Manhattanville College's Atlas Program: Designing a Road Map to Success in College and Beyond

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After a two-year reboot of a 40-year portfolio tradition, Manhattanville College has moved from a required, one-size-fits-all undergraduate portfolio to a series of developmentally-scaffolded ePortfolio courses. This new approach allows students to reflect upon and integrate their learning at the first-year, sophomore, junior, and senior levels, as well as around Study Abroad, Internship, and Service Learning experiences, thus helping them link their educations to their personal and career goals and aspirations. With the help of faculty, alumni, and employer mentors, students are supported in their transition from high school to college and from school to work, developing a community of practice around reflection, self-assessment, self-presentation, and communication. This paper will examine the use of design thinking as a process guiding program development and revision, as well as look at the unique features of the courses offered at each level of student development.

Manhattanville College introduced its Portfolio System in the early 1970s as part of the *Manhattanville Plan*, a National Endowment for the Humanities-funded revision of the College's undergraduate curriculum (Manhattanville College, 1973). Originally conceived as both a vehicle that allowed students to propose individualized programs of study and a way to assess student learning, the student portfolio's role is articulated in the preamble to the plan itself:

Whereas the college recognizes and confirms the need for a fuller and more precise qualitative evaluation of the academic achievements of its students, namely, that each student demonstrate a critical faculty, independence of mind, and competence in at least one field of humanistic studies, be it resolved that the college require, as a condition of the awarding of the degree, that each of its students present a portfolio containing the following evidence of the student's achievement. (Manhattanville College, 1973, p. 18)

Initially, the evidence focused on critical reasoning in the major field of study, mastery of bibliographic and research methods, evidence of independent study, and—in keeping with the concept of breadth in the liberal arts—evidence of mastery beyond the introductory level in two additional fields of study. Thus, the Portfolio System served as the college's "distribution requirements" (Manhattanville College, 1973, p. 19). An early adopter of "evidence-based learning," Manhattanville required students to show evidence of mastery by including papers, exams, photographs of artwork, musical tapes, films, and so forth in their portfolios (Manhattanville College, 1973, p. 19). An elected faculty committee, the Board on Academic Standards, reviewed student portfolios in the sophomore and senior years. Approval of the senior portfolio was required for graduation; no course credit was attached to this requirement.

By the early 1990s, a new generation of students began to chafe at what faculty fondly called "the creative ambiguity" of the Portfolio System. A set of more clearly defined distribution requirements was added, and as the student body grew, the role of the Portfolio as the centerpiece of the curriculum began to break down. Over the next few decades, although it remained a requirement, the Portfolio was increasingly at the margins of student experience—a hoop to be jumped through in order to graduate, but one that many students thought little about until the submission deadline came (and sometimes went). The administration came to see it as costly to enforce, and the faculty, whose advising and teaching loads had increased, had little time to devote to helping their advisees develop meaningful portfolios. At the end of the 2013-14 academic year, with encouragement from the then-president and provost, the faculty voted to suspend the program (for a deeper examination of the decline of the Manhattanville Portfolio System and the important lessons learned that allowed us to bounce back, see Carson, Dehne, & Hannum, in press).

The Designing Process

In the fall of 2014, the Board on Academic Standards, now charged with creating a replacement for Manhattanville College's 40+-year-old Portfolio System, began its new work; the charge itself was vague, the only parameters being that the committee create something optional and credit-bearing. Realizing that buy-in to whatever it created was necessary, the committee attempted to take the needs of the entire community into account, which led them to approach

Figure 1
Design Thinking Principles Illustrating the Cyclical Nature of Iteration
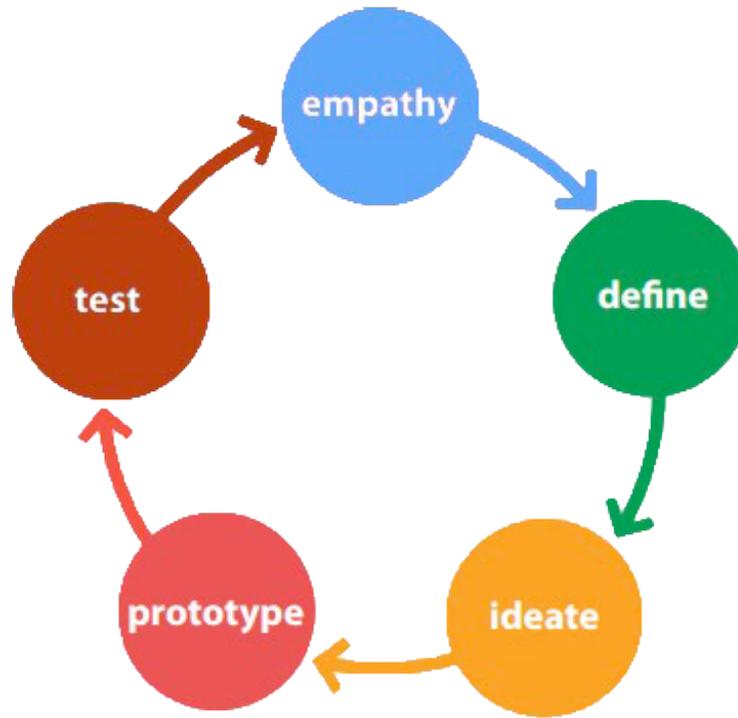
Note. Adapted from d.school (n.d.).

the challenge as a design thinking exercise, following a process defined by Stanford University's d.school (2010; Figure 1). The adoption of the design-thinking methodology by this committee was largely due to two of the committee members having a background in devised theater, and one of the members having an understanding of Agile development. A common focus on the needs of the audience/user/stakeholder and the concept that iterations/prototypes/consistent refinement are the means to a satisfactory end tie these three methodologies together (Cooper-Wright, 2016; Lahey, 2018; Oddey, 1996). The term "design thinking" will be used for the purposes of this discussion as it has achieved a broader base of accepted use, while "devising" is generally limited to theater and "Agile" to software development. The design principles of Empathize, Define, Ideate, Prototype, and Test were guides to the development of our Atlas program, an optional and credit-bearing, four-course scaffolded pathway to graduation and life-long learning. The design process will also be used as a roadmap for our story about the evolution of our Atlas program, its goals, and the integration of ePortfolio as an integral defining feature of the program.

Empathize

Empathy emphasizes the need to "understand the people for whom you are designing" (d.school, n.d., p. 1) with an ultimate goal of designing positive experiences in response to specific user needs rather than a goal of designing a product (Brown, 2009; Brown & Katz, 2009). Starting with emails, in-person invitations, and a series of phone interviews, the committee connected with users of the old Portfolio System to understand where things went wrong and what was needed in a new system. Speaking with faculty, students, alumni, and staff, the committee was able to collect a variety of perspectives reflecting what these different groups understood as existing problems of the suspended Portfolio System and the aspirational needs of a new program.

Define

During this phase, the goal is to "unpack and synthesize your empathy findings into compelling needs and insights" (d.school, n.d., p. 2). The designer uses input from the stakeholders to define the experience that is needed, coming up with a list of issues that concern those stakeholders (Buchanan, 1992). With a deeper

understanding of what our primary stakeholders viewed as important, we began to define the elements to be included in the new program. It became clear that there were some elements of the old Portfolio System that should be retained, including academic planning documents and an emphasis on reflection, as well as new elements that should be added, such as career planning and digital identity development.

Academic planning. Our stakeholders wanted us to provide support to students transitioning to their new college environment, including introduction to college resources, advising support, and academic planning. Cuseo (2014) identified first-year programs that support the transition of high school graduates into the college environment through an emphasis on both academic and personal development as most effective, as measured by academic success and student retention. This effect appears to be due to embedded efforts to connect students with on-campus resources such as tutoring services and other learning support resources. A survey done by the National Survey of Student Engagement (2005) found that students who participated in first-year programs were more likely to engage with and derive satisfaction from academic advising and career advising and planning. With this knowledge, as well as our own past experience, we saw that embedding academic planning into our new program was fundamental moving forward.

Career planning. We heard from our stakeholders the importance of mindful and intentional connections between one's liberal learning and career planning. The connection between the liberal arts and career has not always been an easy one; liberal arts colleges have received significant criticism for not preparing students adequately for careers. Headlines such as "America's 'No Confidence' Vote on College Grads' Work Readiness" (Busteed, 2015), "Many Business Leaders Doubt U.S. Colleges Prepare Students" (Sidhu & Calderon, 2014), and "Skills Learned in School Differ From Those Demanded at Work" (Badal, 2016) all contribute to what has been called higher education's "workforce preparation paradox" (Busteed, 2014). This paradox is demonstrated by recent Gallup poll findings that show that while 96% of chief academic officers polled stated that they felt their institutions were very or somewhat effective at preparing their students for the world of work (Gallup & Inside HigherEd, 2014), only 14% of Americans felt that college graduates were well prepared for work (as cited in Busteed, 2014). Even more telling is that only 11% of business leaders strongly agreed that "Higher education institutions in this country are graduating students with the skills and competencies that MY business needs" (Gallup/Lumina Foundation, 2014, p. 23).

Interestingly, most of the competencies and skills developed in higher education are, in fact, the same ones that employers say that they desire in their employees. For example, the Association of American Colleges and Universities found in a 2015 study that at least 80% of employers agreed that oral and written communication and critical thinking skills are very important (Hart Research Associates, 2015). The National Association of Colleges and Employers (NACE) has defined skills needed for "career readiness" (NACE, 2014), including critical thinking/problem solving and oral and written communication. These same skills are at the educational core of most institutions of higher education (Hart Research Associates, 2015; NACE, 2014).

This "work preparation paradox" (Busteed, 2014) might better be understood as an issue of awareness and translation. For example, an Association of American Colleges and Universities (AAC&U) survey found that while students seem to be aware of what learning outcomes are most important to employers, they perceive themselves as more prepared for the world of work than do employers (Hart Research Associates, 2015). Perhaps, through reflection, students may develop greater awareness and understanding of their own preparedness: what they know and what they do not know. They could then use this information to develop new skills and knowledge—in other words, the skills of life-long learners. Selingo (2016), who has written on the need for institutions of higher education to redesign with a goal of increasing students' active participation in becoming career-ready in a quickly changing workforce, identified important skills graduates need, as described to him by employers. First and foremost, he identifies the importance of being a life-long learner. Employers cannot depend on what students know in an ever-changing landscape; rather, they need graduates who know how to learn new things. Reflective practice emphasizing inquiry, reflection, and integration is a key ingredient of continuous learning and career readiness (Eynon & Gambino, 2017; Selingo, 2016).

Digital identity. Our stakeholders felt that, in anticipation of applying for jobs or graduate school, students needed to create a digital identity that demonstrated their learning, ultimately representing their personal brand to outside audiences (Jones, 2017). Our history of using paper portfolios, and our experience with ePortfolios on our campus (i.e., we were members of the Making Connections and Connect to Learning grants through LaGuardia Community College; see Carson et al., in press), made using ePortfolios as a vehicle for reflection and integration as well as a platform for professional presentation an easy choice.

Using ePortfolios supports making students' learning more visible to themselves (Eynon, Gambino, & Török, 2014), as well as to additional audiences. While we often hear today's students referred to as "digital natives" (Barkho, 2016), in fact, they have a great deal to learn about self-presentation and gearing

their message to specific audiences. Recent research also shows that ePortfolios are becoming increasingly recognized and valued by recruiters. Leahy and Filiatrault (2017) found that 85% of recruiters surveyed "reported that, if students followed up with them via e-mail with a link to a relevant part of their ePortfolio, they would visit the link" (p. 219). Recruiters also stated that if students provided a link to their ePortfolio on a cover letter, e-mail signature (73%), or resume (72%), they would make the effort to review the ePortfolio (Leahy & Filiatrault, 2017). ePortfolio practice supports the advancement of many needs and goals identified by our stakeholders, from reflection and integration of learning (Eynon & Gambino, 2017), to developing meaning and identity through narrative (Buyarski, 2014) and self-authorship (Baxter Magolda, 2014), to personal branding.

Indeed, the power of ePortfolio pedagogy recently was recognized by George Kuh and added as the eleventh High Impact Practice (HIP; Eynon & Gambino, 2017; Kuh, 2008; Watson, Kuh, Rhodes, Light, & Chen, 2016). Kuh (2017) noted that:

> The ePortfolio is much more than a just-in-time twenty-first-century electronic record keeping system. It is an intentionally designed instructional approach that, among other advantages, prompts students to periodically reflect on and deepen what they are learning and helps them to connect and make sense of their various experiences inside and outside the classroom that—taken together—add up to more than the sum of their parts. (Foreword to Eynon & Gambino, 2017, p. ix)

Reflective practice. As suggested by the quote above (Kuh, 2017), supported reflection is a key element to making connections between past and future learning and integrating that learning across contexts. Reflective practice is also the foundation of the development of a useful academic or career plan and a robust digital identity. To make these connections, we recognized the importance of developing in our students a reflective practice that allows them to evaluate critically past learning, supporting self-assessment and future decision-making. Our understanding of reflection has been guided by Carol Rodgers's (2002) model, which is based on the work of John Dewey.

Rodgers (2002) defined reflection, in contrast to a superficial "mulling over" (p. 849), as a rigorous, systematic, and disciplined cycle of practice. Reflection begins with organized prompts directing students to identify a specific experience. Additional prompts guide students in the process of inquiry around this experience to develop a deeper and richer understanding of it. Experiences at their root are interactions with the world that leave us changed (Rodgers, 2002), and this reflective process helps students to make visible the changes that result from their experiences (Eynon et al., 2014).

Similarly, Eynon and Gambino (2017) foreground reflective practice with their inquiry, reflection, and integration cycle, which serves as the foundation for the Catalyst for Learning Framework (see Figure 2). Through this process, students are guided, systematically and intentionally, to inquire and question previous learning and to connect and integrate these learning experiences in order to look forward and apply, or integrate, them with future learning opportunities (Eynon & Gambino, 2017). It was clear that systematic reflection should be a fundamental attribute of the Atlas program; structured into each Atlas class would be multiple reflection assignments emphasizing the importance of developing a reflective practice. With clarity around the elements that needed to be included in our program, our next step was to figure out how to design a format to support these learning priorities.

Ideate

With clearly defined needs and goals, the faculty committee began to ideate, brainstorming a number of different ways to meet these goals within the constraints of their charge, an optional and credit-bearing model. In order to have a credit-bearing program, it quickly became evident that the committee was building at least one course. We also learned from our interviews that we were trying to meet too many objectives in our previous Portfolio System, so we decided to scaffold the content and concepts into multiple courses instead of a single course. We had conversations about collaboratively taught classes, debates over how many credits the courses should be worth, and discussions about whether it would be necessary to take the courses in a particular sequence. This phase is an essential step in the design thinking process, as it forces the design team beyond obvious solutions into the potential for innovation and is the transition from research to creation (Dam & Siang, 2017).

Prototype

Following the ideation phase, the committee settled on a prototype, or model, designed to meet the previously defined goals. Our model included four scaffolded courses, each intended to meet the needs and challenges of students in one of the four years of college. Similar to the guided pathways models (Bailey, Jaggars, & Jenkins, 2015) implemented on a number of campuses nationally, together these four courses provide a clear program map aligned with student end goals (e.g., choosing a major, identifying a career). Each course builds on the learning objectives of the previous one,

moving students on a clear pathway to graduation and the world of work. All courses are also aligned with the program's common learning outcomes (Bailey et al., 2015). Like many guided pathway programs, our program includes active and intentional advising.

Passport, a course designed for first-year students, supports them as they transition to college life and begin to develop their reflective practice. *Pathfinder*, a course for sophomores, supports academic planning and encourages intentional exploration of potential majors while making connections with possible careers. *Compass*, our junior course, is geared toward students examining their liberal learning and actively connecting and integrating learning experiences outside of the classroom with professional goals. *Pursuit*, for seniors, builds on the previous courses, culminating in an external-facing ePortfolio communicating their learning and personal brand to potential employer audiences. Thus, the first two years focus on helping students to design their own college learning experiences, and the second two years help students to design their lives after college.

Passport. As we developed Atlas, we were fortunate that we already had the basics of our first-year course in place. In the spring of 2013, as a result of a Foundations of Excellence® self-study through the John N. Gardner Institute for Excellence in Undergraduate Education, Manhattanville had piloted two "transitions" courses for freshmen. These elective courses were designed to complement our existing First-Year Seminars and First-Year Writing classes and were taught by a team of faculty and staff members. At the time, we were participating in the FIPSE-funded Connect to Learning grant, and so we developed these courses to be ePortfolio-based. Foundations of Excellence®, among others (e.g., Cuseo, 2014), has identified holistic, transitions-type First-Year seminars as having the greatest positive impact on retention and student success (Cuseo, 2014). In particular, FYPs supporting educational planning, goal-setting, and career exploration have been linked to increased student retention. Student commitment to educational and career goals is "perhaps the strongest factor associated with persistence to degree completion" (Wyckoff, 1999, as cited in Cuseo, 2014, p. 7).

The fall course, which would become Passport A, was designed to introduce students to the history and mission of Manhattanville and to campus resources that would help them be successful in college, as well as develop self-awareness and goal-setting practices. Students would hear panel presentations, attend campus activities, and visit campus program offices like the Writing Center, the Counseling Center, and the Center for Career Development. They could use their ePortfolios as spaces to reflect, to document their goal-setting activities, and to post assignments. Passport B, for second-semester students, was planned to continue

with self-assessment, now in the context of possible majors and careers, civic engagement and community service, and intercultural communication, calling for collaboration with the Center for Career Development, the Duchesne Center for Religion and Social Justice, and the Center for Inclusion, among others.

Pathfinder. This ePortfolio-based course was designed to aid sophomores in the selection of a major, academic planning, and career exploration. In the course, students are supported as they clarify the purpose, meaning, and direction of their college educations and explore career possibilities related to those decisions. The textbook for the course is *Designing Your Life: How to Build a Well-Lived, Joyful Life*, written by instructors at Stanford's d.school (Burnett & Evans, 2016). Several exercises from the book make good course activities, specifically the "Goodtime Journal" (Burnett & Evans, 2016, pp. 50-54), "Mind Mapping" (pp. 70-74), and "Odyssey Planning 101" (pp. 96-98). Students are asked to consider why they are at a liberal arts college, what they hope to do after college, and how their current experiences might aid them in attaining their goals. Additionally, students reflect on personality, interests, goals, strengths, and weaknesses and use these assessments to select a major and to begin to think about possible careers. They are asked to set academic goals, inventory their existing skills, and connect with faculty within their major for feedback on and assessment of these plans.

Academic planning plays a significant role in supporting these learning objectives. Our stakeholders continued to support the academic planning component of the old Manhattanville Portfolio System, agreeing that the Four-Year Study Plan was one element that should be retained. Unlike an automated degree audit, completion of the Study Plan, a requirement of this course, compels students to think through the various pathways they might take to graduation and plan their courses (e.g., major, minor, and core curriculum requirements) and co-curricular experiences (e.g., study abroad and service learning).

Compass. This course is designed to help students reflect on co-curricular experiences, with the goal of translating and documenting leadership and team-building skills, showcasing creative work, highlighting unique experiences, and relating these experiences to desirable career skill sets, which is especially crucial in the 21st century (Kuh, 1995). The intent of this course is for students to integrate knowledge gained in and outside the classroom and apply it to solve practical, real-world problems.

Through research and informational interviews, students investigate career options of interest, determining the skills and characteristics needed for success in their chosen fields. A series of guest speakers

from across the campus helps students explore key characteristics, including: civic engagement, leadership, teamwork, creativity, ethical reasoning, and intercultural communication. Each student then selects an extra-curricular or co-curricular experience in which they participate and examines it in terms of organizational culture, skills, and competencies developed through participation, and of ethical issues that might arise (Kuh, 1995). Finally, students curate professional ePortfolios, which seek to integrate learning from their academic, co-curricular, and extra-curricular activities.

Pursuit. Pursuit is designed to identify or affirm a career path. Students begin by identifying significant learning experiences within and beyond their major. Through a series of mapping activities and reflections, these experiences are mined for skills, knowledge, and mindsets that have been developed through participation in learning. All too often, students have a superficial understanding of the hard skills learned, and little understanding of the soft skills developed along the way. For example, while students recognize their improvement in written communication as they learn to write a literature review, they may not recognize the additional skills developed, such as critical thinking acquired through analysis of previous research methodologies and findings, digital literacy skills in searching for scholarly literature, and the beginnings of a systems mindset, putting various pieces of research together in a way that creates a larger and more comprehensive understanding of the issue at hand. They may also fail to recognize that a group project, often loathed by students, serves to develop collaboration and leadership skills.

Generative knowledge interviewing (Peet, Walsh, Sober, & Rawak, 2010) is practiced throughout the course as a specific and intentional way for students to uncover these areas of tacit knowledge and skills. With a deeper, fuller, and richer understanding of their own learning, students begin to generate short stories connecting learning experiences with the products of that learning. Considerable time is then spent "translating" their learning stories into the language of employers. Résumé and cover-letter preparation, interviewing skills, employment seeking, personal branding, and networking are understood as ways of communicating their learning stories in a language understood by employers. A storytelling metaphor is also used as students develop a professional online identity using Digication's ePortfolio platform. Across the semester, students receive visits from faculty and staff to discuss such topics as career planning, resume reviews, hiring and benefits, and even personal finance.

As can be seen, each of these courses is a more rigorous and intentional iteration of the previous course, supporting the development of reflective practice and

the creation of a digital identity. The practices involved in the Atlas program connect with many "high-impact behaviors," as defined by George Kuh (2008). For example: students invest meaningful time and effort into the process of inquiry, reflection, and integration, discuss serious topics such as ethical decision making with faculty members and classmates, and develop intercultural communication skills, essential in today's diverse workforce.

Test

With a prototype in place, we piloted each new course, rolling out one to two new classes each semester. The use of pilots allowed for a fluid assessment and revision process, with courses evolving before the next time they were offered and allowing for lessons learned in each class to inform the development of others. For example, while the Four-Year Study Plan was originally part of Pathfinder, the sophomore level course, early feedback from faculty and students allowed us to introduce easily the Study Plan in the Passport class earlier in a student's career. Serendipitously, at this same time, the Office of Academic Advising and Digication, our ePortfolio platform, were collaborating to create an ePortfolio advising template, embedding the four-year plan, for all students at the College. Thus, ePortfolio now serves as an early advisement tool to help all first and second-year students manage/track their academic progress under the guidance of a professional advisor before transitioning into their majors/programs of study. According to *Academic Advising: A Comprehensive Handbook*, technology provides "a tool that fosters the developmental advising process and promotes students' responsibility for their academic careers" (Sotto, 2000, p. 253). Upon declaring a major, students transition to a faculty advisor. Their advising ePortfolio with its four-year plan goes with them, smoothing the transition between general and major field advisors. Kuh (2006) and Buyarski and Ross (2002) suggested that when academic advising is a shared activity across many partners (e.g., professional advisor, faculty advisor, first-year program mentor, peer mentor), a strong safety net is created for the developing student. The use of ePortfolio allows for this "tag-team" (Kuh, 2006) approach. Now, with testing and revision, an intentional advising process using ePortfolio is incorporated into our Passport course.

One thing that we realized during testing was that staffing of the courses was going to be a challenge. When we put out a call for people to teach in the program, despite large numbers of faculty claiming excitement and support, we were not inundated with volunteers. Fortunately, at this point in our program development, we received a two-year, $100,000 grant

Figure 2

The Catalyst for Learning Framework Illustrating the Foundational Elements of Inquiry, Reflection, and Integration
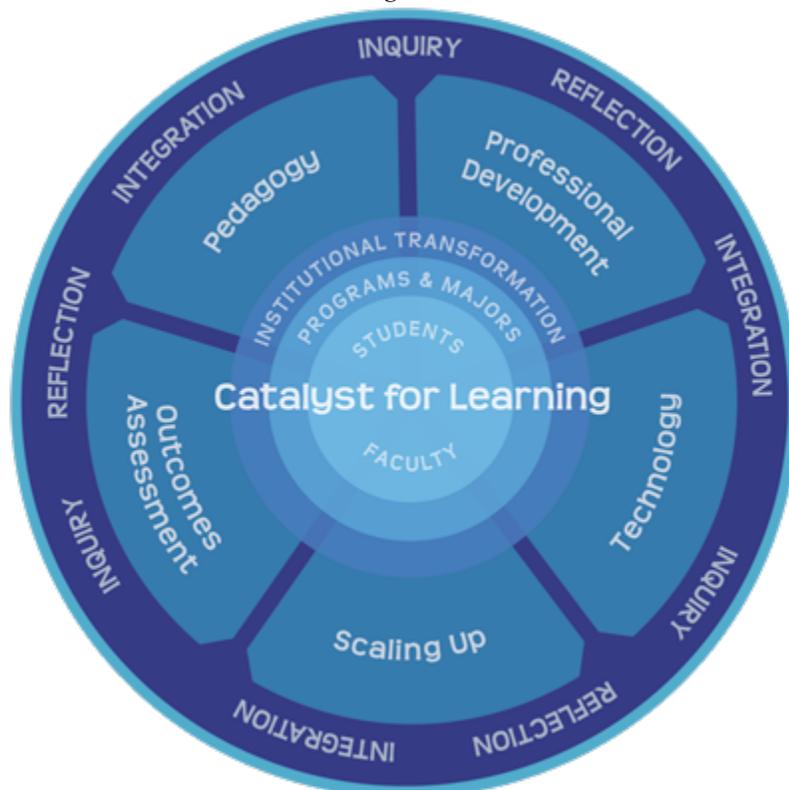
Note. From High-impact ePortfolio practice: A catalyst for student, faculty, and institutional learning, by B. Eynon and L. Gambino, 2017, p. 33. Copyright 2017 by Stylus. Reprinted with permission.

from the Andrew W. Mellon Foundation, which supported course development, faculty development, and the purchase of some technology to support student exploration in making audio and video files for their ePortfolios. The Mellon grant also supported travel by a number of team members to conferences, where we were able to share ideas and experiences with other members of the ePortfolio community as we tested the various courses.

With two years of testing behind us, Atlas is up and running as an optional, credit-bearing School of Arts and Sciences program with courses at all levels offered on a regular cycle. Its primary goals are:

- To support students as they reflect on experiences, develop goals, and make connections between what they have already accomplished and what they hope to accomplish;
- To aid each student in the creation of an online space in which they can showcase their accomplishments and illustrate the correlations

they are making between their various experiences;
- To encourage professional practices in networking and social media usage by students; and
- To connect students with campus resources and with professionals in the student's field of interest.

Assessment. Assessment serves as a formalized way to engage the Test principle of design thinking with regard to our learning outcomes. Each time an Atlas course is taught, we reiterate the design cycle, gathering information from students and faculty about their evaluations of the coursework, learning goals, and outcomes, connect this information to our defined learning outcomes and program goals, and then revise as a result of this examination (see Figure 1). This process can also be described in terms of the inquiry, reflection, and integration process described by Eynon and Gambino (2014, 2017) (see Figure 2). Systematic interrogation of our learning, and application and integration of that assessment, is fundamental to a

learning college (Eynon & Gambino, 2017). Regardless of the terminology used, both emphasize assessment *for* learning as the end goal.

ePortfolios provide a unique opportunity for student learning assessment (Kuh et al., 2015). As examples of authentic student work, ePortfolios present a holistic view of student learning, showing evidence of a variety of learning outcomes and the connections among learning experiences rather than isolated and compartmentalized skills and knowledge (Suskie, 2009). Assessment of the Atlas program started with inquiry into our programmatic goals (see above). The creation of ePortfolios as an online space in which students showcase their accomplishments meets a learning outcome for both the Atlas program and Manhattanville's core curriculum Digital Literacy capability. Students are not only creating content using technology, but they are also learning to communicate effectively to specific audiences in a digital medium.

We began with an examination of students' final ePortfolios from three Atlas courses, evaluating the use of artifacts, reflective analysis of artifacts, ePortfolio navigation, use of multimedia, and so forth. Instructors from across the program reviewed the ePortfolios using our ePortfolio rubric (see Appendix), which was developed by the Board on Academic Standards. Following the assessment, Atlas instructors discussed the results together. As a team, the instructors found that the assessment results suggested that students needed more support choosing representative artifacts demonstrating their learning. Additionally, greater emphasis on multimodal skills was needed, supporting the integration of audio, video, and imagery into student ePortfolios. Students also needed more help thinking about various audiences and how one's ePortfolio might vary as a function of audience.

Using Biggs's (2014) theory of constructive alignment, the Atlas team began the process of examining the relationships between the learning outcomes, the teaching activities designed to support those learning outcomes, and the measurements of the learning outcomes (assessment). If students are not meeting the learning outcome regarding final ePortfolios established for the program, then we need to make adjustments in the learning outcome itself, the learning activities supporting the outcome, and/or the measurement of the learning outcome (our ePortfolio rubric). This first time around, we have made adjustments to our teaching and learning activities, agreeing to emphasize the importance of artifacts and multimodal aspects of an ePortfolio and to engage students in deeper conversations about considerations of audience. These adjustments can also be thought of as the integration of our own learning from the assessment/reflection process, as suggested by Eynon

and Gambino's (2017) I-R-I process. While assessment can be used for accountability purposes (are we meeting the assessment criteria for accreditation?), as well as institutional learning purposes (does this program support our institutional learning goals and mission?), our early programmatic assessment emphasizes revision and improvement of our prototype, strengthening the connections and alignment between our programmatic and course-level learning outcomes, improving our teaching and learning strategies, and course-correcting our learning assessment tools. With a bit more time and data, we will begin the meaningful task of connecting our program's learning outcomes with institutional outcomes: Does participation in the Atlas program support improved student retention and success? Does participation in this program lead to increased success in employability? Does this guided pathway lead to faster completion rates? We are excited to examine the success of our program through this lens.

There are additional, anecdotal ways of measuring the success of our program: Are students taking our courses at increased rates? Do students view these courses as beneficial to their development? It is still early to tell, but we have added additional sections of the courses due to increasing student demand. Over the course of two years, our spring course registrations have grown from 14 to 71 students, and our fall course registrations have grown from 119 students to 136 (different courses are offered in the fall and spring semesters). Currently, about one quarter of our entering freshmen take a Passport class their first year, and increasing numbers of students are enrolling in more than one Atlas class; a quarter of all students who take a Passport course go on to take another Atlas course. Additionally, data analysis has shown that students who take an Atlas class in the first year have, on average, a fall-to-spring persistence rate of 86%.

Student reflections and course evaluations are generally positive. Final reflections suggest that we are meeting the program goal of facilitating students as they reflect on experiences, develop goals, and make connections between what they have already accomplished and what they hope to accomplish. As one student explained her experience in an Atlas class:

> When I originally started this class, I could see the value of it, but I had no idea just how helpful this course would prove to be. Now, at the end of the semester, I have realized that this course has truly helped me to reflect on my college experience. In many ways, the process of creating and presenting a professional e-Portfolio has encouraged me to think cohesively about the last four years. As graduation day approaches, I am thankful for the closure and clarity this portfolio has allowed me as I begin the next chapter of my life (Muckell, 2017).

The design thinking process is intentionally iterative, with each principle both building on the previous step as well as supporting deeper learning and understanding of the information learned in previous steps (d.school, n.d., p. 5). The testing of our four-course prototype led us to understand better the needs and challenges of our stakeholders, and our deeper empathy led to the development of additional course prototypes.

Study abroad and Duchesne 4th credit option. Some of our specialized learning opportunities, such as study abroad and service learning, also provided opportunities for integration into the Atlas curriculum. Collaborating with the Director of Study Abroad, we proposed requiring all students enrolling in a cooperative study abroad program to enroll simultaneously in a one-credit Atlas class. Through pre-trip and post-trip reflections and assignments requiring them to document their observations and experiences while abroad, students' learning while at their host institutions is visible to their advisors and the Study Abroad Director at home, as well as to their peers at other locations around the world. Study abroad has been identified as a High Impact Practice (HIP) by AAC&U (Kuh, 2008), but prior to our adoption of the ePortfolio pedagogy, it was not as well assessed as it could have been in terms of its learning outcomes. Atlas study abroad facilitates students' reflection on how to understand and utilize their cross-cultural and global experience, supporting an internationalized mindset for academic and career success in a global environment.

Service learning, another HIP, was even more in need of a vehicle to integrate it into a student's overall education. At Manhattanville, students may enroll in what is called the 4th Credit Option, allowing them to earn an additional credit by engaging in 30 hours of community service related to one of the courses in which they are enrolled that semester. Coordination between the sponsoring faculty member and the Duchesne Center for Religion and Social Justice, which oversees the program, was often challenging, and the faculty member frequently did not have much insight into the student's activities outside the classroom until he or she gave an end-of-semester presentation. Now, the Duchesne 4th Credit Option is an Atlas course; students post weekly reflections, and respond to prompts about their experiences in the field, and the faculty sponsor and the Director of the Duchesne Center can follow the students' experiences on a daily basis. Again, the adoption of ePortfolio improves the data we are able to collect and analyze as we assess this learning experience and examine service learning and civic engagement

and its potential transformations of participating students as well as communities.

While not yet required across the College, many departments are moving towards an Atlas-informed approach to documenting Internship experiences using ePortfolios. Our team is currently working with the Center for Career Development to facilitate this evolution.

Iterating Forward

While early indicators suggest that Atlas is meeting a real need for Manhattanville students, our testing has revealed that the program is not without its challenges. The first is that of sequencing activities, goals, and practices in an optional set of courses. In other words, while the courses are scaffolded, providing a clear path for development over time, students are not required to take all of them (or even any of them). To some extent, this undercuts the careful developmental layout of the program; however, because each class is designed to be appropriate to students at a specific point in their educations, experience is showing that students who jump in as juniors or seniors catch on quickly.

Perhaps more pressing is the challenge of staffing the program, especially with full-time members of the faculty. At the moment, Passport classes are taught by Student Affairs staff members and members of the Academic Advising staff; we have four full-time faculty members who teach in Atlas. Faculty development workshops and outside speakers funded by the Mellon grant have introduced Atlas pedagogy to a broader segment of the faculty (see Carson et al., in press), but willingness to sign on to teach in the program remains limited. We could likely fill more sections if we had faculty members to staff them. Scaling up is always a challenge, particularly for a small liberal arts institution with a tight budget; however, we do have the support of the most recent institutional strategic plan. Embedded in the plan, endorsed by our new president and the Board of Trustees, are at least two initiatives directly supportive of the Atlas program. One goal emphasizes the integration of high-impact practices through our undergraduate curriculum; the other calls directly for the integration of the Atlas program "with the First-Year Program, core curriculum, and capstone, thereby establishing a streamlined, integrative and scaffolded vertical structure" (Manhattanville College, 2016, p. 6) designed to provide pathways and support students in pivotal transitions, support reflection and integration, and incorporate design thinking processes. Six pilot sections of a newly-designed First-Year seminar incorporating Atlas pedagogy are being planned for Fall 2018. With this wind at our backs, we are hopeful for improved support as we iterate forward in our learning journey.

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Alison is also involved in Manhattanville's Design Thinking Initiative. Her research investigates culture change, acculturation, and identity.

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CHRISTINE DEHNE is Dean of the School of Arts and Sciences and Professor of Communication and Media at Manhattanville College. She served as Chair of the Board of Academic Standards from 2014-2017, leading the development of the Atlas Program and serving as its founding Director. An early adopter of ePortfolio pedagogy on campus, she teaches a Communication and Media capstone course based on the Atlas pedagogy. Another curricular experiment led her to team-teach a course of students working collaboratively using design thinking while building mobile applications. An artist, Christine's current research involves devising immersive Theater for the Very Young.

Acknowledgements

Appendix A
ATLAS ePortfolio rubric

	Unsatisfactory (0-1 pt.)*	Satisfactory (2 pts.)	Good (3 pts.)	Exceptional (4 pts.)
Selection of artifacts	The artifacts and work samples do not relate to the purpose of the ePortfolio.	Some of the artifacts and work samples are related to the purpose of the ePortfolio.	Most of the artifacts and work samples are directly related to the purpose of the ePortfolio.	All artifacts and work samples are clearly and directly related to the purpose of the ePortfolio.
Descriptive text	Only some of the artifacts are accompanied by a caption that clearly explains the importance of the item including title, author, and date.	Most of the artifacts are accompanied by a caption that clearly explains the importance of the item work including title, author, and date.	All artifacts are accompanied by a caption that explains the importance of the item including title, author, and date.	All artifacts are accompanied by a caption that clearly and elegantly explains the importance of the item including title, author, and date.
Reflective commentary	The reflections do not explain growth or include goals for continued learning. The reflections do not illustrate the ability to effectively critique work or provide suggestions for constructive practical alternatives.	Some of the reflections explain growth and include goals for continued learning Some of the reflections illustrate the ability to effectively critique work and provide suggestions for constructive practical alternatives.	Most of the reflections explain growth and include goals for continued learning Most of the reflections illustrate the ability to effectively critique work and provide suggestions for constructive practical alternatives.	All reflections illustrate the ability to effectively critique work and provide suggestions for constructive practical alternatives.
Citations	Images, media or text created by others are not cited with accurate, properly formatted citations.	Most images, media or text created by others are cited with accurate, properly formatted citations.	Most images, media or text created by others are cited with accurate, properly formatted citations, though there may be some copyright issues.	All images, media or text created by others are cited with accurate, properly formatted citations.
Navigation	The navigation links are confusing, and it is difficult to locate artifacts and move to related pages or a different section. Many of the external links do not connect to the appropriate website or file.	The navigation links function adequately, but it is not always clear how to locate an artifact or move to related pages or different section. Most of the pages connect to the navigation menu. Most of the external links connect to the appropriate website or file.	The navigation links generally function well. All of the pages connect to the navigation menu. Most of the external links connect to the appropriate website or file.	The navigation links are intuitive. The various parts of the portfolio are labeled, and clearly organized. All pages connect to the navigation menu, and all external links connect to the appropriate website or file.
Usability & accessibility:	The ePortfolio is difficult to read due	The ePortfolio is sometimes difficult to	The ePortfolio is mostly easy to read.	The ePortfolio is easy to read. Fonts and

Text elements, layout, and color	to inappropriate use of fonts, type size for headings, sub-headings and text and font styles (italic, bold, underline). Inconsistent use of font styles (italic, bold, underline) distracts the reader. Color of background, fonts, and links decrease the readability of the text, are distracting and used inconsistently throughout the ePortfolio.	read due to inappropriate use of fonts and type size for headings, sub-headings, text or long paragraphs. Some use of headings, sub-headings and paragraphs promote easy scanning, though others are somewhat awkward. Color of background, fonts, and links are generally used consistently throughout the ePortfolio, though the choices could be more effective.	Fonts and type size are appropriate to their various applications. In general, use of headings, sub-headings and paragraphs promotes easy scanning. Color of background, fonts, and links generally enhance the read-ability of the text, and are generally used consistently throughout the ePortfolio.	type size vary appropriately for headings, sub-headings and text. Use of headings, sub-headings and paragraphs promotes easy scanning. Color of background, fonts, and links enhance the readability and aesthetic quality, and are used consistently throughout the ePortfolio.
Writing conventions	There are more than 6 errors in grammar, capitalization, punctuation, and spelling requiring major editing and revision.	There are a few errors in grammar, capitalization, punctuation, and spelling. These require minor editing and revision.	There are one or two minor errors in grammar, capitalization, punctuation, and spelling.	There are no errors in grammar, capitalization, punctuation, and spelling.

*A score of 0 indicates an element has not been included.