Academic Portfolios, Holistic Learning, and Student Success in Higher Education
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Abstract

Paradoxically, higher education can fail to achieve high expectations due to formalized learning outcomes.   Accreditation requirements trump learning. My paper conceptualizes the student academic portfolio as an assessment strategy to close this gap. As a body of evidence, it publicizes mastery of learning from the first to final year of a degree program. The portfolio also depicts goals and skills development that aligns to an institution's mission and the student's chosen discipline of study. My aim is to present how, when implemented to best practice, the academic portfolio facilitates enrollment to graduation success.

The particular focus is to depict the academic portfolio as a way of organizing assessment. Reflective statements and direct and indirect instruments document holistic ownership and attainment of personal and pre-professional goals. The artifacts also demonstrate alignment of learning with general education competencies and program outcomes.

The paper first summarizes relevant literature on holistic learning in higher education. It next discusses the comparative advantages of academic portfolios as a basis for student success. Third, it locates this assessment strategy in the context of 21st century higher education skills and competencies for diverse student populations. Finally, it presents the strategy as a contribution to student development theory.

Key Words: e-portfolio, assessment, holistic learning

Introduction

Higher education remains an open horizon. There is plenty of evidence that educational environment matters as much or more as native ability for learning success. As the PISA 2012 results indicate (OECD, 2013), the developed world can learn a great deal from emerging nations. Indeed, quite a few advanced countries have a lot to learn about educational success, including the United States. It is ever more possible to leave one's locale to obtain a college degree, and it is increasingly easy to leave one's country. Public and private institutions face increased competition from regional, national, and international peers and proprietary institutions.

Democracies aspire to educate entire populations. These days, the goal no longer is eighth grade equivalence or even high school graduation. It isn't a college degree either. The route to success, to living wage jobs, requires students to earn at least one degree beyond the baccalaureate. Sadly, too many countries preach this goal but hardly achieve it in practice.

With growing demand driven by democratic intentions and the expectation of employers that today's graduates be highly skilled, there is another driver that matters for educational context.

The demand of global publics for accountability and transparency in educational effectiveness gains pace. Educators, in particular public educators, must prove their worth to remain in business. Too many schools languish under poor retention and graduation rates. Too much money is said to be spent for poor results, and the public is tired. At least that is the pedestrian mantra in many circles, conservative and otherwise. The demand is value for public and private investments to produce results that are clear and meet societal expectations. The price for failure is the closing of programs and schools.

Likewise, accrediting bodies want metrics. They want quantifiable proof of learning that arises from systems of analytics and longitudinal data. Increasingly, local governments and state authorities track students from kindergarten through college in this way. Performance based funding follows the claim that public education should create value for money, and failing schools should not be funded. Concerns about anti-democratic potentials of standards-based measurements and funding schemes don't seem to sway taxpayers as much as the argument that competition and accountability save public money. Grand schemes to leave no child behind and to educate an entire generation through college lead publics by the nose, even as the majority of college-age and adult populations remain undereducated in many, many places.

On the supply side, educators increasingly face student bodies that are underprepared, overcommitted in their private lives, and financially unable to pay. Student educational costs combine with life priorities to presage a timeline for educational success that is non-traditional, for all but the privileged. The context for education also is one of non-traditional students and traditional students needing non-traditional timelines.

The present generation of higher education students is increasingly drawn to methods of instruction that combine high technology, virtual spaces, social media, and a more open field of learning styles and expectations. More comfortable with a YouTube video than a face-to-face lecture, not just eighteen to 21 year olds but even older students are ready and willing to study in hybrid and online settings that create flexibility for their physical time schedules and require instructors to be mentors, assessors, and content experts.

The marketplace of education, rising expectations of graduates, limitations of time and income, proliferation of non-traditional learners, and explosion of educational technologies form the backdrop for the present discussion.

In this context, I want to share and renew the concept of an academic portfolio. This effort develops the understanding of the e-portfolio that links learning to a holistic educational context that achieves greater value for students and for educational stakeholders.

When combined with a holistic learning ideology, a learning philosophy with holistic openness, e-portfolios promise highly effective learning that fulfills student, instructor, employer, and societal expectations. Assessment of e-portfolios, from formative and summative aspects to publishing of learning, is increasingly possible and desirable. Public demands for accountability can be met. Student development can be catalyzed to achieve gains in critical thinking, skills and knowledge mastery, and proven learning that meets market demands.

The paper first summarizes relevant literature on holistic learning in higher education. It next discusses the comparative advantages of academic portfolios as a basis for student success. Third, it locates this assessment strategy in the context of 21st century higher education skills and competencies for diverse student populations. Finally, it presents the strategy as a contribution to student development theory.

Holistic Learning in Higher Education

Holistic education is an educational theory that embeds learning in a relational context that transcends the classroom as traditionally conceived by many, and that transcends the understanding of pedagogy as traditionally conceived. It also tends to favor democratic and globalizing sympathies. Forbes (1996) provides a good genealogy of this educational theory.

Holistic education does not devalue adult, online, or non-traditional learners. It does not preface advanced nations' understandings as the basis for educational validity and value.

The learner is not just a student subject to pedagogy but an active and to-be-engaged and transformed person (andragogy). The student is a co-curricular subject of learning as much as a student embedded in educational curricular contexts. The student also is an engaged citizen and potential leader in wider circles of economy, politics, and global society. Holistic higher education, so conceived, should move the student from general education to world education, as Wildman and Gidley (2006) have expressed it. Pursuing an academic specialization is an intermediate factor.

Hare (2010) notes that holistic education sees the person as learner in a context moving from the classroom to the broader society and ultimately to the global society in formation. Holistic learning integrates the dimensions of experience characterized by Eric Voegelin as God vs. man and universe vs. society. It also transcends these and all other instantiations of "the learning nexus". Holistic learning premises the individual in relation to other individuals and entities as a subject of learning and a person to be transformed through education.

Following Miller (1991), holistic learning upholds the limitless potential of students, sees relationships as a key vector for understanding (both in terms of content or knowledge and method of understanding), and extends the idea that learning informs the whole of one's life and dimensions of living. Holistic education comprises critical thinking, self-discovery, creative application, empowerment, and engagement with others and the world around the learner.

Holistic education also entails the idea that traditional roles between teacher and student can be improved through shared work that relates both to other educational stakeholders inside and outside the academy in relevant learning contexts. Sharing information and knowledge in these relations creates a fuller space and learning experience.

The classroom or even the e-space as a "course shell" should not bound holistic learning. It should and must inform praxis, action, and a cascading of learning-to-experience. The student is integrated to wider circles of participants in the nexus of education that meets her/his needs.

Holistic education (Kim, 2010) also teaches civic leadership. It trains the student as a learner and a person who exists in related and concentric, intersecting and overlapping fields of existence and action that s/he is a citizen and leader. Citizens should be agents in their own education, an idea espoused by Thomas Jefferson, if generalized to a wider field of subjects today. In order to anticipate a truly better society of societies, we must conceive of education as a space, place, and time in which the student teaches in learning, the instructors learn in teaching, in which multiple teachers teach, in which students teach teachers, in which community members participate, in which co-curricular stakeholders participate, in which students teach students, and in which education occurs via settings that relate the content and curriculum to systems of relational synergy.

According to Scott Young (2007), holistic learning creates more effective learning. It depends upon "webs of information" instead of rote learning, tying learning implicitly to broader theories and systems of thought, and the development of understanding through layering of knowledge, experiences, and problem-solving or critical thinking empowerment.

Holistic learning stresses the environmental factors under the control of students, teachers, and other learning stakeholders to say that we can improve learning based upon our igniting the power of mind to connect information and experience to broader concepts and what Young calls webs of information. Holistic learning connects points along a spectrum to see greater integrations of meaning (Young, 2007).

These integrations can be the sequence of assignments or learning products that document and constitute artifacts of a student's coming-to-understand a particular course subject. A student who initiates learning of a field of knowledge should endeavor to visceralize the subject so as to model it, to derive metaphors that apply or relate what is modeled to other aspects of reality and experience, and to explore the elements, parts, and dimensions of the models and metaphors to understand and know the subject more fully (Young, 2007).

The different dimensions of holistic learning can be "reduced" to narratives, notes of thinking, expository or analytical essays; group-based versions of the same; second versions based upon further reading, input from evaluators, mentors, and peers; deeper explorations in special projects that become a term paper or video presentation, extern projects in the wider community; internship papers, reflections, and work products; prior learning assessments and products of experience that reflect learning.

For holistic education, assessment is not just or even primarily about articulating high standards and achieving metrics, for the student or instructor, or community. Assessment becomes the key fulcrum for ensuring that the student as holistic learner is not lost in the process of validating educational institutions, employers, or the community:

> Assessment of level of meaning comprehension would be arranged in consultation with their coaches and peers and involve a combination of thesis, artistic production, action project and meta-analysis in terms of both ecological and esoteric impact. Evaluation would be based on the 'contribution to meaning', and

the life-evolving (esoteric) and life-enhancing (ecstatic) properties of the project
would be included (Wildman and Gidley, 1996).

To anticipate, e-portfolios complement this theory of holistic education as relational,
globalizing, and anticipatory universalizing education. Educational technology makes
real the basis for taking the student beyond the classroom as traditionally conceived and
bringing to life her/his educational experience (Georgiadou and Siakas, 2006). Learning
artifacts and their assessment become elements of a portfolio that charts the student's
own chosen topic. They document formative learning, summative work, and the results
of sharing with outside evaluators, friends, the public, etc. They accomplish the purposes
of accreditation and learning outcomes but go further for the student and educational
stakeholders as a learning community.

Comparative Advantages of Academic Portfolios

Student learning at best practice does not occur primarily because of standards or zero-based
budgeting. These realities can be counterproductive to learning in fact. A great many effective
institutions of higher learning require less funding than the public could imagine, but heroism is
not a model for higher education, certainly not for democratic and public higher education
systems. Accreditation may trump learning in the present context for many, especially if joined
with zero-sum thinking and fiscal conservatism, but the needs of students and societies remain.

E-portfolios, developed through three stages of assessment (formative, summative, and
external/employer/public) can demonstrate what students learn, meet expectations of educational
and societal stakeholders, and provide a basis for student development that incorporates high
expectations, improvement, and learning success (Hill, 2008). E-portfolios can guide educators
in improving curricula, teaching methods, relations with employers, alumni, public and private
funders, and in providing access that meets student learner needs.

E-portfolios, deployed through an educational learning platform or open source equivalent,
overcome the tendency of higher education to be driven by external stakeholders, pressures and
demands – such that accreditation drives learning. Their use can restore the perpetual horizon of
student ownership and participation in learning.

E-portfolios have these other advantages: first, they keep the focus on learning instead of on
teaching. The process of devising and developing the portfolio cannot occur just through
effective pedagogy. It requires attention to student andragogy, to how the student participates in
her/his own learning and responds to content, mentoring, and expectations. Second, they keep
the focus on improving learning rather than testing in a course shell or classroom. An e-portfolio
is nothing if it just a collection of lessons, projects, and student videos. To be anything, the e-
portfolio shows development over time, the influence of feedback and assessment, and the
continuous reworking of student learning products based upon engagement, deepening of
expectations and student ownership, and the crystallization of learning into a coherent whole or
sum that is more than its parts.

Purcell (2011) notes that e-portfolios specifically promise the possibilities of wide access, more universal availability and communication, permanent storage, economy, the learning of e-technology, and the opportunity for instructors to devise more effective pedagogical and learning strategies. They carry advantages for education about contemporary technologies inside and beyond the classroom.

The e-learning portfolio also can and should include a co-curricular level or integrate the artifacts of co-curricular experiences and activities (Gutowski, 2006). If a student pursuing an education degree participates in a Teachers' Club, a service activity for area youth, a project through her/his community or religious organization to provide GED equivalency to community members, or attends a conference or meeting of a professional society as part of his/her educational matriculation, these experiences should be captured in the portfolio. They complement and extend to praxis the learning from a classroom or instructional setting to non-instructional contexts. These contexts do in fact catalyze and bring home the intended learning outcomes and even extend them to greater depth and breadth of understanding.

A caveat is in order. We have to be realistic in estimating the benefits of portfolios, in particular for non-traditional learners (McDaniels, 2009). We cannot expect e-portfolios to be a panacea, even with the most holistic of education methods and the best pedagogy and andragogy around them. We cannot think that portfolios, including use of e-technologies, do not take quality time, and a good amount of it. Those students who are under-motivated, underprepared, and looking only to maximize their chances of doing just enough to pass are a threat and opportunity (McDaniels, 2009). Driessen (2009) notes that portfolios poorly implemented become formulaic and overly subjective interpretations of subject matter as opposed to authentic creations of learning that depict learning. However, they will not validate the superiority of e-portfolios, certainly not in any linear sense. There is some likelihood that e-portfolios will create challenges for older students or for those averse to or unable to access digital and computer-based technologies (Conrad, 2008), though there also is the likelihood that nontraditional students can adapt to e-technology. Paper-based versions of academic portfolios work, but their communicability is limited.

For those who need to be persuaded that e-portfolios and holistic mechanisms of driving them are superior in accomplishing learning, we would need to compare student performance in this context with student performance not using a portfolio.

Ultimately, the use of portfolios that combine well the functions of formative, summative, and publicizing learning experiences can demonstrate significant gains in learning and in student satisfaction with the learning experience. This is because e-portfolios build in iterative, participatory, action-based learning that uses formative data to make improvements, summative products to showcase outcomes, and employer/public views to drive home the contribution of learning to markets, to the public good, and to humanity itself.

Academic Portfolios as an Assessment Strategy

From an assessment perspective, teaching and evaluation are intermixed. With academic portfolios, the purpose of assessment is to further student development as much as to evaluate for

grading or meeting standards. There is room to learn and grow more continuously compared to testing or one-moment evaluations. E-portfolios catalyze learning in groups, participation by those outside classroom settings, peer evaluations and sharing, and collaboration.

E-portfolios provide a means for integrating assessment of general education and program learning outcomes and/or for further developing general education competencies within a content area or major program of study. As Whithaus (2013) has documented, the use of writing studios, for example, in a university setting enabled engineering students to continue their development of general education writing abilities while also learning how to write within the discipline.

E-portfolios create the possibility to forge a "thirdspace" in which learning is transferred and knowledge and skill attainment and application are deepened (Whithaus, 2013). These spaces also can work well for assessing students whose work in a general education field such as science can be adapted to understanding their intended fields of study (Offerdahl and Impey, 2012).

They provide a means for instructors to collaborate with one another in assessing learning and in extending its value, including across disciplines and departments. What Whithaus documented as collaboration between high school and university writing instructors is non-unique. The collaborators could be university or non-university stakeholders; they could link instructors in general education classes with faculty in content areas; they could link instructors and prospective employers, from student teacher supervisors to pre-professional intern supervisors.

Furthermore, the e-portfolio provides a basis for assessing the ability to manipulate library/information sources, to utilize learning, other technologies, and software, and to chart student participation in their own learning rather than merely providing learning artifacts as outputs for class assignments.

E-portfolio design can and should allow students to participate in the design of their own assessments, to provide input/feedback on peers' work, and to reflect upon their own work as a basis for deepening their learning. In fact, this is a critical element to "get right" in order to catalyze the benefits of portfolios.

A key aspect of assessment of e-portfolios is the requirement for sufficient preparation and agreement among the instructor/s and teaching team about the purpose of the e-portfolio, how particular parts of the portfolio will fulfill the objectives of a course, the related general education and learning outcomes of a program, and the mechanisms to apply and disseminate how to build the portfolio itself (Wilhelm, 2006).

Doing a portfolio is not "less work" and likely more. As Wilhelm et al. also note (2006), "Developing a system [for e-portfolios] . . . requires communication and compromise within the college and the departments . . . a more positivist or prescribed approach to learning than they are comfortable in implementing . . ."

Deploying e-portfolios for assessment requires:

1. Training instructors and students that includes the role of assessment and related expectations, as well as the roles of other kinds of users (evaluators, guest viewers, etc.) (Wilhelm, 2006)
2. Agreement on portfolio methodology as it relates to assessment. However, see 6. below.
3. Selection of an e-platform ideally that makes assessment possible. There are commercial and open source possibilities here.
4. Flexibility in providing avenues for assessment of student expression and creative construction of the portfolio in terms of its components, theme subject, and development. Tigelaar et al. (2005) value an approach that allows the varied stakeholders for assessment to construct their quality metrics, rubrics, etc. in each setting.
5. Understanding that the best or "right" assessment approach will not happen at the beginning and all at once, regardless of how much planning, foresight, and genius obtains. Reaching best practice will likely occur after iterating use, reflection, and input from trial and error. (Wilhelm, 2006)
6. Handling skepticism and opposition from traditionalists, those against "reflection" and holism, and those unwilling to put in the effort, not all of whom are students. Strive to overcome objections by pointing to the value added for students and all stakeholders (Wilhelm, 2006).

Conclusion: Academic Portfolios and Student Development

The process of developing a student portfolio is a basis for student development that can drive enrollment, retention, and graduation. It also can guide and inform the professional development of educators, the human capital lenses of employers and communities, and the oversight of legislative and educational regulatory agencies.

Several studies focus on the potential and pitfalls of academic portfolios for non-traditional students (Conrad, 2008). Brown (2001) comments on the power of portfolios as a tool for adult and non-traditional learners: they respect their self-directed and experience-based self-understanding; they permit student learners to voice and share of their experiences, to inform what is given them with what they consider related knowledge and skills; they enable learners to refashion and "transform" what they have understood into a fuller or more complete understanding through the development of a course and related work; they provide opportunities for reflection and distillation of meaning from self-understanding; they "chunk" or sub-divide a larger task into more defined, limited and manageable tasks, suiting the time needs and dispositional preferences of non-traditional learners.

This approach achieves gains in self-valuation of past experience and current efforts, increases interactions between learner, peers, and instructors, and creates learning experiences and products that enable them to apply what they learn to their current work, activity, and lives outside of the course and portfolio experiences.

Brown (2001) sees portfolios as a way to bridge the individual as adult/non-traditional person, student, and worker, bringing the work of the academy and society closer into alignment, what she refers to as the "reflective bridge".

Certainly, the elements of academic and e-portfolio theory and assessment discussed above can be adapted to a variety of global cultures, educational practices, and settings, enhancing its power as a technology for global society in the 21st century.

If academic portfolios can be devised and implemented to include many of the elements discussed in the literature, they provide an excellent, perhaps unparalleled answer for education in the 21st century in terms of student development. In meeting diverse student populations, in providing a means of creation that transcends nationalism and localism, in binding together the student as learner with the many other dimensions of experience for the student as person, and in providing a basis for students to participate in and lead more of their learning than ever before, academic portfolios should be here to stay. In leading generations past and present to the world of online and digital technology, they provide not only a current basis for publicizing learning and for bringing in stakeholders for assessment within and outside the academy, but they also verify the continuing validity of education as a permanent possibility.

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