 Computers and Writing conference (C&W), the 2012 Council of Writing Program Administrators conference (CWPA), and in invited presentations at California State University, Northridge; Governor's State University; Iowa State University; and Kumamoto and Osaka Universities in Japan.

Holistic	Excelling (4)	Accomplishing	Progressing (2)	Developing (1)
Impression		(3)		
Audience & Style	Through a compel- ling voice and style, writer demonstrates thorough under- standing of audience and task.	Through an appropriate voice and style, writer demonstrates ade- quate understand- ing of audience and task.	Writer's voice and style may not demonstrate under- standing of audience and task.	Writer's inap- propriate voice and style fails to demonstrate understanding of audience and task.
Focus & Develop- ment	Writer clarifies major aims, arranges mate- rial to support those aims, and may show insight into problem- atic or provocative aspects of the topic.	Writer clarifies ma- jor aims, arranges most material to support those aims, and provides adequate material.	Writer does not always make major aims clear, arrange material to support those aims, or provide adequate material.	Writer confuses readers about major aims or develops no major point adequately.
Analysis	Writer carefully and consistently evaluates the relevance of contexts and/or rhetorical strategies when presenting a position.	Writer evaluates the relevance of contexts and/or rhetorical strate- gies when present- ing a position.	Writer identifies some relevant contexts and/or rhetorical strategies when presenting a position, but may not evaluate consis- tently and carefully.	Writer fails to identify contexts and/or rhetor- ical strategies when presenting a position.
Source Integration	Writer understands and eloquently articulates his/her ideas as they relate to those of others and effectively integrates source material.	Writer frequently understands and articulates his/her ideas as they relate to those of others and integrates source material.	Writer sometimes understands and articulates his/her ideas as they relate to those of others and attempts to integrate source material.	Writer rarely understands and articulates his/her ideas as they relate to those of others and ineffectively integrates source material.
Format & Editing	Writer shows mature command of format conventions and sen- tence- level features of written language (grammar, spelling, punctuation, and usage).	Writer controls format conven- tions and sentence- level features of written language.	Writer may not adhere to conven- tions of format, and loses control of one or more elements of written language at the sentence level without significantly impeding communi- cation.	Writer does not adhere to format conventions and loses control of one or more elements of written language at the sentence level, impeding communication.
Reflection	Writer evaluates growth and com- posing processes in detail, and cites compelling evidence within portfolio.	Writer describes growth and com- posing processes, citing evidence within portfolio.	Writer describes growth and process- es superficially, or may not adequately develop ideas or provide evidence.	Writer fails to describe growth and processes.

Figure 12.2. The FYComp ePortfolio scoring rubric.

Scaling UP: Intra-institutional Progress

Once FYComp had shown that we could use our ePortfolio assessment for meaningful program improvement and curricular change, we focused on the possibilities for using ePortfolios for learning and assessment campus-wide, with the idea that faculty and departments could learn a great deal about students and their learning by having students keep longitudinal, cross-disciplinary ePortfolios. Some of the institutions in our I/NCEPR cohort and later cohorts, including IU-PUI, Clemson, and University of Georgia, actually had such campus-wide implementations in effect, and I hoped that NIU could learn something from them. In 2005, we hosted Kathleen Blake Yancey to give an ePortfolio keynote at our conference on portfolio integration, and members of the campus community seemed to be energized by the palpable excitement about ePortfolios. But we learned the hard way that unless higher administrators embrace and support changes in curriculum, pedagogy, and assessment, busy faculty will continue "business as usual" and not take on the hard work of making the changes in their own practices (see Summers et al. and Castaño & Novo, this collection).

In 2008 and 2011, the NIU president rolled out strategic planning initiatives to gather good ideas for productive changes in the way we "do" higher education to better support our student population and regional mission. Since I was still a strong believer in ePortfolio learning and assessment, in both years I put forth strategic planning proposals for a longitudinal general education ePortfolio (see Summers et al., this collection). Of course, I had to contact and get letters from stakeholders in key campus support offices such as Faculty Development and Instructional Design, Writing Across the Curriculum, the Office of Assessment, and many more, and these stakeholders were effusive in their support. In 2008 there was really no response to my strategic planning proposal beyond silence, but in 2011, there was a hopeful tone to the upper administration's response, along the lines of: "We are not ready, but this is a good idea."

Collaboration with General Education

Behind the scenes, however, forces were moving in a more positive direction. We had been through a two-year cycle of Foundations of Excellence in the First Year of College (a national program run by the John N. Gardner Institute for Excellence in Undergraduate Education), and the General Education Revisioning Task Force had begun collecting data on campus opinions about what general education (Gen Ed) and the baccalaureate should become in the future. Gen Ed goals and outcomes were being rewritten and there seemed to be more incentive for change.

Enter, in 2013, a brand-new president and a brand-new provost with good ideas about jumpstarting collaboration and changing the outlook of the university based on what all stakeholders—students, faculty, administrators, staff, alumni, and local citizens—could agree on. The new initiative, the Bold Futures program,

brought stakeholders together to decide on what actions they could take to make change in the university and the relationship between the university and the city. General education revision and retention were at or near the top of the list, and finally stakeholders from many campus departments and offices began meeting to explore how they could work together. For example, the associate vice-provosts for assessment and general education took a keen interest in the example set by the FYComp ePortfolio assessment, and soon picked up on the fact that I had proposed a Gen Ed ePortfolio program a few years earlier.

Collaboration with Office of Assessment

The director of the Office of Assessment Services began collaborating with FY-Comp on incremental steps to make our program ePortfolio a more integral part of the university's assessment landscape by offering us help with tabulating ePortfolio scores and correlating them with other important demographic information such as gender, race, socioeconomic background, and standardized test scores. These correlations allow us to find out how well we are serving diverse populations and give us a footprint of student abilities in written communication, critical thinking, and information literacy that we use as part of our annual Voluntary System of Accountability (VSA) report. With an eye toward a campus-wide writing rubric that could be used at any level in any department, the director of assessment also funded the FYComp assessment subcommittee to work for a semester to revise the ePortfolio scoring rubric to align it with the American Association of Colleges and Universities (AAC&U) VALUE rubrics for written communication, critical thinking, and information literacy (see Carpenter & Labissiere, this collection). Our most recent program outcomes statement and scoring rubric reflect changes that allow comparability of writing scores across the disciplines and from students at every level of undergraduate studies.

The Longitudinal General Education ePortfolio

In our discussions about the future of general education at NIU, we agreed on a key point mentioned frequently in current research: as a high impact practice, ePortfolio could become a cornerstone and hinge-pin of the undergraduate student experience (Eynon & Gambino, 2017; Hubert et al., 2015; Watson et al., 2016). Currently, NIU students begin their ePortfolios in FYComp classes, but we agreed that the ePortfolio should really be an integral part of a student's introduction to general studies, and thus it was implemented on a trial basis in UNIV 101: Introduction to the University classes (see Terry & Whillock, this collection). At the time of writing, perhaps 60% of NIU students take this class, but within a few years, we hope that the class will be mandatory for all first-year students, and transfer students will need to take UNIV 201, a similar introductory course that takes notice of their previous academic experience and channels it into what NIU can provide. Of course, assessment of student general education outcomes is one main purpose of the NIU ePortfolio, but those of us who use portfolios know that they can enable much more than evaluation or assessment. In short, ePortfolios are a focal point for conversations about our trajectories and growth as students and professionals. Like most portfolio users, we want to harness some of the integrative, iterative, and synthesizing power of *folio thinking* to deepen and enrich the educational experiences of our students. As a "meta high impact practice" (Kahn & Scott, 2013), the ePortfolio process itself—not just the eventual assessment of the portfolio—can make the biggest difference in whether students feel connected to their learning and able to create and maintain first a learning identity, then a professional identity through the stories they tell in their online portfolios. And as Trent Batson (2015) points out, ePortfolios are a discourse form, a dialogic literate practice through which reflective lifelong learners invent and reinvent themselves.

Platform Decisions

The longitudinal Gen Ed ePortfolio is still in its infancy, and we have many, many challenges to overcome. For example, the question of what software platform to use comes up frequently (see Richardson et al., this collection). Inevitably, every program, department, college, or university has different needs and local circumstances. In FYComp we had no budget for commercial software solutions such as Livetext or Digication, two popular platforms in the US, so we taught students to use Mozilla Composer, which is now called Seamonkey, to create their ePortfolios. This pedagogical choice proved time consuming in terms of faculty development and supporting students, but since we are a technology-rich writing program, we have been able to provide that support from within our program infrastructure. About seven years ago, we discovered that the Google Sites platform was free and much easier to use, and, coincidentally, our school migrated all student email to Google around the same time. So Google Sites allowed us to require ePortfolios of all students in the program—about 2,000 per semester.

However, when we joined forces with Assessment and General Education, we had to face the fact that all NIU students use the Blackboard course management system for almost all of their other classes, and Blackboard offers its own ePortfolio tool. My colleagues across campus, including support staff in Faculty Development and Instructional Design, were fairly insistent that FYComp needed to use the Blackboard ePortfolio tool in order to allow students to maintain continuity across the semesters and years of their undergraduate education. This position is understandable, since the chronology of learning development is one of the most helpful features of a longitudinal ePortfolio, and viewing the history of one's own learning offers students rich opportunities for finding patterns in their own growth and extrapolating toward professional identities. Using the same platform to develop the ePortfolio helps avoid confusion and promotes continuity (see Dellinger & Hanger, this collection). However, without more progress

on the institution-wide portfolio as of the present moment (2020), we are seriously considering moving beyond Blackboard and/or allowing more student and instructor choice.

Scaling up often means sacrificing local concerns so that artifacts and data are comparable, but local iterations can persist. For example, even though snapshots of all of our students' FYComp ePortfolios are officially accessible through Blackboard, we allow for students to link out from Blackboard to live versions of their ePortfolios in Google, Wix, Squarespace, or whatever platform they prefer. When they graduate, of course, despite all the promises to the contrary by Blackboard about portability of student portfolios, students will most likely keep and maintain their portfolios on these other platforms.

Scaling Up: Inter-institutional Progress

For the past few decades, national and international organizations have facilitated large-scale collaborations among individuals and institutions interested in ePortfolios (see Figure 12.3), as discussed above. But in a time of dwindling travel budgets and support for membership fees, some educators are not able to join forces with these national and international organizations. Further, local and regional needs may not reflect larger national and international trends. More to the point, regional higher education institutions, since they share an increasingly mobile population of students and potential students, have a vested interest in sharing resources to make it easier for those students to transfer among regional community colleges and universities.

How do we scale up from local programmatic assessment?



Figure 12.3. Scaling up from individual ePortfolios to international partnerships.

Collaborating with Community College Partners

When the partners at my regional institution—Assessment, General Education, and FYComp—announced the changes to Gen Ed to the Council of Deans, we were met with a lot of questions, among them the problem of transferability. Since our community college partners have an established system of facilitating transfer of general education credits to our university, they asked, how could NIU guarantee that transfer students would continue to get credit under the new system? Moreover, if we made the Gen Ed ePortfolio part of our degree requirements, how would students at community colleges prepare to fulfill this requirement? Partially to address these concerns, NIU sent delegations to our main "feeder" schools to meet with faculty and administrators there and discuss ways of moving forward together. At these meetings, as part of our introduction to the new Progressive Learning in Undergraduate Studies (PLUS) general education program,² we brought up the Gen Ed ePortfolio idea, and found that many of the schools either already had a portfolio serving some assessment purpose, or desired to create or improve one.

Based on these contacts, three of us—the former associate vice provost for general education, the former associate vice provost for outcomes assessment, and myself—developed an informal network of regional colleagues who expressed an interest in working with each other to figure out how ePortfolios might help with transferability in two ways. First, to help community colleges and universities better understand shared learning outcomes and ePortfolio practices, and second, to better facilitate the transfer of credit by allowing students to create portable records of their learning, along with personal statements about what that learning means to them (see Carpenter & Labissiere, this collection).

The Northern Illinois ePortfolio Symposium

Our first step in harnessing some of that interest was to host a regional ePortfolio summit and invite faculty and administrators from across northern Illinois to join us. We had generous support through a grant from the Illinois Board of Higher Education to cover keynote travel expenses and honoraria, and to provide refreshments and lunch to attendees. Our keynote speakers were nationally known ePortfolio experts Bret Eynon and Laura Gambino, who brought the audience up to speed with the latest developments in both the theory and the implementation of ePortfolios across the country. Since the

^{2.} Progressive Learning in Undergraduate Studies (PLUS) is NIU's revised general education program. Not only does it include foundational, breadth, and diversity requirements, it also offers students academic/career pathways in a variety of cross-disciplinary fields, such as sustainability, social justice, and global connections. For more information, see http://niu.edu/plus/.

Catalyst for Learning site had only that year been rolled out, they showcased some of the powerful examples and resources for higher education ePortfolio initiatives and provided a thorough rationale for the higher education ePortfolio movement.

Energized by the keynote, my colleagues and I moved to presentations and discussions of exemplars from NIU and two community colleges, covering the disciplines of FYComp, nursing, educational technology, and two different general education exit portfolio requirements, one currently digital and the other aspiring to go digital soon. The keynote speakers provided a thoughtful response, discussing the ways in which these diverse programs might work together to provide a powerful interdisciplinary, inter-institutional framework for students to document their learning in several areas.

About 30 colleagues from 15 different northern Illinois higher education institutions stayed for the final meeting, which focused on planning a regional ePortfolio partnership. As local planners at NIU, our goals were fairly modest. First, we wanted to investigate possible roles for ePortfolios to help students in the process of transferring general education credit and documenting both institutional and extra-curricular learning experiences, and second, we wanted to create a sharing network for ePortfolio practices among our regional institutions. Despite our attempts to limit the scope of the partnership, several of the attendees brought up less attainable goals, such as having all institutions adopt the same ePortfolio platform, or unifying general education goals and outcomes across all institutions. But we agreed that we would like to collaborate, and gave ourselves the name Illinois Regional ePortfolio Partnership (IREP). See Appendix A for our objectives and project goals.

IREP: A Wobbly Beginning

Since one of the NIU ePortfolio partners took a job elsewhere, and the other two of us were busy running our separate programs, it took many months to make any progress on IREP.³ However, I presented on IREP at the ePortfolio Forum at the AAC&U conference in January 2015 with the faculty chair of assess-

^{3.} As most of the IREP planning was taking place, I was in conversation with the I/ NCEPR leaders about the possibility of proposing a cohort that would focus precisely on the needs IREP had identified: the role of ePortfolio in facilitating transfer among institutions in a specific region. In 2014, IREP leaders put out several emails to faculty and staff at partner schools mentioning the possibility of such a cohort and asking partners to express interest. A few did express interest, but as is typical with those who do the "heavy lifting" work of institutional assessment and change, most were overcommitted, and many became confused about the relationship between the two opportunities, the IREP regional group and the I/NCEPR potential cohort. At a certain point late in 2014, we had to make a choice about our priorities, so we postponed the I/NCEPR proposal and focused only on getting IREP up to speed. If and when the time is right, we will revisit the idea of creating a new coalition cohort to model the process of regional ePortfolio collaboration.

ment from one of our community college partners, and we were encouraged by the Northern Illinois P-20 Partnership of high schools, community colleges, and universities to work with their organization. This was especially helpful since the NIU president and the presidents of most of the regional community colleges are already members of the P-20 Network; with their endorsement in February 2015, we were able to identify faculty and staff to represent each institution at IREP meetings.

After months of planning and getting endorsements from higher administration at our partner institutions, we hosted a "kickoff" meeting in May 2015. About 30 faculty and staff from 12 institutions attended. We affirmed a basic set of goals and purpose statement (see Appendix A) and discussed some "what-if" scenarios: some that seemed helpful for transfer, but others that seemed to some of the community college stakeholders as if NIU would be creating a new, extra entrance requirement very difficult for community college transfer students to fulfill. We tried to assuage that concern by guaranteeing that any new initiatives would only be pilot projects, meant to test ideas but not to create new hurdles for transfer.

At the end of the day, the IREP group did agree on at least two action items. First, the nursing programs from the partner schools agreed to be in touch to discuss ways to coordinate their nursing portfolios so that students from each institution could bring a portable learning record that would be acceptable and recognized by the transfer institution. And second, the partners agreed that a good initial step would be to put up an IREP website stating our history, goals, purpose, and objectives, as well as showcasing ePortfolio practices from partner institutions.

However, leadership (and therefore enthusiasm and motivation) changed in NIU's nursing program, and early proponents seemed doubtful that we could run a pilot after all. We agreed to shift our focus to FYComp for the pilot, and accomplished significant work on the IREP web site. Then, we hit a wall when budget cuts led to enrollment drops and drastic reduction in personnel through attrition.

Budget and Enrollment Worries: When Scaling Up Gets Put on Hold

Timing isn't everything, but just as opportunities and complementary institutional needs can emerge quickly, they can disappear just as fast when conditions change. In November 2014, Illinoisans elected a new governor, whose first order of business was to try to fix a very broken state budget and pension system. This "fix" resulted in a stand-off over the state budget, which led to state university funding being withheld. At the same time, a combination of low numbers of college-aged students and parents with more savvy higher education shopping strategies resulted in dropping enrollments: from a high of over 25,000 students in 2006, enrollments fell to 18,000 in 2016. The then-new president and provost had made their best efforts to address student retention issues in their early years, but by 2015, the combination of budget shortfalls and lowered enrollments produced a hiring freeze. NIU survived by not hiring new faculty and staff when people retired or moved elsewhere, and this meant that everyone had to work harder, and many innovative (but potentially costly in terms of money and time) programs were put on hold. Such was the fate of IREP, and it "took the wind out of the sails" of our efforts to work on a longitudinal general education portfolio for all students.

Program Prioritization: Opportunities for Transformation?

However, even in the midst of a budget crisis, our institution followed through on another strategic planning process, Program Prioritization (PP), which allowed NIU to reallocate resources to departments and programs with a demonstrated record of serving students well, in cost-effective ways. English and FYComp fared well in the PP process, and transformation plans should have allowed us to proceed with efforts to coordinate FYComp with UNIV Introduction to the University classes and integrate the longitudinal general education ePortfolio in UNIV 101 classes as outlined above. One sticking point—that not all first-year students were taking UNIV 101-was addressed in the report, which recommended that UNIV 101 be required for all first-year students and be housed in an academic department or college. When drafting this chapter in 2015, I thought that the planets might be aligning again, and though busy with running my FYComp program, I was ready to collaborate again on making meaningful institutional change to benefit our students. But the budget crisis continued into a third year, enrollments dropped again, and the NIU president, who had been an ally to FYComp, came under fire for improper hiring practices during his efforts to remake the university in his first few years. Planets come into alignment, but they also fall out of alignment, so the conditions for change that follow must be considered both in their presence and their absence.

What are the Conditions for Change?

To affirm and expand upon the groundbreaking work of the C2L group, I will here discuss three strategies—collaboration, persistence, and *kairos*—that stakeholders need to embrace to meet the kinds of paradigm shifts in education brought on by recent socioeconomic changes affecting higher education (see Figure 12.4).

Collaboration

At every level—individual, course, program, institution, and inter-institutional partnership—the key to progress depends upon looking beyond individual class-

es and programs to find and build relationships with stakeholders in other campus departments and offices, and at our partner institutions. Randall Bass (2014) and the other authors represented in the C2L literature recognize this collaborative element in almost all ten of their Core Strategies for Scaling Up. Not only must institutions develop an effective ePortfolio team (#1), that team must represent key stakeholders from across the campus (see Richardson et al., this collection), connect to academic and co-curricular programs (#2), involve students (#4), use professional development to advance the ePortfolio initiative (#5), and align with institutional planning (#9) (see Dellinger & Hanger and Summers et al., this collection). What's more, to be effective, collaboration must advance from both ends of the spectrum: bottom-up with student exemplars and forward-thinking faculty, and top-down through the efforts of higher administrators (president, provost, deans, chairs) who understand and have the authority and resources (C2L Core Strategy #9) to enact the vision for higher educational change articulated so well by the AAC&U, AAEEBL, I/NCEPR, and other groups. Our collaborations with the higher administration in the offices of Assessment, General Education, and Faculty Development have created a feeling of trust, and a strong hope that we can accomplish much together (see Summers et al., this collection). When we work together, we stay focused on the goal of helping students succeed in their studies, become engaged, critical-thinking citizens, and embark on enriching professional pathways.



Figure 12.4. Strategies for change.

Persistence⁴

In the context of institutional and inter-institutional needs, state and national initiatives, and educational research, meaningful change can be glacial. An organization's ability to change can depend upon many factors such as: accreditation of the university and its programs, the ability of students to transfer easily between colleges and universities, state and national requirements, retention issues (remember that NIU enrollments are down by thousands of students), and stakeholders' reluctance to try new (possibly risky) initiatives. In the face of such institutional inertia, ePortfolio proponents have to be patient and work with colleagues to think ahead, and must always be ready for change. Persistence means continually, but gently, reminding stakeholders of both the need for change and the pathways for doing so. It means not only recognizing internal and external catalysts for change, but also being a catalyst. It means keeping alive and pursuing Bass's (2014) vision for "a set of practices and connections that enable an institution to carry out an unshakeable focus on student learning and a shared responsibility for educational quality and student success" (p. 5). In my case, remember that I started proposing Gen Ed ePortfolios over nine years ago (see timeline, Appendix B); it took many years and many tries for me to find collaborators in Faculty Development, Assessment, and General Education who would listen to and enact initiatives with me. Sometimes, as in current years of budget impasse, declining enrollments, and the departure of our president, we must not expect speedy change, but instead stay patient, active, and involved (see Summers et al., this collection).

Kairos

Kairos is a Greek term that means at the right or appropriate time or a propitious moment for decision and action. Change doesn't happen overnight, but sometimes many catalysts or enabling conditions (rhetoricians call these exigencies) appear at the same time, and it becomes clear that it is time to act. Institutional priorities with common or complementary interests often emerge simultaneously, like an interplanetary alignment. With the dispositions of persistence and a collaboration firmly entrenched in our institutional cultures, we can be ready when *kairos* emerges, when the conditions for change come about. We need to have relationships in place with other stakeholders, so that we can act strategically at the right moment, when the interests dovetail and the need is clear. Being aware not only of *what* and *how* is important, but as Dànielle DeVoss, Ellen Cushman, and Jeff Grabill (2005) point out, the policies and systems that make up institutional infrastructures "might best be thought of as a

^{4.} Note that in the context of this chapter, by "persistence," I mean the willingness of institutional stakeholders to pursue institutional change in the face of challenging circumstances, not "persistence" as used by some educational theorists to refer to students remaining at an institution from one semester/year to the next.

'when' and not a 'what'" (p. 37), so recognizing *when* to wait and *when* to act is also crucial.

Letting the Light Shine on Grassroots: Top-Down and Bottom-Up

Advocates for change need to be good collaborators, they need to be persistent, and they need to be in touch with both local and global contexts so that they can recognize kairos when conditions arise. To some degree, they must be able to see through the eyes and experiences of many stakeholders, grasp the significance of changing social and educational trends, understand policy and strategic planning, and know how to share the urgency or exigency with others. And they need to come from different points on the spectrum of experience and expertise: from students and faculty, to supportive professional staff, deans, provosts, and presidents. But, as emphasized in the Core Strategies for Scaling Up (Eynon et al., 2014b), no matter how strong the grassroots efforts may be, they probably will not survive if top administrative leaders aren't involved and providing the curricular, pedagogical, financial, and merit (e.g., tenure and promotion) support that allows the light to shine in to encourage the grassroots. Unfortunately, the current NIU leadership has been too busy with the budget impasse, enrollment worries, and the change in top-level leadership to consider providing that support, but I feel confident that the situation will soon improve.

Conclusion

Since I first drafted this chapter, Catalyst for Learning leaders Bret Eynon and Laura Gambino (2017) have published an update on the C2L project entitled High Impact ePortfolio Practice: A Catalyst for Student, Faculty, and Institutional Learning, which includes an even more succinct statement on scaling up (Chapter 7, pp. 134-152), and an updated statement from Randall Bass on scaling up ePortfolio's role in rethinking and rebuilding higher education (Chapter 8, pp. 153-160). On the book's cover, it is noted that "over half of U.S. colleges are employing ePortfolios" so "the time is ripe to develop their full potential to advance integrative learning and broad institutional change." In Chapter 7, Eynon and Gambino (2017) admit that "scaling any technology-based innovation in higher education is challenging" (p. 134) and that even though "64% of U.S. colleges use ePortfolio at their institution . . . very few of them have most or all of their students using ePortfolios" (p. 135). Like some of NIU's efforts to take ePortfolios campus-wide, "many ePortfolio projects remain at the pilot stages and never fulfill their promise" (Eynon and Gambino, 2017, p. 135). And yet, as I hope I have made clear, as a programmatic initiative, ePortfolio pedagogy, curriculum, and assessment efforts have matured in NIU FYComp. In times of better funding and enrollments, with forward-thinking leadership and support for grassroots efforts, we made significant progress toward campus-wide ePortfolio integration by forming strategic partnerships with the Offices of Assessment, General Education, and Faculty Development, and at the very least, we have an effective tool for comparing written communication, critical thinking, and information literacy in all undergraduate programs and levels. Through the creation of IREP, we demonstrated that in a better economic climate, higher education institutions from a regional area could collaborate to improve the changing educational and assessment landscape for students who, more frequently than ever, transfer among these institutions. At both the institutional and interinstitutional level, along with the partners left standing, I remain committed to Bass's (2014) claim that by connecting "often-marginalized centers of innovation," ePortfolio initiatives "inform and deepen pedagogical practices campus-wide and introduce increasingly rich views of student learning into the everyday flows of teaching, learning, assessment, and curriculum design" (p. 153). But until at least two conditions emerge—a stable state budget and new campus leaders who accept and can build on the findings of Eynon, Gambino, Bass, and others through local action-we are left in a holding pattern: persistent to the end, and ready to collaborate when kairos dictates.

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Appendix A. Illinois Regional ePortfolio Partnership (IREP) Purpose/Objectives

- Explore ways in which ePortfolios can be used to facilitate students' transfer across institutions in the Illinois higher education system
- Demonstrate the use of ePortfolios as a means of assessing college and career readiness and as a way to complement/supplement the use of standardized tests
- Share successes and develop a compelling case for the adoption of ePortfolios within the Illinois higher education system
- Share lessons learned in the implementation and use of ePortfolios
- Explore ways that ePortfolios can foster inter-institution articulation at all levels
- Establish a nationally recognized model for the integrated use of ePortfolios across the Illinois higher education system.

IREP Project Goals

- Demonstrate a viable alternative to standardized testing for assessing common core competencies by sharing and collaborating on a mindset of "folio thinking" that requires iterative reflection on learning and professional pathways
- Clarify the issues (technical, procedural, and pedagogical) that need to be addressed in order to facilitate the transfer of student portfolios across institutions
- Determine whether an ePortfolio can help to better assess incoming students' educational needs as they move across institutions
- Show how an ePortfolio could help students feel better prepared to transition to a new school or the marketplace

Appendix B: NIU ePortfolio Timeline 2001–2015

