



BULLDOG *experience*

ENGAGE • REFLECT • CREATE



MISSISSIPPI STATE UNIVERSITY
QUALITY ENHANCEMENT PLAN

ON-SITE VISIT FEBRUARY 25-29, 2024



Executive Summary

Mississippi State University (MSU) is excited to adopt the Bulldog Experience as its next Quality Enhancement Plan (QEP). With this plan, the university intends to engage undergraduate students in learning experiences, develop their reflective habits to make meaning of those experiences, and teach them how to create new knowledge based on their reflections of what they have learned. The framework for the plan is based on Kolb's experiential learning model, and will seek to fulfill three student learning outcomes whereby students will be able to (1) identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them; (2) synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content; and (3) apply previously learned knowledge and skills to new situations or scenarios.

The topic selection process was tied directly to the university's strategic planning process. A task force of 31 people from each of the academic colleges, the Student Association, the Graduate Student Association, Faculty Senate, Staff Council, and staff who represent the different types of co-curricular activities completed an initial inventory of experiential learning activities across campus and the effects on student learning. What they found was that most students participated in at least one experiential learning activity; however, students had difficulty connecting that experience to their coursework or its application to their future careers. This task force in conversation with the President's Cabinet decided to adopt the broad topic of experiential learning as its next QEP.

The President's Cabinet appointed a Faculty Director and an Executive Director to design a plan to improve student learning through experiential education with the help of a Steering Committee comprised of members from the task force as well as others who serve as partners in this plan. This group of individuals formed a QEP team that designed an implementation plan to help create more experiential learning activities and to incorporate a reflection process into existing experiential learning activities. A grant program was established to incentivize involvement in the Bulldog Experience activities, and a subcommittee of members will review submissions. The QEP team designed an assessment plan that uses a checklist and a rubric for direct assessment and results from the National Survey of Student Engagement (NSSE) as an indirect assessment. These instruments will help the Bulldog Experience determine the extent to which its learning outcomes are being achieved, and the results will be used to make improvements to the QEP.

The directors have designed training materials for faculty, staff, and students, and conducted a pilot of this training during the summer and fall 2023 semesters. The pilot involved two new curricular and two co-curricular experiential learning activities, along with a convenience sample of other existing activities to establish a baseline for assessment. These data were analyzed and used to make modifications to the implementation plan prior to the proposed launch of the full Bulldog Experience in fall 2024.

Results of this pilot reinvigorated the excitement around the topic. Excerpts from the student reflections and feedback from the faculty and staff involved in the experiences reinforced the need for and the potential for Bulldog Experience. The campus community is ready to enact this plan, and over time, the success of the program can be characterized as Bulldog Experience becoming infused into the fabric of the undergraduate experience at MSU even after the QEP ends.

Table of Contents

Executive Summary.....	1
Table of Contents	2
List of Tables	3
List of Figures	3
Introduction to Bulldog Experience	4
Background of MSU	4
The Meaning of Bulldog Experience and the Logo	5
Learning Outcomes	5
Topic Identification	5
Broad-based Support of Institutional Constituencies.....	10
Plan to Improve Student Learning	12
Engagement Continuum	14
Concrete Experience	14
Reflective Observation.....	15
Abstract Conceptualism.....	15
Active Experimentation.....	16
Use of Reflection.....	17
Implementation of Bulldog Experience	18
Inclusion of High-Impact Practices.....	19
BELL Grants	20
Support for Faculty	21
Support for Staff	22
Bulldog Recognition	23
Resources Committed to the Plan	23
Human Resources	23
Executive Director	23
QEP Coordinator	24
Faculty Director.....	24
Additional Staff	24
Fiscal Resources	25
Partners.....	25
Steering/Advisory Committee	26
Plan to Assess.....	27
Learning Outcomes	27
Assessment Instruments and Data Collection	28
Explanation of Initial Reflection Checklist.....	29
Explanation of Culminating Reflection Rubric	30
Connection to NSSE’s Reflective and Integrative Learning Engagement Indicator	34
Assessment Summary Table	35
Data Analysis & Follow-Up.....	36
Pilot Studies	37
BELL Grants	37
Curricular: New or Expanded Experiential Learning Opportunities.....	38
Curricular: Orienting Students Toward Habits of Reflection	39
Curricular: Testing the Checklist and Rubric on Course-based Reflections	41
Co-Curricular: New or Expanded Experiential Learning Opportunities	44

Co-Curricular: Addition of Reflections to Existing Experiential Learning Opportunities	46
Criteria for Success.....	47
Annual Timeline	49
Conclusion.....	50
References	51
Appendix A: Transforming MSU Vision, Pillars, and Outcomes.....	52
North Star Vision.....	52
Pillars with Outcomes	52
Appendix B: Members of the Steering/Advisory Committee	54
Appendix C: Excerpts from Pilot Study Reflections	55
Excerpts from WFA 4433 Mammalogy Undergraduate Research Reflections	55
Excerpts from ME 4443 Mechanical Engineering Capstone Project Reflections.....	56
Excerpts from Interior Design Internship Reflections.....	57
Excerpts from College of Education Internship Reflections.....	57
Excerpts from WFA 4394 Waterfowl Ecology and Management Field Trip Reflections	58
Excerpts from RDG 3223 Assessing Reading Difficulties Community-Engaged Learning Initial Reflections	59

List of Tables

Table 1. Number of undergraduate degree programs that require internships or capstone experiences from 2021-22	6
Table 2. Distribution of undergraduate programs with internships or capstones by college	7
Table 3. Proportion of seniors involved in experiential learning activities by college	8
Table 4. Seniors' involvement in experiential education by type and by college.....	9
Table 5. MSU Senior means for the Reflective & Integrative Learning scores from NSSE	9
Table 6. Comparison between the Reflective & Integrative Learning scores and the percentage of seniors participating in one or more experiential learning activity	10
Table 7. Topic rankings by constituent group.....	12
Table 8. Projected Budget.....	25
Table 9. Connection between the checklist and the QEP learning outcomes.....	29
Table 10. Rubric for the Culminating Reflection.....	31
Table 11. Connection between the Bulldog Experience learning outcomes and the related NSSE questions.....	34
Table 12. Summary of the assessment for Bulldog Experience.....	35
Table 13. Assessment procedures and target scores for each learning outcome	48

List of Figures

Figure 1. Response rates from university constituents	11
Figure 2. The Engagement Continuum	14
Figure 3. Kolb's Experiential Learning Cycle.....	17

Introduction to Bulldog Experience

Mississippi State University (MSU) is proud to adopt experiential learning as the focus of its Quality Enhancement Plan (QEP), named Bulldog Experience. With this plan, the university intends to engage undergraduate students in learning experiences, develop their reflective habits to make meaning of those experiences, and teach them how to create new knowledge based on their reflections of what they have learned. This document describes how the topic was selected, how the plan will be implemented, how the results will be assessed and used for continuous improvement, how it will be resourced, and how results from pilot projects from summer and fall 2023 were used to prepare for full implementation.

Background of MSU

Mississippi State University (MSU) is a comprehensive, doctoral-degree-granting university located primarily in a rural town with four off-campus sites and numerous distance education courses. Originally founded as the Agricultural and Mechanical College of the State of Mississippi—one of the national land-grant entities created by Congress through the 1862 Morrill Act—MSU was established February 28, 1878.

In fall 2023, MSU enrolled 22,657 students of which 80% were undergraduate students. Nearly two-thirds of the students hail from the state of Mississippi; however, enrollment includes residents from every state in the U.S. and 85 countries from around the world. Undergraduate enrollment includes a diversity of students with first-generation students (36%), Pell-grant students (28%), African-American students (16%), and U.S. military veteran students (5%).



MSU students on a study abroad to Cambodia

The Meaning of Bulldog Experience and the Logo

The name Bulldog Experience: Engage, Reflect, Create was chosen because it captures the spirit of the program and its objectives. First, “Bulldog” represents the idea that all individuals within the Mississippi State University community are bulldogs, as that is the university mascot. Secondly, it captures the overarching focus of this initiative, which is experience. The three words below “Bulldog Experience” were intentionally selected because they express the outcomes of each experience. A student will engage in experiences; reflect on those experiences; and as a result, create new knowledge through those experiences.

The fonts were chosen also intentionally; the serif font used for bulldog, engage, reflect, and create symbolizes the courage, determination, and toughness of bulldogs. The script font used for experience represents the flowing nature of Kolb’s Experiential Learning Cycle. Theoretically, the last “e” in experience connects back to the first “e” in experience to represent that the engage, reflect, create cycle is continuous and that a key goal of this initiative is to instill lifelong learning as a core value for MSU students.



Learning Outcomes

The MSU Bulldog Experience seeks not only to engage every student in some form of experiential learning, but also to help students create new knowledge through reflective thinking practices. Specifically, the program addresses three learning outcomes that will indicate success. Upon completion of their time at Mississippi State University, students will be able to (1) identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them; (2) synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content; and (3) apply previously learned knowledge and skills to new situations or scenarios.

Topic Identification

When Dr. David Shaw began his role as Provost and Executive Vice President in 2019, he set out almost immediately to charter a new direction and strategic plan for Mississippi State University. He initiated the planning process through a series of transformational task forces to explore various topics important to the university’s mission. Seventeen task forces explored ideas from unmanned aerial vehicles to academic programs in healthcare to student course surveys. Experiential learning was one of the task force topics. Once the task forces had completed, the university administration began a series of listening sessions, which ultimately resulted in five strategic pillars, or goals, that have the potential to improve the quality of the institution:

1. Serve the Whole Student
2. Strengthen Our Bonds
3. Ignite Innovation
4. Elevate Our Community
5. Tell Our Story

This plan became known as “Transforming MSU,” and was formally adopted in spring 2023 as the university’s strategic plan. Appendix A provides the list of 5 pillars or broad goals and the 21 specific goals or outcomes within the pillars.

MSU identified the first goal of “Serve the Whole Student” as the most important area in need of transformation. The institution’s retention and graduation rates have remained stagnant for over a decade, and feedback from the listening sessions expressed a desire for more experiential learning opportunities. As part of the Experiential Learning Task Force, team members conducted an inventory of the types of existing experiential learning activities in curricular and co-curricular programs and an analysis of the effect of participation on student learning from the 2021-2022 academic year. The team realized quickly that not all experiential learning activities are tracked, and accurate numbers of student participation was difficult to find.

In curricular programs, team members found that 62 out of 84 degree programs require either an internship or capstone experience, and eight degree programs require both. Twenty-two degree programs require an internship, while 48 degree programs include a required capstone experience. Twenty-two degree programs did not require either an internship or a capstone experience. This represents just over one-fourth of the degree programs in which students are not required to complete a high impact practice as part of their degree program. Table 1 summarizes the percentage of degree programs represented by each count.

Table 1. Number of undergraduate degree programs that require internships or capstone experiences from 2021-22

Current Status of Internships or Capstone Offerings	Number of Programs	Percentage of all MSU undergraduate programs
Internship or Capstone Required	62	73.8%
Neither Internship nor Capstone Required	22	26.2%
Internship and Capstone Required	8	9.5%
Internship Required	22	26.2%
Capstone Required	48	57.1%
Total Programs	84	

In terms of the specific units in which these internships and capstone experiences reside, 100% of the degree programs within the Colleges of Business, Education, Forest Resources, and Veterinary Medicine require either an internship or capstone experience. Within the Bagley College of Engineering, all but one degree program or 92.3% require either an internship or capstone experience. Within the Colleges of Agriculture and Life Sciences and Architecture, Art, and Design, 82.4% and 75% of the degree programs require an internship or capstone experience, respectively. Two relatively new degree programs are housed within the Academic Affairs unit. One of those programs requires an internship or capstone experience. The unit that requires the fewest internships or capstone experiences is the College of Arts and Sciences with only 40.7% of its degree programs requiring these high-impact practices. These data are summarized in Table 2.

Table 2. Distribution of undergraduate programs with internships or capstones by college

Unit	Degree Programs Offered	Degree Programs Requiring Internship or Capstone	Program Percentage
Academic Affairs	2	1	50.0%
Agriculture and Life Sciences	17	14	82.4%
Architecture, Art, and Design	4	3	75.0%
Arts & Sciences	27	11	40.7%
Business	8	8	100.0%
Education	8	8	100.0%
Engineering	13	12	92.3%
Forest Resources	4	4	100.0%
Veterinary Medicine	1	1	100.0%

Other curricular experiences currently offered to undergraduate students at MSU include diversity/global learning (study abroad), service learning (community-based learning), and undergraduate research. Prior to the Bulldog Experience pilot year, approximately 500 students participated in diversity/global learning study abroad experiences annually. In terms of service learning, about 60 undergraduate courses have a Community-Engaged Learning designation with an approximate enrollment of 1,500 students across all sections of those courses. With regard to undergraduate research, a minimum of about 375 undergraduate students have participated in formal undergraduate research projects guided by faculty researchers; however, tracking the exact number was difficult to determine because these experiences have not been formalized on a transcript.

Within the co-curricular offerings, Mississippi State University has a thriving volunteer program offered through the Maroon Volunteer Center. Many student organizations require students to give their time and use their talents in local communities. Other organizations promote volunteering and members volunteer on their own, rather than in fulfillment of a requirement. In many of those cases, the opportunities relate directly to one's major. For example, on Dr. Seuss Day each year, education majors will volunteer to read to elementary children in the local schools. Each year there are approximately 25 volunteer service opportunities, and over 5,500 volunteer students are involved in these experiential learning engagements.

Other Co-Curricular offerings include leadership opportunities within student organizations, Greek life, and residential life; participation in athletic teams, spirit squads, and music performance groups; student competitions, and student employment. Currently there are over 300 student clubs and groups, 37 Greek organization chapters and 16 residence halls. Collectively, there are at least 300 students in leadership positions within those student clubs and groups and about 600 students in leadership roles within the Greek organizations. Approximately 90 students have leadership roles in residential life. Among the 17 athletic teams recognized by the NCAA at Mississippi State University, there are about 350 student athletes and within the various spirit groups, there are about 85 spirit squad student athletes. Additionally, many of the athletic teams have other students affiliated with their groups who serve as student trainers, managers, and other positions. Furthermore, approximately 700 students

participate in student music performance groups including band, choral, opera, orchestra, and applied music areas (such as piano, guitar, and strings). Students also have the opportunity to engage in several student competitions, such as the EcoCar collegiate automotive engineering competition, but there is currently no mechanism for tracking the number of such competitions or the number of students involved in those events. In terms of on-campus student employment, there are approximately 2,700 students employed in various positions across the university.

While many undergraduate students who attend MSU are involved in at least one co-curricular activity that has the potential for experiential learning, few of these activities require or facilitate reflection. Furthermore, students may not even realize that these types of activities are considered experiential learning that potentially connect to their coursework or their future careers.

According to the NSSE results, students report their participation in experiential learning at different rates depending on their major; however, most students are engaged at some level. The programs in Academic Affairs are relatively new; however, these seniors report the least amount of engagement in experiential learning (58% of seniors reported having participated in at least one experiential learning activity). The College of Architecture, Art & Design has the most students engaged in at least one experiential learning activity (96% of seniors involved in at least one experiential learning activity), and the College of Agriculture and Life Sciences has the highest proportion of seniors having participated in two or more activities (66% of seniors). Table 3 provides an analysis of the number of MSU seniors who have done or plan to do one of the following experiential learning activities.

Table 3. Proportion of seniors involved in experiential learning activities by college

Unit	No experiential learning activity	One experiential learning activity	Two or more activities
Academic Affairs	42%	53%	5%
Agriculture and Life Sciences	7%	27%	66%
Architecture, Art, and Design	4%	44%	52%
Arts & Sciences	31%	28%	41%
Business	28%	33%	39%
Education	12%	32%	56%
Engineering	9%	28%	63%
Forest Resources	9%	34%	56%
Veterinary Medicine	9%	27%	64%

Table 4 shows the distribution of the types of experiential learning activities that students are involved in. Two-thirds of seniors reported engagement in an internship, co-op, field experience, student teaching, or similar career-related learning experience. All of the Veterinary Medicine students reported engagement in an internship or similar experience. Study abroad had the fewest participants; however, students from the College of Architecture, Art, and Design had the highest proportion of students engaged in study abroad. More focus is needed on growing opportunities for senior capstones and research with faculty.

Table 4. Seniors' involvement in experiential education by type and by college

	Internship	Formal leadership role	Learning community	Study abroad	Research with faculty	Senior capstone
Academic Affairs	16%	16%	26%	11%	11%	32%
Agriculture & Life Sciences	70%	54%	32%	20%	57%	61%
Architecture, Art, & Design	72%	40%	40%	36%	40%	60%
Arts & Sciences	55%	42%	27%	17%	30%	46%
Business	42%	42%	25%	16%	12%	55%
Education	85%	44%	47%	10%	22%	41%
Engineering	77%	52%	33%	18%	36%	75%
Forest Resources	69%	53%	38%	22%	41%	69%
Veterinary Medicine	100%	36%	36%	9%	9%	36%
MSU overall	66%	45%	33%	17%	30%	55%

Although most students are involved in experiential learning activities, few are engaged in the process of reflective thinking to help them connect those experiences to real-world applications. According to the NSSE results, Reflective and Integrative Learning has traditionally been one of the engagement indicators where MSU students fall significantly below peer comparison groups. This indicator measures that students' perceptions of their ability to connect their understandings and experiences with the course content to the world around them.

Table 5 indicates MSU seniors' performance compared to target scores for SEC peers.

Table 5. MSU Senior means for the Reflective & Integrative Learning scores from NSSE

	2014	2016	2018	2019	2020	2021	Target
Reflective and Integrative Learning	36.2	35.8	35.0	34.9	35.5	35.1	37.1

Questions from the NSSE that informed the Reflective and Integrative Learning include asking students how often they did the following:

- Combined ideas from different courses when completing assignments
- Connected your learning to societal problems or issues
- Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
- Learned something that changed the way you understand an issue or concept
- Connected ideas from your courses to your prior experiences or knowledge

According to the NSSE data, students' ability to reflect and integrate learning across their experiences in college did not necessarily correlate. For instance, in the College of Engineering, 91% of students reported having engaged in one or more experiential learning activity; however, the college's average

Reflective and Integrative Learning score is 32.2. Table 6 provides a breakdown of the colleges' average Reflective and Integrative Learning Engagement indicator along with the percentage of students who have engaged in one or more experiential learning activity. A Pearson's correlation between the number of experiential learning activities and a student's reflective and integrative learning score is 24.2%, which is significant at the less than .001 level. From this analysis, one can conclude that the mere participation in experiential learning activities does not necessarily affect a student's overall ability to connect experiences to coursework and to transform their experiences into new knowledge. Similarly, feedback from alumni surveys indicated that students had difficulty connecting their course content to their future careers. Even though a majority of MSU students complete an internship or co-op experience, there seems to be a disconnect between their course content and how it applies in new situations in the future.

Table 6. Comparison between the Reflective & Integrative Learning scores and the percentage of seniors participating in one or more experiential learning activity

Unit	Average score on the Reflective and Integrative Learning NSSE survey	Percentage of seniors who participated in one or more experiential learning activity
Academic Affairs	29.9	58%
Agriculture and Life Sciences	37.4	93%
Architecture, Art, and Design	35.1	96%
Arts & Sciences	37.1	69%
Business	35.7	72%
Education	39.0	88%
Engineering	32.2	91%
Forest Resources	33.8	91%
Veterinary Medicine	38.7	91%

The MSU community recognized that for the institution to fulfill its vision to “provide an innovative, hands-on learning experience, meeting all students where they are and equipping them for a world that needs their talent,” more effort is needed to enhance the experiential learning opportunities. For this reason, Mississippi State University selected the broad topic of experiential learning as its next QEP.

Broad-based Support of Institutional Constituencies

The topic selection process involved many constituents from across campus. The Experiential Learning Task Force, chaired by the Vice Provost charged with leading the Transforming MSU strategic plan, collaborated with members of the President's Cabinet to select the broad topic of experiential learning as the next QEP. Membership on this task force included 31 people from each of the academic colleges, the Student Association, the Graduate Student Association, Faculty Senate, Staff Council, and staff who represent the different types of co-curricular activities such as Campus Activities, Career Center, International Education, and Maroon Volunteer Center.

Once the broad topic of experiential learning was selected for the next QEP, the Experiential Learning Task Force set about narrowing the focus to the specific initiatives that the plan would undertake.

Drawing from the high-impact practices described in the literature (Kuh 2008), constituents were asked which areas of experiential learning they thought were most important for MSU students. Faculty, staff, students, employers, and alumni were asked by survey to rank the following eight high-impact practices:

- First-year seminar and experience courses to transition students to college
- Learning communities where small groups of students take two or more courses together
- Collaborative assignments and projects
- Research with a faculty member
- Intercultural studies
- Service learning, community-based learning opportunities
- Internships / co-ops
- Courses or projects that demonstrate what you've learned either in that class or throughout your college career (e.g., portfolios, performance/presentation, poster/exhibit)

There were 2,274 responses to the constituent surveys. Of these responses, 65% came from students, 20% from alumni, and 5% each from employers, staff, and faculty. Current and former Mississippi State University students formed the majority of input for narrowing the topic. Figure 1 indicates the response rates by constituent type.

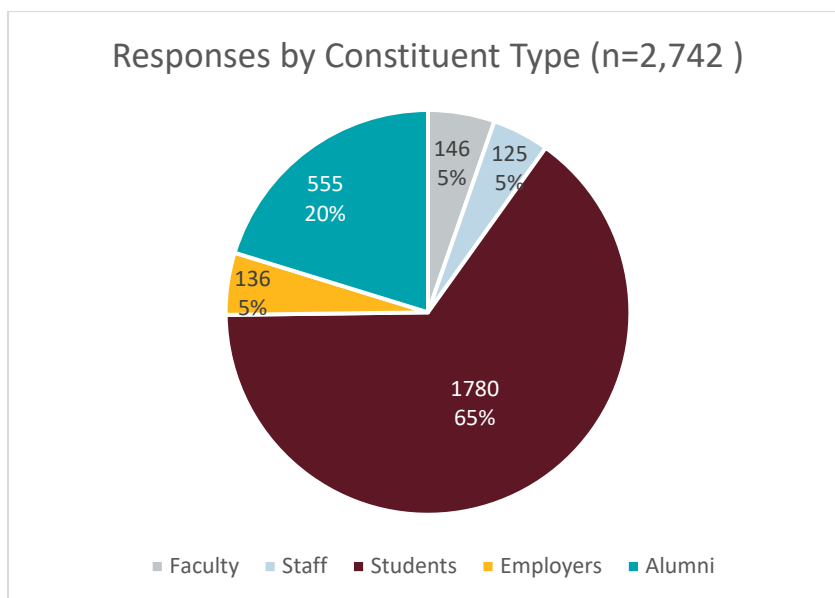


Figure 1. Response rates from university constituents

The topic with the most interest from the most constituent types was first-year seminar and experience courses. MSU was already engaging in developing a 3-hour first-year experience course using separately funded grant opportunities and private giving. Because that initiative was underway with its own funding, first-year experience (FYE) is not considered a part of experiential learning for the QEP; however, the assessment plan describes how Bulldog Experience will leverage the FYE courses as an opportunity to introduce reflective thinking.

The second most selected topic was internships and co-ops. Overwhelmingly, alumni responded that this aspect was most important to them in their college career or a topic they wished they had had while

in school. Although only two constituent groups selected internships and co-ops, the responses were a large proportion of the alumni participants.

The next two categories close in number of responses were collaborative assignments and projects and learning communities where students take two or more courses together. Patterns surrounding community and social engagement were evident in the popularity of the topics selected in response to this survey.

Table 7 provides the results of the survey that selected the topics for the QEP.

Table 7. Topic rankings by constituent group

	Faculty	Staff	Students	Employers	Alumni
First-year seminar and experience courses to transition students to college	✓	✓	✓		✓
Internships / Co-ops				✓	✓
Collaborative assignments and projects	✓		✓	✓	
Learning communities where small groups of students take 2 or more courses together	✓		✓		✓
Courses or projects that demonstrate what you've learned either in that class or throughout your college career (e.g., portfolios, performance/presentation, poster/exhibit)		✓		✓	
Service learning, community-based learning opportunities		✓			

Based on the responses from this survey, as well as feedback from the faculty and staff currently offering experiential learning opportunities, Bulldog Experience decided to focus on incorporating reflective thinking into existing experiences and to work with academic programs and co-curricular programming to create new collaborative experiences where students could work together to enhance their learning opportunities.

The majority of the Experiential Learning Task Force, as well as some new volunteers and invited faculty representatives, reconstituted as the Bulldog Experience Steering Committee (members are provided in Appendix B). The Steering Committee began meeting monthly starting in summer 2022 to design the specific plan. This committee voted on the overarching goals and learning outcomes for the next QEP and charged the QEP staff with implementing the plan.

Plan to Improve Student Learning

The focus of Bulldog Experience is on student learning through experiential engagements with intentional reflection that build in complexity over time. The university's desire goes beyond students

simply just having experiences which end when the duration of the experience is over. Instead, the university wants to enable students to maximize the potential of their experience by reflecting on them critically and by making connections to prior learning that occurred both in and out of the classroom. In doing so, students will create new knowledge that will impact their futures.

Through Bulldog Experience, the QEP staff will help faculty and staff design experiential learning opportunities. Where no experiences exist currently, Bulldog Experience will seek to establish new opportunities both inside and out of the classroom. Where experiences currently exist, Bulldog Experience will ensure that reflective activity is occurring at the appropriate level. The QEP assessment process will help faculty and staff fine-tune their activities to ensure students are learning deeply and creating new knowledge from what they learned as they progress through their academic careers.

Students will be encouraged to track their engagement in experiential learning opportunities through Cowbell Connect, a software program designed for encouraging student involvement. Every student already has a Cowbell Connect account, and many experiences have been added to their accounts even if the student is not aware. Through Bulldog Experience, students will be encouraged to apply for Bulldog Recognition as a university-recognized achievement for developing reflective habits and learning how to use those habits to build new knowledge.



Students in a leadership seminar

In order to prepare students for meaningful reflection, Bulldog Experience stakeholders will specifically teach them in designated courses what the university means by reflection: it is a process through which one carefully, critically, and intentionally thinks about, analyzes, and evaluates a particular experience in terms of what was learned, how it changed one's understanding or perspectives, and how it might be applied to future experiences. By requiring students to reflect on their experiences throughout their time at Mississippi State University, they will see firsthand the value and importance of reflecting and, as they move on after graduation, continue to use reflection as a tool for professional growth. In particular, they will see that by producing a tangible written or spoken reflection, their communication skills are further refined and developed which is one of the most important professional skills they will need in their futures.

The theoretical framework on which the goals and learning outcomes of Bulldog Experience are based is Kolb's Experiential Learning Cycle (1984) and select High-Impact Educational Practices (Kuh, 2008). Through Bulldog Experience, Mississippi State University has adopted Kolb's definition of experiential learning which is "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming the experience (Kolb, 1984, p.41)." MSU chose to use high-impact practices because they are evidence-based teaching and learning practices through which experiential learning can occur.

Engagement Continuum

Not all experiential learning opportunities are designed to help students think deeply about academic content and create new knowledge. Early in their academic careers, students are not ready to apply their content knowledge to new situations. In other situations, faculty and staff may not have prepared the student appropriately for the ability to transform their experiences into new knowledge. For this reason, Bulldog Experience designed the Engagement Continuum to show the depth of learning students should receive from the experiences. From participatory engagements at the left to the culminating experiences on the right (see Figure 2), students have a range of activities that build up through the four stages of the Kolb model.

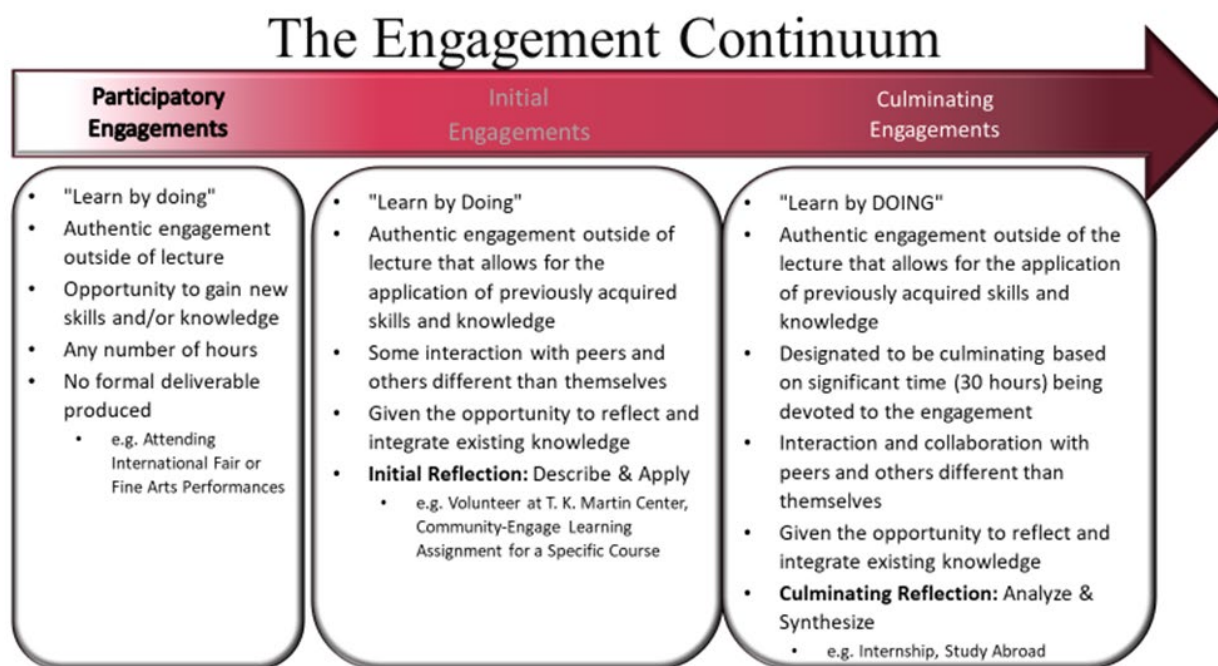


Figure 2. The Engagement Continuum

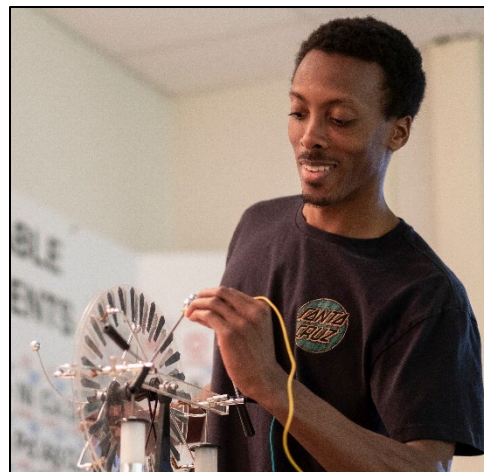
Concrete Experience

Kolb's Experiential Learning Cycle begins with Concrete Experience. These concrete experiences are participatory engagements that do not have guided reflective activities and that may only result in students observing and considering whether they like or dislike the activity. Participatory engagements give students exposure to, and awareness of, the diverse opportunities and activities offered at MSU. These engagements are authentic and occur outside of formal lecture classes. Students are not required to formally reflect, although they are encouraged to think about the experience in terms of what they learned from it about themselves and about what types of experiences they would like to have while attending MSU. Examples of participatory engagements include attending the annual International Fiesta sponsored by the Holmes Cultural Diversity Center and World Neighbors Association, attending fine arts performances sponsored by various departments, and attending Global Lecture Series events hosted by the Student Association Executive Council.

Reflective Observation

The next stage of Kolb's Experiential Learning Cycle is Reflective Observation, which aligns with initial engagements on the engagement continuum. Students will engage in this stage of the Experiential Learning Cycle when they construct initial reflections. By constructing an initial reflection, students will review and reflect on the initial experience. The expectation of the depth of an initial reflection is that students are transforming the experience into new knowledge by describing the engagement and how they applied previously acquired skills and knowledge during the engagements.

Typically, these engagements will be less than 30 hours in duration, and students will have limited prior experiences with which to connect. Examples of such initial engagements include community-engaged learning assignments, course-required field trips, informal survey research, course assignments, and community volunteer activities. The Office of Bulldog Experience will collaborate with both co-curricular and curricular units to construct experiential learning engagements in intentional ways so that students can make connections between out-of-class experiential learning engagements with in-class learning when they reflect as part of the Reflective Observation stage of the Experiential Learning Cycle. Experiential learning engagements created within co-curricular units will have intentional components that will allow students to make connections to general education courses, in particular. Experiential learning engagements created within curricular units will provide opportunities for students to apply what they are learning in their degree-specific course work. Students participating in those experiential learning engagements will be able to connect more directly what they experienced in those curricular experiential learning engagements with what they are learning in their program of study courses.



Student leading a Physics demonstration during Science Night at the Museum

Abstract Conceptualism

The third stage of Kolb's Experiential Learning Cycle is Abstract Conceptualism which captures what the student concludes or learns as a result of the experience. Through training offered by the Office of Bulldog Experience, faculty and staff will learn how to guide students' conceptualization of what they learn while completing experiential learning engagements. This training for faculty and staff will focus on what comprises experiential learning, the Kolb Experiential Learning Cycle and what each phase entails, the Bulldog Experience reflection prompts, and the use of reflection to facilitate the creation of new knowledge after the experiential learning engagement is completed.

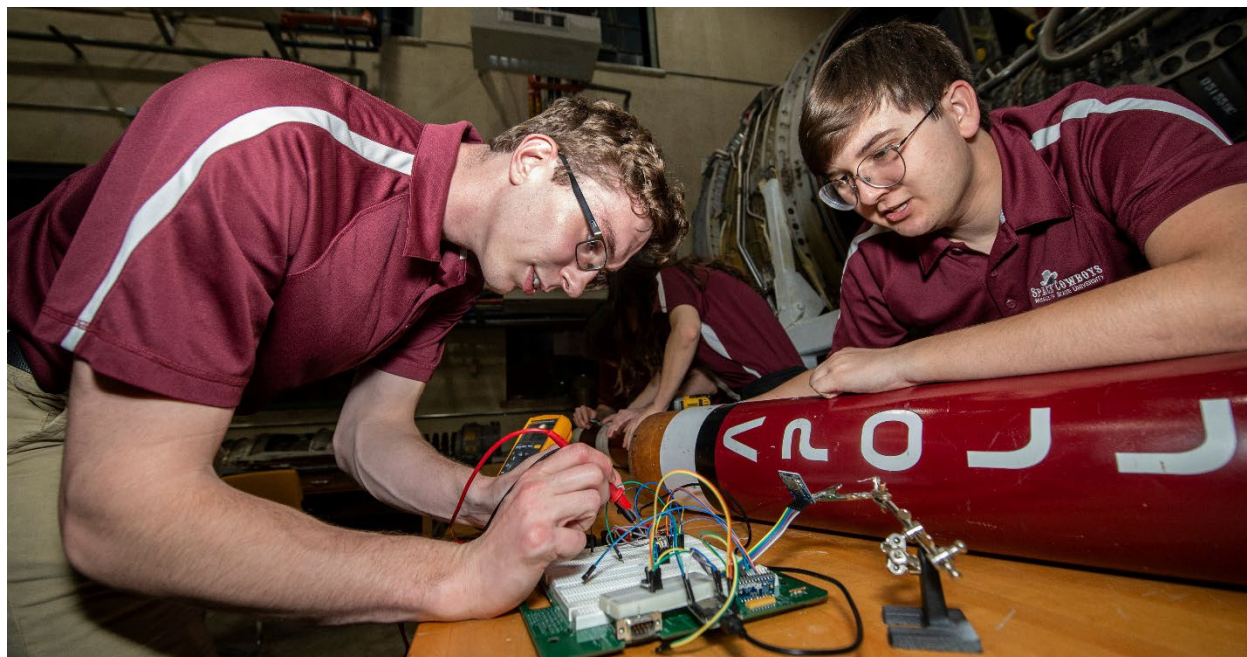
At the other end of the continuum are culminating engagements. These engagements are also authentic and allow for the application of previously acquired skills and knowledge but more so than in the case of initial engagements. These engagements must be significant in terms of the duration being at least 30 hours and the expected array of connections that students should be able to make with previous coursework and out-of-class experiences. Students completing culminating engagements will interact and collaborate with peers and others different than themselves. By being culminating, these

engagements will occur during the last semesters that the student is enrolled as an undergraduate at MSU. Examples of culminating engagements include undergraduate research, internships, study abroad experiences, and capstone courses and projects. Upon completion of culminating engagements, students are required to reflect on the engagement as well as all of their previous experiential learning engagements and course work in order to produce a formal deliverable called a culminating reflection.

Currently, most culminating experiences offered at MSU do not require reflections that facilitate application, analysis, and synthesis of prior experiences, although some do require a reflection focused on what was learned. The overwhelming majority of other experiential learning opportunities do not require any type of reflection. As a result of Bulldog Experience, students participating in initial and culminating engagements will be required to reflect on those engagements by responding to prompts that focus on transforming undergraduate student's experiential learning engagements into new knowledge. Additionally, the Office of Bulldog Experience will work with faculty to provide intentional assistance to students who are typically under-represented in terms of participation in the high-impact practices of diversity/global learning, service and community-based learning, internships, capstone courses and projects, and undergraduate research.

Active Experimentation

The final stage of the Experiential Learning Cycle is Active Experimentation which happens during a culminating engagement and culminating reflection. During the Active Experimentation stage, students plan and try out what was previously learned during the Abstract Conceptualism phase. Through the creation of a culminating reflection, students will explain how they planned and tried out what was previously learned when confronted with new experiences that were part of the culminating engagement. In particular, students will reflect on how they applied previously learned knowledge and skills to new situations or scenarios. By using a rubric aligned with the Bulldog Experience learning outcomes to assess culminating reflections, the Office of Bulldog Experience will be able to determine how the student engaged in active experimentation.



The Office of Bulldog Experience will work with faculty within each curricular program area to create and implement at least one high-impact practice culminating experience to each of their students. By engaging in these culminating experiences, students will be able to actively experiment with what was already learned and experienced when confronted with new situations. Students will provide evidence of this active experimentation through the creation of culminating reflections.

Kolb's Experiential Learning Cycle

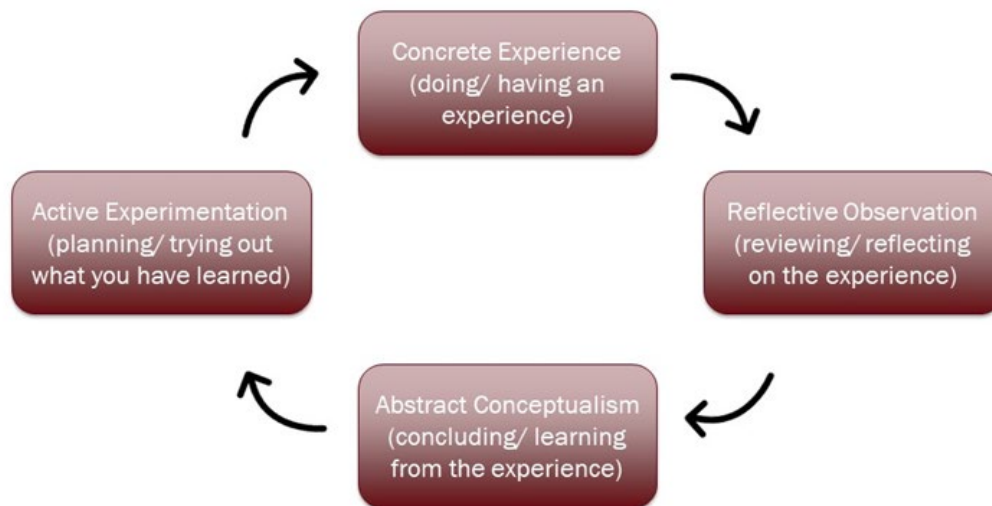


Figure 3. Kolb's Experiential Learning Cycle

Use of Reflection

As John Dewey stated, “We do not learn from experience, we learn from reflecting on experience (Dewey, 1933, p. 78).” Thus, the Bulldog Experience Executive Committee, in collaboration with the Bulldog Experience Steering Committee, determined that formal reflections would be the optimal student deliverable in terms of demonstrating how they transformed their experiences into new knowledge. The Bulldog Experience Steering Committee defined “reflective knowledge” to be the result of intentional, contemplative consideration of one’s experiences, built over time, which is evidenced by a formal deliverable. The formal deliverable is a reflection that is either produced in written format or audio format with verbal communication. This is aligned with the second phase of Kolb’s Experiential Learning Cycle, Reflective Observation, as well as the third and fourth phases, Abstract Conceptualism and Active Experimentation, respectively. By producing a formal reflection, students will demonstrate those three phases of the Experiential Learning Cycle. In particular, initial reflections will be used to demonstrate the second and third phases, Reflective Observation and Abstract Conceptualism. Culminating reflections will be used to demonstrate the fourth phase, Active Experimentation.

Reflection was also chosen due to the intrinsic benefits of formally reflecting. Those benefits include helping one learn from mistakes, empowering one to gain self-awareness, enabling the creation of new ideas, and facilitating more refined and developed communication skills through the act of producing a formal written or spoken reflection. Other research-supported benefits are that those who regularly

reflect on their experiences are happier than, more productive than, and outperform those who do not (Di Stefano, Gino, Pisano, & Staats, 2014). When students are first introduced to Bulldog Experience and the inclusion of reflection to demonstrate the transformation of experiences into new knowledge, these benefits are shared with students in an effort to promote reflection as a habit of growth lifelong self-improvement.

Implementation of Bulldog Experience

Bulldog Experience will be introduced to students through a newly created first year experience course, FYE 1003, The MSU Experience. The Office of Bulldog Experience will provide an interactive learning session for each section of FYE 1003 that includes what Bulldog Experience is, what it means to reflect, the benefits of reflection, a process for how to reflect, the three types of engagements and characteristics of each, the two types of reflections and the possible reflection formats, and an introduction to the Bulldog Recognition opportunity (described at the end of this section). Similarly, a new senior year experience course, “Bulldog Experience: Reflecting & Preparing for Post-College Life,” will be offered for one credit-hour through the Office of Bulldog Experience for graduating seniors through which they will be guided in creating a culminating reflection and communicating the benefits of the experiences they had in their academic career. These students will also learn what Bulldog Experience is, what it means to reflect, the benefits of reflection, a process for how to reflect, the three types of engagements and characteristics of each, the two types of reflections and the possible reflection formats as part of the course. Other topics that will be discussed within the course include life-long learning, setting goals and priorities, constructing a résumé and cover letter, maintaining work-life balance, and developing and maintaining positive life habits. Students not enrolled in either of these courses will be introduced to Bulldog Experience through curricular and co-curricular events sponsored or co-sponsored by the Office of Bulldog Experience, by faculty who add Bulldog Experience reflections to their courses that already include experiential learning activities, and by faculty and staff offering new experiential learning engagements.

The Executive Director and Faculty Director have already begun socializing the plan with the academic and co-curricular units across campus. The directors intend to meet with every curricular department at the degree program level in four phases.

- Phase 1: Meet with small groups of program area faculty for each degree program within each department. During each meeting, introduce program faculty to Bulldog Experience, explaining the goals and learning outcomes and the meaning of experiential learning with intentional reflection and discuss which specific required courses within the degree program could be designated as experiential learning courses with a required Bulldog Experience reflection. Faculty will continue the discussion in subsequent program area meetings to determine what course or courses will contain an initial experience and what course or courses will contain a culminating experience, if such courses exist.
- Phase 2: Faculty will add the Bulldog Experience reflection to courses in which experiential learning activities already exist that can be made into initial or culminating experiences by adding a required reflection.
- Phase 3: Meet with program area faculty who teach the courses that include Bulldog Experience reflections to give them feedback on the reflections that have been submitted and scored by the Office of Bulldog Experience.

- Phase 4: Work with faculty in program areas to develop new experiential learning courses that will provide either an initial experiential learning engagement or a culminating experiential learning engagement to students majoring in that program. The Office of Bulldog Experience aims to have at least two experiential learning courses designated within each degree program, one that includes an initial engagement and one that includes a culminating engagement.

The Office of Bulldog Experience has been working closely to the co-curricular units on campus to design new experiences and to incorporate reflective elements into existing opportunities. The Division of Student Affairs has already implemented a tracking program, called Cowbell Connect. The Executive Director will continue to work with the staff in Student Affairs to fine-tune how this tool is used to facilitate tracking participatory experiences and designing those experiences in ways that will appear in students' culminating reflections.

Inclusion of High-Impact Practices

To ensure that Bulldog Experience considers engagements that are grounded in theory to have a significant positive impact on students, MSU looks to high-impact practices for ways that students are encouraged to engage in experiential learning. While not all experiential learning will fall into these categories, these are areas that are highlighted because they encompass many of the activities that are already happening at Mississippi State University. Instead of trying to incorporate more high-impact practices, it is better to start with focusing on what already is a part of the university and working with key leaders in each area to enhance these high-impact practices by including reflection into each component. The Office of Bulldog Experience identified six high-impact practices to include in this Quality Enhancement Plan:

- First-Year Seminars and Experiences
- Diversity/Global Learning (Study Away/Abroad)
- Service Learning, Community-Based Learning
- Internships (and Co-Ops)
- Undergraduate Research
- Capstone Courses and Projects (could include Simulations)



Student working on a capstone project for Interior Design

Kuh (2008) recommends that students should participate in at least two high-impact practices (HIP) during their academic careers, but ideally would participate in one HIP each year of their college career. Because Bulldog Experiences is working with each degree program to incorporate experiential learning in an introductory course as well as ensuring all programs have a culminating experience embedded in their degree program, most students will participate in at least two high-impact practices. The Office is also partnering with units across campus to ensure that students can engage in high-impact practices outside of their degree program as well. For these reasons, most students are likely to participate in at least two high-impact practices during their academic careers.

Bulldog Experience has set standards and definitions for what qualifies as experiential learning. Participatory and introductory experiences that students engage in are more geared toward getting students involved in the experiential learning cycle. However, culminating experiences should incorporate elements to ensure that they are having a positive impact on students. Kuh, O'Donnell, and Reed (2013) found that high-impact practices share eight key elements:

- Performance expectations set at appropriately high levels
- Significant investment of time and effort by students over an extended period of time
- Interactions with faculty and peers about substantive matters
- Experiences with diversity, wherein students are exposed to and must contend with people and circumstances that differ from those with which students are familiar
- Frequent, timely, and constructive feedback
- Periodic, structured opportunities to reflect and integrate learning
- Opportunities to discover relevance of learning through real-world applications
- Public demonstration of competence.

Of these key elements, Bulldog Experience is primarily focusing on three areas: significant investment of time and effort by students over an extended period of time; periodic, structured opportunities to reflect and integrate learning; and opportunities to discover relevance of learning through real-world applications. While other elements of these high-impact practices are likely taking place when students are in the classroom or engaging in co-curricular activities, Bulldog Experience felt that trying to ensure each of these key elements were met by each of the experiential learning opportunities was too much to take on in the initial five-year QEP.

BELL Grants

Faculty and staff will be encouraged to submit applications requesting funding through a Bulldog Experience Learning Liaison (BELL) Grant for up to \$5,000 per unique experiential learning engagement. Applications will be due once each spring semester and once each fall semester. The Office of Bulldog Experience will review grant applications and award faculty or staff by the end of the semester prior to when the engagement will be implemented. The purpose of these grants is to provide financial support for experiential learning engagements that are either completely new or are the result of expanding a previous experiential learning activity that was already part of a course or co-curricular activity. Preference in awarding grants will be given to culminating engagements and first-time applicants. Those receiving BELL Grants must also agree to participate in training offered by the Office of Bulldog Experience and as part of the application must provide a detailed timeline describing the creation or expansion and implementation of the experiential learning engagement being proposed. If awarded a BELL Grant, faculty or staff will be required to submit a detailed report at the end of the semester in which the engagement occurred describing attainment of the goals and outcomes as stated in their application. Within each application, faculty or staff must state how the proposed engagement aligns with specific Bulldog Experience learning outcomes. The Office of Bulldog Experience will also provide individual brainstorming sessions for those interested in adding experiential learning engagements but who are uncertain as to how to go about doing this.



Faculty and student from a mammalogy class practicing concepts from the course

Support for Faculty

Bulldog Experience will support faculty primarily through training and grants offering monetary support. Each semester, the Office of Bulldog Experience will provide training to include what experiential learning is at MSU, the learning outcomes of Bulldog Experience, the Kolb Experiential Learning Cycle, the importance and benefits of reflecting, the need for reflection to facilitate the creation of new knowledge after experiential learning engagements are completed, a process for reflection that includes both individual and social components that should be taught to students, what each reflection prompt means, the different types of engagements, and the different levels of reflection. Subsequent training will be provided to faculty that focuses specifically on assessment of both initial and culminating reflections, in terms of what is expected within initial reflections, how to use the initial reflection Checklist, what is expected within culminating reflections and how to use the culminating reflection Rubric. As needed, individual training units will discuss how to facilitate better student reflections and how to address any weaknesses noted in the reflections submitted during the previous year. The Office of Bulldog Experience will also support faculty teaching classes that include initial or culminating experiential learning engagements by providing one interactive learning session to their students about Bulldog Experience, the benefits of regularly reflecting, the need for reflection to facilitate the creation of new knowledge after experiential learning engagements are completed, a process for reflection that includes both individual and social components that they should employ, and explanations of what each reflection prompt means.

The Office of Bulldog Experience will provide logistical support to faculty who are adding or expanding experiential learning opportunities. Bulldog Experience staff will offer technical support for using Canvas for collecting electronic reflections. Staff will also provide standard language for course syllabi and

Canvas assignments regarding required initial or culminating experiential learning engagements and initial or culminating reflections. Within this standard language will be a brief description of what an initial or culminating experiential learning engagement is, what an initial or culminating reflection is, and the five reflection prompts that students will be required to respond to upon completion of the engagement. Faculty who wish to require written reflections, rather than audio or video with spoken language, will have access to a reflection template. The Office of Bulldog Experience will maintain an informative website with a specific tab for faculty resources. Within this tab, faculty will be able to find information about Bulldog Experience, initial and culminating engagement descriptions, initial and culminating reflection descriptions, the template for reflections, the BELL Grant form, and the checklist and rubric that will be used to score initial and culminating reflections.

Support for Staff

Bulldog Experience will support staff through training and grants offering monetary support, the same way faculty are supported. Staff will be trained on an ongoing basis as they create experiences for students to engage in. The role of the Office of Bulldog Experience is to help ensure that they are setting up new experiences that align with the Bulldog Experience learning outcomes, for example, by ensuring that students consider how the engagement might tie into their long-term plans and their academic program of study. Staff will also be trained on the Kolb Experiential Learning Cycle, including the importance and benefits of reflecting and the need for reflection to facilitate the creation of new knowledge after experiential learning engagements are completed. Staff members will also be trained on how to include the Bulldog Experience reflection prompts as well as how to evaluate them using the initial reflection checklist. Additionally, staff will be trained on how to use the data from their reflections to learn what students are getting from the experience to evaluate whether the event had the intended impact.



Students attending a performance at the International Fiesta, an event Student Affairs supports every spring

Bulldog Recognition

Starting spring 2025, students will have the ability to earn Bulldog Recognition, a designation highlighting their embracement of experiential learning. To receive this recognition, students must submit an application as well as a culminating reflection. In the application, students will list their top five experiential learning activities and describe how these activities were meaningful and beneficial to them. The reflection they submit may have been completed as part of an experiential learning class activity, such as in a capstone or other course with a culminating project. Students who receive Bulldog Recognition will have this noted on their transcript and will have a cord that they wear along with their graduation regalia. In order for as many students to earn it as possible, the criteria will be set intentionally to promote a high level of engagement in experiential learning. During the summer, an assessment team will apply the rubric to the culminating reflections if they were not a part of a Bulldog Experience class. These results will be added to the plan's overall assessment results. After the first year of implementation, a subcommittee of the Bulldog Experience Advisory Committee will review the applications and the assessment results to determine whether the criteria are appropriate or if the application needs further consideration.

The purpose of the Bulldog Recognition is to incentivize engagement in the Bulldog Experience and to help students see how the experiences connect to their future careers. This process helps them cultivate a narrative that they would like to share with potential employers, graduate admission personnel, faculty, or others who want to better understand how they engaged in experiential learning. Students who choose to enroll in a special topic course, starting in the Spring 2024 semester, will explore how to build and leverage this recognition in their future careers and graduate school searches.

Resources Committed to the Plan

MSU is committed to implementing Bulldog Experience and has designated appropriate human and fiscal resources to accomplish the QEP's goals and outcomes. An annual budget of nearly \$500,000 will employ five individuals to implement the plan, assess the plan, as well as fund grant opportunities to grow the number and type of experiential learning opportunities. Furthermore, a dedicated advisory committee has been established to ensure that the Bulldog Experience maintains operations as designed and to provide support throughout the university community for its continued endorsement.

Human Resources

MSU has identified five personnel for a total of three full-time equivalent staff to the implementation and completion of the QEP. The Executive Director and the QEP Coordinator are full-time staff dedicated to the administration and support of the plan. A half-time Faculty Director also contributes to the implementation and faculty coordination for the success of the plan. A quarter-time Budget Coordinator that is shared with the Office of Institutional Research & Effectiveness supports the fiscal and human resources needs of the Bulldog Experience. Finally, the accreditation liaison has a quarter-time appointment to support the executive functions of the plan to ensure that it continues to follow the institution's strategic plan.

Executive Director

Dr. Kayla Pineda, Executive Director, currently serves as the full-time administrator for ensuring the implementation of Bulldog Experience. She has nearly ten years of experience working in student

learning assessment, where she worked closely with academic program coordinators and program faculty to design assessment plans in accordance with MSU's institutional effectiveness process. As the Executive Director, Dr. Pineda will take the lead on implementation of the plan, marketing, data collection and analysis, managing the QEP staff, overseeing the grant applications and recognitions, designing the co-curricular training, and collaborating with staff on developing and enhancing co-curricular experiences.

The Executive Director and Faculty Director will work to ensure concurrence on all major decisions affecting Bulldog Experience. Together, they will review grant submissions and determine selections, review the assessment framework and results, make adjustments to the plan as needed, and co-chair the Steering Committee.

QEP Coordinator

Mr. Jason Cory serves as the QEP Coordinator, a full-time staff member dedicated to Bulldog Experience. His role is charged with implementing the planning processes as directed by QEP leadership. He will create training materials, provide technical support, maintain the QEP website, and serve as a point of contact for procedural questions. He will also coordinate the logistics of the QEP, such as meeting schedules for the Steering Committee, including taking minutes.

Prior to joining the QEP, Mr. Cory served as the Administrative Assistant to the MSU Robert Holland Faculty Senate. He worked closely with the President of the Senate and has made numerous faculty connections. As a recognizable staff member to many faculty across campus, Mr. Cory will continue being a familiar face for other university-wide initiatives through the QEP.

Faculty Director

Dr. Rebecca Robichaux-Davis joins the QEP half-time as the Faculty Director with her other half-time role as Professor of Elementary Education in the College of Education. As Faculty Director, her main function is to engage faculty in Bulldog Experience to enhance student learning. She will collaborate with academic program coordinators and program faculty to add reflection and to create culminating experiences where none exist. She will work to increase the number of faculty who participate in Bulldog Experience and to continuously assess and improve the experiences that faculty create. Dr. Robichaux-Davis provides the technical expertise to develop training modules for faculty and staff on incorporating reflection into experiential learning activities. She has developed and will maintain the EXL course, which is a form of a senior capstone for graduating undergraduate students.

Dr. Robichaux-Davis served as President of the Faculty Senate during the 2020 COVID-19 pandemic. She has experience leading the faculty and collaborating with other content experts. Furthermore, in her faculty position in teacher preparation programs for elementary education, she oversees the K-12 field experiences and internships for pre-service teachers. She has over 20 years of experience using student-focused pedagogy to guide students in becoming reflective professionals. Through scaffolded reflection exercises, her students connect what they have learned in the field to what they have studied in the classroom.

Additional Staff

In addition to the two quarter-time personnel, additional staff may be needed on a contractual basis to support the assessment activities of the QEP. In years 0 and 1, Bulldog Experience anticipates being able

to facilitate the assessment procedures in-house, but as the plan grows, additional personnel may be needed to evaluate student deliverables using the QEP rubric.

Fiscal Resources

Bulldog Experience has a total budget of \$500,000 annually beginning in FY2024. Roughly half of the budget will go toward salaries for an Executive Director, Faculty Director, Coordinator, and portions of salaries for other staff across campus who will contribute to the plan. The remaining budget will go toward faculty or staff grants to encourage the creation of additional experiential learning opportunities.

Table 8. Projected Budget

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Salaries	\$267,000	\$267,000	\$267,000	\$267,000	\$267,000	\$267,000
Professional Development	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
NSSE instrument	\$8,500	\$8,500	\$8,500	\$8,500	\$8,500	\$8,500
Marketing	\$10,000	\$8,000	\$5,000	\$5,000	\$2,500	\$2,500
Supplies	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500
Evaluators	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000	\$65,000
Grants	\$120,000	\$122,000	\$125,000	\$125,000	\$127,500	\$127,500
Total	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000

If the institution were to award merit raises at any point during the lifetime of the QEP, then those raises would be applied to the salaries and the total budget for the unit would increase accordingly. However, those raises cannot be anticipated for the purposes of planning.

Partners

Bulldog Experience will collaborate with numerous individuals and departments across the university to enhance existing and create new experiential learning opportunities for students. The university team involves curricular and co-curricular experiences, with partners across the administration and staff, faculty, and students.

Without the classroom experience, the connection between the curriculum and post-baccalaureate careers would be lost. Therefore, Bulldog Experience will rely on support and leadership from each of the deans, associate deans, and the department heads to motivate participation among academic programs and faculty.

The co-curricular offices within the Division of Academic Affairs, the Division of Student Affairs, and the Division of Student Access, Opportunity, and Success have all pledged to support the experiential learning initiatives as part of the QEP. Offices such as International Institute and Study Abroad, the Center for Community Engagement, the Career Center, and the Center for Student Activities are valuable contributors to the success of the plan. With a common, shared goal of improving the learning experience for students, the partnerships were formed easily.

The Executive Director and Faculty Director have already made key connections among these partnering offices and departments. This team, along with volunteers from the Steering Committee, have conducted town hall meetings and various information sessions. Over summer 2022 at the division-wide retreat, the Vice President of Student Affairs made it clear that the offices of the division will support Bulldog Experience. In the pilot year, members from both the curricular and co-curricular perspectives participated in the initial activities of Bulldog Experience.

Steering/Advisory Committee

The Bulldog Experience Steering Committee was formally established in spring 2022. Membership consisted of faculty representation from each academic and service college, as well as a member from the Student Association. Preference was given to faculty with different experiences with the high-impact practices such as those leading community engagement experiences, study abroad coursework, undergraduate research opportunities, field experiences, and other forms of collaborative or capstone projects with connections to real-world applications. Additionally, membership from the co-curricular side includes the Maroon Volunteer Center, International Institute, Center for Student Activities, Office of Student Success, Alumni Partnerships & Business Development, and the Career Center.

The Steering Committee met monthly to discuss the details of the plan to implement and assess Bulldog Experience. Once the plan had been designed, the committee shifted toward being an Advisory Committee that will meet once a semester to review assessment results and plans for the upcoming academic year. Members of the Steering/Advisory Committee are provided in Appendix B.



Steering Committee meeting, led by the Faculty Director

Plan to Assess

Bulldog Experience seeks to engage every MSU undergraduate student in experiential learning activities through both curricular and co-curricular engagements that require students to reflect on these experiences and transform their experiences into new knowledge. In this context, “experiences” are meaningful and beneficial activities or events that result from select high-impact educational practices (Kuh, 2008). Also in this context, “experiential learning” refers to “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming the experience” (Kolb, 1984). This section of the document describes what the students will learn, the assessment instruments and plan for data collection, description of the pilot studies and initial data results, discussion about data analysis and criteria for success, and the annual timeline for assessment activities.

Learning Outcomes

To facilitate such experiential learning experiences, three learning outcomes aligned with Kolb’s Experiential Learning Cycle are central to the program’s design. Specifically, as a result of participating in Bulldog Experience, undergraduate students will be able to identify connections between their in-class and out-of-class experiences that were meaningful and beneficial to them; synthesize multiple sources of information, including prior experiences, to deepen their understanding of academic content; and apply previously learned knowledge and skills to new situations or scenarios.



Students at Career Expo talking with prospective employers

Bulldog Experience will enhance student knowledge, skills, and behaviors by specifically focusing on connections between in-class and out-of-class experiences. By learning to identify connections between in-class and out-of-class experiences, students will build unique knowledge and skills that would not likely be built if students only had in-class or out-of-class experiences rather than both. By bringing both types of experiences together and focusing on the connections between them, students will better understand the reason for both in terms of why those experiences were meaningful and beneficial to them.

Students’ knowledge, skills, and behaviors will also be enhanced as they deepen their understanding of academic content. Through an emphasis on reflection, Bulldog Experience resources will facilitate students in synthesizing information acquired through multiple courses and experiences. By combining various parts of their academic courses and experiences to create a cohesive and coherent whole, students will deepen their understanding of the academic content that they are learning. They will gain a different perspective on the academic content taught in their classes by synthesizing it with prior

experiences. By doing this repeatedly over their time while enrolled at Mississippi State University, students will gain knowledge, skills and behaviors needed for handling new situations or scenarios that they will encounter after they graduate. Through reflection, students will gain experience in extrapolating their own unique but generalizable ways of approaching new situation or scenarios. This knowledge and skill will be invaluable to them in whatever they choose to do after graduating whether that be employment, graduate school or professional school.

Assessment Instruments and Data Collection

Baseline data indicates that while many students are currently engaged in potential experiential learning engagements and high-impact practices, few experiences involve intentional reflections that address the three learning outcomes of Bulldog Experience. Consequently, the Office of Bulldog Experience will work with faculty and staff responsible for those engagements to add the Bulldog Experience Reflection to those activities so that the attainment of the three learning outcomes can be measured. The Bulldog Experience Reflection involves a series of prompts that guide students through the reflective process. These reflections will be evaluated in one of three ways depending on the students' depth of experience: (1) count of reflections (2) outcome-aligned checklist, and (3) outcome-aligned rubric. Additionally, the culture surrounding reflective activity will be tracked using data received through the National Survey of Student Engagement (NSSE).

Because the depth and breadth of one's ability to reflect on one's experiences develops over time through intentionally engaging in the practice of reflection, the engagement continuum has been defined so that experiential learning opportunities can be categorized as participatory, initial, or culminating. First, participatory engagements involve students learning new skills and knowledge through active involvement and occur in authentic settings outside of the lecture classroom. Students are not required to create a formal reflection as a result of participation in these engagements, but they are encouraged to communicate with others about the experience and what was learned. Next, initial engagements also involve students learning by doing in authentic settings outside of the lecture classroom, but students are expected to interact with peers and others different than themselves and apply existing knowledge and skills during the experience. Students are given the opportunity to reflect and integrate existing knowledge after completion of initial engagements through which they will describe the experience and what was learned, as well as how they applied previous knowledge during the experience and how they will apply what they learned to future experiences. Finally, culminating engagements have the same characteristics as initial engagements, but require a significant amount of time, approximately 30 hours, and typically occur near the end of the student's degree program. Upon completion of the culminating engagement, students create a culminating reflection through which they analyze and synthesize their culminating experience and the various curricular and co-curricular experiences that led up to the culminating experience.

To assess initial reflections, a checklist of six "yes/no" items aligned with the three learning outcomes will be used. Each of the three learning outcomes were partitioned into two behaviors resulting in two checklist items per outcome. At this stage of the students' development of their ability to reflect, the Office of Bulldog Experience is assessing whether they describe and apply throughout the responses to the Bulldog Experience Reflection prompts. To assess culminating reflections, a rubric which expands the checklist will be used. Each item in the checklist is one item or row of the rubric. Each of the six items is described in terms of a series of performance indicators which will be used to assess the extent

to which the student is not only describing and applying, but also analyzing and synthesizing. The completed checklists and scored rubrics will be used as direct measures of attainment of the three outcomes. NSSE data will be used as an indirect measure of attainment of the learning outcomes. As data are collected and analyzed through these instruments, feedback about the results will be distributed to the units who are responsible for the engagements that led to the completion of the initial and culminating reflections yielding the results. Over time, growth in the students' ability to describe, apply, analyze, and synthesize their experiences through reflection is expected.

Explanation of Initial Reflection Checklist

To assess initial reflections in terms of the three learning outcomes, a checklist comprised of six items was constructed. Each learning outcome was decomposed into two observable and measurable checklist items resulting in six "yes/no" behavior statements. A checklist was used because at the initial engagement stage of the engagement continuum which aligns with the Reflective Observation and Abstract Conceptualism phases of Kolb's Experiential Learning Cycle, students are learning how to reflect by describing experiences and applying existing knowledge while engaged in the new experience. Because students are developing their ability to reflect when constructing an initial reflection, it is appropriate to only assess whether each of the six behavior statements are present in their reflection, rather than the extent to which they are doing the behavior. First, it must be established that students are doing each behavior before assessing how well they are doing those behaviors. The three learning outcomes and the six behavior statements are shown in Table 9.

Table 9. Connection between the checklist and the QEP learning outcomes

Learning Outcome	Checklist Behavior Statement
The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them.	Student identified connections between in-class and out-of-class experiences that were meaningful to them.
	Student identified connections between in-class and out-of-class experiences that were beneficial to them.
The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content.	Student synthesized multiple sources of information to deepen their understanding of academic content
	Student synthesized prior experiences to deepen their understanding of academic content.
The student will apply previously learned knowledge and skills to new situations or scenarios.	Student applied previously learned knowledge and skills to new situations or scenarios
	Student described how specific aspects of their experiences can be applied to their future

Initial reflections will be assigned three scores, one for each learning outcome. Each of the three scores can be 0, 1, or 2 based on the number of "yes" checks received for each pair of behavior statements. The target score for each pair of behavior statements is 1 which indicates that the student is partially meeting the associated learning outcome. Scores of 2 for each pair of behavior statements indicate that the student is completely meeting the associated learning outcome at the Abstract Conceptualism stage of the Experiential Learning Cycle (Kolb, 1984).



Students studying strength conditioning

Explanation of Culminating Reflection Rubric

To assess culminating reflections in terms of the three learning outcomes, the checklist used to assess initial reflections was expanded. The six behavior statements found in the checklist became the six criteria of the rubric. For each of the six criteria, five performance indicators, one for each of the performance levels: “emerging,” “developing,” “novice,” “intermediate,” and “exemplary”, were defined. For culminating reflections, each learning outcome is measured by two rows on the rubric. A rubric was developed to assess culminating reflections because at the culminating engagement stage of the engagement continuum which aligns with the Active Experimentation phase of Kolb’s Experiential Learning Cycle, students have prior experience reflecting and should have at least demonstrated their ability to partially meet each of the three learning outcomes through initial reflections. When reflecting on culminating experiences, students are expected to be able to analyze and synthesize their experiences across their years as an undergraduate student and apply their cumulative knowledge to new situations and scenarios, as well as to their futures post-graduation. Because students will have already partially met the three learning outcomes, it is appropriate to assess the extent to which they are doing each of the associated behaviors for each of the three learning outcomes. Additionally, by using a rubric to assess culminating reflections, more specific feedback can be provided to the degree program areas in terms of overall strengths and weaknesses of their students. The rubric used to assess culminating reflections is provided in Table 10.

Table 10. Rubric for the Culminating Reflection

Criteria	Emerging	Developing	Novice	Intermediate	Exemplary
Student identified connections between in-class and out-of-class experiences that were meaningful to them.	Student did not identify connections between in-class and out-of-class experiences.	Student identified connections between in-class and out-of-class experiences but does not mention anything about experiences being meaningful.	Student identified connections between in-class and out-of-class experience; states that experiences were meaningful but does not explain how and/or why.	Student identified connections between in-class and out-of-class experience and broadly explains how and/or why experiences were meaningful.	Student identified connections between in-class and out-of-class experience and explains in detail how and/or why experiences were meaningful using specific examples.
Student identified connections between in-class and out-of-class experiences that were beneficial to them.	Student did not identify connections between in-class and out-of-class experiences.	Student identified connections between in-class and out-of-class experiences but does not mention anything about experiences being beneficial.	Student identified connections between in-class and out-of-class experience; states that experiences were beneficial but does not explain how and/or why.	Student identified connections between in-class and out-of-class experience and broadly explains how and/or why experiences were beneficial.	Student identified connections between in-class and out-of-class experience and explains in detail how and/or why experiences were beneficial using specific examples.
Student synthesized multiple sources of information to deepen their understanding of academic content.	Student did not describe multiple sources of information when discussing their understanding of specific content within their academic discipline.	Student described multiple sources of information when discussing their understanding of specific content within their academic discipline.	Student applied multiple sources of information when explaining their understanding of specific content within their academic discipline.	Student analyzed multiple sources of information and aligned those sources with their understanding of specific content within their academic discipline.	Student synthesized multiple sources of information and demonstrated how their understanding of specific content within their academic discipline was deepened.

Criteria	Emerging	Developing	Novice	Intermediate	Exemplary
Student synthesized prior experiences to deepen their understanding of academic content.	Student did not describe prior experiences when discussing their understanding of specific content within their academic discipline.	Student described prior experiences when discussing their understanding of specific content within their academic discipline.	Student applied prior experiences when explaining their understanding of specific content within their academic discipline.	Student analyzed prior experiences across multiple semesters and aligned those experiences with their understanding of specific content within their academic discipline.	Student synthesized prior experiences across multiple semesters and demonstrated how their understanding of specific content within their academic discipline was deepened.
Student applied previously learned knowledge and skills to new situations or scenarios.	Student did not state that previously learning knowledge and skills were applied to a new situation or scenario.	Student stated that previously learned knowledge and skills were applied to a new situation or scenario but there is no implicit or explicit evidence of this.	Student provided implicit evidence of applying previously learned skills or knowledge to a new situation or scenario.	Student communicated in broad, general terms how they applied previously learned knowledge and skills to a new situation or scenario.	Student communicated using specific examples/instances of how they applied previously learned knowledge and skills to a new situation or scenario.
Student described how specific aspects of their experiences can be applied to their future.	Student did not describe how general aspects of one experience could be applied to their future.	Student described how general aspects of one experience could be applied to their future.	Student described how specific aspects of one experience could be applied to their future.	Student described how broad aspects of multiple experiences could be applied to their future.	Student described how specific aspects of multiple experiences could be applied to their future.

Culminating reflections will be assigned a score from 0 to 8 points based on the assessed level for each behavior with “emerging” being assigned 0 points, “developing” being assigned 1 point, “novice” being assigned 2 points, “intermediate” being assigned 3 points, and “exemplary” being assigned 4 points. The target score for culminating reflections will be 6 points indicating that the student is reflecting on average at the intermediate level in terms of the first learning outcome. During the pilot year, addressing inter-rater reliability will not be necessary as only one evaluator will be used to score all culminating reflections. To address inter-rater reliability for the two rubric items assessing the first learning outcome after the pilot year, one evaluator will score each culminating reflection and a second evaluator will score randomly selected culminating reflections. Scores for the randomly selected reflections will be compared and differences noted. When differences that are greater than 2 points between the scores occur, reasons for the assigned level and performance indicator will be discussed and eventually consensus will be achieved. Through an iterative cycle of scoring, comparing, and discussing, scores on subsequent culminating reflection rubric items should eventually converge, and agreement within 2 points obtained.

After the first year, training will be provided by the Office of Bulldog Experience evaluators for faculty and staff, as needed, who are responsible for collecting culminating reflections. Randomly selected culminating reflections will continue to be scored by the Office of Bulldog Experience and those scores will be compared to the scores of other trained evaluators. When scores do not agree, the same interactive cycle of scoring, comparing, and discussing will be used until convergence of scores and agreement is obtained. The Office of Bulldog Experience will provide feedback and training on culminating reflections until a majority of the culminating reflection scores within a degree program or unit are at the intermediate level or exemplary level.



Student assisting in sea turtle rehabilitation



Student volunteers for Habitat for Humanity as part of the Day One, first-year experience course

Connection to NSSE's Reflective and Integrative Learning Engagement Indicator

The Office of Bulldog Experience will continue to administer the National Survey of Student Engagement (NSSE) to first-year and senior students and track the Reflective and Integrative Learning scores accordingly. Selected questions from this indicator relate to each of the three learning outcomes:

Table 11. Connection between the Bulldog Experience learning outcomes and the related NSSE questions

Learning Outcome	Associated NSSE Questions
The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them.	How often did you combine ideas from different courses when completing assignments?
	How often did you connect your learning to societal problems or issues?
The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content.	How often did you include diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments?
	How often did you connect ideas from your courses to your prior experiences or knowledge?
The student will apply previously learned knowledge and skills to new situations or scenarios.	How often did you learn something that changed the way you understand an issue or concept?

NSSE data will be evaluated each cycle that it is administered to ensure that the Reflective and Integrative Learning indicators are reaching MSU's target scores, and that gaps are closing across all the colleges. In cases where students may be underperforming, the Office of Bulldog Experience will work with those faculty or co-curricular units to improve training materials, introduce more experiential learning opportunities, or strengthen the connection between existing learning opportunities and the learning outcomes.

Assessment Summary Table

Table 12 summarizes the activities that Bulldog Experience will facilitate, how those activities will be measured, the three learning outcomes, and how the three learning outcomes will be assessed through direct and indirect measures all within the framework of the Kolb Experiential Learning Cycle.

Table 12. Summary of the assessment for Bulldog Experience

	Kolb Experiential Learning Cycle			
	Concrete Experience	Reflective Observation	Abstract Conceptualism	Active Experimentation
Activities	Participation in High-Impact Practices (in and out of class)	Initial Reflection on Concrete Experience		Culminating Reflection on Abstract Conceptualism
Measured by	Counting experiences & closing demographic gaps	Reflection that identifies and describes experiences and how knowledge is being applied		Reflection on how they experimented with what they learned when confronted with new experiences
Learning Outcomes				
Identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them		Counts of Reflections Completed	Checklist (Units evaluate content for course/program modification)	Culminating Reflection Rubric scores NSSE Data
Synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content				
Apply previously learned knowledge and skills to new situations or scenarios				

Data Analysis & Follow-Up

Data collected for Bulldog Experience will consist of three scores per initial reflection assessed and three scores per culminating reflection assessed and one unique alphanumeric identification label that includes an abbreviated name for the experience and an assigned reflection number. This data will be stored in Excel spreadsheet workbooks by semester, year, and the co-curricular unit or academic degree program responsible for the experience, with each experience having its own spreadsheet within the workbook. All Bulldog Experience spreadsheet workbooks will be stored on the university's departmental shared j: drive, a local network drive stored on servers located at Mississippi State University and managed by Information Technology Services (ITS). These spreadsheets will be maintained by the Office of Bulldog Experience personnel.

As reflections are scored, the scores will be entered into the appropriate spreadsheet of the given co-curricular unit's or academic degree program's Excel workbook. Data within each spreadsheet page will be analyzed and the results added to a data summary spreadsheet for that co-curricular unit or academic degree program. Analysis of data collected through initial reflections will include counts and percentages of how many students met the target score of 1 for each learning outcome and how many students did not meet the target score for each learning outcome. The data summary spreadsheet will be used to track trends within each co-curricular unit or academic degree program with regard to student reflections on initial engagements. Analysis of data collected through culminating reflections will include counts and percentages of how many students met the target score of 6 or higher for each learning outcome and how many students did not meet the target score of 6 for each learning outcome. Additionally, counts and percentages for each performance level will also be calculated. The data summary spreadsheet will be used to track trends within each co-curricular unit or academic degree program with regard to student reflections on culminating engagements.

At the end of each semester, data for the reflections assessed that semester will be analyzed. During the summer, summary data to date will be analyzed for trends across the previous semesters within each co-curricular unit and academic degree program. Also during the summer, results for each semester and year across all co-curricular units and academic degree programs will be aggregated to determine overall counts and percentages of students meeting the target level or higher for initial reflections and meeting the target level or higher for culminating reflections. Each summer, the Office of Bulldog Experience will determine if the number of students within each co-curricular unit and academic degree program scoring the target score or higher is increasing, as well as if the overall number of students across the university scoring the target score or higher is also increasing for both initial and culminating reflections. This will indicate if a majority of the students involved in individual co-curricular units or enrolled in specific degree programs are meeting the three learning outcomes and simultaneously if the university student body, as a whole, is meeting the three learning outcomes.

At the end of each summer or at the start of the next fall semester, Office of Bulldog Experience personnel will meet with individual co-curricular units and academic program area faculty to share and discuss the results of their initial and culminating reflections from the previous year. If a majority of the students within a given co-curricular unit or academic program are not scoring at the target level for any of the three learning outcomes with regard to either initial or culminating reflections, additional training will be provided to faculty and staff in those units and possibly to groups of students within those units.

The Office of Bulldog Experience will collaborate with faculty and staff to determine the best ways to address noted weaknesses within initial and culminating reflections.

Pilot Studies

The Office of Bulldog Experience conducted several pilot studies to test the implementation methods and procedures for various components of Bulldog Experience, as well as to review logistical aspects of data collection and analysis that will be part of the assessment of Bulldog Experience. Part of the responsibilities of the office will be to ascertain the feasibility of implementing the different components of Bulldog Experience across the university, identify any issues and potential obstacles associated with various Bulldog Experience forms and communication tools, and verify the usefulness of the assessment tools. As a result of conducting the pilot studies, a few implementation methods and procedures have already been modified, and members of the Bulldog Experience team will continue to review and assess results to modify training and assessment procedures each year of the plan.

BELL Grants

The QEP intends to provide support for creating new or expanding existing experiential learning activities by awarding Bulldog Experience Learning Liaison (BELL) Grants for up to \$5,000 per unique experiential learning engagement. In fall 2023, the Office of Bulldog Experience piloted the BELL Grant application process. Nine BELL Grant applications were submitted, two curricular and seven co-curricular. The office awarded grants to both curricular activities and two of the co-curricular activities. Through this initial application phase, the usefulness of the grant application was evaluated and further viable procedures for making the purchases necessary to complete each of these projects were identified. As a result of reviewing the completed grant application forms, the application form was modified to include additional questions and requested more detailed timelines and budgets. The grants were successful in expanding experiential learning opportunities for these two colleges and in the co-curricular units.



Curricular: New or Expanded Experiential Learning Opportunities

The Office of Bulldog Experience provided grant funding for two curricular pilot studies in fall 2023. For one study, the office awarded \$3,500 to Dr. Chris Ayers toward purchasing equipment for a fox study as part of WFA 4433 Mammalogy. This course typically enrolls 45 College of Forest Resources students. With this equipment, the students conducted undergraduate research with members of the local community, and they practiced techniques taught in the class to conduct authentic research. After completing the research, the students completed a Bulldog Experience Reflection.

Fifty students who were enrolled in WFA 4433 completed a Bulldog Experience Culminating Reflection at the end of the semester. The experience was deemed a culminating experience because the students were engaged in the high-impact practice of undergraduate research for more than 30 hours across the entire semester and because it was a senior-level course in which students had to apply knowledge from previous courses in order to complete the requirements for the project. Students also had to use communication skills, which had been previously developed through general education coursework. The Bulldog Experience Culminating Reflection rubrics were used to score each reflection. Scores were then analyzed to determine how many students met each of the three learning outcomes, the average score for each outcome, and how many learning outcomes were met by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was met by 20 students or 40%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was met by 4 students or 8%. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was met by 7 students or 14%. The average score for each of the three outcomes was 4.90, 3.98, and 4.52, respectively, with 6 being the minimum score to be considered as meeting that outcome. Three students met all three outcomes; four students met two of the outcomes, and 14 students met one of



the outcomes. Twenty-nine students did not meet any of the learning outcomes. Excerpts of these reflections are found in Appendix C.

The second study provided \$5,000 to Mr. Ross Smith for engineering software licenses and other equipment for ME 4433 Mechanical Systems Design and ME 1111 Introduction to Mechanical Engineering. These engineering courses provide students with the opportunity to complete out-of-class real-world projects through a collaboration with industry professionals. Through these projects, students were able to bridge classroom knowledge with practice applications while enhancing their understanding of how theory translates to the professional world of a mechanical engineer. At the conclusion of the course, 59 students enrolled in ME 4433 completed a Bulldog Experience Reflection.

The ME 4433 experience was deemed to be a culminating experience because the students were engaged the high-impact practice of a Capstone Course during which the students had to apply knowledge across their program of study in order to solve the unique problem given to them. Students also had to use communication skills as they interacted with industry partners. These skills had been previously developed through general education coursework. The Bulldog Experience Culminating Reflection rubrics were used to score each reflection. Scores were then analyzed to determine how many students met each of the three learning outcomes, the average score for each outcome, and how many learning outcomes were met by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was met by 36 students or 61%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was met by 52 students or 88%. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was met by 35 students or 59%. The average score for each of the three outcomes was 5.49, 6.93, and 5.51, respectively, with 6 being the minimum score to be considered as meeting that outcome. Twenty-three students met all three outcomes; 24 students met two of the outcomes; 6 students met one of the outcomes; and 6 students did not meet any of the learner outcomes. Excerpts of these reflections are found in Appendix C.

Curricular: Orienting Students Toward Habits of Reflection

Leveraging the newly revised First Year Experience Course, FYE 1003 The MSU Experience, the Office of Bulldog Experience provided an interactive learning session to each of the twenty sections. Faculty Director guided the freshmen through the goals of Bulldog Experience, the purpose of experiential learning, the different types of experiential learning engagements, the importance and benefits of reflection, and a five-step process for constructing a meaningful reflection. This interactive learning session has become the basis for the first in a series of trainings provided to faculty or students about experiential learning engagements and reflection at Mississippi State University.

At the conclusion of each learning session, the students were asked to respond to three questions as a way to determine what they saw as the main takeaways of the presentations. With regards to what the students learned, their responses indicated that they had gained a general understanding of what a Quality Enhancement Plan is and what Bulldog Experience is and had learned the importance of reflection, the types of experiential learning engagements and reflections, and how experiential learning can be used for personal growth. In particular, one student commented “MSU wants us to be prepared for the working world.” Another student shared “we should be striving for more than just good grades but experience.” In response to what the students are most excited about and what they are looking

forward to, the students shared that they are excited about getting involved, reflecting on their experiences, and meeting new people through Bulldog Experience opportunities. One student stated, “learning how to make reflection a habit.” Another student said, “getting to learn more from my experiences at MSU.” Another student who commented on the reflection process shared “learning how to mature and grow as an individual by using the process of reflection. One other student noted that they were most excited about “embracing the opportunity to take time and think about the many experiences college will bring.”

By reading through the student responses and answering student questions at the end of each session, the Office of Bulldog Experience was able to determine areas within the presentation that needed to be emphasized more and areas that did not need to be emphasized as much when first introducing students to Bulldog Experience. Subsequently, the presentation used for each session was modified to include more information on the benefits of reflecting, more information on the benefits of experiential learning from the student perspective, and less details about the engagement continuum and the scoring of the reflections. The order of the slides within the presentations was also altered to improve the flow of the information presented. Additionally, each of these interactive learning sessions was given within the second, third and fourths weeks of the semester, but the presentation was much better received in the fourth week than in the other weeks, so in the future, the session will be presented in the third, fourth, and fifth weeks of the semester.

The 380 students enrolled in FYE 1003, The MSU Experience, were required to complete at least two participatory and one initial engagement as part of the course. They were also required to submit formative reflections for each engagement during the semester and then at the end of the semester, they submitted a Bulldog Experience Initial Reflection. During the semester, the Faculty Director checked in with each instructor to inquire about the responses to the formative reflections and if any of the instructors needed any additional support from the Office of Bulldog Experience in terms of assisting students with learning how to reflect. The initial reflections that will be submitted by all FYE 1003 students will be scored to test the usefulness of the checklist, to get baseline data for initial reflections they were constructed after being taught about reflection and to determine strengths and weaknesses within the initial reflections.

The FYE 1003 experience was a high-impact practice initial experience and as such the resulting 156 reflections were scored using the Bulldog Experience Initial Reflection Checklists. Scores were then analyzed to determine how many students addressed each of the three learning outcomes at the initial level, the average score for each outcome, and how many learning outcomes were addressed by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was met by 133 students or 85%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was met by 131 students or 84%. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was met by 155 students or 99%. The average score for each of the three outcomes was 1.49, 1.25, and 1.75, respectively, with 1 being the minimum score to be considered as addressing that outcome at the initial level. Of the 156 students, 125 students met all three outcomes; 13 students met two of the outcomes; and the remaining 18 students met one of the outcomes.



Student working on art mural project

Curricular: Testing the Checklist and Rubric on Course-based Reflections

Select faculty across disciplines who already engage their students in experiential learning activities as part of their regularly taught courses agreed to add the Bulldog Experience Reflection to their courses for purposes of piloting the reflection prompts, initial reflection checklist, and culminating reflection rubric. Students enrolled in these courses were not provided any instruction on how to reflect so that true baseline data could be obtained, in terms of student ability to meaningfully reflect on their experiences without instruction or knowledge of Bulldog Experience learning outcomes. Within the College of Architecture, Art and Design, Ms. Lyndsey Miller teaches a summer internship course, ID 4753 Interior Design Internship. The senior students enrolled in this course completed internships across the country. At the end of the internship, they submitted Bulldog Experience Culminating Reflections. Within the College of Education, all graduating senior pre-service teacher interns submitted a Bulldog Experience Culminating Reflection. This was facilitated by Dr. Donna Shea the director of the College of Education's Office of Clinical and Field-Based Instruction, Licensure, and Outreach. Dr. Brian Davis of the College of Forest Resources teaches WFA 4394, Waterfowl Ecology and Management, in the fall semester. This course includes a laboratory component. Certain labs consist of field trips to regional wetlands and other wildlife management areas. The field trips make up the experiential learning engagement for the course. At the end of the course, the students will submit a Bulldog Experience reflection. Ms. Karyn Brown who teaches CO 4813 Public Relations in Organizations in the College of Arts and Sciences, requires the students to complete a class project using various techniques for image building and campaign development for profit and non-profit organizations. At the end of the course, students submitted 160 Bulldog Experience reflections.

Twenty-nine students completed the Interior Design Internship, ID 4753, and submitted a Bulldog Experience Culminating Reflection. The Bulldog Experience Culminating Reflection rubrics were used to score each reflection. Scores were then analyzed to determine how many students met each of the three learning outcomes, the average score for each outcome, and how many learning outcomes were met by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was met by 14 students or 48%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was met by 10 students or 28%. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was met by 7 students or 34%. The average score for each of the three outcomes was 5.14, 4.38, and 4.76, respectively, with 6 being the minimum score to be considered as meeting that outcome. Four students met all three outcomes; 6 students met two of the outcomes; 7 students met one of the outcomes; and 12 students did not meet any of the learner outcomes. Excerpts from these reflections are included in Appendix C.

One hundred twenty-three students completed the College of Education Teaching Internship and submitted a Bulldog Experience Culminating Reflection. The Bulldog Experience Culminating Reflection rubrics were used to score each reflection. Scores were then analyzed to determine how many students met each of the three learning outcomes, the average score for each outcome, and how many learning outcomes were met by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was met by 83 students or 67%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was met by 58 students or 46%. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was met by 27 students or 22%. The average score for each of the three outcomes was 5.51, 5.10, and 5.09, respectively, with 6 being the minimum score to be considered as meeting that outcome. Sixteen students met all three outcomes; 37 students met two of the outcomes; 45 students met one of the outcomes; and 25 students did not meet any of the learner outcomes. Excerpts from these reflections are included in Appendix C.



Student from teacher preparation program engaged in field experience

Seventeen students completed WFA 4394 and submitted a Bulldog Experience Culminating Reflection concerning their field trip experiences. The Bulldog Experience Culminating Reflection rubrics were used to score each reflection. Scores were then analyzed to determine how many students met each of the three learning outcomes, the average score for each outcome, and how many learning outcomes were met by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was met by 11 students or 65%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was met by 6 students or 35%. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was met by 10 students or 59%. The average score for each of the three outcomes was 5.88, 4.59, and 5.53, respectively, with 6 being the minimum score to be considered as meeting that outcome. Five students met all three outcomes; 4 students met two of the outcomes; 4 students met one of the outcomes; and 4 students did not meet any of the learner outcomes. Excerpts from these reflections are included in Appendix C.

Four faculty members who teach courses that have the MSU Community Engaged Learning designation required their students to submit a Bulldog Experience reflection after completing the community engaged requirement of the course. These courses are offered within the College of Arts and Science, the College of Business, and the College of Education. Specifically, the faculty and courses involved in this pilot study were Dr. Leslie Baker who teaches CO 4603 Family Communication, Dr. Emily Maretz who teaches MGT 3213 Organizational Communication, Dr. Kathleen Thomas who teaches EC 4423 Public Finance, and Ms. Kim Smith who teaches RDG 3223 Assessing Reading Difficulties. Students enrolled in each of these courses were either required or strongly encouraged to submit a Bulldog Experience reflection near the end of the semester. The Office of Bulldog Experience received 40 Bulldog Experience Initial Reflections submitted as part of CO 4603 or RDG 3223 which provided the opportunity to determine the usefulness of the Initial Reflection checklist to acquire baseline data for reflections in which the students were given some guidance about reflecting as part of a Community Engage Learning course, but not specific guidance with regards to the Bulldog Experience reflection expectations.

Thirty-one students completed RDG 3223 and submitted a Bulldog Experience Initial Reflection concerning their community engaged learning experience. The Bulldog Experience Initial Reflection checklists were used to score each reflection. Scores were then analyzed to determine how many students addressed each of the three learning outcomes at the initial level, the average score for each outcome, and how many learning outcomes were addressed by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was addressed by all 31 students or 100%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was addressed by all 31 students. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was also addressed by all 31 students. The average score for each of the three outcomes was 1.55, 1.65, and 1.74, respectively, with 1 being the minimum score to be considered as addressing that outcome. All 31 students met all three outcomes. Excerpts from these reflections are included in Appendix C.

Nine students completed CO 4603 and submitted a Bulldog Experience Initial Reflection concerning their community engaged learning experience. The Bulldog Experience Initial Reflection checklists were used to score each reflection. Scores were then analyzed to determine how many students addressed each of the three learning outcomes at the initial level, the average score for each outcome, and how many learning outcomes were addressed by each student. The first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was addressed by 8 students or 89%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” was addressed by 8 students or 89%. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” was also addressed by 8 students or 89%. The average score for each of the three outcomes was 1.00, 1.44, and 1.67, respectively, with 1 being the minimum score to be considered as addressing that outcome. Eight of the students met all three outcomes, while one student did not meet any of the outcomes.

The Office of Bulldog Experience received five additional Bulldog Experience Culminating Reflections through Dr. Anastasia Elder, a member of the Bulldog Experience Steering Committee. Three of these reflections were completed by students who had completed an undergraduate research project within the Bagley College of Engineering not affiliated with a specific course. The other two reflections were completed by students who had completed a study abroad through the Honors College. The Bulldog Experience Culminating Reflection rubrics were used to score these five additional reflections. Scores were then analyzed to determine how many students met each of the three learning outcomes, the average score for each outcome, and how many learning outcomes were met by each student.

For the three undergraduate research reflections, the first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” was met by all three students or 100%. The second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” and the third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” were not met by any of the students. The average score for each of the three outcomes was 6.00, 4.33, and 4.33, respectively, with 6 being the minimum score to be considered as meeting that outcome.

For the two study abroad reflections, the first learning outcome, “The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them” and the second learning outcome, “The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content” were met by one student. The third learning outcome, “The student will apply previously learned knowledge and skills to new situations or scenarios” were not met by any of the students. The average score for each of the three outcomes was 5.50, 4.50, and 5.00, respectively, with 6 being the minimum score to be considered as meeting that outcome. One student met two of the outcomes, while the other student did not meet any of the learning outcomes.

Co-Curricular: New or Expanded Experiential Learning Opportunities

The Office of Bulldog Experience provided grant funding for two co-curricular pilot studies in fall 2023. One of these studies provided \$3,500 to purchase food for The Longest Table, which is an event of the Student Association that brings students, faculty, and staff members together for a shared meal. The

event facilitates community-building conversations, increased understanding among people of diverse backgrounds, and creates a powerful visual that everyone has a place at the table. The “longest” table is one long table composed of smaller tables with each smaller table having a “secret faculty or staff” facilitator who leads conversations around their lived experience and how that experience impacts their views, career, family, and other aspects of life. Conversation starter prompts included: Why did you chose to attend Mississippi State? What about the place, people, and culture you grew up with influences who you are today? What is your favorite memory and toughest moment of your college experience thus far? What are you hoping to do while you are at MSU that you have not done? What do you most appreciate about MSU and this community? What does MSU represent to you? What are your hopes and dreams for the future? What are you most excited about or fearful as you look into your career aspirations? Students who attended The Longest Table received a Bulldog Experience t-shirt and were given instructions for how to complete a Bulldog Experience Initial Reflection. None of the students who attended this event ever submitted an initial reflection.

The other co-curricular funded pilot study was a Passport Drive in collaboration with the International Institute to assist students with costs related to obtaining their first passport so that they can subsequently participate in an international study abroad experiential learning engagement. The Office of Bulldog Experience was able to award \$5,000 to this event to support the expenses related to purchasing 25 passports. To be considered, students had to provide a formal reflective paper that described a time when they experienced culture shock and what that felt like and how they adapted to that feeling or describe a time when they were homesick and what they did to overcome it. Twenty-five students submitted an initial reflection, which were forwarded to the Office of Bulldog Experience. The checklist was applied to these reflections and scored in the same manner as those for the initial reflections from the curricular programs. None of the students met any of the learning outcomes.



Study abroad experience in Rome, Italy

Co-Curricular: Addition of Reflections to Existing Experiential Learning Opportunities

The Office of Bulldog Experience is also collaborating with staff within co-curricular units on campus to engage in pilot studies by adding the Bulldog Experience reflection to existing co-curricular experiential learning activities. These studies did not require any funding. Three pilot studies emerged through partnerships with staff in the Division of Student Affairs. Dr. Jackie Mullen, the Assistant Vice President for Student Affairs, works with the student leaders of the Student Association and coordinates the Lead Maroon class. Dr. Mullen asked the leaders of the Student Association and the students participating in the Lead Maroon class to complete culminating reflections. Mr. Andrew Rendon, the then-Director of Planning and Assessment, worked with all student employees within the Division of Student Affairs to complete a Bulldog Experience reflection periodically during their student employment experience.

Among all of these experiential learning opportunities, the Office of Bulldog Experience received 2,761 reflections from co-curricular events. The checklist was applied to a sample of these reflections, and like the Passport Drive described in the previous section, none of the students scored a 1 or 2 for any of the learning outcomes. As stated in a quote from a student who spent time volunteering, “As it pertains to my degree, there isn't much of a connection; however, I still enjoyed my time and am happy that I can return to continue to assist the shelter whenever they need it.” Although students may be engaged in high-impact practices that they find meaningful and beneficial, they struggled to connect the co-curricular engagement to their chosen major. Students did, however, refer to using teamwork and communication skills during the co-curricular experiences.

The pilot revealed that with regard to co-curricular experiences, participatory events cannot be converted to initial events, and initial events to culminating, simply by requiring students to reflect. If the students do not engage in an experiential learning activity and are not guided through the purpose of the activity and reflection, then it is difficult for them to answer the prompts in a meaningful way. The events from the co-curricular experiences should be considered participatory, and more training is needed to move those events or to connect the experiences toward initial and then culminating activities.



Student performance in the MSU Marching Band

Going forward, participatory events will not require a formal experiential learning reflection, but they will encourage a different form of reflection prompt to help them connect to a specific life skill that they are practicing. Currently, Student Affairs has established four “pathways” that co-curricular experiences will follow to help students develop these life skills:

- Cultural and global diversity
- Leadership and teamwork
- Communication and interpersonal development
- Professionalism and preparedness

These pathways are foundational skills that each student should have before leaving Mississippi State University. It is a long-term goal to see the effect of participatory engagement in the culminating reflections.



Student volunteer

Criteria for Success

By the end of the QEP in spring 2029, the Office of Bulldog Experience has high hopes for the learning gains that students will experience as a result of the implementation of this plan. Baseline data from the NSSE was gathered during the topic selection phase and used as the basis for the need to enhance student reflection and training for faculty and staff who guide student reflection. Targets for spring 2029 were chosen based on the scores of the current averages from SEC peers. MSU’s threshold for acceptance is the current baseline levels, and if results fall below the baseline, then further intervention to the plan and associated training will be needed.

During the topic selection phase, the Experiential Learning Task Force gathered much of the tracking pieces to determine the extent of opportunities available to students, the number of students participating, and the effect of the activities on their reflective and integrative learning. However, no direct assessment data existed related specifically to the student learning outcomes. Therefore, data collected from the pilot experiences were used to set the criteria for success for each of the learning outcomes for the new Bulldog Experience instruments with the checklist and rubric. Targets for spring 2029 were set based on professional experience and may be adjusted depending on the initial progress of the plan in the first few years. The threshold for acceptance is the current baseline results, and if annual results fall below this level, then further intervention and reflection is needed for the plan.

Table 13 provides a summary of the assessment procedures for each learning outcome, the baseline data, and the target data for 2029. Each outcome has a direct measure for initial and culminating experiences based on the engagement continuum. Each outcome also has indirect measures pulled from the NSSE survey results, which speak to the culture surrounding experiential learning. Participatory activities will be tracked throughout the plan; however, they will not be measured as part of the learning outcomes assessment unless they add a student reflection.

Table 13. Assessment procedures and target scores for each learning outcome

Learning Outcome	Assessment Procedure	Baseline Data from 2024	Target for 2029
The student will identify connections between in-class and out-of-class experiences that were meaningful and beneficial to them.	Proportion of experiential learning activities that include a reflection that prompts students to make connections between the experiences and their learning	42.3% (2,736 reflections for 6,468 activities)	75%
	Proportion of initial reflections with a combined checklist score of 1 or better	88% scored 1 or better with average of 1.48 (n=196)	95%
	Proportion of culminating reflections with a rubric score of 6 or better	59% scored 6 or better with average of 5.39 (n=281)	75%
	NSSE question: How often did you combine ideas from different courses when completing assignments?	66% of seniors reported “often” or “very often”	70%
	NSSE question: How often did you connect your learning to societal problems or issues?	50% of seniors reported “often” or “very often”	57%
The student will synthesize multiple sources of information, including prior experience, to deepen their understanding of academic content.	Proportion of initial reflections with a checklist score of 1 or better	87% scored 1 or better with average of 1.32 (n=196)	95%
	Proportion of culminating reflections with a rubric score of 6 or better	46% scored 6 or better with average of 5.17 (n=281)	65%
	NSSE question: How often did you include diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments?	40% of seniors reported “often” or “very often”	50%
	NSSE question: How often did you connect ideas from your courses to your prior experiences or knowledge?	80% of seniors reported “often” or “very often”	83%
The student will apply previously learned knowledge and skills to new situations or scenarios.	Proportion of initial reflections with a checklist score of 1 or better	99% scored 1 or better with average of 1.48 (n=196)	100%
	Proportion of culminating reflections with a rubric score of 6 or better	31% scored 6 or better with average of 5.06 (n=281)	50%
	NSSE question: How often did you learn something that changed the way you understand an issue or concept?	66% of seniors reported “often” or “very often”	70%

Annual Timeline

At the start of each semester, the Office of Bulldog Experience will identify all curricular and co-curricular units that will be submitting Bulldog Experience reflections at the end of the semester. The Bulldog Experience Coordinator will confirm with each of these units that students will continue to submit reflections and how those reflections need to be shared with the office. Early in each fall semester, the Faculty Director will meet with faculty in program areas to share feedback about strengths and weaknesses of those reflections and to provide additional training on reflection, specific to identified areas of weakness. The Executive Director will meet with staff in the co-curricular areas to provide feedback to strengthen their activities' connections to experiential learning. Both directors will continue to work with faculty and staff in units that have not yet identified initial or culminating engagements to facilitate the process of doing so. By the end of year 2, the aim is to have all degree programs offering at least an initial or a culminating experience and be working on offering at least one of each by the end of year 3. The directors will continue to offer training for both curricular and co-curricular learning engagements to improve existing experiences and add additional ones where they may not exist.

At the end of each fall semester, the semester's reflections will be collected and scored as they are submitted. In year 1, all submitted reflections will be scored twice; once by someone in the Office of Bulldog Experience and once by someone responsible for the engagement that led to the reflections. If no such person can be identified, then the second person to score it will also be from the Office of Bulldog Experience. Once a unit has demonstrated that a majority of the reflections submitted for a given experiential learning engagement are receiving scores at the target score or higher, then the Office of Bulldog Experience will only score a random subset of reflections in subsequent years for that same experience for the purpose of assessing and maintain interrater reliability.

Additionally, each fall, the Office of Bulldog Experience will work with the course lead and the instructors of the first-year experience course to teach the incoming students about Bulldog Experience, experiential learning, and the importance and benefits of reflection. Through the Office of Bulldog Experience, a new course "Bulldog Experience: Reflecting & Preparing for Post-College Life" or a similar version of the course will be taught to seniors in both the fall and the spring to facilitate the process of producing a culminating experience and applying for Bulldog Recognition.

At the start of each spring semester, the Office of Bulldog Experience will score initial and culminating reflections that were submitted in the fall semester that had not been scored prior to the end of the fall semester. Once these are scored, the scores of a random selection of reflections will be compared and the process to address interrater reliability will be implemented. When all fall reflections have been scored, the scores will be entered into the appropriate Excel spreadsheet and analyzed so that feedback reports can be constructed for each unit that submitted reflections.

At the end of each spring semester, all of the semester's reflections will be collected and scored as they are submitted, as time allows. As sets of reflections are scored, those scores will be entered into the appropriate Excel spreadsheet so that they can be analyzed.

During each summer, the Office of Bulldog Experience will finish scoring all initial and culminating reflections that were submitted in the spring semester. Once these are scored, the scores of a random selection of reflections will be compared and the process to address interrater reliability will be

implemented. When all spring reflections have been scored, the scores will be entered into the appropriate Excel spreadsheet and analyzed so that feedback reports can be constructed for each unit that submitted reflections. Data across semesters will also be compared for each program area, department, college and across the entire university to identify strengths and weaknesses, as well as look for trends within each level of data. Before the end of each summer, feedback reports will be prepared so that they can be shared at the start of the next fall semester.

Conclusion

MSU is excited to embark on its next QEP called Bulldog Experience. With the partnership of the campus community, guidance from the Advisory Committee, and leadership from the Office of Bulldog Experience, the university hopes that students will deepen their understanding of their undergraduate education through learning experiences (both curricular and co-curricular), develop their reflective habits to make meaning of those experiences, and create new knowledge based on their reflections of what they have learned. To accomplish this goal, the Office of Bulldog Experience has identified three learning outcomes connected to the Kolb model for experiential learning. The leadership of the QEP will work with faculty and staff to create new experiential learning opportunities and incorporate into existing activities the reflective habits that helps students create new knowledge based on their experiences. A checklist and rubric have been designed that will track student learning and evaluate the achievement of the learning outcomes. An assessment process has been established with considerations for interrater reliability, and the results of the assessment will be used to improve faculty and staff training to support improvements to the learning environment for MSU students. In time, the culture of reflection and connection of learning experiences to post-college life will become engrained in the campus community such that Bulldog Experience will cease to be a QEP and will become a systematic, ongoing program that enriches all undergraduate students at MSU.

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Appendix A: Transforming MSU Vision, Pillars, and Outcomes

North Star Vision

At Mississippi State, we're redefining the role of a land-grant university. We provide an innovative, hands-on learning experience, meeting all students where they are and equipping them for a world that needs their talent. We're working to help our communities prosper while exploring cutting-edge solutions to the world's biggest challenges.

Together, we're taking care of what matters in the 21st century – starting in our own backyard.

Pillars with Outcomes

We have developed five key pillars to guide the collaboration and collective action that will support our university's transformation. Each pillar represents an essential focus area of our transformation roadmap, which summarizes the strategic goals of Transforming MSU.

Serve the Whole Student

Help students thrive through innovative academic programs and memorable experiences while ensuring a holistic focus on student well-being.

- Provide a supportive, vibrant campus environment that allows students to enjoy meaningful learning, research, and service activities during their MSU experience
- Prepare all of our students with the tools to live healthy and productive lives.
- Incorporate new academic content and teaching methods that enable students to use their knowledge and to lead fulfilling careers.
- Help student achieve their academic goals by providing services that enable them to graduate on-time and with distinction.
- Expand experiential learning opportunities for students so that we may instill a hunger for lifelong learning in all of our graduates.

Strengthen Our Bonds

Grow and nurture relationships that further enhance our vibrant community.

- Increase opportunities for employee development and advancement.
- Deepen the bonds we have with alumni to support their connection to MSU and the value of the degree they have earned.
- Expand partnerships with industry and employers to create new opportunities for students and ensure the education they are receiving is relevant for tomorrow's workplace.
- Build and enhance our networks with community and government leaders and with peer organizations to create pathways for mutually beneficial goals.
- Grow fan affinity and engagement through innovative experiences on and off campus.

Ignite Innovation

Foster life-changing research and creative endeavors to advance our society.

- Grow recognition for MSU's role in completing life-changing research in areas that matter to our state, region, and world.
- Expand programs for faculty and staff researchers so that they have the support they need to be successful.
- Renew our commitment to supporting entrepreneurship in all forms, especially in developing a strong workforce for Mississippi and communities like ours.
- Double down in our research and scholarly activity that promotes solutions in areas that matter like community health, child and youth development, and sustainability and resiliency.

Elevate Our Community

Serve our communities with the knowledge and experience that address critical challenges and unique opportunities.

- Expand outreach activities that allow us to apply the life-changing solutions evident in our research.
- Expand opportunities for service learning to inspire a continued commitment to serving our communities as MSU students, alumni, faculty and staff.
- Create more "on-ramps" for members of our communities to receive the knowledge and skills they desire through micro-credentials and stackable credentials.
- Grow capacity in communities that fosters economic development and social mobility.

Tell Our Story

Grow awareness and shape the perception of MSU by amplifying the stories, impacts, and excitement of our community.

- Grow our brand recognition beyond Mississippi and the southeast region
- Engage more individuals in experiencing all that MSU has to offer through our teaching, research, and outreach missions
- Celebrate the real value of MSU's efforts in Mississippi and communities like ours

Appendix B: Members of the Steering/Advisory Committee

- **Chris Ayers**, Assistant Teaching Professor, Curator of Collections, College of Forest Resources
- **Tracey Baham**, Associate Vice President for Institutional Strategy & Effectiveness and Accreditation Liaison
- **Karyn Brown**, Instructor II, College of Arts & Sciences
- **Reuben Burch**, Associate Vice President for Research; Associate Professor, Jack Hatcher Chair, College of Engineering
- **Annika Campbell**, Director, Study Abroad
- **Jason Cory**, QEP Coordinator
- **Anastasia Elder**, Associate Dean, Shackouls Honors College; Director of Undergraduate Research; and Professor, College of Education
- **Brent Fountain**, Vice Provost
- **Michelle Garraway**, Outreach and Engagement Coordinator, Office of the Provost
- **Ellie Herndon**, President, Student Association
- **Adam Knight**, Professor, College of Education
- **Caroline Kobia**, Associate Professor, College of Agriculture & Life Sciences
- **Lyndsey Miller**, Associate Professor, College of Architecture, Art, and Design
- **Bethany Mills**, Executive Director, Career Center
- **Todd Mlsna**, Professor, College of Arts & Sciences
- **Eric Moyen**, Assistant Vice President for Student Success, Professor, College of Education
- **Jackie Mullen**, Assistant Vice President for Student Affairs, Student Experience
- **Bindu Nanduri**, Professor, College of Veterinary Medicine
- **Kayla Pineda**, Executive Director, Quality Enhancement Plan
- **Rebecca Robichaux-Davis**, Professor, College of Education; Faculty Director, Quality Enhancement Plan
- **Leanna Smith**, Assistant Director, Alumni Partnerships & Business Development
- **Kathleen Thomas**, Professor and Head, College of Business

Appendix C: Excerpts from Pilot Study Reflections

Excerpts from WFA 4433 Mammalogy Undergraduate Research Reflections

“This experience allowed us to get hands-on experience and be part of a much larger scale project. Our research will contribute to the other research being done on red foxes in the United States. I am honored we, as Mississippi State students, got to be part of it. Another part of this project that was especially important was communication with the landowners. A vital part of wildlife/fisheries biologists’ jobs is being able to talk to the landowner and communicate with them about their goals and objectives. In this case, we needed to be able to set up a camera on someone’s property and come back frequently to check it. It was important for us to communicate and keep the landowner updated about our visits. Most of the time, we don’t get the opportunity apply these skills until we are actually in the workplace.”

“What was cool to learn is not only setting up trail cams, but how to identify the wildlife during the night. Some images were hard to distinguish but knowing certain features of the animal helped to recognize them. This has been a beneficial project in knowing how to monitor species in a given area.”

“During this study, one thing I have been learning over the course of my degree was further re-emphasized. One of the biggest things to fully understand in the field of wildlife science is that since your main variable is a living creature, you cannot control it. Learning to let go of control within the pursuit of science is an important skill that I am continuing to grow.”

“I used my knowledge of basic animal groups and specific species identification required for many of my classes in order to properly identify species caught on the cameras. Additionally, the knowledge on being professional and speaking with landowners was useful as well, as we had to communicate with the landowners ourselves.”

“Overall classes such as Wildlife Techniques, dendrology, and applied ecology are classes where I learned skills such as tree identification, habitat characteristics, and setting up deer cameras. Lastly, people skills are something that is never brought up enough! I learned that people skills and small conversations go a long way in forming a bond. My program of study concentration is “Human-Wildlife Interactions,” and this experience helped me see how I might tackle a conflict of a wildlife species on a landowner’s property. I was able to visually and physically see what I have been learning in the classroom at Mississippi State in person, along with realizing that wildlife interacting in nature is happening everywhere! The interactions are not just happening in the jungle of Madagascar and the river of the Amazon. Interactions are also happening in backyards, trees outside of Thompson Hall, and even Davis Wade Stadium.”

“I had classes on trees and plant life. I used this and my knowledge of landscapes to help determine where exactly would be the best to set up our camera trap up to heighten our chances of being successful. This experience taught me how to properly hone all my skills together and to use them appropriately. After having multiple classes on the basic life of nature and flora and fauna of life, this class and assignment helped me be able to show myself that I am able to apply all of my skills suitably.”

Excerpts from ME 4443 Mechanical Engineering Capstone Project Reflections

“The previous knowledge and skills that I used during the experience are not only what I have learned in 4 years of engineering classes, but also all the time-management, project management, and teamwork skills I have acquired during my college path.”

“The prior knowledge and skills used from my in-class experiences primarily come from time in courses such as machine design, mechanics of machinery, and vibrations. From each class, I respectively learned about and applied knowledge on factors of safety, how to make an effective mechanism or system, and how vibrations on a system can cause damage to the system. The prior knowledge and skills used from my out-of-class experiences primarily come from my time with CAVS and the Formula SAE team. The knowledge and skills I learned and applied from CAVS include applying the importance of making products and workspaces user-friendly, straightforward, and effective. As for the Formula SAE team, what I learned and applied includes the meeting of tight deadlines and schedules. Other experiences include learning deeper and more effective communication and presentation skills. This reflects my in-class experience with technical writing.”

“This experience has been meaningful and beneficial to me by allowing me to experience a realistic engineering problem from start to finish. While other classes offer snippets of the real world, having a class that puts concepts learning previously into a purely applicational sense has been extremely importance. I can clearly see why things like machine design are important when designing a highly specialized tool. I can see why the concepts from prerequisites of that class are important and why they are important to learn and apply to a system.”

“Throughout the project, I applied a range of knowledge and skills gained through both in-class and out-of-class experiences. The foundation in mechanical engineering principles acquired in various courses enabled me to understand and navigate the complexities of designing the solar panel system and integrating it into the grow house. Skills in project management, acquire through coursework and extracurricular activities, facilitated effective team collaboration, resource allocation, and timeline adherence. Communication skills developed through presentations and technical writing courses were crucial for conveying complex engineering concepts to both technical and non-technical stakeholders. The hands-on experiences from laboratory work and previous projects equipped me with practical problem-solving skills, essential for addressing challenges encountered during the design and testing phases.”

“The experience provided a profound understanding of the intricate relationship between mechanical engineering principles and sustainable agricultural practices. I learned how to navigate the interdisciplinary nature of projects, synthesizing knowledge from mechanical engineering and plant sciences to create an effective and innovative solution. This experience also deepened my appreciation for the importance of holistic thinking in engineering design. The integration of renewable energy sources into agricultural systems requires a nuanced understanding of both technological and biological aspects. This aligns with the broader shift towards sustainable engineering practices, emphasizing environmental stewardship and resource efficiency.”

“This experience was profoundly meaningful as it provided a practice application of theoretical knowledge, bridging the gap between classroom learning and real-world problem solving. Engaging with industry consultants and faculty advisors enriched my perspective, offering insights into professional

practices and industry expectations. The collaborative nature of the project fostered teamwork, communication, and adaptability, crucial skills in any professional setting.”

“From this experience, I learned that Mechanical Engineers have to utilize all of their skills and knowledge from all of their classes. Mechanical Engineers get to learn a little about the other different types of engineering. In this project, I got to tap into my electrical engineering knowledge. I was able to expand on what I already knew and learn new things about AC motors and how they work.”

Excerpts from Interior Design Internship Reflections

“The knowledge and skills I used from previous in-class and out-of-class experiences was critical to my success as a new working professional. I used my knowledge of materials and textiles that were taught in classes like “Textiles” and “Materials & Resources.” Because of these classes I know what to look for when selecting finished for furniture in a project. I know how certain chemicals can react and/or how durable the material is. We took several studio courses that allowed us to practice presentations while allowing feedback from our peers. This is tremendously important in our industry and I am beyond grateful we were able to participate in many presentations along the way.”

“At Mississippi State, we learn these programs, Revit and AutoCAD, much earlier than most programs, and so my team was shocked with how much I knew. Presentations were a big part of my Interior Design Major, and it is true what the professors preach to us about presenting to clients and you do it a lot. It might not be exactly like presenting your projects to your class that you fully did along, but just that experience alone that our professors gave us helped me a lot at BDG. I have learned how to approach clients and even just other designers and architects in my office. I am coming out of this internship with much more knowledge in this field than before and it is because of my professors and my boss that I have the want and need to keep learning daily about this amazing career for my future.”

“The knowledge and skills previously acquired through in-class and out-of-class experiences that I used included space planning, field measuring, Revit, AutoCAD, Adobe Creative Suite, concept development, board layout communication skills, and presentation skills. I used these skills in developing preliminary floor plans, presentations, design options, renderings, and networking opportunities. Space planning to align with building codes is extremely important so that tenant safety is always accounted for. The biggest things I learned about this dealt with air ducts and fire rated walls and protrusions into corridors. When visiting sites, it is important to take as many measurements and pictures as possible to refer back to. It was overall a great learning experience.”

Excerpts from College of Education Internship Reflections

“The previous knowledge and experience I had prior to this placement has been beneficial in creating lesson plans and assessments to use in the classroom. Throughout all of my block courses (early, middle and senior), I have learned great strategies and techniques to use in lesson plans that engage students and monitor their learning. I have also had other smaller placements where I observed the classroom teacher to see first-hand what worked and did not work. In my current teaching internship experience, I am learning great strategies that align with my program of study. Upon graduation, I will be qualified to teach reading, math, and social students in grades K-8. In my experience, I am learning how to engage students in reading passages and learning the subject matter which can be used in all areas I will be

certified in. I am also learning how to manage student behavior and disruption. This will be a continuous learning opportunity as I enter into my teaching career.”

“My academic program is a Bachelor of Science in Elementary Education with a concentration in Middle School. For the past three and a half years I have been taking classes on how to teach to the best of my abilities and practices to ensure that. By completing this internship experience, I was able to take what I learned and implement it into a classroom and get hands-on experience before I graduate and get a job. Without this internship I would feel less prepared as I went into my first classroom. This is because no amount of classwork and courses can prepare you for what curveballs are thrown at you during your time in the classroom. Since I had an internship for what I am going to do as my profession, which is become a teacher, I also have relevant work experience to my degree. The internship I was in enabled me to learn more about teaching in an elementary school setting, without having to sit in more lectures about this. It felt like the puzzle piece that puts everything together in my degree, and without it, I would be going into my first classroom blind.”

“The knowledge and skills I have acquired in and out of my classroom experience have been incredibly valuable to my student teaching internship. My in-class experience set me up for success when it comes to knowing the foundation of education and the why behind the things that we do in the classroom. I did not always see it while I was in class or doing homework but now that I am teaching in the classroom I have realized just how important all of the pre-work was. I think that my in-class experience prepared me most in understanding how to write and lesson plan but more importantly why it is so important to dedicate time to planning each lesson. Now that I am planning my own lessons for actual students, I understand why there was such a focus on being mindful of your planning. You want to design lessons that are going to have the most educational impact on your students and engage them in a meaningful way.”

“I can honestly say that Mississippi State University’s education department prepared me thoroughly for my internship. I recall many times a light bulb turning on over my head when I would make the connection between something I learned in class and something I was seeing in the classroom. I feel MSU designed a program that truly aligns with the teaching experience and the classroom environment. I remember learning all about phonics and phonemic awareness and I am not going to lie, it was confusing, but when I got in the classroom and I was able to see everything they were teaching me in action, it just clicked.”

“Some of the teaching practices that I have found to be most valuable are those strategies to keep students engaged in lessons and classroom activities. The strategies I have implemented in the classroom with my mentor teacher have aligned with the strategies I learned about in my academic program of study. These research-based strategies that I learned about in my program of study have proven to be effective in the classroom during my internship experience.”

Excerpts from WFA 4394 Waterfowl Ecology and Management Field Trip Reflections

“This experience allowed me a more in-depth, hands-on approach on how to properly manage moist soil impoundments in a tidal area for waterfowl species and see the results of said management with actual waterfowl on the impoundments. I feel as if that is something you can learn all day long in the classroom, but until you can walk through one and flush ducks as you are picking up vegetations they are eating, it won’t make sense.”

“These field trips were great ways to see the concepts we learned throughout the course be applied to real management actions.”

“The ways that the experience was meaningful and beneficial to me were seeing the concepts we learned in class implemented on such a large scale in the South Carolina Lowcountry, learning about the history and culture of the Lowcountry, as well as the people we met along the way. I really enjoyed listening and learning from both Dr. Kaminski and Mr. Prevost. The wealth of knowledge about waterfowl and botany that these two individuals possess is extraordinary and it felt special to learn from them in person.”

Excerpts from RDG 3223 Assessing Reading Difficulties Community-Engaged Learning Initial Reflections

“I loved this experience, because I have never been able to work one-on-one with a student before, and I have never assessed a student either. This experience was very beneficial for me to have before moving on to senior block.”

“In this experience, we assessed our student on sight words, DIBELS, and many more assessments. In all of my education classes at Mississippi State University, we have discussed these types of assessments and how to use and give them correctly. All of my classes at Mississippi State University have been preparing me for assessing and understanding a student’s knowledge on material.”

“A lot of our early block instruction was used for this field experience like blending, segmenting, sight word recognition, oral reading fluency, and more. It was great that we had previous knowledge of the assessments that we had to give, however, it was even better that we got to actually give the assessment and the results that followed the assessment. I learned how to properly give literacy assessments and how to evaluate the data from the assessments to properly provide my student with interventions.”

“I was able to apply a lot of what I learned in the Early Block literacy classes in order to meet my student where he was academically. The classes I have taken at Mississippi State have prepared me for this experience. Specifically, my understanding of phonetics, reading comprehension, and fluency aided me in this experience.”

“The experience was beneficial to me because it taught me how to actually use and give reading assessments to a student in the real world. It was meaningful to me because I formed a relationship with the student that I was giving the assessments to. I learned how to prepare an activity that will be both beneficial and engaging for the student after the assessments.”