

## ARTICLE

# Synthesizing Project-Based Learning and Universal Design for Learning to Enhance Student Success: A Review and Reflection

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## Abstract

The principles of project-based learning and Universal Design for Learning overlap in significant ways that when combined can improve student success in the classroom. Project-based learning incorporates student interests, encourages student choice and metacognition, and allows for multiple ways of communicating mastery. Moreover, it helps students to connect prior knowledge with new information, further enhancing student success. By drawing from Universal Design for Learning principles when designing curriculum, instructors create more successful classrooms for their students. This article reviews current Universal Design for Learning and project-based learning research, shows the relationship between the two ideologies, and reflects on a classroom design influenced by the primary elements of Universal Design for Learning and project-based learning.

## Keywords:

Universal Design for Learning, curriculum, alternative assessment, project-based learning

Drawing from constructivist learning theory, this essay explores contemporary research in Universal Design for Learning (UDL) and project-based learning (PjBL) to illustrate how UDL and PjBL complement one another to support student success. The essay reflects on an upper-level British literature course whose curricular design combines the UDL framework and PjBL pedagogy. This combination encourages student engagement and motivation, enhances curricular understanding of the subject matter, and helps students connect unfamiliar literature to their everyday lives. It concludes by proposing PjBL+UDL alternatives for courses outside of English studies.

PjBL and UDL embrace similar conceptions of learning that follow from constructivism. Constructivist learning theory asserts students create their own knowledge when they combine, apply, and reflect on their experiences. Drawing from both Jean Piaget's and Paulo Freire's theories of education, constructivism posits that rather than a product, learning is a process that students must actively engage. Classrooms based on a constructivist theory privilege active learning, student choice, and a broader understanding of the lived experiences of students and their contexts above the more traditional lecture style (Allen, 2022).

## Universal Design for Learning

Universal Design for Learning is “a framework to guide the design of learning environments that are accessible, inclusive, and challenging for every learner” (CAST, 2024); faculty and instructional designers use the framework to guide course development rather than respond in

## Synthesizing PjBL and UDL *continued*

real time to student needs and accommodations (Hayward et al., 2022). Table 1 shows UDL's three main categories (design multiple means of engagement, design multiple means of representation, and design multiple means of action and expression), and each category's respective guidelines. Each category includes a guideline designed to improve student access, support, and executive function, illustrated by the rows of the table. Each guideline contains 2-5 "considerations." These considerations, such as "optimize choice and autonomy," in the "Welcoming Interests and Identities" section, act as checkpoints in curriculum design. (For a complete list of the considerations, see the CAST website: <https://udlguidelines.cast.org/>).

Currently, faculty in the humanities, education, and affiliate disciplines such as language instruction, reading, and literacy are more likely to implement UDL than those in STEM and the allied health professions (Hayward et al., 2022; Joseph & Añazco, 2025). The lack of professional development, faculty conceptions about time investments, and a belief that making information more accessible decreases instructional rigor are responsible for lower levels of UDL integration in many disciplines, particularly in STEM and adjacent fields (Casebolt & Humphrey, 2023; Chini et al., 2021). Despite these concerns, faculty across disciplines who have adopted UDL have found higher student retention and success (Casebolt & Humphrey, 2023) and lower levels of classroom inequity across modalities (Redstone & Luo, 2025).

## Project-Based Learning

While UDL is a framework to support curricular design, PjBL is a student-centered pedagogical model that encourages student choice, critical thinking, and creativity. It is supported by constructivist learning theories which purport that learning happens when students create knowledge themselves through interaction with the material rather than passively receive knowledge from their teachers (Allen, 2022). In PjBL classrooms students develop a question, design a research procedure, determine materials needed, identify a target audience, and decide how they will display their findings or what they have learned (Bell, 2010). Often, but not always, PjBL can be completed in collaborative spaces, allowing students to practice interpersonal and intercultural communication skills (Daskou & Tzokas, 2020). PjBL "introduces real-world scenarios, encouraging students to engage with complex issues. It enhances their critical thinking skills and aligns with the principles of self-regulated learning as students take charge of their learning journey" (D'Elia et al., 2025, p. 12). Metacognitive practices and investment in one's learning journey are hallmarks of PjBL classrooms. Loyens et al. (2023) identified PjBL assignments as those in which "students seek solutions or clarifications [that] are relevant to their lives," "answer questions," "collaborate with other students, teachers, and members of society," and often, but not always, use technology to "produce artifacts" (para. 7). In a PjBL classroom, there is rarely one "right" answer or way to come to a solution. Instead, students are asked to reflect on their own skills,

**Table 1**  
UDL Framework Categories and Guidelines

|                                   | Design Multiple Means of Engagement | Design Multiple Means of Representation | Design Multiple Means of Action and Expression |
|-----------------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------|
| Enable Student Access             | Welcoming Interests and Identities  | Perception                              | Interaction                                    |
| Enable Student Support            | Sustaining Effort and Persistence   | Language and Symbols                    | Expression and Communication                   |
| Enable Student Executive Function | Emotional Capacity                  | Building Knowledge                      | Strategy Development                           |

## Synthesizing PjBL and UDL *continued*

knowledge, and expertise.

Unlike UDL, PjBL has been widely adopted in STEM and allied fields (Burmesch et al., 2024; Hira & Anderson, 2021; Ozfidan et al., 2022; Wang et al., 2025). PjBL is also widely used in education, social sciences, humanities, and interdisciplinary fields (Andersen & Hvidtfeldt, 2022; Balleisin et al., 2023; Boardman & Coleman, 2025; Joseph & Añazco, 2025; Na sulong et al., 2023; Salido-López, 2025). Across these studies, students who participated in PjBL activities showed increased learning of course content and greater soft skills practice. Because of the student-centered nature of PjBL, it has also been found to increase achievement of diverse student groups: research has shown that both students with disabilities and language learners benefit from PjBL curricula (Boardman & Coleman, 2025; D’Elia et al., 2025; Joseph & Añazco, 2025). In their meta-analysis of PjBL research, Chen and Yang (2019) concluded students enrolled in humanities courses benefited more from PjBL than students in STEM.

Recent PjBL research has highlighted student growth in critical thinking, creativity, and problem-solving. The American Association of Colleges and Universities (2026) has included these skills in their “Essential Learning Outcomes.” Researchers have addressed PjBL’s role in increasing critical thinking (Burmesch et al., 2024; Ozfidan et al., 2022), student creative capabilities (Andersen & Hvidtfeldt, 2022), and problem-solving skills (Azer et al., 2021; Hira & Anderson, 2021; Tabar & Meshgi, 2022). Fatima et al.’s (2025) study examined the relationship between these three skills and PjBL’s effect on improving them.

PjBL has also been found to increase student metacognition, motivation, and engagement. Wang et al. (2025) found that the use of PjBL in an undergraduate physics course improved student motivation alongside content and conceptual knowledge and problem solving. Researchers investigating an agricultural journalism capstone that used PjBL found students showed exceptional pride in producing a final project that would be professionally published. The

authenticity of this work increased student engagement (Burmesch et al., 2024). In a study of master’s level in-service teachers participating in PjBL curriculum design instruction, in-service teachers reported they found PjBL to increase students’ metacognitive skills like goal setting and reflection and improved their critical thinking (Martinez, 2022).

### Intersections Of Universal Design for Learning and Project-Based Learning

PjBL can enhance a course designed using UDL guidelines because key principles support one another in offering greater student choice and autonomy. Research examining the intersections of PjBL and UDL is typically found in studies of K-12 classrooms (Boardman & Coleman, 2025; Boardman & Hovland, 2024; Fitzgerald & Evans, 2024; Javed et al., 2024; Joseph & Añazco, 2025). Salido-López (2025) and Watzke (2025) discuss the joint application in higher education. This essay contributes to the growing discussion of the benefits of using PjBL in a course supported by the UDL framework, particularly in the post-secondary classroom.

Table 2 illustrates the relationship between the seven core elements of PjBL (Buck Institute for Education, 2022, p. 2) and the UDL Guidelines (CAST, 2024). To prevent repetition, “authenticity” and “challenging problem or question” in the PjBL core elements have been combined. Though all three categories of UDL guidelines are represented, PjBL attends most to “design multiple means of engagement” because of the heavy emphasis on student choice, authenticity, and scaffolding support that appears in well-designed PjBL classrooms.

### Case Example: Project-Based Learning in an Upper-Level English Literature Course

This section details an example of PjBL as it is integrated into a course designed using UDL guidelines. The curricular design attends to the UDL guidelines across all three categories of engagement, representation, and action and expression.

## Synthesizing PjBL and UDL *continued*

**Table 2**  
The Relationship Between PjBL core elements and UDL guidelines

| PjBL Element                                  | UDL Guideline                                                                                                                                                                                                                                                                                                                                   | Significance of Relationship                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| An authentic, challenging problem or question | Design Multiple Means of Engagement <ul style="list-style-type: none"> <li>• Welcoming Interests &amp; Identities</li> </ul> Design Multiple Means of Representation <ul style="list-style-type: none"> <li>• Building Knowledge</li> </ul>                                                                                                     | Student engagement and motivation increase when students believe work applies to their lives (Bermesch et al., 2024; Buck Institute for Education, 2022, p. 3). Both UDL and PjBL encourage faculty to create a variety of learning opportunities so students recognize the relationship between learning and their lived experiences.   |
| Sustained Inquiry                             | Design Multiple Means of Engagement <ul style="list-style-type: none"> <li>• Sustaining Effort &amp; Persistence</li> </ul>                                                                                                                                                                                                                     | PjBL's broader nature and sustained inquiry should encourage faculty to provide appropriate scaffolding and support for students (Boardman & Coleman, 2025). Both UDL and PjBL encourage offered supports through which students build confidence.                                                                                       |
| Student Voice and Choice                      | Design Multiple Means of Engagement <ul style="list-style-type: none"> <li>• Welcoming Interests &amp; Identities</li> </ul> Design Multiple Means of Action & Expression <ul style="list-style-type: none"> <li>• Interaction</li> <li>• Expression &amp; Communication</li> <li>• Strategy Development</li> </ul>                             | In PjBL- and UDL-supported classrooms, students choose how to complete work and engage with the material even within specific parameters (answering the question asked, genre of final project, subject matter, etc.) to ensure they meet course learning objectives.                                                                    |
| Reflection                                    | Design Multiple Means of Engagement <ul style="list-style-type: none"> <li>• Emotional Capacity</li> </ul> Design Multiple Means of Representation <ul style="list-style-type: none"> <li>• Building Knowledge</li> </ul> Design Multiple Means of Action & Expression <ul style="list-style-type: none"> <li>• Strategy Development</li> </ul> | Reflection improves metacognition (Martinez, 2022). Reflection in the PjBL classroom supports the third row of UDL guidelines intended to support student executive function, and it helps students understand their strengths and weaknesses.                                                                                           |
| Critique & Revision                           | Design Multiple Means of Action & Expression <ul style="list-style-type: none"> <li>• Expression &amp; Communication</li> <li>• Strategy Development</li> </ul>                                                                                                                                                                                 | Peer and teacher critique, alongside revision, allows students to continue to practice their metacognitive and executive functioning skills. Through critique, part of the scaffolding process, teachers and peers provide feedback through different media. Students can use this feedback to strategize and make plans as they revise. |
| Public Product                                | Design Multiple Means of Representation <ul style="list-style-type: none"> <li>• Perception</li> <li>• Building Knowledge</li> </ul> Design Multiple Means of Action & Expression <ul style="list-style-type: none"> <li>• Interaction</li> <li>• Expression &amp; Communication</li> <li>• Strategy Development</li> </ul>                     | Student choice in planning, implementation, and execution of the public product provides opportunities to make decisions about accessing and displaying information. This student choice echoes UDL's emphasis on multiple means of representation, action, and expression.                                                              |

## Synthesizing PjBL and UDL *continued*

British literature, 1760-present, is an upper-level literature survey, covering poetry, prose, and drama from authors who lived in the British commonwealth and/or former British colonies. Enrolled students are primarily English majors and minors who have completed the pre-requisite introduction to literature course. Students who successfully complete the course will be able to:

- A: Describe the differences between the Romantic, Victorian, Modernist, and contemporary periods of British literature;
- B: Explain the evolution of British literature between 1760 and the present;
- C: Describe each period's primary characteristics, according to wide scholarly consensus;
- D: Recognize important themes and techniques employed by authors during the various periods;
- E: Apply basic techniques of literary interpretation to works in various genres; and,
- F: Determine the relationship between historical events and literary production.

The course uses the driving question "How can British literature published since 1760 help us understand contemporary society?" to provide a framework for discussion and analysis.

I have designed the course using UDL principles to enable multiple means of engagement, interaction, and representation. I make course texts available in print and electronic versions. Because the course addresses primarily historical texts, many are also available in free audio versions, which I share with students. I also use video to supplement course materials. All texts, regardless of media, are accessible to assistive technologies and tools. Class instruction

includes frequent reviews, expansions, and applications of vocabulary and concepts learned in the pre-requisite course. These applications help students connect prior and new knowledge and work towards transfer and generalization. Course discussions, informal assignments, and exams provide scaffolding for students through the semester, giving students the opportunity to practice answering the semester's driving question as it relates to different texts, applying literary analysis techniques, and learning more about the historical context. Importantly, I have worked to include a diverse array of authors, cultures, and time periods, attending to the "represent a diversity of perspectives and identities in authentic ways" and "cultivate understanding and respect across languages and dialects" considerations (CAST, 2024).

While the vast majority of assignments are completed in the learning management system, the course design addresses the "Action & Expression" considerations. For most assignments, such as exams and weekly informal writings, students may type or video/audio record their responses, which often includes choice in which texts they respond to and the topic of those discussions. Exams are open-note/open-book and untimed. Students have one week to complete the exam and turn it in through the LMS, and all students may use assistive tools and technologies without need to ask for specific accommodations. If students do not meet objectives on the exams, they are asked to revise their work, without penalty, until they have met course objectives. This provides flexibility for students, following the "vary and honor the methods for response, navigation, and movement" consideration (CAST, 2024). Class meetings allow students to convey information in diverse ways, whether through large-group discussion, typing directly into the shared Google Doc the class uses to take notes, or groupwork. Students are also encouraged to contribute to the Google Doc outside of class time.

Integrating PjBL into the curricular design

## Synthesizing PjBL and UDL *continued*

attends to the majority of the considerations in the “designing multiple means of engagement” guideline. The impetus for PjBL in this course is to help students understand that literature, even that published hundreds of years ago, speaks to the human condition, encourages empathy, and teaches contemporary readers to put their own experiences into context and conversation with

others’ experiences. The assignment, “Thinking Outside the Essay,” provides the culminating public product for the course. This assignment is introduced during week 2 of the university’s 16-week semester. It is due in week 14. Figure 1 shows the assignment prompt.

Table 3 shows the relationship between the

**Figure 1**  
Thinking Outside the Essay Prompt

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>Assignment Introduction</i></p> <p>In many of your humanities or social science courses, you will be asked to write essays: you will develop a thesis, find evidence from the texts, perform a close reading that defends your thesis, and put it together in a nice, coherent essay. In our course, we will do this work in class discussions and in-class activities, the comments we make in our class Google Doc, our weekly writing assignments, and our exams. Thus, the culminating assignment will not be another essay, but it instead will be a comparative creative project that asks you to engage with one (or more texts) that we have read this semester in a reflective and purposeful manner of your choice. This assignment is designed to foster your critical thinking skills as you make decisions about the texts you work with. The project will specifically address the question <b>“How can British literature published since 1760 help us understand contemporary society?”</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p><i>The Assignment Learning Objectives</i></p> <ul style="list-style-type: none"> <li>• To facilitate engagement with at least one of the works of literature we have examined this semester and at least one other source (this may be another class text or an outside source);</li> <li>• To demonstrate mastery of at least <b>one</b> of the works we have read in class (this mastery may be demonstrated by exploring the text’s historical context, considering the literary techniques used to create the work, exploring major themes and issues within the piece of literature, or a combination of these and other analytic techniques); and</li> <li>• To answer the question <b>“How can British literature published since 1760 help us understand contemporary society?”</b> in a way that teaches people outside of our classroom space the importance of the literature we have read in relation to contemporary society.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><i>The Assignment Guidelines</i></p> <p>You have complete creative control. Your goal, as outlined by the learning objectives above, is to engage with a work in a way that demonstrates its importance to contemporary society. The form this project takes is entirely up to you, as long as you adhere to the following guidelines.</p> <p>A successful creative project will include:</p> <ul style="list-style-type: none"> <li>• A unique project that you have conceptualized, planned, and executed independently. The project should be comparative. It should speak to and with at least one other source. This source might be another text in the class or a non-course text (these non-course texts might include music, movies, books, advertisements, social media, etc. My definition of text is very broad. If you are uncertain about your choices, please ask).</li> <li>• A 3-4 page reflection (or 5-8 minute video) that explains:             <ul style="list-style-type: none"> <li>(a) what your project represents and why you chose this particular creative display;</li> <li>(b) the rationale behind the major decisions you had to consider while planning and executing this project; and</li> <li>(c) a critical discussion of how this project enhances our understanding of the work in its original context AND what it teaches us about contemporary society.</li> </ul> </li> <li>• Completion of the single-point rubric that identifies your project’s strengths and weaknesses using specific examples to justify the strengths and opportunities for growth. (See Appendix).</li> </ul> |

## Synthesizing PjBL and UDL *continued*

seven core PjBL elements (with the “authenticity” and “challenging problem or question” combined to mirror Table 2), the “Thinking Outside the Essay” assignment features, and UDL alignment. It also discusses a specific example from the course to illustrate how the concepts work together. The core elements of PjBL and the UDL guidelines are closely related

to one another. Each of PjBL’s core elements are supported by UDL guidelines to help “ensure that all learners are able to access and participate in meaningful, challenging learning opportunities” (CAST, 2024). Conversely, the sustained nature of PjBL and its emphasis on student voice and choice fit well within UDL’s guidelines to ensure all students have the ability

**Table 3**  
The relationship between PjBL Core Elements, UDL, and “Thinking Outside the Essay”

| PjBL Core Element                             | Assignment Feature                                                                                                                                                    | UDL Implementation                                                                                                                                                                                         | Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| An authentic, challenging problem or question | How does British literature published between 1760 and the present help us understand contemporary society?                                                           | This question draws from UDL’s “Welcoming Interests & Identities” guideline to increase student autonomy. It also encourages the diverse perspectives found in UDL’s representation category (CAST, 2024). | One student staffed a soccer team with eleven characters encountered during the semester. They explained the responsibility of each player’s position on the field and matched those characteristics with specific characters from novels and short stories we had read. This project showed the continuity and complexity of the human experience. Focusing on authentic learning that is meaningful to students in the moment engages and motivates them to learn (Buck Institute for Education, 2022). This student connected information that was foreign to them (literature that is hundreds of years old or written from different perspectives) to their lived experiences.                                                    |
| Sustained Inquiry                             | The project spans twelve weeks.                                                                                                                                       | Sustained inquiry requires clear scaffolding (Boardman & Coleman, 2025) and supports the UDL criteria of helping students to sustain efforts.                                                              | The student’s soccer project drew from multiple texts across the semester. They continually looked for connections between the literary characters and their knowledge of the psychology/personal characteristics of athletes, refined their previous knowledge, and applied it to new texts.<br><br>Class instruction provided scaffolding. Each day, we purposefully explored the driving question, giving students repeated opportunities to practice conceptualizing answers and refine their comparisons. When students engage deeply with a text, they have a greater appreciation for that text, its context, and the culture from which it came. This knowledge enables greater success in meeting course learning objectives. |
| Student Voice and Choice                      | Students choose to work with any class text and have free choice for a comparative text, including genre and/or media. Students devise their own presentation method. | This project does not work without student choice. The variety of texts students choose from and the choices they make presenting the final product address considerations in all three access guidelines. | Soccer had played an important role in the student’s life, and they had the ability to bring that knowledge into the literature classroom and connect it with information that was new to them. By analyzing different literary and historical characters, the student used prior knowledge of human psychology to understand literary characters’ motivations. These choices may have made the project not just more enjoyable for the student but also helped them to think more critically about the literature we read.                                                                                                                                                                                                            |

Synthesizing PjBL and UDL *continued*

| PjBL Core Element     | Assignment Feature                                                                                                                                                                                                                                                                                                                              | UDL Implementation                                                                                                                                                                                                                                                                                                                                                                              | Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                 | (cont.) Student voice and choice is key to constructivist learning theory (Allen, 2022). Choice increases motivation, engagement, buy-in, and critical thinking/problem solving, and it helps students understand the importance of the new information (Azer et al., 2021; Buck Institute for Education, 2022; Hira & Anderson, 2021; Tabar & Meshgi, 2022).                                                                                                                                                                                                                                                                             |
| Reflection            | The reflection asks students to justify their choices, suggest revisions, and answer the driving question.                                                                                                                                                                                                                                      | Purposeful reflection supports UDL considerations that address metacognition and critical thinking.                                                                                                                                                                                                                                                                                             | The student's reflection justified their decisions. By defending their roster, they identified the similarities and differences of people across cultures and time, answering the driving question and showing a deep understanding of the literature.                                                                                                                                                                                                                                                                                                                                                                                    |
| Critique and Revision | Students apply a single-point rubric (see Appendix) to their own and peers' work at mid-terms. This rubric guides revision and is used again during the reflection stage at the end of the semester.                                                                                                                                            | Peer and self-critique are particularly important to the "sustaining effort and persistence" considerations. It provides "action-oriented feedback," "optimizes challenge and support," "offers action-oriented feedback," and encourages collaboration (CAST, 2024). Students are also encouraged to speak with the instructor to brainstorm and get feedback, strengthening these components. | Critique and revision help students practice metacognition, set goals, and reflect (Martinez, 2022). Paired with appropriate scaffolding, critique and revision help students practice "growth mindset" (Buck Institute for Education, 2022, p. 6), further embracing the process-oriented learning of constructivism. Critique and revision are important within a scaffolded classroom helping students understand what goals they have or have not met.                                                                                                                                                                                |
| Public Product        | <p>Students complete a comparative creative project that answers the driving question.</p> <p>The final project is presented during finals week where peers have the ability to ask and answer questions related to their project.</p> <p>*To embrace PjBL even more, I am considering expanding this presentation to the campus community.</p> | The assignment instructions draw on UDL principles of student choice and voice, reflection, metacognition, and critical thinking.                                                                                                                                                                                                                                                               | <p>Most assessments in post-secondary English classes are text-based. This final product allows students to experiment with modalities other than text. In line with constructivism, students apply prior literary analysis skills to new literature and contexts.</p> <p>In the soccer project, the student drew on previous knowledge of soccer and literary analysis skills to apply it to new contexts. They created a slide deck presentation, rather than a traditional essay, to illustrate how these characters would play their positions, using visual images to help their audience imagine these characters on the field.</p> |

## Synthesizing PjBL and UDL *continued*

to access and participate in their own learning. In this curricular design, the creative project helps students meet course learning objectives such as recognizing and identifying important themes and techniques employed by authors during the various periods, applying basic techniques of literary interpretation to works in various genres, and determining the relationship between historical events and literary production.

### Integrated PjBL and UDL Application in Other Disciplines

Integrating PjBL and UDL is not confined to the English or humanities classroom. Faculty should first begin curriculum design with the UDL guidelines in mind, ensuring materials are accessible, learning is appropriately scaffolded, students have multiple ways of demonstrating learning, and there is room for student choice and voice. Though the UDL guidelines most often attend to design and access opportunities, faculty should also seek to incorporate diverse voices and perspectives. Part of ensuring students have multiple ways of showing what they have learned is the type of assessments available to students. Using PjBL as a framework provides this opportunity. Building the class with UDL guidelines first enables the PjBL aspect of the class to be accessible.

While this project's specific driving question, "How does British literature, published between 1760 and the present, help us understand contemporary society?" may be inappropriate outside of the literature classroom, adapting the question to fit other disciplinary learning goals makes this pedagogy widely applicable. The closest corollaries are other humanities courses. In foreign language literature classes, students might be asked "How does [Spanish, French, German, Arabic, etc] literature help us understand our contemporary society?" In this project, students would practice language skills and consider intercultural similarities. Watzke (2025) asks students in German language classes to conceive of, plan, and prepare a presentation using German rather than rely on exams. In history classes, faculty might ask students "What does [a particular historical event/person/

time period] teach us about the world today?" or "How can [a particular historical event/person/ time period] help us solve a global problem today?" Students' public products might include pitching their proposed solution—comparing the historical and contemporary problems and solutions—to a panel of judges.

Social science classes can also benefit from this approach. Psychology faculty may ask their students to design and execute a study appropriate for the content subject matter (Na sulong et al., 2023). To share their research, psychology faculty could organize a campus symposium or poster session. An upper-level political science or sociology course could ask students "How does globalization impact your daily life?" To answer the question, students could complete a visual ethnography, taking photographs of local and personalized instances of globalization. The ethnography would include a reflection that brought together the photographs, student experiences, and course concepts. Students would present their visual ethnographies in a public photo exhibition at the end of the semester (Nielsen et al., 2021). Similarly, lower-level students enrolled in a social problems course might be asked to explore "How do social problems effect people on an individual level?" The public product for this course could include writing a children's book that explores the answer to this question (Maples & Taylor, 2013).

### Student Examples

To help faculty envision the form this kind of assignment can take, this section provides examples of student projects. The variety of projects illustrates students' ability to engage with multiple methods of learning and practice executive functioning skills. Because this project did not fall under IRB jurisdiction, student consent to include their project descriptions was obtained by email after students had graduated from the university.

- A former music major shared their passion for musical theater when they created a slide deck that compared multiple texts from the

## Synthesizing PjBL and UDL *continued*

semester with contemporary musicals. By reflecting on this project and sharing it with classmates, this student shared their own expertise in musical theatre.

- One student built the starting lineup for a baseball team using nine characters from texts read throughout the semester. The student assigned each character a contemporary song as a walk-up song that would play as they went up to bat; the student analyzed their choices, explained why the song was representative of the player, and considered how it would get the crowd excited to see that player at bat.
- One student found themselves to be the only person in class to defend Isabella Thorpe in Jane Austen's *Northanger Abbey* (2002). This student fashioned themselves as a lawyer for "misunderstood characters" and created a defense for Isabella. They used class discussion notes to articulate the accusations against Isabella and drew from gender and class expectations of Austen's time to prove Isabella's actions were not underhanded.

## Conclusion

This article responds to a current gap in post-secondary educational research by presenting a course design guided by the core elements of PjBL and the UDL guidelines. It explores the overlap between the two concepts and suggests that PjBL complements classes designed with the UDL guidelines. This combination creates a classroom environment that creates opportunities for metacognition, problem solving, critical thinking, and creativity and supports student learning outcomes. Both concepts draw heavily from constructivism, seeking active learning and reflective opportunities for students in the learning environment to understand how their own experiences speak to new knowledge that they are learning. Further research, including qualitative, quantitative, and mixed-methods studies that review student performance in classes using this dual design process, is warranted.

Synthesizing PjBL and UDL *continued*

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## Synthesizing PjBL and UDL *continued*

### Appendix

#### *Single Point Rubric*

Students use this rubric to assess their work at a mid-semester checkpoint and as part of the reflection on the final draft of their project.

| Opportunities for Growth | Criteria                                                                                                                                                                                    | Strengths |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|                          | The project is unique, and I have planned and executed it independently.                                                                                                                    |           |
|                          | The project compares at least two texts, one of which must be from our required reading.                                                                                                    |           |
|                          | The reflection explains my completed project so that someone not in the course can understand it.                                                                                           |           |
|                          | The reflection identifies and explains the major decisions I considered while planning and executing this project.                                                                          |           |
|                          | The reflection includes a critical discussion of how my project enhances our understanding of the work in its original context AND an appreciation of the selected work in today's society. |           |
|                          | Revisions required to meet the criteria for the assignment.                                                                                                                                 |           |