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REFLECTION

Integrating Values-Enacted Learning into Project-Based Learning Courses

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Abstract

This paper explores ways of integrating values-enacted learning into courses designed on project-based learning (PBL) principles. Building on the ways in which PBL courses provide opportunities for students to reflect on the skills they develop while working on their projects, this paper examines ways to include discussions of the values that inform those skills, and how those values are enacted as students perform various learning behaviors and tasks. "Documenting Performance," a senior seminar taught in Spring 2020, served as a case study for this investigation. The course partnered with two theater companies, and students devised projects to document various artistic and administrative processes involved with two productions that were to be staged that semester. When the pandemic shut down both the university and theaters mid semester, students had to quickly reorient their projects. The paper describes how the original course design used PBL principles to help students discover and design their projects. It then goes on to demonstrate how observing students as they revised their projects led to further insights into the connection between values and PBL projects. It concludes with drawing some suggestions derived from observations made both before and after the shutdown, aimed at linking discussions of values to specific course activities so students can enact and reflect on the role these values play in the success of their projects.

Keywords:

project-based learning; values-enacted learning behaviors; student autonomy

Courses designed on the principles of project-based learning (PBL) help students develop the skills needed to execute and assess projects of their own design. These courses also provide opportunities to examine the values that inform the learning behaviors that are enacted in the development of student projects. Often, though, the relationship between values and skills remains implicit. This paper investigates ways to make that connection more explicit to students, so that they not only enact the skills needed to complete successful projects but also actively identify and discuss the values that inform those skills and learning behaviors.

PBL may be defined as "a teaching method where teachers guide students through a problem-solving process [that] includes identifying a problem, developing a plan, testing the plan against reality, and reflecting on the plan while in the process of designing and completing a project" (Wurdinger, 2016, p. 13)¹. In PBL courses, instructors serve more as facilitators than as experts, and students act as principal investigators. Values-enacted learning may be defined as a teaching strategy that intentionally creates opportunities for students to enact and reflect on behaviors that are grounded in particular

Since this definition includes the word "problem," it may help to differentiate project-based from problem-based learning, at least as the distinction was contemplated in the capstone. In a problem-based course, typically all students work on a common research question, often devised by the instructor. For example, a problem-based version of this course might center on "How can theaters attract more college students?" and students, working individually or in teams, might investigate various components of that question-social media, ticket prices-and collectively propose solutions. In the project-based capstone students had a common object of study-the two productions-but they each devised a research question based on their own interests, and their final projects did not result in a cumulative archive. The course also differed from community-engaged learning. While we did partner with two community organizations (the theater companies), they served primarily as the objects of the students' investigations, and not as co-investigators with the students working on a problem whose solution would benefit their organizations.

values.² For example, a course may identify curiosity as an important value, and designate active questioning as a learning behavior grounded in that value. An assignment may ask students to enact curiosity by having them read a play and generate questions about it, and then reflect on how that process enhanced not only their understanding of the play, but also of the value of curiosity to their learning more generally.

To some degree, all teaching methods call for behaviors based on certain values, even if acknowledged only in the breach, when students fail to enact them. Simply stating that points will be deducted from late assignments, for example, implies a value placed on punctuality and requires certain behaviors to enact that value such as time management. A PBL course may be an especially apt place to investigate the links between learning behaviors and values because PBL principles, such as autonomy, already imply certain values and, further, project development necessitates a range of activities where behaviors based on those values may be enacted, observed and assessed.

A variety of research underwrites efforts to integrate values with learning behaviors. For example, research on group work demonstrates that students cannot simply be placed in groups and expected to succeed. Instructors must discuss with students the values and behaviors essential to working in groups successfully, such as compromise and communication (Peterson, 2012; Blowers, 2003; Kapp, 2009). Similar findings also hold true in other areas such as creativity (Armitage, Pihl, & Ryberg, 2015; Cunningham, 2018; Lindvang & Beck, 2015; Servant et al., 2015) and ethics (Gorzycki, Allen, & Howard, 2013). Other scholarship indicates that values-enacted learning remains fertile ground for investigation (Goldstein & Fernald, 2009; Isham, 2018; Nitkin, White, & Shapiro, 2016). This paper seeks to contribute to this scholarship by arguing that the success of student projects in PBL courses depends not only on mastery of content or skills, but also on intentionally integrating opportunities to define, discuss and evaluate the values-enacted behaviors that are equally important to completing projects.

"Documenting Performance," a senior capstone taught in the English Department of Temple University in Spring 2020 serves as the case study for this investigation. In the course, which partnered with two professional theater companies in Philadelphia, each student devised a project that documented some aspect of the artistic or administrative processes involved in producing plays. Students defined research questions on an array of processes and then collected and created content to document those processes.³ Projects took many forms: a written report, a narrated slide show, a video, or a website. When the pandemic caused theaters to shut down and the University to move online, many projects and some of the original plans to assess the course were upended. But this disruption also created unanticipated opportunities to gather information by observing how students reoriented their projects, especially those who had planned to document a production that had now been shut down.

Assessment of the capstone originally planned to collect and evaluate data including: 1. Course documents and assignments; 2. Class discussions and student conferences; 3. Project proposals; 4. Project plans; 5. Workshops on the proposals and plans; 6. Student self-reflection papers; 7. Final projects; 8. Course evaluations; 9. Notes kept by the instructor throughout the semester. Some of this information was gathered (1, 2, 3, 7 and 9), and some of it was lost due to the pandemic (4, 5, 6 and 8). While that loss is regrettable, the move to online classes afforded unanticipated opportunities to collect information which still addressed the original research question of this paper. This information includes: 1. Individual Zoom conferences with students; 2. Email communications with students and theater artists;

² Values-enacted learning is modeled on the concept of "values-enacted scholarship" which Agate et al. (2020) define as an initiative that aims to "cultivate fulfilling habits of scholarship" wherein "an explicit set of shared and agreed-upon values are instantiated in the work(s) produced" (p. 2).

³ In these documenting projects, collection involved gathering documentation that was generated by the production process, such as costume designs or programs. Creation involved making new content for the project such as an interview with an actor.

⁴ In response to the chaos of the shutdown, it was decided to eliminate the self-reflection paper, a particularly unfortunate loss to the assessment plan. While course evaluations were available, the university did not require them in Spring 2020, and so return rates were negligible.

3. Revised project proposals; and 4. Final projects. The information collected both before and after the shutdown informs the observations, assessments, and recommendations in this paper.

Part I provides descriptions of the course design and plans to integrate values-enacted learning with PBL principles. Part II recounts various ways students reoriented their projects after the shutdown, and delineates some unexpected discoveries about their behaviors. Drawing on information gathered both before and after the shutdown, Part III assesses these findings and offers some suggestions for further improving the integration of values-enacted learning with PBL principles.

I.

Temple University is a public research university located in Philadelphia, a city that enjoys a vibrant theater scene. According to the latest available data, Temple enrolls around 27,000 undergraduates, the majority of which (75%) are Pennsylvania residents. Although many of these residents come from the Philadelphia region, few have attended local theater. The College of Liberal Arts enrolls around 5,300 of those undergraduates of which 390 have declared English as a primary or dual major (Temple, 2020). All majors are required to take a senior seminar, capped at 20 students. Five capstones were offered in Spring 2020; students selected "Documenting Performance" for a variety of reasons: an interest in the topic, previous courses with the instructor, a good fit with their schedules. Of the nineteen majors enrolled, seven had declared dual majors in secondary education, theater, political science, economics or dance. All of the students needed to complete the course in order to graduate that May.

The course partnered with two professional theater productions: *Babel*, written by Jacqueline Goldfinger, directed by Deborah Block, and produced by Theatre Exile (in production from January to early March), and *Everybody*, written by Branden Jacobs-Jenkins, directed by Elizabeth Carlson-Guerin and produced by the Curio Theatre Company (scheduled for production from mid-

March to May). Although the whole class read both plays, each student chose one of the two productions as the focus of their projects which documented processes such as script revision, costume design and marketing. Thanks to previous relationships with the instructor, both companies provided generous access to their work: students could observe rehearsals, examine script drafts and design sketches, interview artists and more.

The course was divided into two equal parts. Part I was designed to familiarize students with the plays, with theater and documentation processes, and to begin identifying possible projects. Several theater artists and administrators visited class to help familiarize students with the creative processes of producing a play, from writing the script to opening night. They also described the administrative processes that support production such as fundraising and marketing. As the visitors walked through these processes, they highlighted the kinds of documentation generated each step of the way. To introduce some methods of documentation and related ethical issues, students read selections from scholarship, and completed a number of assignments, such as site assessments (where they evaluated online performing arts archives), and a version of show-and-tell, described further below. In addition to these activities, students read both plays with a questioning mindset with an eye toward identifying research questions for their projects.⁵

Part II was dedicated to project development. Students drafted proposals which defined a research question, identified ways to collect or create documents needed to address that question, and contemplated related issues such as scope and scale. In project plans, students were to construct a detailed, step-by-step timeline of the tasks required to implement their proposals. In addition to a series of individual conferences with the instructor, workshops were planned for both the proposals and plans wherein students would provide feedback to each other. Part II emphasized the processes of project development, and was not particularly concerned with the final product. To be sure, projects could not simply be collections of information; they also had to analyze that information in light of the research question. Nevertheless it did not matter much if students had the

⁵ Students were also required to attend performances of both plays. All students saw Babel; Everybody suspended production before rehearsals started.

technical skills, for example, to build a website; they could instead mock up a site on paper, and describe its contents and functionality. The semester was to culminate in project presentations, to which all contributing artists would have been invited.

In sum the course was designed to provide opportunities for the instructor to collect and assess information about how best to integrate values-enacted behavior into project-based learning. To limit the number of variables in this investigation, group work was excluded from the course design, since it would have introduced another set of factors to plan, implement and evaluate. That said, it is quite possible to imagine a version of this course where students worked in teams on their projects.

The various strategies used within this course design were all, in one way or another, aimed at enacting a foundational PBL principle: fostering student autonomy. Since most students believed they did not know enough about either theater or archiving to be entrusted with so much responsibility for their projects, many activities --especially early in the semester-- were dedicated to activating another key PBL principle: the movement from knowns to unknowns, based on the conviction that what students already know could serve as a point of reference for exploring what they do not yet know. What follows are descriptions of some core PBL principles, and ways in which the course attempted to activate them.

PBL fundamentally re-aligns the student-instructor dynamic such that while instructors never fully relinquish authority, they gradually share it more equitably with students (Weimer, 2013). Students function more as principal investigators, while instructors serve as facilitators. As such, students have both the freedom and responsibility to execute high-level decisions about both the form and content of their own work. To be sure, in most capstone courses students have some degree of choice about the content of their work (i.e., the topic of their seminar papers), but major decisions about form have already been determined by the instructor: students must produce an academic paper of a certain number of pages, citing a certain number of sources, formatted according to a particular style guide, and often even following a particular argumentative structure such as the thesis-evidence-conclusion model (Hayden, 2017).

Students acculturated to that level of specificity may

experience a good deal of anxiety over the autonomy with which they are entrusted in a PBL course (Bledsoe & Baskin, 2014; Donham, Heinrich, & Bostwick, 2009; Inderbitzin & Storrs, 2008; Raney, 2003; Weimer, 2013). "Documenting Performance" was designed to enact a gradual shift toward increasing student autonomy. While some students expressed excitement about the level of freedom they enjoyed, others expressed concern, especially about the formal requirements for the projects. Most questions early in the semester, in fact, were about format and, by implication, grading: If I do a PowerPoint, how many slides? If I make a video, how many minutes? If I conduct an interview, how many questions? One student cut to the chase: "I do better when I know exactly what is expected of me. I just do better when someone tells me what to do." These comments closely echo Weimer's (2013) observation that many students' "idea of a good class is one where the teacher tells them exactly what to do" (p. 88).

Most students also expressed concern about their mastery of content: if they knew little about theater, how would they know what to document? One PBL strategy for addressing these concerns is to help students realize that they already know a great deal that will be useful to their projects, even if a connection to theater is not immediately evident. Based on works such as Ranciere's The Ignorant Schoolmaster (1991), and reaffirmed by other scholarship (Hayden, 2017; Weimer, 2013), PBL assumes that students' current knowledge can be analogized to new knowledge; that, in this case, everybody already knows something relevant to theater-or that could be made relevant -- even if they have no direct experience with theater itself. Instructors facilitate a process by which students identify some of what they already know, and then discover ways to connect that knowledge to what needs to be known next in order to execute their projects.

The semester began by distributing a short survey which asked students about their experiences with reading plays, attending performances, and participating in productions. The results showed that the class ranged from a few students who had been actively involved with theater most of their lives, to students who would be attending their first professional production. Discussing the results of the survey in class provided several opportunities to allay some anxiety in students with little theater experience, first by assuring them that they

were not alone in that regard. Further, since the course was not about producing plays, but rather documenting the processes by which plays are produced, a lack of familiarity with those processes could actually be an advantage since the job of documenters is to observe and ask questions about anything that they find interesting or confusing and in need of explanation. Those too familiar might take for granted aspects of the process that might otherwise productively be documented, if you think to ask. "Beginner's mind" might also inform choices about how to present material after it is documented, since inexperienced students will be alert to the kinds of contextual information they need to make sense of the content (McMillan & Wotanis, 2018; Reinsmith, 2000).

Similarly, to help discover points of contact with the work of documenting and archiving-- with which no student was familiar -- the class engaged in a show-andtell exercise. Students shared an item of personal value with the class, and answered questions that opened up a discussion of technical and ethical issues involved in archiving. As an example, one student brought in a journal they kept on a trip to Europe. They started out by giving basic information about the journal: what it was, where and when they traveled. This descriptive information points to the need for metadata about objects in a collection. The student also allowed that it would be difficult for anyone to understand many of the entries without further information about names, places and events; this points to the need for contextual information to assist users of archival materials. When asked if they would permit just anyone to see the journal, the student answered no, some of it was too personal, thus underscoring the need to preserve confidentiality and to control access. When asked if an exact replica would adequately replace the journal if it were damaged or stolen, the student answered no, there was a significance imparted to the original item, pointing to issues of authenticity and preservation. Finally, the student naturally fell into recounting stories related to the journal-- why it was important, the memories it evoked. Such moments helped students start to consider the importance of storytelling in their projects: documenting preserves not only objects, but also the stories those objects help us to tell.

An assignment to read both plays with a questioning mindset was also part of this process of working from

knowns to unknowns. Having students ask questions-rather than respond to questions asked by the instructor-is a key PBL strategy for helping them take ownership over their projects (Browne, Rex, & Bouzat, 2018; Donham, Heinrich, & Bostwick, 2009; Valtanen, 2014). Students were instructed to ask as many questions as possible about the plays, with the ultimate goal of developing them into potential projects. They were encouraged to steer away from "What does this mean?" questions (standard fare for English majors) and toward "How will they do that?" questions, which would help keep the focus on production processes. For example, while interrogating Babel (which is about genetic engineering), one student became curious about the sudden appearance of a talking stork. The student asked a series of questions based on this unusual moment: how will the costume be designed to be workable for the actor who wears it? Where do you get such a costume and how much does it cost? Further questions focused on the materials one might need to document the costume such as interviews with the actor and costume designer; examination of design sketches and the costume itself. From there more questions followed: will all or some of this material be accessible? what equipment might be needed to collect or create it? From that original curiosity about a strange costume, a project began to take shape.

The movement from knowns to unknowns both enacted the value of autonomy and helped those students with minimal theater experience to find projects that were anchored in their own interests. Some examples of projects discovered through this process include:

- 1. A dual English-Economics major noted how frequently theater administrators talked about the money needed to run a company and mount productions. From that observation, a project evolved around documenting the financing and budgeting required to produce *Babel*, resulting in a website.
- 2. A dual English-Political Science major with experience in collecting and analyzing data from public opinion surveys, was interested in capturing audience response to *Everybody*. They devised plans to survey a representative sampling of audiences, and to present an analysis of the results in a presentation and written report.

3. Three students, with interest and experience in graphic design or social media, devised projects to document and assess the impact of various elements of the marketing campaigns for the productions: the effectiveness of graphics in capturing attention; word-of-mouth about the plays on social media. These projects variously took form in a website, a presentation, and a written report.

4. Two students happened to live by the venues where the performances were presented. In both cases, they walked by these venues every day, but knew little about their histories, so they devised projects to investigate how, in one case an old tire warehouse in South Philadelphia became a theater, and in another, how a neighborhood church in West Philadelphia came to house a performing space. These projects were presented as narrated slide shows with accompanying written reports.

The variety of projects on this list illustrates the challenge of grading in a PBL course. Projects can be so different in both content and form, it can be difficult to articulate a common set of standards by which to evaluate them all equitably. The specific expectations for a website, for example, may be quite different from those for a video, even if they were both documenting the same part of the production process. This lack of specificity in how projects would be graded was a particular source of anxiety for many students who, for the most part, had become acculturated to assignments with detailed instruction templates and assessment rubrics. Moreover, it was particularly challenging to delineate a relationship between grading and the goal of integrating valuesenacted behaviors: should values figure into a grade calculation, and if so, how? Course design was wholly inadequate in its address to all of these questions. A more cognizant grading plan is outlined in Part III.

II.

The University began online classes on March 16. *Babel* ended its scheduled run on March 8, before theaters shut down. *Everybody* was scheduled to begin rehearsals on March 23, but the production was shut down so projects centered on that play lost their primary source. Students had completed drafts of their proposals, and the class was just about to begin workshopping those drafts. Some students had to travel long distances on short notice to

return home; others and their families had already begun to experience financial and health hardships. It was clear that we could not simply attempt to accomplish everything online that we had planned for in-person. On March 19, I met with each student individually on Zoom. After checking in on their well-being, we screenshared their proposal drafts to discuss what work, if any, they had already completed (some students working on *Babel* had already started their projects); how much time they had to devote to their work, and how to revise their projects so that they could complete them and graduate in May.

After these conferences and follow up emails, most revision plans were in place. Some students elected an option offered to anyone who, for whatever reason, knew they would not be able to pursue their project as planned in any form. These students expanded their proposals into a longer paper that described any work they had completed, outlined the work they had hoped to accomplish, and then speculated about the discoveries they had hoped to make with regard to their research question. About a quarter of the class took this option. Three projects, all on Babel, were far enough along that completing them required only minor adjustments. For example, the student working on the stork costume had already visited the theater before the shutdown, photographed the costume, and video-recorded an interview with the actor who wore it. The designer sent the student PDFs of design sketches, and conducted an interview on Zoom. Some projects were never heavily dependent on in-person work, and were able to shift with only minor modifications. For example, the two students working on venue histories were able to complete most of their planned research using online archives of photographs, architectural drawings, and newspaper accounts. Another student who had planned to document media coverage of *Everybody* pivoted instead to document coverage of the impact of the shutdown on theater companies.

Two projects, both highly dependent on in-person observations of *Everybody*, provided unanticipated opportunities to observe student behaviors that were particularly salient to the research question of this paper, and eventuated in discoveries about how better to integrate values-enacted behaviors with PBL principles. Since the discoveries made by observing both

projects were generally the same, only one project is described here.

A dual major in English and Theater grew curious about a central conceit of Everybody: to dramatize the impact of chance in our lives, the playwright specified that each actor would play multiple roles, and the combination of the roles they would play at any given performance was to be determined by lottery, drawn by audience members. On any given night, the actors had no idea which roles they would be playing until right before the show started. Based on their own experiences, the student knew the important role a director plays in helping actors navigate the vulnerability and uncertainty involved with any stage performance. The element of chance in Everybody only seemed to intensify that uncertainty, and so the student wanted to observe how the director worked with actors in rehearsals to prepare for a dizzying number of combinations of roles.

In our Zoom conference, rather than attempt to solve an unsolvable problem (there were now no rehearsals to observe), we stepped back to the original research question and asked: What was important to you about that question in the first place? What initially motivated your curiosity? The student readily identified the core value that informed the question: how does someone in a leadership position (here, the director), behave towards those in their charge who are experiencing vulnerability or uncertainty? Before our conference, the student had observed a Zoom meeting the director of Everybody had generously invited the class to attend, wherein the director and the cast discussed the fate of their production.⁶ The student realized that their observation of this meeting provided a different, and perhaps more meaningful, opportunity to witness a director working with their actors in the face of uncertainty and vulnerability, now not about the logistics of playing roles by chance, but with the higher stakes of shuttering the production and losing significant income. This was potentially a way to preserve what the student most valued about their project. A written summary of that meeting (a recording was not used in order to preserve confidentiality) along with a video of a follow up interview with the director, provided sufficient information to engage the research question, and interpret the findings in a Sway presentation.⁷

Observing how students reoriented their projects led to several insights. First, it is noteworthy that when given the option, 25% of the class elected to write something close to a traditional seminar paper -- the expansion of their proposals following an outline provided by the instructor. From the conferences, it was evident that students selected this option for many different reasons; a few students expressed regret at having to do so because they were excited about their original projects. But the variety of reasons does not disqualify an important observation: some students opted for a familiar format, perhaps especially in the face of uncertainty. Earlier in the semester, the perceived uncertainty may have been about an instructor who did not give the instructions students expected. Here it may have stemmed from the need for re-assurance that they would be able to complete this required course and graduate on time.

Working with the English-Theater major (and one other student whose project was similarly revised) uncovered a new factor to include in the design and assessment of PBL courses: in addition to considering the values-enacted behaviors needed to execute projects, it is also important to consider the values that inform and motivate those projects in the first place. The two factors are of course related, but the values that inform students' choices of research questions may be primary, as they become the foundation of all subsequent choices and behaviors enacted to explore those questions. Both students were able to transcend the specifics of their plans and talk more generally about what they valued most in their projects. And those conversations revealed that ultimately it was not the knowledge or skills-based experience alone (for example, the student's own experience as an actor working with directors) that informed their choices, but also what they valued about those experiences(how relationships help navigate uncertainty).

Identifying the values on which their research questions were grounded enabled the students to

⁶ Initially the expectation was for the shutdown to last only a few weeks, so at the time of the meeting the cast was deciding whether to continue rehearsals and reschedule the performances or to suspend the production indefinitely.

⁷ The instructor, student, and director collectively decided not to interview the actors out of respect for the challenges they were facing in the moment.

shift their plans significantly while maintaining some engagement with their original motivations. It also provided the opportunity to anchor other values-enacted behaviors-- flexibility, resourcefulness, collaboration-- to that foundation. Perhaps students could turn to these foundational values as a basis for finding alternative plans when needed, and also as a basis for reflecting on their projects overall. While the course design included opportunities to discuss the values-enacted behaviors likely to aid in the execution of projects, it did not provide a place to discuss the values that originated the projects. Those discussions only arose in response to the impact of the shutdown on several projects, and provided useful insights for ways to improve the course.

III.

The following suggestions are based on observations made both before and after the shutdown. They include reflections on elements of the course design that generally worked well or needed relatively minor modifications, and also new discoveries about how to strengthen the integration of values-enacted learning with PBL principles.

Because the class was fortunate to have spent half the semester together in person, we were able to acclimate to the ground rules of the course, at least in part. Therefore, it is reasonable to assume that certain PBL principles had been sufficiently established such that they were able to help students through the sudden need to rework their projects. These included at least some acclimation to the uncertainties involved in developing projects, the autonomy required to execute them, the emphasis on process over product, and cultivation of a questioning mindset.

The very thing that made some students anxious at the beginning of the semester, navigating uncertainty, likely helped carry them through to the end. Uncertainty and contingency were intentionally designed into the course, primarily by having students develop the forms of their projects over time, rather than providing them with a replete set of requirements at the outset. As Hayden (2017) says, in any PBL class, regardless of topic, "students [have] to confront uncertainty at every step in the course" (p. 145). The ability to collect or create content was also contingent on some factors beyond the

students' control, even before the pandemic. There was no guarantee they would be able to access the documents or interview the artists that they had hoped to. From the first day, and repeatedly thereafter, students were advised: your plans will change, so it is wise to have alternatives at the ready. And while no one in January could have anticipated the circumstances of March, it did not seem that any student was worried that the shutdown would entirely upend their plans. For some, it became an opportunity to pivot their projects to respond to the moment; for others, it was yet another contingency that required patience and flexibility.

Students also knew they would have both autonomy and primary responsibility for deciding how to redirect their projects. In the post-shutdown Zoom conferences, I facilitated discussions about revising plans, but I did not make any decisions for the students, any more than I had before the shutdown. As evidenced by their revised plans, every student was sure-footed in taking the lead when assessing the state of their work, generating and evaluating possibilities for redirection, and completing decent projects, in time enough to graduate, even if they were not as ambitious as initially conceived.

An emphasis on process also served students well both before and after the shutdown. From the start, students knew they were not expected to complete fully-realized projects; the focus instead was on the various stages of development. The syllabus detailed many intermediate deadlines that now served, where necessary, as final endpoints. If a student was at the proposal stage, rather than expect that a good project plan could emerge from a weak proposal--we reframed the endpoint as writing the strongest possible expanded proposal. Students also knew that their course grade -- and their graduation-did not rest on one high-stakes final product. Backloading evaluation creates anxiety under the best of circumstances, so the flexibility afforded by the focus on process helped calm the waters in a moment of intense uncertainty.

While assignments premised on the questioning mindset worked reasonably well, further reflection indicates opportunities to incorporate values-enacted learning more explicitly. For example, the play reading assignment required high levels of attentiveness and curiosity to generate many questions. It also gave the

students concrete actions--"read the play; ask lots of questions"--instead of a vague exhortation to "be curious!" Thus the assignment could be an opportunity explicitly to link a value (curiosity) to enacting certain learning behaviors related to that value (asking questions). While the original assignment made this connection implicitly, it could be improved if while reviewing this (or similar) assignments, the class identifies an array of behaviors that might help them execute the task, and then follows up with a brief reflection after the assignment is completed.

In the original course design, the starting point for projects was identifying a research question, but the starting point for any discussion of values came after that, in contemplating the steps it would take to develop that research question. This design worked reasonably well, but it often missed opportunities to integrate values with the work at hand, in part because the foundational motives for the projects had never been expressly articulated and discussed. Strategizing with students about ways to reorient their projects in response to the shutdown revealed the importance of including a discussion of values with regard to the research question itself. Incorporating that discussion more explicitly into the course may establish a stronger foundation for all subsequent efforts to connect values-enacted behaviors with project-related activities. There may be several ways to achieve these goals.

Even before they begin to develop research questions, it could be made clear to students that their autonomy encompasses not only decisions about the shape of their projects, but also about the values-enacted behaviors on which those projects depend. For example, to signal that the identification, development and assessment of values-enacted learning is an integral part of the course, it may be useful to begin the semester by having students self-assess their work habits and behaviors, adapting a strategy described by Blowers (2003) with respect to group work. This exercise need not take the form of a personality assessment, or of a prompt to list strengths and weaknesses. The conversation could begin more indirectly by asking students to write briefly about a project that went well for them and one that presented some challenges. The project need not be limited to schoolwork, and success can be defined on their own terms. These accounts could serve as a basis for discussions where student and instructor together identify the underlying behaviors behind both successes and challenges. From there students might prioritize some behaviors they would like to develop while working on their projects and, just as importantly, some that they might want to declare off limits, areas that may be unproductive to challenge at this point in their lives.

These discussions might even help determine the kinds of projects students decide to pursue, which would allow them to capitalize on their current strengths, work on improving in certain areas, or even avoid staking a project too heavily on a self-perceived weakness (Lewis, 2018). If, for example, a student identifies curiosity as a strength, they may want to consider a project that includes conducting interviews. Alternatively, if a student is uncomfortable with interviews, they may want to challenge that discomfort, or if they prefer, design a project that does not require any interviews. Similarly, these discussions may help to identify students who may find PBL methods difficult at first. If a student says they are "good at following instructions," this information might help the instructor to strategize accordingly so that the student gradually works to provide some structure for themselves, rather than depending primarily on external direction.

This inventory of values and learning behaviors, in turn, could be referred to as students develop research questions. We often invite students to contemplate the value of their work by asking the "so what?" question when developing a thesis for an academic research paper. But this version of the question primarily asks students to consider the importance of their work to other people -- the scholarly conversation in which their paper participates. As discovered at shutdown, an innerdirected version of this question is also useful: why is this project important to you? How will working on it contribute to the development of some of the values discussed in the inventory, and provide opportunities to enact these values in your work? Perhaps students could write a values action plan as part of their proposals, stating both the value of the project itself, and the kinds of values-enacted behaviors needed to design, execute and assess the project. For example, in the project on actors randomly playing multiple roles, the foundational value may be set on the ability of people in leadership positions to help those in their charge to manage uncertainty so that they can successfully do their work.

And a values-enacted learning behavior central to the project may be collaboration, both as observed between the actors and director, and between the student themself and the artists they were documenting.

Further, tracking behaviors could be incorporated into project proposals and plans, as they have now been identified to be as crucial to the success of the project as any content or skill. Just as students track progress on tasks, they can monitor attendant behaviors, assessing and revising them, in consultation with the instructor. Key here is building in periodic opportunities to reflect on how these values inform their learning. The original course design included only one such opportunity, a selfevaluation at the end of the semester. This was a mistake, not only because we never got to it, but also because it would have been too late to be of any actionable use. Perhaps at various points in the project, students might use any number of proven methods to reflect on their work: individual reflection papers, journals, letters, learning charters, and the like (Grossman, 2009; Johansson & Svensson, 2019; Parkinson, 2005). For example, the theater student might reflect on the role resourcefulness played in reorienting the project to the director's Zoom meeting with the cast.

The fact that, when given the option, 25% of the students chose a more familiar format for their projects may provide some clues on how better to anticipate and manage the anxiety that often manifests in PBL courses. A key realization here is that not all students will experience the same degree of liberation and excitement about gaining so much autonomy, at least not immediately. Instructors always navigate a fine line between helping students challenge their resistances, and knowing when to back off, because pressing on might be unproductive if not harmful. A new subject matter, or an old subject matter at an advanced level, or a new teaching method, can provoke all sorts of defensiveness in all kinds of students, perhaps especially in those who have figured out how to succeed under predictable rules. While there will be times to sustain a level of uncertainty so that students will need to activate certain behaviors to push through, there will also be times where it may make sense to incorporate more traditional conventions, because too much newness all at once can be counterproductive. Students need some familiar guideposts to feel secure enough to face new challenges.

And by far, the single most important place to incorporate some familiar guideposts is in the area where students expressed the most concern: grading. It may be useful, for example, to experiment with a hybrid model of a values-based and traditional grading scheme. The PBL principle of autonomy suggests that students should have shared responsibility not only for developing their projects, but also for developing the criteria by which those projects will be evaluated. But if students are initially anxious about devising their own projects, they are even more daunted by developing ways for their work to be graded--which has almost always been the purview of the instructor (Meinking & Hall, 2020).

Even if all projects are very different from each other, there is still value in obligating all students to a common set of standards, originating in part from the instructor. But these standards do not have to come from the instructor alone. Instead, it may be worth establishing some common grounds upon which all work will be evaluated together in discussion with the class. In the capstone, for example, such common expectations collectively established might have included: students must complete all assignments; they must participate in all workshops, providing written feedback for every draft they have been assigned; all projects need a well-defined research question; all projects must create or collect sufficient documentation to develop that question meaningfully; all projects must include an interpretive or analytical component, and cannot merely be a collection of information. To be clear, the original course design failed even to provide an instructor-generated version of this list. The suggested corrective is to co-create such a list with the students, so that expectations are clear, and some sense of equitable evaluation across very different projects might be sustained.

In addition to common standards, it may be worth working with each student to establish specific standards by which to evaluate their individual projects. As observed at shutdown, students were able to articulate what they valued most about their work, and had internalized some idea of what a successful version of their projects would look like. Perhaps those values could also be incorporated into self-assessments, course grades, or both. In this way, projects will be at least partly evaluated in terms that matter most to students. Further, there may be some consideration of the ways

their own standards intersect, or fail to intersect, with the common standards for the whole class. This could be a worthwhile question to consider: can your own values always be realized and measured in terms of common standards, or are there also places where the two sets of standards seem to deviate or even conflict?

Although the findings of this investigation derived from a particular course taught at a very unusual moment in time, they do indicate the opportunities and merits of integrating values-enacted learning into courses designed on PBL methods and principles. Since many different academic disciplines offer PBL courses, it seems reasonable to assume that the strategies suggested here for including discussions of values in those courses could be profitably adapted. While projects will always be specific to a course, the PBL principles and values-enacted behaviors upon which those projects depend are very likely generalizable.

With that prospect in mind, this investigation concludes with three general conditions that may facilitate integrating discussions of values in PBL courses.

(1) Develop a vocabulary to make the underlying assumptions of the course design explicit and transparent;

doing so allows students and instructors to discuss openly and critically the values and principles upon which the course is based. Further, provide frequent opportunities for students to use this vocabulary to reflect on the values-enacted behaviors that enable their work. (2) Anchor any discussion of values to specific learning activities. Doing so will keep these discussions from growing too abstract. It will also demonstrate to students that their own personal values are not being judged. Discussions center on how values inform and are enacted through project-related tasks, and not on the student performing those tasks.

(3) Finally, trust that students are willing and able to have these conversations, even if they at times seem hesitant. At first they may seem reluctant to accept so much control over their own projects, but grounding those projects in discussions of values-enacted learning enables students to work responsibly, productively, and creatively.

References

Agate, N., Kennison, R., Konkiel, S., Long, C.P., Rhody, J., Sacchi, S., & Weber, P. (2020). The transformative power of values-enacted scholarship. *Humanities and Social Sciences Communications*, 7(1), 1-12.

Armitage, A., Pihl, O., & Ryberg, T. (2015). PBL and creative processes. *Journal of Problem Based Learning in Higher Education*, 3(1), 1–4.

Bledsoe, T.S., & Baskin, J.J. (2014). Recognizing student fear: The elephant in the classroom. *College Teaching*, 62(1), 32–41.

Blowers, P. (2003). Using student skill self-assessments to get balanced groups for group projects. *College Teaching*, *51*(3), 106–110.

Browne, M.N., Rex, J.M., & Bouzat, F. (2018). Once I

recognize the need to ask, encourage, and nurture classroom questions: How do I spring into action? *College Teaching*, 66(4), 187–189.

Cunningham, B.J. (2018). Re-focusing the creative process: Blending problem-based studio practice and online reflection. *Journal of Problem Based Learning in Higher Education*, 6(2), 144–152.

Donham, J., Heinrich, J.A., & Bostwick, K.A. (2009). Mental models of research: Generating authentic questions. *College Teaching*, 58(1), 8–14.

Goldstein, G., & Fernald, P. (2009). Humanistic education in a capstone course. *College Teaching*, 57(1), 27–36.

Gorzycki, M., Allen, D., & Howard, P. (2013). Assessing ethical thinking as a cognitive task: A reliable rubric. *Currents in Teaching and Learning*, 6(1), 40–52.

- Grossman, R. (2009). Structures for facilitating student reflection. *College Teaching*, *57*(1), 15–22.
- Hayden, W. (2017). And gladly teach: The archival turn's pedagogical turn. *College English*, 80(2), 133–158.
- Inderbitzin, M., & Storrs, D.A. (2008). Mediating the conflict between transformative pedagogy and bureaucratic practice. *College Teaching*, *56*(1), 47–52.
- Isham, J. (2018). How should we prepare students to address the challenges of our time? *Currents in Teaching and Learning*, 10(2), 2–8.
- Johansson, M., & Svensson, T. (2019). Individual reflection paper: Supporting students' learning in the critical phase of self-directed learning in PBL. *Journal of Problem Based Learning in Higher Education*, 7(1), 97–106.
- Kapp, E. (2009). Improving student teamwork in a collaborative project-based course. *College Teaching*, *57*(3), 139–143.
- Lewis, C. (2018). Hearing a play: Learning from radio Shakespeare. *College English*, 80(4), 364–386.
- Lindvang, C., & Beck, B. (2015). Problem based learning as a shared musical journey: Group dynamics, communication and creativity. *Journal of Problem Based Learning in Higher Education*, 3(1), 1–19.
- McMillan, L., & Wotanis, L. (2018). Those who can't, teach? Project-based learning for teachers and students in the digital age. *Currents in Teaching and Learning*, 10(2), 51–57.
- Meinking, K.A., & Hall, E.E. (2020). Co-creation in the classroom: Challenge, community, and collaboration. *College Teaching*, 68(4), 189–198.
- Nitkin, M.R., White, S.K., & Shapiro, M. (2016). Professional skills as cornerstones of liberal education: Moving students from theory to action. *College Teaching*, *64*(1), 10–18.

- Parkinson, D.D. (2005). Unexpected student reflections from an underused genre. *College Teaching*, *53*(4), 147–151.
- Peterson, C.H. (2012). Building the emotional intelligence and effective functioning of student work groups: Evaluation of an instructional program. *College Teaching*, 60(3), 112–121.
- Ranciere, J. (1991). The ignorant schoolmaster: Five lessons in intellectual emancipation. Stanford University Press.
- Raney, D. (2003). Whose authority?: Learning and active resistance. *College Teaching*, *51*(3), 86–93.
- Reinsmith, W.A. (2000). Beginner's mind. *College Teaching*, 48(1), 12–14.
- Servant, V.F.C., Noordzij, G., Spierenburg, E.J., & Frens, M.A. (2015). Thinking in possibilities: Unleashing cognitive creativity through assessment in a problem-based learning environment. *Journal of Problem Based Learning in Higher Education*, 3(1), 46–62.
- Temple University. (2020). Fall 2020 student profile.https://www.temple.edu/sites/www/files/Student%20Profile%20Fall%202020.pdf. Retrieved March 2, 2022.
- Valtanen, J. (2014). Question-asking patterns during problem-based learning tutorials: Formal functional roles. *Journal of Problem Based Learning in Higher Education*, 2(1), 29–44.
- Weimer, M. (2013). Learner-centered teaching: Five key changes to practice. Jossey-Bass.
- Wurdinger, S.D. (2016). The power of project-based learning: Helping students develop important life skills. Rowman & Littlefield.