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Assessing Experiential Learning at an HBCU

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Author Note

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Intersection: A Journal at the Intersection of Assessment and Learning

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Abstract: This paper will highlight the work at Delaware State University, an HBCU, on experiential education projects through a Howard Hughes Medical Institute (HHMI) Inclusive Excellence grant. It focuses on assessing experiential learning curriculum in individual courses as well as evaluating student growth from research and external opportunities. It highlights the preliminary outcomes of these projects with rubrics and survey data for assessing new experiential activities in course curriculum across campus as well as the Experiential STEM Lab Internship Program. As a component of Delaware State University's strategic plan, these new programs have promoted student success as well as diversity, equity, and inclusion initiatives. The results will demonstrate positive benefits for faculty, students, and a culture of assessment.

Keywords: *Experiential Learning, Reflection, Rubrics, Assessment*

Introduction

Assessment plays a pivotal role in all aspects of higher education. As experiential learning and transformative experiences increase in colleges and universities across the country, a focus on assessment practices is necessary to ensure quality learning and measurable growth in skills beyond class grades and graduation. Through experiential learning, students develop soft skills or holistic competencies, critical thinking, reflection, and professional competencies, which can be challenging to assess (Qualters, 2010). Assessment is also a crucial component of accreditation evaluations and, therefore, all facets of learning, including experiential learning, need to be integrated. This paper will address how Delaware State University (DSU), an HBCU (Historically Black Colleges and Universities), has increased experiential learning and the measures it has taken and will take, to assess it.

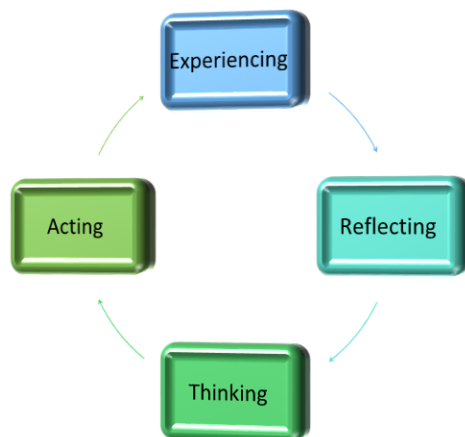
Experiential learning: Definitions and the learning cycle

Experiential learning is "a teaching philosophy that informs many methodologies in which educators purposefully engage with students in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities" (Association for Experiential Education, para. 2). Much like any skill, such as riding a bicycle or playing an instrument, learning is most meaningful when it is through a lived experience. David Kolb, who popularized experiential learning, defined it through the experiential learning cycle (Figure 1). The cycle has four stages: experiencing, reflecting, thinking, and acting (Kolb & Kolb, 2018). First, students must have a concrete experience, then students reflect critically on the experience, then they think about it through abstract conceptualization to create new ideas or change their previous notions or beliefs. Finally, they act on what they internalized and modify their approach based on their

previous learning. Learners move or spiral through the learning cycle continuously as they have new learning experiences, reflect, and grow. Learners learn best by doing, by having an experience. However, for experiential learning to be successful, the experience itself is not enough. Learners must incorporate meaningful reflection into the learning experience and then use reflection to change or improve for the next experience.

Figure 1

The Learning Cycle



Experiential learning can take many shapes as activities both internal and external to the classroom. These opportunities can occur inside the classroom as part of the course grade, for course credit as an internship, or as extracurricular work for a degree requirement. Some standard examples of experiential learning include internships, study abroad, service learning, case studies, role-play activities, simulations, clinical work, and laboratory research.

Kolb has outlined eight important aspects of the experiential learning cycle that define its characteristics (Kolb & Kolb, 2018):

1. Learning is an endlessly recurring cycle, not a linear process.
2. Experiencing is necessary for learning.
3. The brain is built for experiential learning.
4. The dialectic poles of the cycle are what motivates learning.
5. Learning styles are different ways of going around the learning cycle.
6. Full-cycle learning increases learning flexibility and development.
7. Teaching around the learning cycle.
8. The learning cycle can be a rubric for holistic, authentic assessment.

The different tenets of experiential learning, as Kolb summarizes, apply to both classroom instruction and extracurricular activities. For students engaging in research, internships, study abroad, and so on, programs must incorporate these elements into them for successful experiential learning, just as they are in ideal classroom learning activities.

Delaware State University and experiential education

Delaware State University's strategic plan, REACH 2026, has outlined various goals and Key Performance Indicators (KPIs) for the university. As part of its second pillar, Academic Excellence, the goal is to enhance student-learning outcomes (SLOs) "through engaging classroom and experiential learning opportunities." Specifically, the KPIs for this goal are the number of experiential learning opportunities offered at DSU (including internships, simulations, clinical work, labs, service learning), and the percentage of students engaged in experiential learning opportunities. Therefore, the goal is both to increase experiential learning opportunities at DSU generally as well as the number of students participating in these activities.

As an HBCU, serving minority and first-generation students, many students face financial and personal barriers that prohibit them from participating in various experiential learning events. Data gathered by the Institutional Research, Planning, and Analytics Department at DSU report that over 80% of the undergraduates and 56% of graduate students are members of racial and ethnic minority groups. The median family income is approximately \$49,000, which ranks it 320th out of 377 selective public institutions in terms of the financial resources of the student body. About 13% of DSU students come from families in the lowest income quintiles, and over 50% are eligible for Pell grants. Research has documented that minority students are underrepresented in these transformative experiences, including study abroad (NAFSA, 2022) and undergraduate research (Hurtado et al., 2009). The barriers to these opportunities vary broadly, but can include a lack of mentors at the pre-graduate school level, difficulties in meeting graduate curriculum and GRE requirements, insufficient knowledge of the possibilities open to them (related to the lack of mentors), and, limited sources of financial aid that preclude them from taking on external opportunities in place of another income source (Miller & Orsillo, 2020; Pierszalowski et al., 2018; Wilson & Shrock, 2001; Winkle-Wagner & McCoy, 2016). Yet, these experiences often lead to better outcomes in student success and gainful employment after graduation (Kezar & Holcombe, 2020). Students are able to connect their learning to professional contexts and develop soft skills. To combat the lower participation of experiential learning for minority students and focus on student success, program expansion, and inclusion, experiential learning must be emphasized for both internal (in the classroom) and external (outside of the classroom) activities. Universities must design experiential learning opportunities to fit within student schedules and not create financial burdens.

DSU has taken various steps in the last few years to augment experiential learning throughout the campus. The university has built new partnerships with communities and businesses in the region for service learning and internships. The Office of Undergraduate Research, Experiential Learning, and Honors (URELAH) was created at DSU to expand opportunities, particularly internships, for students as well as to serve as a central site for students to locate these opportunities. Faculty have also had the opportunity to take professional development workshops on experiential learning through the Society for Experiential Education and some have engaged in a summer 2023 project to add new experiential learning activities to their classes. The summer project incorporated additional training, including group meetings and resources, and required faculty to create activities, assessments, reflections, and rubrics for a selected course. While some students may still not be able to participate in external opportunities such as internships or study abroad, incorporating experiential learning in the classroom



is a valuable way to engage more students, expose them to the benefits of experiential learning, incorporate career-building skills, and meet the goals of DSU's REACH 2026 strategic plan.

Experiential education qualification form

To formalize the process of experiential course designation, an application process requiring the completion of an Experiential Designation Form followed by the approval of a sub-committee of the Faculty Senate will be required. During the fall 2023 semester, the Faculty Senate will approve the designation with the work of the Teaching Effectiveness Committee. This designation will not only inform students about an experiential learning designation in the course catalog but will also be a way for administrators to assess and track the number of students participating in these experiences. Additionally, this gives faculty the opportunity to assess their experiential learning activities and market their course as experiential learning. To ensure quality review, faculty will complete an Experiential Learning Designation form and the Faculty Senate will evaluate the courses to approve the designation. On the form, faculty include the following information (with an attached syllabus and sample activities and reflection prompts):

1. How does the course incorporate experiential learning? (check all that apply)
 - ☐ Simulations
 - ☐ Case Studies / Problem-Based Learning
 - ☐ Service Learning
 - ☐ Research / Internships
 - ☐ Capstone
 - ☐ Fieldtrips / Field Work
 - ☐ Performance-Based Learning
 - ☐ Other _____
2. Please list the student learning outcomes for the experiential learning in the course:
3. Describe the experiential learning activities in the course.
4. How will the course incorporate student reflection?
5. Describe briefly how you will assess the experiential learning activities.

The form allows for both instructors and the faculty at large to assess the merits of experiential education in a particular course and provide a mechanism to improve these elements through Faculty Senate feedback.

Assessment of experiential learning

While the goal of elevating educational opportunities for students is imperative for them to develop the necessary skills for life beyond graduation, the assessment of these activities must be planned carefully and consistently. The assessment practice of experiential learning should be a multipronged approach, with both quantitative and qualitative data, as well as holistic rubrics for skill development and reflection. Quantitative data can be collected through rubric evaluations for both individual assignments and overall learning outcomes for experiential learning. Qualitative data can be collected through student reflections and open responses on course surveys. Moreover, it is necessary for

assessment at all stages in the learning cycle with formative and summative assessment in each course. Efforts to increase faculty understanding and adoption of this process will be essential moving forward through professional development training and workshops. For fall 2023, a hybrid tutorial involving an informational video on the tenets of designing courses with experiential learning components as well as follow-up synchronous group sessions will be implemented following Faculty Senate approval. Quantitative data on a large scale show the number of students participating in internships, study abroad, research, and other experiential learning opportunities. Gathering this type of data can document their successful completion of these activities as well as student employment post-graduation. Various offices across campus track these data and integrate them into annual and accreditation reports, which the broader campus community can then access. On a smaller scale, programs and faculty can use quantitative data to track student success, growth, and achievement of learning outcomes. They can track this information through course assessments. Departments can compare these to other courses without the experiential learning designation to track the benefits as well as plan for future improvements.

Qualitative data, from survey responses and reflections, are also a meaningful way to capture the student experience and personal growth. For example, in 2021, DSU initiated a semester-long STEM Lab Internship Program for early sequence undergraduates. In this program, students were paired with mentor faculty and assisted in a lab on faculty's research projects. The experience includes pre- and post-reflection activities, which gather meaningful survey data for assessment purposes. A sample of the questions include:

- 1) Do you feel that your internship experience assisted with learning/understanding concepts in your classes?
- 2) Did the program change the way that you think/thought about "research" positively or negatively?
- 3) What are your post-graduation plans?
- 4) Have you worked in other internships or programs since the program?
- 5) What were the benefits of this program for you personally?

Collecting this information is valuable for measuring student perceptions and growth, as well as creating a plan to improve the program. Currently, student responses were almost uniformly positive to the survey questions. All students felt like the experience assisted in understanding concepts learned in class, they had a more positive view of research and were more likely to enroll in future internship programs. The surveys also served as an avenue for the program directors to make changes to the program as part of a continuous improvement model and use excerpts to promote the program to future students and for additional administrative funding.

As internships and other opportunities continue to expand, programs can improve assessment through student surveys and reflection activities. For all experiential learning, even external opportunities, reflection and the evaluation of reflection must be integrated for meaningful and consistent assessment. For experiential learning courses, a required student survey will be administered at the end of each semester. Departments and programs can use these for review purposes. For external learning activities, such as internships, students will complete reflections and a final survey to

document their learning. The standardization of these assessment practices will lead to consistent reporting and detailed evaluation of experiential learning across the institution.

Assessment of reflection

One challenge of experiential education is the assessment of reflection. Reflection, a key component of experiential learning, must be assessed for students’ ability to reflect deeply and critically on experiences as well as measure their growth (Fines, 2014). Reflection allows students to process the experience, describe it, detail what they learned, and how they will improve for the next stages of the learning cycle. Thus, the creation of evaluation tools to measure student reflection is essential for experiential learning. During the summer 2023 faculty summer project, faculty explored different reflection rubrics and were encouraged to create their own for their class’s reflection activities. A sample reflection rubric for activities from an Intermediate Spanish course with native-speaker language partners can be found in Table 1.

Table 1

Sample reflection rubric for language partner activities for Intermediate Spanish

	NEEDS IMPROVEMENT	MEETS EXPECTATIONS	EXCEEDS EXPECTATIONS
DESCRIBING EXPERIENCE Student provides a description of the experience, observation, of the session and what was discussed	Unclear, vague or disorganized, little to no description	Clear but general with some description	Clear, detailed and focused, particularly on the specific aspects that challenge or are of interest to the student
DESCRIBING RESPONSE Student provides a description of their intellectual and emotional response to the experience	Unclear, vague or disorganized	Some response but limited to one domain (e.g., only emotional, intellectual) or to reflection only, without indication of critical reflection.	Clear and focused description of the feelings, thoughts, and questions raised by the student before, during the session and upon reflection.
GENERAL LANGUAGE AND CULTURE REFLECTION	Minimal reflection. Little personal reflection or limited to description of	Making connection between student’s personal assumptions, habits, or values and the opinions or	Critical evaluation (questioning, examining more closely) student’s personal assumptions, habits, or values and their connection to the opinions

Evidence that the student has questioned or evaluated their prior language knowledge, perceptions, actions, or culture beliefs	general opinions and behaviors without reflection on underlying assumptions, habits, or values driving those opinions or behaviors. Little reflection on language use.	behaviors upon which the student is reflecting. Reflection on language and culture weaknesses or opportunities.	or behaviors upon which the student is reflecting in light of other perspectives. Perceptive reflection on language and culture.
USING INSIGHTS Student's reflection leads to plans for future action and improvement in language skills	Student reflection is entirely backward looking, with no indication of how the student will use the insights and skills gained to improve language skills and cultural awareness.	Student has generalized statements regarding how the reflection will direct future language skills, intercultural communication or cultural awareness.	Student provides concrete plans for further action or reflection for a specific purpose such as developing skills, improving self-understanding, or refining belief systems with specific language elements (including grammar and vocab points and expressions) to be addressed
FORMAT AND TIMING	Fails to meet minimum word requirement or submitted late	Meets the word requirement. Follows format.	Exceeds the word requirement. Follows format and is organized.

An analytic rubric provides an assessment measure for reflection, both guiding students and giving them the flexibility to reflect meaningfully. As more courses incorporate reflection activities into the curriculum, students will have more opportunities to enhance their reflection skills. Additionally, as experiential learning courses continues to expand at the university, a collection of rubrics will be shared with faculty to provide copious models for rubric creation. Departments, in order to measure improvement in student reflection skills over time, can track these data through consistent rubric evaluations.

Conclusion

While DSU is still on a journey to expand experiential education for its students, some of the preliminary steps outlined in this paper demonstrate the value of assessment of experiential learning and techniques to capture the data and tell the story about its impact. Thus, assessment is at the forefront of the design of these activities. Student surveys for experiential learning activities, faculty course designations and professional development, holistic reflection rubrics, and consistent data

tracking are important elements of this assessment venture. With a focus on assessment and expanded opportunities in experiential learning, students and programs will benefit from enhanced outcomes and learning that is both more meaningful and transformative.

References

- Association for Experiential Education. What is Experiential Education?
<https://www.aee.org/what-is-experiential-education>
- Delaware State University. Reach 2026 Strategic Plan.
<https://www.desu.edu/about/reach-2026-strategic-plan>
- Fines, B. G. (2014). *Assessing Reflection*. <https://www.smu.edu/-/media/Site/Law/faculty/teaching-resources/Student-ReflectionRubric.pdf>
- Hurtado, S., Cabrera, N. L., Lin, M. H., Arellano, L., & Espinosa, L. L. (2009). Diversifying Science: Underrepresented Student Experiences in Structured Research Programs. *Res High Educ*, 50(2), 189-214. <https://doi.org/10.1007/s11162-008-9114-7>
- Kezar, A., & Holcombe, E. (2020). The Role of Collaboration in Integrated Programs Aimed at Supporting Underrepresented Student Success in STEM. *American Behavioral Scientist*, 64(3), 325-348. <https://doi.org/10.1177/0002764219869421>
- Kolb, A., & Kolb, D. (2018). 2018 Kolb and Kolb 8 things learning cycle AEL reprint 40-3.
- Miller, A. N., & Orsillo, S. M. (2020). Values, acceptance, and belongingness in graduate school: Perspectives from underrepresented minority students. *Journal of Contextual Behavioral Science*, 15, 197-206. <https://doi.org/https://doi.org/10.1016/j.jcbs.2020.01.002>
- National Association of Foreign Student Advisers (2021). Trends in U.S. Study Abroad.
<https://www.nafsa.org/policy-and-advocacy/policy-resources/trends-us-study-abroad>
- Pierszalowski, S., Vue, R., & Bouwma-Gearhart, J. (2018). Overcoming Barriers in Access to High Quality Education After Matriculation: Promoting Strategies and Tactics for Engagement of Underrepresented Groups in Undergraduate Research via Institutional Diversity Action Plans. *The Journal of STEM Education: Innovations and Research*, 19.
- Qualters, D. M. (2010). Bringing the outside in: Assessing experiential education. *New Directions for Teaching and Learning*, 2010(124), 55-62. <https://doi.org/https://doi.org/10.1002/tl.421>
- Wilson, B. C., & Shrock, S. (2001). Contributing to success in an introductory computer science course: a study of twelve factors. *Acm sigcse bulletin*, 33(1), 184-188.
- Winkle-Wagner, R., & McCoy, D. (2016). Entering the (Postgraduate) Field: Underrepresented Students' Acquisition of Cultural and Social Capital in Graduate School Preparation Programs. *The Journal of Higher Education*, 87, 178-205. <https://doi.org/10.1080/00221546.2016.11777399>

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