Think
FORWARD

QUALITY ENHANCEMENT PLAN

UNIVERSITY OF MISSISSIPPI

THE UNIVERSITY *of*
MISSISSIPPI

JANUARY 2019

Dear Dr. Wheelan:

Developing students' critical thinking skills is an essential part of any undergraduate academic program and a core responsibility of our academic community. At the University of Mississippi, it is a core component of our mission and strategic plan, which calls for actions that "foster critical thinking across the curriculum."

I am proud to present to you **Think**FORWARD, the University of Mississippi's Quality Enhancement Plan (QEP). **Think**FORWARD is designed to foster critical thinking skill development in lower-division, general education courses and co-curricular learning experiences by enhancing faculty development and modifying student learning environments. As we outline in the following pages, **Think**FORWARD sets out an ambitious set of actions, unites our community of scholars around a central learning outcome, and reflects our ongoing commitment to improve general education.

We are excited by the opportunities this QEP offers our students and faculty and look forward to sharing our QEP vision with the On-Site Review Committee during their visit to campus. Thank you very much for the attention you are giving to the University of Mississippi's reaffirmation of accreditation process.

Sincerely,

Larry D. Sparks
Interim Chancellor
University of Mississippi

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EXECUTIVE SUMMARY

The University of Mississippi is a comprehensive public-research university and the flagship University of the State of Mississippi. With Fall 2018 enrollment of 20,418 and regional instructional sites in DeSoto, Tupelo, Booneville, and Grenada, the University is Mississippi's first comprehensive, public university and classified as R1: Doctoral University—Highest Research Activity in the Carnegie Classification of Institutions of Higher Education.

The mission of the University is to create, evaluate, share, and apply knowledge in a free, open, and inclusive environment of intellectual inquiry. The education of undergraduates plays the primary role in the life of the University. And in fulfillment of that role our mission charges us explicitly to provide "an academic experience that emphasizes critical thinking" (University, 2018).

Critical thinking is at the heart of a college education. Our graduates face a complex and rapidly changing world. In order to thrive in any walk of life, University of Mississippi graduates must be able to form sound judgments based on reason and fact, remain open to the discovery of new facts, and understand that their judgments are made in the context of a world of broad and diverse perspectives. We know that while we cannot predict with detail the future of the world of work in which our graduates will engage, preparing them to meet it with strong critical thinking skills will enable to them to adapt to any challenge.

We have developed this *Quality Enhancement Plan,* **Think**FORWARD with twin goals to support critical thinking: over the course of five years, we will (a) cultivate the ability of our faculty to teach critical thinking and (b) enhance the student learning environment to better engage critical thinking. Through a consensus-driven process, we have articulated a local definition of critical thinking and have also developed six student learning outcomes unique to our campus. In support of these goals, we will engage in seven comprehensive actions, which include hiring new personnel to lead our initiative, creating an annual faculty institute to support critical thinking pedagogy, providing opportunities for critical thinking redesign grants, supporting faculty programming on critical thinking, as well as developing other initiatives. The learning outcomes will be regularly assessed and all of these actions will be supported financially and administratively.

ThinkFORWARD springs forth from broad conversations between students, faculty, and staff. This dialogue is clearly tied to our strategic plan, *Flagship Forward*, which specifically dedicates us to academic excellence. Our community views this plan as an opportunity to achieve even greater success with the mission we now undertake. Our campus culture understands the value of critical thinking to a college education.

We are thinking forward!

INTRODUCTION AND EVIDENCE FOR COMPLIANCE

This preface provides the SACSCOC On-Site Reaffirmation Committee a brief roadmap for reading the Quality Enhancement Plan (QEP). It first facilitates ease of access by describing the role of each subsequent chapter in the document. Second, it gives information relevant to standard **7.2 Quality Enhancement Plan** specifically identifying where evidence for compliance to the *2018 Principles of Accreditation* can be found within the document.

Introduction to this Document

This document records and represents an extensive process by the University of Mississippi (UM) to develop a meaningful and ambitious plan to improve student learning and student success. As such, it speaks to our campus culture, our values, and our role in our community. In addition to narrating our journey and articulating our values, this document also fulfills the more pragmatic function of describing our QEP to both internal and external audiences.

Chapter 1: Institutional Processes for Topic Selection and Development

This chapter gives a brief overview of the institution and describes the institutional process that led to our QEP topic selection. As this chapter explains, the process was part of our ongoing and comprehensive institutional planning efforts, including our new strategic plan, *Flagship Forward*. This chapter also describes how our process solicited input from constituents from across our learning community who helped us arrive at a topic which would directly address student performance. A group of campus faculty and staff members carefully considered how critical thinking enhancement efforts could be implemented.

Chapter 2: Literature Review and Best Practices

Chapter Two explains how we researched the field of critical thinking, how we identified the most important concepts from the field, and how we documented the best practices of those teaching and learning communities that have succeeded in the classroom. Our research helped us understand the power and challenge of critical thinking as a QEP topic with which faculty throughout our campus could identify strongly, but also wish to define differently. This chapter concludes with our definition of critical thinking. Our definition is grounded in existing literatures but is informed by our unique institutional needs – to improve critical thinking pedagogy in first- and second-year courses.

Chapter 3: Desired Goals and Student Learning Outcomes

This chapter describes how we developed specific and measurable goals for the QEP. In particular, we explain how our definition of critical thinking plays a role in improving both student learning performance and the student learning environment. We also introduce and explain in detail our student learning outcomes and how the pursuit of these student learning outcomes fulfills our institutional mission.

Chapter 4: Actions to be Implemented and Timeline

Chapter Four introduces the specific and measurable actions we will take to reach our goals and outcomes. Our goals are comprehensive, involving three broad categories of people, programming, and places, and are also enumerated in our timeline. The five-year timeline features specific and achievable year-by-year actions, designed to advance our QEP goals and student learning outcomes and supported through our budget.

Chapter 5: Assessment

This chapter explains how we will know if we are successful with our plan, and how assessment results will be used to improve critical thinking and the QEP as needed. We based our assessment plan on clear student learning outcomes. The plan is comprehensive, including standardized tests to specifically measure critical

thinking skills, course-embedded direct assessment methods, as well as indirect assessment methods. This plan includes measurements at both individual and programmatic levels.

Chapter 6: Institutional Resources

Our last chapter establishes our commitment to the critical thinking quality enhancement plan. In addition to the timeline in Chapter Four, this chapter includes a specific budget to enable hiring key personnel, implement faculty development opportunities, develop programs focused on critical thinking, enhance the student learning environment, and asses our QEP goals and student learning outcomes. Furthermore, this chapter identifies the duties of key personnel and provides the organizational structure for these employees.

Evidence for Compliance

QEP evaluators and on-site committees use *Reviewing the Quality Enhancement Plan: An Evaluative Framework* (SACSCOC, 2018) as a rubric to help guide their assessment of an institution's QEP. The document provides specific, qualitative language to assist committees in evaluating the five components of the review framework within any particular QEP.

We produced Table 1 to assist readers in locating the specific evidence for compliance within this document.

Table 1: *Evidence for Compliance with SACSCOC Standard 7.2 Quality Enhancement Plan*

Standard 7.2	Evidence	Chapters
A. Topic A **topic** *identified* through its **ongoing, comprehensive planning and evaluation** *processes*	QEP topic of critical thinking extends from our mission statement. All facets of campus involved in topic selection. Clear relationship between critical thinking and student success.	Chapter 1
B. Broad-based support Has **broad-based** *support* of institutional constituencies	QEP topic selection, implementation, and development teams included rotating representatives from faculty, staff, and students.	Chapter 1 Chapter 3 Chapter 4 Chapter 6
C. Focus **focuses** on *improving* **specific student learning outcomes** and/or **student success**	Six defined and measurable student learning outcomes arose from research and institutional need to fulfill teaching mission.	Chapter 2 Chapter 3 Chapter 5
D. Resources *commits* **resources** to **initiate, implement, and complete** the QEP	Ample funds for reaching QEP goals are articulated; amounts determined by study of QEP expenditures of other institutions with focus on critical thinking.	Chapter 6
E. Assessment includes a **plan to** *assess* **achievement**	The QEP includes two goals and six learning outcomes with specific direct and indirect measures.	Chapter 3 Chapter 5

CHAPTER 1

CHAPTER 1: INSTITUTIONAL PROCESSES FOR TOPIC SELECTION AND DEVELOPMENT

Overview

The University of Mississippi (UM) utilized a multi-phase process with a series of committees to identify, develop, and launch the Quality Enhancement Plan (QEP). This process included topic selection, implementation, and development, which were all shaped by our institutional planning process and extensive input. This chapter documents how our topic selection generated information and specific ideas from a wide range of constituents. Additionally, the development of this QEP followed a representative process that considered institutional needs, viability of a plan, and constituent input.

QEP Topic Selection Process

Topic Selection Committee

In the Fall of 2016, Chancellor Jeffrey S. Vitter appointed the Quality Enhancement Plan Topic Selection Committee and charged the committee to identify a maximum of three QEP topic ideas for consideration by university leaders (see Appendix A).

Amy Wells Dolan, Associate Dean and Associate Professor of Leadership & Counselor Education, led the 22-member committee that included faculty, staff, and students (see Appendix B). The committee met nine times during the 2016-2017 academic year and subcommittees met as needed (see Appendix C). During these meetings the committee reviewed the SACSCOC QEP guidelines and examined UM's 2009 QEP to understand the scope and requirements of a quality enhancement plan. To inform their decision-making process, committee members reviewed QEPs from peer institutions, examined best practices related to enhancing student learning, evaluated institutional assessment data (see Appendix D), and discussed their findings. The committee identified nine areas of student learning that could be enhanced through a QEP. The committee then sought feedback on these topics from faculty, staff, and students via survey and a focus group discussion (see Appendix E). Critical thinking emerged as the most important area of student learning and also the area of learning most in need of improvement. The committee recognized that critical thinking is a broad topic and a critical thinking QEP could be implemented in myriad ways. Therefore, the committee divided into three subcommittees and each subcommittee developed for consideration a possible approach to enhancing critical thinking among UM undergraduates.

The QEP Topic Selection Committee chair fulfilled the committee's charge by submitting the recommendation of critical thinking as the QEP topic to Chancellor Vitter (see Appendix F). University Senior Leaders reviewed the committee's report and endorsed critical thinking as the QEP topic.

Implementation Team

In Spring 2017, Interim Provost and Executive Vice Chancellor Noel Wilkin appointed the QEP Implementation Team and charged the team to "continue the QEP development process by refining the focus of the QEP topic and developing recommendations for improving critical thinking of UM undergraduate students" (see Appendix G).

The 12-member team included faculty and staff, some of whom also served on the QEP Topic Selection Team (see Appendix B). The group met 16 times during Summer and Fall 2017 (see Appendix H). The QEP Implementation Team reviewed the Topic Selection Committee report to understand the topic and scope of the QEP. To inform their decision-making process, team members reviewed critical thinking QEPs from peer institutions, examined best practices related to critical thinking, and discussed related experiential learning practices (frequently called "high-impact practices"), as research on engaged educational or experiential learning practices indicates those efforts positively impact students' critical thinking skills. Team members

interviewed faculty colleagues to ascertain how critical thinking is defined within their disciplines, met with the directors of two university programs that advance critical thinking to understand their approaches to enhancing critical thinking skills, and administered a survey to department chairs to determine the prevalence of engaged educational practices within individual academic programs (see Appendix I). Through thoughtful exchange, the team identified the scope, framework, and proposed strategies of the critical thinking QEP to fulfill its charge.

The QEP Implementation Team fulfilled its charge and submitted a summary report to the Provost that included a definition of critical thinking, goals, student learning outcomes, and recommended actions to achieve the goals and improve student learning (see Appendix J). The team also developed the scope and framework of the QEP to facilitate further development of an appropriate and manageable plan.

Development Committee

In Fall 2017, Provost and Executive Vice Chancellor Noel Wilkin appointed the five-member QEP Development Committee (see Appendix B) and charged the committee to "develop a QEP proposal" (see Appendix K). A sixth member joined the committee in late spring 2018. The committee met 15 times during spring and summer 2018 (see Appendix L). During these meetings the committee thoughtfully considered the 14 QEP actions proposed by the Implementation Team and adopted seven revised actions for final consideration. To complement the proposed actions and foster understanding of how the QEP will unfold, the committee established a framework of people, programming, and places. Committee members established an appropriate budget to support the proposed initiatives and an infrastructure for QEP personnel. Additionally, the committee established a plan to assess the student learning outcomes and evaluate the QEP goals. That committee completed its work and delivered this QEP Proposal on August 10, 2018.

Listening Sessions

Once the topic had been selected, the Development Committee shared the proposed QEP goals, outcomes, and actions (see Appendix M) with key campus stakeholder groups including the chairs and directors from the College of Liberal Arts, the Council of Academic Administrators, Faculty Senate, leaders of the University Libraries, directors from the Division of Student Affairs, and faculty from the Departments of Biology and Writing and Rhetoric. Faculty, staff, and administrators comprise these key constituent groups and each group provided the QEP Development Committee with substantive feedback that was incorporated into the QEP proposal.

Overall, the constituent groups supported the QEP definition of critical thinking and cautioned the Development Committee to distinguish analytical reasoning from critical thinking. The groups also supported the QEP goals and student learning outcomes. University librarians articulated existing library programs that align closely with the QEP goals and student affairs educators shared the co-curricular experiences that afford students opportunities to apply critical thinking skills outside of the classroom. Members of the Faculty Senate discussed how critical thinking instruction already taking place could align with the QEP and inquired about assessing critical thinking skills. Biology and Writing & Rhetoric faculty as well as librarians and student affairs educators inquired about their roles in the implementation of the QEP.

These meetings promoted the QEP among faculty, staff, and administrators and allowed them to identify ways in which they can contribute to the goals and learning outcomes of the QEP. The feedback was incorporated by the Development Committee as they refined and finalized the QEP actions.

Institutional Planning

The QEP topic selection and development is a direct outgrowth of our institutional strategic planning process. Chancellor Vitter launched a 100-day listening tour in January 2016 called the Flagship Forum which enabled faculty, staff, students, and alumni to participate in events on the Oxford and regional

campuses, as well as in locations across the State of Mississippi and nationwide. In August 2016, the University held its first-ever Town Hall meeting. The widespread input from participants in the Flagship Forum and Town Hall meeting afforded the University community an opportunity to question how it may change to enhance student learning.

Four foundational areas – or "pillars" – emerged from these activities to guide the University's strategic planning efforts: Academic Excellence; Healthy and Vibrant Communities; People, Places, and Resources; and Athletics Excellence. The University's Strategic Planning Council – led by Provost and Executive Vice Chancellor Noel Wilkin with faculty, staff, and students from across the university – reviewed the institution's strengths and weaknesses in relation to these four pillars.

Flagship Forward: A Strategic Planning Framework for the QEP

This faculty-led, planning process culminated in a new strategic plan, *Flagship Forward*. The strategic plan includes a transformative initiative, goals, and metrics key to sustaining and extending excellence in each of the four pillars (Figure 1). The plan, the transformative initiatives generally, and the goals specifically refer to the importance of critical thinking skill development. Particularly, the first two pillars of the *Flagship Forward* strategic plan directly relate to our selection of critical thinking as a QEP topic. The first pillar, academic excellence, includes goals clearly tied to our critical thinking topic.

First Pillar: Academic Excellence

The first goal of academic excellence relates to enhancing the quality of academic programs, stating that we will "encourage the development of experiential learning in all undergraduate academic programs," and "provide opportunities to foster innovations in teaching, research, and scholarship, engagement, and administrative leadership."

A second goal relates to supporting faculty excellence to provide opportunities to foster innovations in teaching, research and scholarship, engagement and administrative leadership. The strategic plan calls for actions that will "support teaching innovation, especially around use of technology and novel active learning pedagogies to improve learning outcomes."

Finally, a third goal tied to the academic excellence pillar is to enhance student success and critical thinking. This goal clearly informs the QEP topic selection, calling us to "provide opportunities for students to engage in experiences and services designed to enhance student success through critical thinking." The strategic plan calls for actions that "foster critical thinking across the curriculum." This goal will be measured through the evaluation of the QEP.

Second Pillar: Healthy and Vibrant Communities

A second pillar of the *Flagship Forward* strategic plan is to build healthy and vibrant learning communities. This pillar establishes goals to "educate and engage global citizens" and "foster an intellectual and engaged environment." Engaged and intellectual pursuits such as study abroad, undergraduate research, and engaged scholarship and service foster a critical thinking environment.

Overall, UM's *Flagship Forward* strategic plan presents a resounding call that critical thinking skill development is central to improving our academic mission. The plan presents a bold path to increase our academic excellence, and, consequently, the faculty-led process informed our QEP topic selection.

FLAGSHIP FORWARD

INSPIRE. DISCOVER. TRANSFORM.

ACADEMIC EXCELLENCE	HEALTHY AND VIBRANT COMMUNITIES	PEOPLE, PLACES, AND RESOURCES	ATHLETICS EXCELLENCE
Enhance the Quality of Academic Programs	Increase Diversity and Excellence	Enhance Faculty and Staff Merit and Satisfaction	Support Academic Success of Student-Athletes
Support Faculty Excellence	Educate and Engage Global Citizens	Plan for Enrollment Growth, Enhance the Campus, and Foster a Healthy Student Environment	Maintain a Culture of Compliance
Enhance Student Success	Increase Entrepreneurship and External Connections	Improve Access to Digital-Immersive Experiences	Build Inclusiveness and Community Involvement
Increase Research and Creative Achievement	Foster an Intellectual and Engaged Environment	Enhance Visibility and Appreciation of the Arts	Compete and Inspire Success
Flagship Constellations	**M Partner**	**Comprehensive Capital Campaign**	**Athletics Endowment**

TRANSFORMATIVE INITIATIVES

THE UNIVERSITY OF MISSISSIPPI

FlagshipForward.OleMiss.edu

Figure 1. Strategic Plan

Faculty Leadership: A Cultural Framework for QEP Topic Selection Process

The work of the faculty-led QEP Topic Selection, Implementation, and Development Committees complements the university-wide strategic planning process.

The principal rationale for this selection is the clear expression by faculty, students, and staff that critical thinking is an essential teaching and learning topic and also a learning skill in need of improvement. Beyond the broad support, though, a further reason for the selection is the centrality of critical thinking to our institutional educational mission. As one of the University's long-stated general education learning outcomes, critical thinking is a broad set of skills which varies across disciplines in terms of its teaching, but always requires students to conceptualize problems; interpret, analyze, and appraise evidence; and make evaluative judgments from that evidence. This structured reasoning is increasingly essential to success in a varied workforce and life. Additionally, students' critical thinking skills can be developed, nurtured, experienced, and assessed in myriad ways. This opportunity to improve students' critical thinking is the essential call for our QEP.

Summary

The UM community thoughtfully engaged in deliberative, faculty-led processes to identify the QEP topic of critical thinking. These community-wide efforts included University strategic planning and a well-organized, coordinated QEP topic selection process, both of which integrated input from faculty at all ranks, staff, students, and administrators. Together, these inclusive processes validate the selection of critical thinking as the area in which we collectively believe we can enhance student learning.

CHAPTER 2
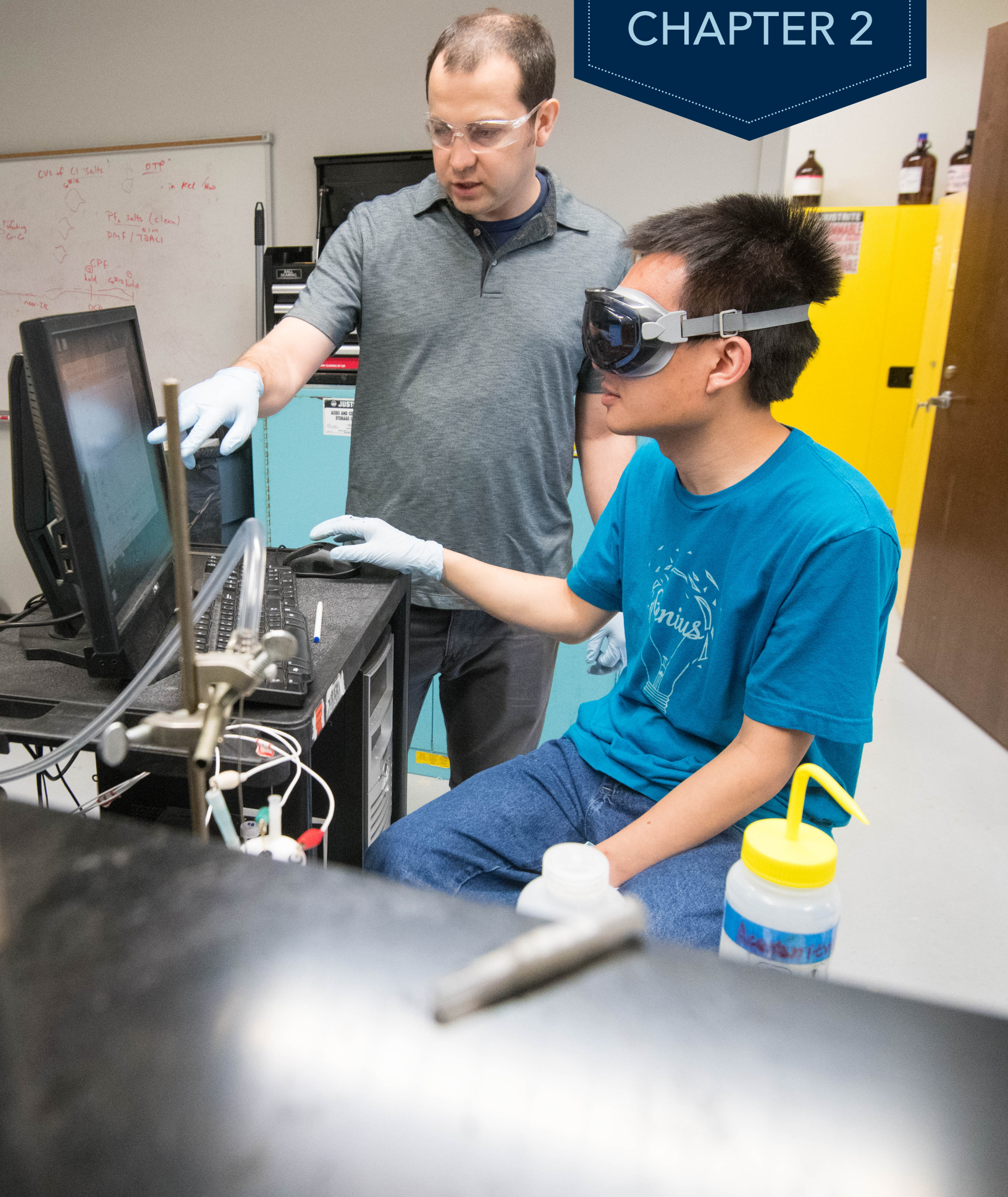
CHAPTER 2: LITERATURE REVIEW AND BEST PRACTICES

One of the main challenges to enhancing critical thinking skills among our students lies in finding a common definition and understanding best practices. Faculty often have differing or undeveloped ideas about critical thinking. This conceptual and theoretical muddle contributes to an inability to propose a coordinated plan for teaching critical thinking. This chapter makes the case that we carefully reviewed current knowledge and best practices regarding critical thinking. This review has informed our choices of QEP actions, student learning outcomes, and assessment.

This chapter reviews scholarly works that shape our understanding of critical thinking. Specifically, we briefly survey three analytical frameworks that we find helpful in our understanding of critical thinking development. After this brief review, we next discuss common elements and principles from these varying frameworks. After establishing common ground, we offer an operational definition of critical thinking that informs our eventual choices of goals, actions, and assessment methods. Finally, we apply our definition of critical thinking by discussing best practices associated with critical thinking development.

Three Critical Thinking Frameworks

The literature on critical thinking is multidisciplinary and often presents related but distinct conceptual frameworks. These academic frameworks draw from different disciplinary lenses: cognitive psychology, developmental education, education psychology, moral reasoning, formal logic, and human decision-making. Each framework defines, operationalizes, and measures critical thinking uniquely.

The goal of UM's QEP is not to invest in one particular analytical framework but rather to draw common elements from them and to apply them practically so that we can train faculty, modify teaching, promote student learning, and assess student learning effects. This practical approach for a common understanding of critical thinking has guided the QEP development.

Consequently, we limit the literature review to applied and empirically-assessed studies related to college-level skill development. Generally, reviews and meta-analyses of critical thinking development show that classroom interventions can have positive results (Kennedy, Fisher, and Ennis 1991; Pithers and Soden 2000; Lai 2011). Two meta-analyses make this point clearly. Higgins, Hall, Baumfield, and Moseley (2005) analyze 29 different international studies (in either the United States or United Kingdom) finding large and significant effect sizes (approximately 0.62) compared to most educational interventions. Likewise, Abrami, Bernard, Borokhovski, Wade, Surkes, Tamim, and Zhang (2008) conduct an even larger meta-analysis of 117 different classroom-based, critical thinking studies. They find significant learning gains of critical thinking interventions (with modest effect sizes). Meta-analyses such as these two studies present the most compelling evidence that despite variation in research designs across empirical evaluations of critical thinking, evidence shows that these skills can be developed with well-administered interventions.

Still, what is critical thinking? That is, how do analysts conceptualize and measure it? Do they conceive of it as largely a cognitive function, a set of behavioral attitudes or standards, or a collection of moral values and traits? Each of these frameworks – cognition, behavioral attributes, and moral traits - have their followers and their place in the diverse literature on critical thinking.

Several studies adopt a mainly cognitive approach. Bloom, Engelhart, Furst, Hill, and Krathwohl (1956) offer a framework for cognitive development and argue that higher-order cognitive operations such as analysis and reflection demonstrate critical thinking develops after students first master functional, basic cognitive processes. This cognitive skill development does not naturally evolve but instead requires intentional interventions. Facione (1990, 2015) elaborated on this view, arguing that critical thinking is foremost a purposeful, reflective judgment. It is a set of tools of inquiry that can be developed. Halpern and Hakel (2003) propose a taxonomy of reasoning techniques for this critical thinking development: verbal (or persuasive) reasoning, argument analysis, scientific reasoning (hypothesis-testing), statistical reasoning (probability analysis), and decision-making or problem analysis. These reasoning approaches present analytical frameworks for skill development that allow for assessment. Facione and his associates, for example, have developed a California Critical Thinking Skills Test for assessing this students' skill development (Insight Assessment, n.d.).

A second common conceptual framework for critical thinking relates it to behavioral attributes, processes, or standards. Wolcott (2006) views critical thinking as largely developmental, implying that a student progresses through stages as a "confused fact-finder," "biased jumper," and "perpetual analyzer." The latter state is one of non-commitment and relativism. For most, our natural states are toward uncritical thinking reflected in frequent actions and behaviors driven by psychological limits and biases. An extensive literature on cognitive biases and behavioral economics has presented experimental evidence showing that humans behave in systematic and fundamental ways counter to self-interest or critical reasoning. Kahneman (2011) and Giroux (1979) review this extensive view that human behaviors must be overcome to promote critical thinking.

A final conceptual order to understanding critical thinking relates to moral values or psychological traits that relate to better decision-making. These moral virtues compel those who possess them to be evidence-driven in their decision-making, rejecting alternative approaches such as tradition, authority, or revelation. Paul and Elder (2006) present 25 different psychological competencies for how to become a better critical thinker. Facione, Facione, and Giancarlo (2000) likewise propose various affective dispositions such as inquisitiveness, trust in reasoned inquiry, and acknowledging one's own biases. These affective dispositions compel critical thinkers to suspend judgment without careful questioning of their own pre-conceptions and others' perspectives.

Paul and Elder (2009; 2014) posit perhaps the most integrative approach for conceiving of critical thinking development by enveloping the "elements

of reason," "universal intellectual standards," and "intellectual traits." The elements of reason are the building blocks of reasoned thought: purposes, questions, points of view, information, inferences, concepts, implications, and assumptions. The intellectual standards are applied to these building blocks for evaluating decision-making or problem-solving process. These standards are: clarity, accuracy, precision, relevance, depth, breadth, logic, and fairness. Finally, the application of these standards allows us to hone intellectual traits (or virtues) that demonstrate a commitment to critical thinking. These traits include intellectual humility, integrity, courage, empathy, perseverance, autonomy, and fair-mindedness.

Common Principles from the Three Frameworks

We note that these cognitive, behavioral, and moral frameworks have more common, rather than distinctive, characteristics. The most common principles are that critical thinking requires self-awareness, a commitment to evidence-based reasoning, and intentional practice.

The first common element is that individuals must be aware that skill development compels deliberate, thoughtful actions. Most knowledge is not transferred but must be self-created. Nilson (2015) argues that critical thinking requires interpretation, generalization, and analysis. These cognitive skills begin by evaluating an ethically or empirically ambiguous claim. A claim, she argues, is a belief, value, assumption, position, or hypothesis relating to a complex, contentious controversy. The claim concept is purposefully broad to include humanities, arts, social and natural sciences as places to which claims are routinely made and evaluated.

A second common theme is that critical thinking requires a commitment to reason and evidence. The nature of claims varies drastically across an academic curriculum. Herman and Nilson (2018) argue that analytical strategies for critical thinking must be infused with discipline-based content knowledge. Students' development of disciplinary knowledge and their critical thinking skill must be married or "infused" to have sustained, significant impacts in learning. Natural, social, and applied sciences tend to rely on decision principles and practices broadly related to the scientific method. In contrast, humanities and fine arts emphasize interpretative and self-reflective skills requiring students to apply disciplinary knowledge and make reasoned arguments. Faculty clearly vary in their disciplinary approaches and knowledge; however, they share a commitment to teaching students to engage in evidence-based reasoning. This commitment compels us to integrate inquiry (or

The **definition of CRITICAL THINKING** for **Think**FORWARD is the ability to conceptualize problems, gather pertinent information, interpret data, appraise evidence, distinguish diverse points of view, and articulate personal insights, in order to present reasonable and effective arguments, responses or conclusions.

problem)-based learning exercises across our courses to develop students' critical thinking.

A final commonality to these three frameworks is that critical thinking development requires intentional practice. Critical thinking requires sustained effort and necessitates application of disciplinary knowledge. Consequently, critical thinking skills are developed through repeated, well-constructed exercises within disciplinary college courses.

Critical Thinking in the Disciplines

A fundamental part of UM's QEP plan is the belief that critical thinking is most likely to be developed by specific discipline practitioners and when embedded within and across discipline-based courses. Academic studies on how to stimulate critical thinking development have long grappled with controversies over domain-specificity vs. domain-generality of critical thinking skills (Ennis, 1989; McPeck, 1990; Smith, 2002) and whether to teach critical thinking skills in stand-alone courses vs. within discipline-specific courses (Ennis, 1989; McPeck, 1990; Perkins & Salomon, 1989). Both of these issues relate to our decision to focus on a goal to alter disciplinary-based learning environments. Specifically, we argue that our strategic focus on broad learning environments will enable domain-specific critical thinking embedded within discipline-specific courses.

The first controversy is whether critical thinking skills transcend any particular course domain and, if so, are transferable and applicable across domains. Those scholars advocating the position that critical thinking skills are domain-general (and thus applicable across a wide variety of course domains) assert that science, literature, art, psychology, or other disciplinary domains apply the same general critical thinking skills (e.g. Davies, 2013; Halpern, 2013; Kuhn, 1999). They claim the existence of a set of general critical thinking skills are applicable across disciplines and that everyday life critical thinking tasks across domains share significant commonalities. Notably, they all present fundamental problem-based reasoning that requires conceptual clarity, openness to broad alternatives, clear evaluative standards, and analysis.

On the other side, scholars making the case for domain-specificity (e.g. Barrow, 1991; McPeck, 1990; Moore, 2011) emphasize that the ability to think critically is largely associated with specific criteria within a disciplinary domain. Notably, McPeck (1990) who represents the earlier domain-specificity position argues that critical thinking skills required in one domain are different from those required in another.

The other controversy that motivates our learning environment goal is whether critical thinking skills are best developed in courses generically defined for critical thinking or courses that are discipline specific. This debate within the critical thinking literature, not surprisingly, closely parallels the earlier controversy on domain specificity. Logically, if you side with the view that critical thinking requires domain-specific knowledge, you are also inclined to adopt the view that critical thinking development resources should be concentrated on existing discipline-based courses.

Following this logic, McPeck (2016) argues in his book, *Teaching Critical Thinking*, that discipline-specific courses are where the greatest gains can be made in students' critical thinking skills. He writes that "specific subject content determines the required ingredients for thinking critically in each case. One of the more unwelcome consequences of this [domain generality] view is the notion that 'general critical thinking skills' are largely meaningless. Therefore, the great bulk of critical thinking programs which exist today are seriously misguided, in my view" (preface, 2016). McPeck argues that resources should be directed toward enhancing and embedding critical thinking exercises in existing discipline-specific courses.

In summary, critical thinking is increasingly needed within a college curriculum as unfiltered information becomes readily accessible to our students. Human cognition and social-behavioral norms serve us by simplifying complex decision-making so that fast, uncritical decisions can be made. Critical thinking, in contrast, is difficult requiring both time and reflection. Halpern (1998, 1999) argues that a critical thinker must persist,

resist impulsiveness, remain open-minded, readily admit error, but also follow a conscious, deliberate process of decision-making. Nilson (2013) presents a set of self-regulated learning strategies in which learners must lead in their own critical thinking development. In the next section, we offer a definition of critical thinking that builds on these central attributes – self-awareness, evidence-based reasoning, and intentional practice - of the three theoretical frameworks.

Defining and Operationalizing Critical Thinking

As mentioned previously, a vexing and fundamental challenge to operationalizing the enhancement of critical thinking is consensus on operational standards underlying the concept and skill development. Faculty are often challenged or resistant to defining and operationalizing critical thinking given its inherent abstraction and differing disciplinary perspectives. Without a shared meaning of critical thinking, we cannot operationalize a coordinated plan for skill development.

We found that faculty on our campus hold a common "we know it when we see it" mindset. That is, faculty recognize the outcomes of critical thinking and the shared attributes of critical thinkers. Many faculty believe that critical thinkers are able to identify similar patterns and categorize problems to better solve them; assess alternative explanations by analyzing them using objective, defensible evidence and information; evaluate this evidence to make balanced, comprehensive judgments; and, finally, interpret complex relationships by presenting them through graphics (art, pictures) or numbers (tables, charts) in order to communicate findings to others. These are the shared outcomes that we aspire for college-level, critical thinking. They represent attributes of individuals that we readily recognize as critical thinkers.

Still, these attributes do not identify the basic conditions of critical thinking skill development. To come to a shared meaning, the QEP Implementation Team applied the concepts developed above in our literature review to focus on where and why skill development could be most improved. The team decided that focusing on a set of sequenced, foundational skills would be most important to our students.

The QEP Implementation Team, thus, defined critical thinking as the ability to

- conceptualize problems,
- gather pertinent information,
- interpret data and appraise evidence,
- distinguish diverse points of view, and
- articulate personal insights, in order to
- present reasonable and effective arguments, responses, or conclusions.

The Implementation Team prioritized the need to enhance critical thinking skills among first- and second-year undergraduate students and identified lower-division, general education courses and co-curricular learning opportunities as the key opportunities for QEP initiatives to enhance critical thinking.

We believe that this definition of critical thinking is faithfully derived from a consensus of the literature and also reflects the engagement of our local community. As such, it offers a definition with sufficient intellectual grounding which can be operationalized successfully.

CHAPTER 3: DESIRED GOALS AND STUDENT LEARNING OUTCOMES

Having identified how the enhancement of critical thinking fulfills our institutional mission, and having arrived at a definition of critical thinking by applying scholarly literature to our local context, we now construct goals to coordinate our activities and ensure that they improve student learning.

The purpose of **Think**FORWARD is to improve the university's ability to educate independent and effective critical thinkers. While working toward this broad purpose, we identify two operational QEP goals and link them closely to critical thinking learning outcomes:

> **Goal 1:** Cultivate and develop the ability of faculty to *better foster critical thinking*, and

> **Goal 2:** Create a more engaged *student learning environment*.

| Faculty Development | Enhanced Student Critical Thinking | Engaged Learning Environment |

Figure 2. QEP Goals

Our primary target for these goals will be improving the critical thinking skills in general education, lower-division, discipline-based courses.

The Faculty Development Goal

The faculty development goal is established to cultivate and develop the ability of faculty to better foster critical thinking. UM already supports the development of teaching and learning through its Center for Excellence in Teaching and Learning (CETL), which delivers traditional faculty development through programs such as speakers and open forums, teaching observations, and transformative teaching practices.

The Engaged Learning Environment Goal

The second QEP goal is established to create a more engaged student learning environment to improve critical thinking. The learning environment includes the place, nature, or time in which students engage the curriculum including critical thinking activities. These environments include the classroom design, the degree of community in collaboration among learners, and connections between learners outside of regular class meetings. Creating the environment – the place, nature, and time of learning - can help faculty and students to make critical thinking skills a more understandable and achievable part of general education classes.

Student Learning Outcomes

Working from the definition of critical thinking - *the ability to conceptualize problems, gather pertinent information, interpret data, appraise evidence, distinguish diverse points of view, and articulate personal insights, in order to present reasonable and effective arguments, responses, or conclusions* -- and the explicit context of our institutional needs, we now identify six detailed student learning outcomes (SLOs) which demonstrate higher-order critical thinking skills. These six outcomes present a developmental path through which students are likely to acquire advanced critical thinking skills and are directly related to our definition of critical thinking. Notably, as critical thinkers, students will be able to:

1. Conceptualize complex issues or problems;
2. Gather pertinent facts or ideas to explore complex issues or problems;
3. Interpret data and appraise evidence;

4. Distinguish, compare, or contrast diverse points of view and/or alternative conclusions;

5. Articulate personal insights about complex issues or problems; and

6. Communicate a reasonable and effective argument, response, or conclusion.

The faculty development and learning environment goals that we envision will be designed to impact these specific critical thinking learning outcomes.

The initial step in the critical thinking process is to *conceptualize* complex issues or problems. Students will identify the nature and importance of the issue or problem as well as consider possible approaches to address it. This may require the student to relate the problem to concepts or theories in a discipline or place it in the context of their current knowledge.

A second learning outcome will be for students to *gather* and order evidence that is most relevant for addressing problem-based exercises related to core concepts. Students must be able demonstrate a capacity to identify, organize, and determine appropriate sources of facts and information and to identify the most salient evidence.

Third, students must be able to *interpret and appraise evidence*. Interpretation and appraisal of evidence requires students to assign meaning to information or data; allows students to gain sophisticated understanding of a theory, perspective, or problem; and necessitates that students determine the meaning and significance of disparate information or data.

Fourth, students must learn to *distinguish* among multiple, competing, and or complementary explanations or perspectives before drawing conclusions. This outcome requires that students demonstrate capacity to distinguish between, compare, or contrast diverse positions or perspectives.

A fifth essential learning outcome is to *articulate* personal insights. This outcome requires students to build on their evaluation of alternatives by considering and incorporating their personal views or experiences across differing alternatives.

Our sixth critical thinking learning outcome is to *communicate* a reasoned and effective conclusion. Students must be able to express their arguments, responses or conclusions succinctly and effectively. Their responses should reflect all the earlier learning outcomes required for critical thinking.

Gather Information

Articulate personal insights

Conceptualize the problem

STUDENT LEARNING OUTCOMES

Communicate conclusion

Interpret and appraise information

Distinguish alternative conclusions
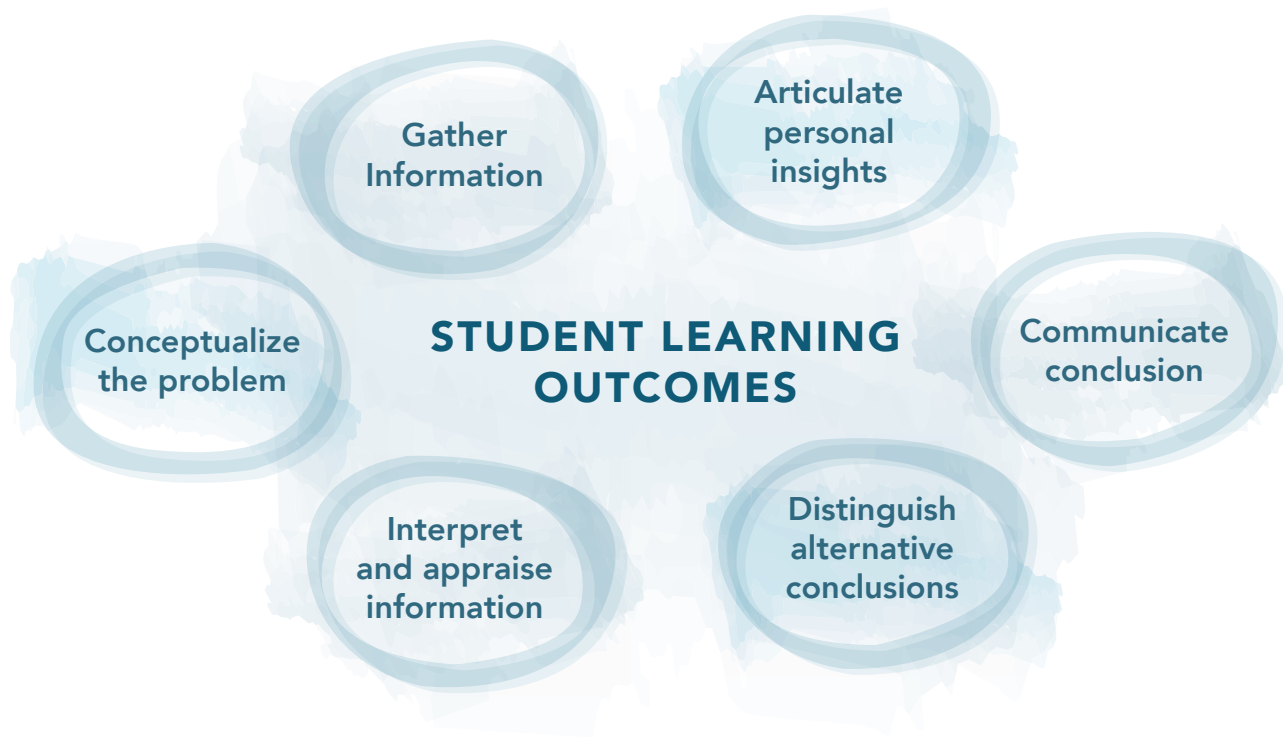
Figure 3. Student Learning Outcomes

Figure 3 represents the building of student learning outcomes required to become a critical thinker. These six skills represent a process in critical thinking development.

Based on input from faculty, the Implementation Team prioritized the need to enhance critical thinking skills among first- and second-year undergraduate students and identified lower-division, general education courses and co-curricular learning opportunities as the key for QEP initiatives to enhance critical thinking. This focus stems from faculty observations shared with the team. Specifically, faculty noted that students in lower division courses, while proficient at retrieving information, appear to have underdeveloped critical thinking skills. The Implementation Team reviewed institutional data and determined UM students develop critical thinking skills in upper division courses and through experiential learning activities. Therefore, the Implementation Team concluded the greatest opportunity for developing basic critical thinking skills among our students would be to introduce these skills at an earlier stage in their academic careers. That is, the idea is to introduce students to higher level thinking requirements at an earlier stage so that these critical thinking skills can be reinforced in their upper division experiences.

In conclusion, we state two broad goals – a faculty development goal and engaged learning environment goal. We also state six specific learning outcomes, which will provide the basis of our assessment. The next chapter presents the actions that are associated with these goals and learning outcomes.

CHAPTER 4: ACTIONS TO BE IMPLEMENTED AND TIMELINE

During the development of **Think**FORWARD, faculty, students, and administrators forwarded dozens of ideas for improving critical thinking at UM. Through our rich and varied conversations, we articulated a local definition for critical thinking based in theory and wrote and refined six desired student learning outcomes.

Now we present an achievable sequence of seven major actions to reach those outcomes. These actions received broad-based support during our campus listening sessions and represent our best local opportunities for improving critical thinking. Each is grounded in research, and each has been tested in practice, either on a small scale at our own university or at another institution. These are actions with proven track records and potentially high impact. Our seven actions are grouped in to three major categories: **people, programming, and places** as illustrated in Figure 4, below.

PEOPLE	PROGRAMMING	PLACES
HIRE QEP PERSONNEL: QEP Director QEP Assistant Director	Create Critical Thinking Institute Create Faculty Development Workshops Launch Critical Thinking Redesign Grants Create Critical Thinking Teaching and Learning Guide Build Critical Thinking Cohorts	Redesign Physical Classroom Spaces to Support Critical Thinking

Figure 4. QEP Actions

In support of our first QEP goal, *cultivate and develop the ability of faculty to better foster critical thinking*, we will improve critical thinking by empowering faculty. A new faculty development model directed toward critical thinking skills must champion our shared framework for understanding critical thinking skills. Participating faculty must be able to transfer this critical thinking framework to their discipline-based courses. The shared framework will be communicated to faculty in the Faculty Approaches to Critical Thinking (FACT) Institute (discussed in the next section). To reach this goal, we must clearly communicate intellectual standards, developmental stages, and pedagogical strategies for progression of students' critical thinking.

In support of our second QEP goal, *create a more engaged student learning environment*, we will improve the learning environment supporting critical thinking by directly engaging students. We will focus on first- and second-year students, who are less likely than juniors and seniors to encounter experiential or active learning environments. Through the QEP we will actively recruit faculty who teach lower-division, multi-section, general education courses to participate. By addressing our most pressing local problems and by focusing on the lower division, we will improve critical thinking for thousands of UM students.

UM is invigorated by this opportunity of scale and by the chance to improve critical thinking for students early in their college curricula. If we can improve the foundation of critical thinking for our first- and second-year students, they will be better prepared for their majors and careers.

For a graphical timeline of the QEP's sequence of actions, please consult Figure 5, QEP Action Timeline, and Figure 6 QEP Impact Timeline, found at the conclusion of this chapter. Below, each QEP action is described in detail, placed into institutional context, considered from a number of perspectives, and clearly connected to our desired QEP goals or student learning outcomes.

An achievable sequence of **seven major actions** will provide opportunities for students to become *effective ctritical thinkers*.

ACTION 1

HIRE PERSONNEL:

QEP Director
QEP Assistant Director

GOALS

Faculty Development

In the first phase of the QEP, we will launch a national search for a QEP Director. This person will become the daily leader of our QEP implementation and will serve a leadership role in our current Center for Excellence in Teaching and Learning (CETL).

One of the director's first tasks will be to further build out staff and integrate QEP programming within CETL. The director, in coordination with institutional research, effectiveness, and planning (IREP), will search for and hire an assistant director. The assistant director will also have a background in teaching and learning development and will oversee assessment of the QEP goals and learning outcomes.

These two hires will enable us to establish the infrastructure and leadership necessary to implement the rest of our QEP actions. This expansion fits our local context and carries many benefits for the purposes of implementing our QEP. It leverages CETL an already established unit with expertise in faculty development procedures and cultural credibility to accelerate and ground QEP implementation; and creates, from the very beginning, a clear path for sustaining the progress of QEP implementation following the five-year implementation period.

QEP Advisory Board

The Executive Vice Chancellor for Academic Affairs and Provost will appoint a QEP Advisory Board to guide the implementation of the QEP and advise the QEP Director. The QEP Director will chair the advisory board and members will include faculty and undergraduate student representatives, some of whom served on previous QEP committees; CETL Director; FASTrack Director; Director of Institutional Research, Effectiveness, and Planning; Associate Director of Institutional Effectiveness; representatives from the Division of Student Affairs and University Libraries; administrators from the Office of Academic Affairs and the College of Liberal Arts; and the SACSCOC liaison. The Advisory Board will meet at least quarterly to discuss the progress of the seven QEP action items, provide feedback to the QEP Director, and recommend any modifications to the plan. Additionally, the board will assist with the FACT Institute proposal process (discussed further in Action 2), review assessment results and make recommendations for learning improvement based on those results, and evaluate progress of QEP goals. The QEP Advisory Board will champion the QEP effort on the UM campus.

ACTION 2
Create FACT Critical Thinking Institute

GOALS
Faculty Development

SLOs
SLO 1: Conceptualize the problem
SLO 2: Gather Information
SLO 3: Interpret Information
SLO 4: Distinguish Alternative Conclusions
SLO 5: Articulate Personal Insights
SLO 6: Communicate Conclusions

To begin cultivating faculty who foster critical thinking, the QEP Director will plan and pilot a faculty development institute during the summer of 2019. This institute will be the first in a series of annual summer workshops based on lessons learned from peer institutions with successful models, such as Clemson University's Thinks2 Faculty Institute.

Our institute will be called the Faculty Approaches to Critical Thinking (FACT) Institute, and will engage faculty in developing successful interventions for teaching critical thinking in their courses and assessing critical thinking skills. The QEP Director will develop a FACT curriculum for faculty that enables them to (a) learn from invited experts, (b) identify where critical thinking teaching and learning opportunities either already exist in their classrooms and/or can be introduced, (c) develop useful experiential learning practices to support critical thinking, and (d) develop appropriate assessment methods to measure student learning and provide feedback to faculty and students. Regardless of the specific content of any one session, the overall philosophy of FACT will be that critical thinking enhancements employed by faculty can help our students not only learn existing course content, but also think critically about the subject matter. The workshops will be designed primarily for faculty teaching lower-division courses, where we see the most potential for improving critical thinking outcomes.

During the first year, the QEP Director, in consultation with the QEP Advisory Board, will draft and distribute a detailed call for proposals for the FACT Institute. UM faculty will be asked to submit proposals for redesigning lower-division courses to more purposefully teach and assess critical thinking.

Successful faculty participants will receive a generous stipend and curriculum design support during the summer to further research and refine their proposed course redesigns. Faculty will be asked to teach their redesigned course during the following academic year and to teach them again at least twice in subsequent years.

In the first summer, we will fund 12 faculty proposals. In the second summer and beyond, we will fund 25 proposals. After faculty members participate in the FACT Institute, they will be encouraged to return during following summers to play leadership roles in hosting sessions during the institute, to refine their course redesigns based on assessment results, and to mentor new faculty participants. Those who return and serve in such a mentorship role will each receive additional support appropriate to their level of participation.

Thus, over the five years of **Think**FORWARD, we will create a large cohort of 137 additional faculty champions (12 inaugural faculty participants and 25 faculty participants each summer) who will have redesigned courses impacting thousands of UM students within the general education curriculum. By keeping faculty involved over time, we will create a community of practice, in which lessons can be shared within and across disciplinary and departmental boundaries. As will be discussed in subsequent actions, this community of practice will be supported through continuing faculty development workshops scheduled throughout the

year, and an articulation of local, consensus-driven best practices through our Teaching and Learning Guide, discussed further in Action 5.

We know this model of faculty development works on our campus. On a smaller scale, it has been used successfully in two recent programs that utilized "the call for proposals" model described above, and both attracted strong faculty participation, in excess of proposed goals.

By incentivizing and supporting faculty innovation, we will create a volunteer force of QEP stakeholders, instructors who purposefully and strategically include critical thinking lessons in their courses. We will keep these faculty champions involved in the QEP across multiple summers, and we will build a scholarly community of practice around the teaching of critical thinking. This is a powerful and practicable model for catalyzing and sustaining pedagogical change. Thus, it will be the first priority—the first action—undertaken by the newly hired QEP Director.

ACTION 3	GOALS	SLOs
Align Existing CETL Teaching and Learning Development Activities with QEP	Faculty Development Student Learning Environment	**SLO 1:** Conceptualize the problem **SLO 2:** Gather Information **SLO 3:** Interpret Information **SLO 4:** Distinguish Alternative Conclusions **SLO 5:** Articulate Personal Insights **SLO 6:** Communicate Conclusions

Throughout the QEP development process, we found widespread support among our faculty for the idea of improving critical thinking. However, not every faculty member will be available to participate in the summer FACT Institute. And yet, we seek to extend the benefits of the QEP to as many instructors as possible. In addition, we want to extend critical thinking development opportunities to graduate instructors.

In order to serve the highest number of UM instructors and to benefit the highest number of UM students, the QEP Director will implement faculty development workshops focused on critical thinking throughout the duration of the QEP in coordination with existing CETL programming. The QEP Director may refocus existing faculty and graduate instructor development workshops, and /or create new faculty development learning communities to fulfill this charge. During the five-year implementation of the QEP, faculty development speakers, events, and programs will be focused largely on some aspect of critical thinking.

Our CETL maintains several faculty development initiatives, including a regular lunch series with external speakers, a graduate instructor workshop, and smaller and more informal discussion groups (FacChats) in which faculty meet over coffee to discuss topics related to teaching. The QEP Director may leverage these existing initiatives to reiterate and reinforce teaching and learning practices related to critical thinking. We will also integrate critical thinking development into an existing graduate instructor workshop and a learning community for new faculty. We will use sessions to highlight faculty from the summer institute and critical thinking redesign grant programs.

In addition to faculty development efforts, UM offers a robust supplemental instruction (SI) program that provides a model for peer-to-peer learning. SI is a set of weekly review sessions developed by course faculty and facilitated by students that have recently completed the course with great success. These SI leaders

have been selected by their professor to organize SI sessions addressing challenging materials in the course. Students compare notes, discuss readings, develop organizational tools, and predict test items in informal SI review sessions. SI is used in historically difficult courses and is open to all students.

With QEP support, we aim to supplement SI model by building critical thinking learning exercises into designated, participating courses. Faculty will develop critical thinking exercises in which SI Leaders would use as part of their SI sessions. Resources will be directed to create critical thinking-enhanced supplemental instruction course. Incorporating critical thinking skill development into SI will allow us to build on an already successful peer-to-peer learning model.

The QEP Director will launch this refocused faculty development schedule during the 2019-2020 academic year. It will continue throughout the five-year implementation period.

While many faculty will be eager participants in FACT, our summer critical thinking institute, and other faculty will engage with our course and program grant redesign program (discussed further in action 4), still other groups of faculty will be curious to learn more about critical thinking, even if they are not yet ready to commit to extended programs. Workshops and learning communities will allow for faculty to exercise their intellectual curiosity around critical thinking and generate ideas for more sustained participation in the QEP – all within a supportive small group format.

ACTION 4

Launch Critical Thinking
Redesign Grants (CTR)

GOALS

Faculty Development

SLOs

SLO 1: Conceptualize the problem

SLO 2: Gather Information

SLO 3: Interpret Information

SLO 4: Distinguish Alternative Conclusions

SLO 5: Articulate Personal Insights

SLO 6: Communicate Conclusions

In addition to developing the workshop series, the QEP Director and staff will launch a critical thinking redesign (CTR) grant program to promote diffusion of critical thinking development across the University. Like the summer institute, this program will be incentivized and supported and participants will be selected through a call for proposals. Individuals awarded critical thinking redesign grants are expected to contribute to the critical thinking teaching and learning guide (Action 5) and assess the critical thinking learning outcomes of their students. However, through the critical thinking redesign grant program, faculty, as well as librarians and student affairs educators, will be asked to redesign or enhance portion(s) of existing course or co-curricular initiatives.

These smaller scale improvement projects will be conducted during the academic year, with a participant workshop conducted during the January intersession. Again, this action will broaden the impact of our QEP as faculty who might not be ready or able to participate in the summer institute have the opportunity to begin with a critical thinking redesign grant project. The critical thinking redesign grant program also affords opportunities for staff to foster critical thinking through co-curricular initiatives also broadening the impact of the QEP.

Individuals with successful critical thinking redesign grant proposals will receive $1,000 each to undertake their redesign projects. Successful proposals will seek to purposefully incorporate critical thinking outcomes and activities into existing lower-division courses or co-curricular activities. A redesign of the entire course or program is not necessary, rather participants will be able to revise one or more units, assignments, or programming aspects to enhance critical thinking.

Throughout our QEP development process, faculty of all ranks and disciplines expressed concerns about the traditional lecture model used in so many lower-division courses. We have observed a cultural shift toward more active learning pedagogies which are due in part to the broad dissemination through journals, conferences, and local faculty development activities of the "active learning" message. And yet, we also learned during the QEP development process that lecturing continues to dominate as pedagogy in lower-division courses. If most faculty members now understand the limitations of lecturing alone, they have not yet acted on that knowledge.

As Christine Harrington (2016) notes, research has shown that interspersing lecture with opportunities for students to digest, reflect on, or discuss new information, such as a brief active-learning activity after 15 minutes of lecturing or an ungraded, 5-minute writing exercise improves critical thinking. In other words, instructional changes do not have to be dramatic to be effective. As faculty, we can improve critical thinking for our students by making modest adjustments to the traditional model. Our QEP seeks to take advantage of this inflection point in faculty attitudes. Using the critical thinking redesign grant, we will catalyze modest improvements within many lower-division courses. We will bring the teaching and learning of critical thinking to scale.

Through the QEP critical thinking redesign grant, we will provide incentives and support to faculty and staff wishing to move beyond lecturing in general education courses, and/or enhance co-curricular programming. This ongoing faculty development program will be coordinated by the Director of the QEP.

ACTION 5

Create Critical Thinking Teaching and Learning Guide

GOALS

Faculty Development

Student Learning Environment

SLOs

SLO 1: Conceptualize the problem

SLO 2: Gather Information

SLO 3: Interpret Information

SLO 4: Distinguish Alternative Conclusions

SLO 5: Articulate Personal Insights

SLO 6: Communicate Conclusions

Faculty involved in the FACT Institute, the workshop series, communities of practice, and who receive critical thinking redesign grants will contribute to UM's "Critical Thinking Teaching and Learning Guide." This open and collaborative document will be a uniting thread between all QEP faculty development activities. As faculty work together within teams, or individually, the teaching and learning guide will serve as a way to document their emerging thinking about critical thinking teaching and learning and to formatively self-assess their efforts. The guide will be collaboratively authored by UM faculty in each participating department, which would document their developing critical thinking assignments, practices, and assessments.

In response to the selection of critical thinking as a QEP topic, the development team consistently heard from faculty of all disciplines both an enthusiasm for the topic followed by a statement "We already do this." The development team knows that each discipline sees the value of teaching critical thinking, and sees it through their disciplinary lens. The teaching and learning guide will give faculty the opportunity to be specific about their endorsement of critical thinking, their disciplinary definitions of critical thinking, and how they put those definitions to work in their classrooms particularly at the lower-division level. Faculty will be asked to include assignments which they have used to teach critical thinking, and methods used to assess critical thinking outcomes. Further, librarians and student affairs educators will document the opportunities, exercises, and initiatives they use to foster critical thinking as well as the methods used to assess those skills.

The teaching and learning guide will be a growing repository of the success of **Think**FORWARD. It will be an open document where lessons can be shared with colleagues at UM and at other institutions. The teaching and learning guide will improve our ability to achieve our QEP goals and will capture our efforts in reaching these goals. It will document the assessment of our practices, and provide a framework for regular and sustained reflection.

This innovative and collaborative document will be published in eGrove, UM's institutional repository under a CC-BY license. It will be freely accessible to internal and external stakeholders. As it grows, the teaching and learning guide will tell the story of our QEP and provide lessons for future educators seeking to improve critical thinking for their students.

The steps for developing the guide include:

1. Participants will be given clear instructions on preparing their contributions. This orientation will be part of the FACT summer institute, the workshop series, and the critical thinking redesign grant processes.
2. Participants will be asked to write brief reflections following the first time they implement their newly developed practices.
3. Participants will be asked to include a description of implementation fidelity, an overview of the impact, a summary of the learning outcome results, and recommendations for improvement.
4. As faculty members participate in the FACT Institute across multiple summers, they will be asked to update and further reflect upon their teaching and learning guide sections.

The Critical Thinking Teaching and Learning Guide will be a lasting contribution of UM's QEP. It will be collaboratively authored inquiry into effective teaching practices and will contribute to an interdisciplinary understanding of critical thinking teaching and learning practices.

SLOs

SLO 1: Conceptualize the problem

SLO 2: Gather Information

SLO 3: Interpret Information

SLO 4: Distinguish Alternative
Conclusions

SLO 5: Articulate Personal Insights

SLO 6: Communicate Conclusions

UM devotes considerable effort and resources to the development of robust support programs for first-year students. Student learning communities (e.g., FASTrack) and supplemental instruction (SI) offer first-year students a carefully calibrated balance of academic challenge and support. We will build upon this foundation by focusing faculty and curricular development resources from these first-year programs to expand critical thinking development. These first-year support programs provide the structural framework for the enhanced teaching and learning of critical thinking. Faculty teaching in these programs choose to do so, with some incentives and rewards already in place. As John Bean (2011) has said, "critical thinking activities to promote learning [do] not happen through serendipity. Teachers must plan for it and foster it" (p. 3). The instructors of two prominent learning communities will play important roles in the implementation of **Think**FORWARD. If assessment data about these communities suggest that they are effective for fostering critical thinking skills, the university will consider the development of additional learning communities.

FASTrack

ThinkFORWARD seeks to leverage the success of the FASTrack program, which is a well-organized and fully staffed learning community for first-year students. FASTrack students are first-time, full-time students who take classes together in cohorts of 20; they receive specialized academic advising; they benefit from well-trained peer mentors; and they have dedicated academic coaches who track and guide their progress. This learning community program has been built methodically over the last ten years and now includes many components considered to be high impact practices. FASTrack now serves more than 400 students per year, or approximately 12% of UM's first-year class. Analysis of student achievement data indicates participants are retained at a higher rate than non-participant peers.

Through the QEP, we will create summer Critical Thinking Retreats for FASTrack faculty. During these sessions, faculty from all FASTrack courses, Writing 101 and 102, EDHE 105 (UM's college success course), and several introductory courses from the social sciences, will work together to develop critical thinking lessons and activities.

Beginning in 2020, the QEP Director will recruit FASTrack faculty to participate in these summer retreats. FASTrack faculty will think purposefully and across disciplinary lines about the teaching of critical thinking. Faculty will receive summer stipends of $1,000 each to participate in the annual retreat. Retreats will occur for three consecutive years, giving this important faculty team an opportunity to design, pilot, assess, refine, and re-assess their curricular improvements.

Through this series of Critical Thinking Retreats, FASTrack faculty will design linkages between their courses and plan critical thinking activities that will improve QEP outcomes for the 400+ students involved in FASTrack. All of their planning and activities will be published in the Critical Thinking Teaching and

Learning Guide. In this way, we will improve an already successful learning community and create an additional avenue for achieving and sustaining our QEP goals. By enhancing a proven model, and by focusing FASTrack faculty on QEP goals, we will improve critical thinking for a large group of first-year students across a key set of lower-division courses.

Provost Scholars

Even as we enhance a proven and mature learning community, we will use the QEP to strengthen a nascent learning community with tremendous potential. The Provost Scholars program attracts some 800 first-year students every year and is an honorary designation. Provost Scholars are chosen based on their ACT scores and high school grade point averages and candidates who join the program participate in minimal cohort-based programming.

ThinkFORWARD seeks to enhance the Provost Scholars program by adding experiential learning opportunities related to critical thinking. Under the QEP, Provost Scholars will be able to register for a specially created first-year seminar. Liberal Arts (Liba) 102 for Provost Scholars will be a writing and speaking intensive seminar designed to improve the critical thinking skills of participants. Each section of the seminar will be capped at 20 students and will be taught by an experienced UM faculty member. We launched a pilot of the seminar in two course sections during the fall of 2018.

A committee of faculty with previous small-seminar teaching experience is currently designing the new Liba 102 for Provost Scholars' curriculum. Two of the faculty on the design committee taught the pilot sections in the fall of 2018, and the design committee is now spending the spring and summer of 2019 refining the curriculum. Each member of the committee received $1,000 for this additional work.

A goal is to have up to six seminar sections offered to incoming Provost Scholars, thereby serving up to 120 students. The development and refining process will be repeated during the summer of 2020 subject to Provost Scholar participation. During Academic Year 2020-2021, ten sections of Liba 102 for Provost Scholars will be offered, thereby serving 200 students.

By focusing resources and energy on our Provost Scholars, we will extend the benefits of the QEP to this large and under-programmed group of students, all of whom have tremendous academic potential. We will improve their critical thinking skills through a writing and speaking intensive seminar and transform their honorary designation into a unifying and enriching learning community.

ThinkFORWARD will leverage the success and growth of FASTrack, a mature and robust learning community with proven benefits. The QEP will also catalyze improvements to a nascent learning community, the Provost Scholars. Both actions are strategic and efficient. The faculty in these programs will plan and implement key curricular improvements to improve critical thinking. By the end of the five-year implementation period, these actions will have improved critical thinking for a diverse student group. Furthermore, as instructional teams in FASTrack and Provost Scholars create and refine curricula to focus on critical thinking, they will be creating points of sustainability for our QEP. These actions are a strategic way to improve critical thinking for a significant number of UM students and to sustain those improvements beyond the five-year scope of our QEP implementation plan.

ACTION 7

Redesign Physical Classroom
Spaces to Support Critical Thinking

GOALS

Student Learning Environment

As we studied the actions of campuses who successfully developed critical thinking practices in their communities, we learned more about the relationship between active learning practices and classroom design. Therefore, we have allocated resources for the development of active learning classrooms in key undergraduate courses. We are in the process of building TEAL (Technology Enabled Active Learning) classrooms in our new science building, as well as in several additional buildings, and anticipate their development in time to impact the QEP. One fully-developed TEAL classroom already exists in the Jackson Avenue Center, and may be used by the QEP Director and staff to train faculty in using these affordances for the teaching of critical thinking. TEAL classrooms are active learning classrooms generally furnished with moveable chairs and round tables and that also provide easily accessible outlets for student laptops and equipment for data projection. These classrooms promote student-centered learning, rather than a traditional classroom that focuses the attention on the instructor.

The QEP Director and staff will help to articulate the principles of successful classroom redesign and incorporate the new affordances in teaching and learning practices. The goal is to renovate existing traditional classrooms and learning spaces, such as the library, to assure access to active-learning classrooms across the UM campus.

QEP Action Timeline

UNIVERSITY OF MISSISSIPPI

QEP Action Timeline

	Y 0 2018-2019			Y 1 2019-2020			Y2 2020-2021			Y3 2021-2022			Y4 2022-2023			Y5 2023-2024		
	FALL	SPR	SUM	FALL	SPR	SUM	FALL	SPR	SUM	FALL	SPR	SUM	FALL	SPR	SUM	FALL	SPR	SUM
Action 1 Hire QEP Director		■	■	■														
Hire QEP Assistant Director			■	■														
Action 2 Create FACT Critical Thinking Institute			■			■			■			■			■			■
Action 3 Create Faculty Development Workshops				■	■		■			■			■			■		
Action 4 Launch Critical Thinking Redesign Grants (CTRG)				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action 5 Create Teaching and Learning Guide				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action 6 Build Student Cohorts				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action 7 Redesign Classrooms				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Figure 5. QEP Action Timeline

QEP Impact Timeline

Y0	Y1			Y2			Y3			Y4			Y5			Total Faculty Implementing Critical Thinking
2019	2019-2020			2020-2021			2021-2022			2022-2023			2023-2024			
SUM	FALL	SPR	SUM	FALL	SPR	SUM	FALL	SPR	SUM	FALL	SPR	SUM	FALL	SPR	SUM	
FACT	CTR	CTR	FACT	CTR	CTR	FACT	CTR	CTR	FACT	CTR	CTR	FACT	CTR	CTR	FACT	
+12 faculty																12
	+15 faculty															27
		+15 faculty														42
			+25 faculty													67
				+15												82
					+15											97
						+25										122
							+15									137
								+15								152
									+ 25							177
										+15						192
											+15					207
												+25				232
													+15			247
														+15		262
															+25	287

Figure 6. QEP Impact Timeline

CHAPTER 5: ASSESSMENT PLAN

The assessment of UM's QEP meets two needs: first, to determine the extent to which students achieve the expected learning outcomes; and second, to determine and improve the overall effectiveness of the QEP. Information gathered through the assessment process will be shared with the QEP Advisory Board and used by the QEP Director and Assistant Director to make decisions about the effectiveness of QEP programs, modifications to the QEP programming, and the impact the QEP has on faculty, students, and the UM learning environment. The University of Mississippi has a robust institutional effectiveness process and we will use that process as a foundation for evaluating the QEP, including assessing students' critical thinking skills.

The framework for the QEP is developed from the purpose and definition of critical thinking. UM's QEP improves the University's ability to educate independent and effective critical thinkers. Critical thinking is the *ability to conceptualize problems, gather pertinent information, interpret data, appraise evidence, distinguish diverse points of view, and articulate personal insights, in order to present reasonable and effective arguments, responses, or conclusions.*

Assessing Critical Thinking Learning Outcomes

By cultivating and developing the ability of faculty to better foster critical thinking in lower-division, general education classes, UM students will have ample opportunity early in their college career to develop critical thinking skills. Similarly, by creating a more engaged learning environment, students can also develop critical thinking skills outside the classroom through engaged learning experiences and co-curricular programs. The discipline-specific knowledge and application of critical thinking skills will vary somewhat across courses and students will engage in myriad learning experiences and programs based on their interests, academic, and career goals. Despite these differences in how students experience critical thinking across the curriculum, students who participate in QEP activities will demonstrate the ability to:

- Conceptualize complex issues or problems
- Gather pertinent facts or ideas to explore complex issues or problems
- Interpret data and appraise evidence
- Distinguish, compare, or contrast diverse points of view and/or alternative conclusions
- Articulate personal insights about complex issues or problems
- Communicate a reasonable and effective argument, response, or conclusion

In order for these student learning outcomes to be achieved, the QEP activities must directly provide opportunities for students to become effective critical thinkers.

The assessment plan for **Think**FORWARD includes direct and indirect assessment of the six QEP student learning outcomes and evaluation of the two QEP goals (see Figure 7).

Direct Assessment of Student Learning Outcomes

The six QEP student learning outcomes emerge directly from the University's context-specific definition of critical thinking. UM will directly measure the extent to which these outcomes are achieved using a nationally-normed instrument and course-embedded assessment methods.

Students' critical thinking skills will be assessed using a nationally-normed instrument. We believe that including such standardized and normed tests in the assessment plan will provide the QEP Advisory Board and QEP personnel with valuable information about the overall success of our efforts, allow comparisons with other institutions, and comparisons of our students' performance over time. However, selecting an existing, appropriate instrument proved to be challenging. Office of Institutuional Research, Effectiveness, and Planning (IREP) staff examined nationally-normed instruments such as the Critical Thinking Assessment Test (CAT), ETS HEIghten Critical Thinking Assessment, and the California Critical Thinking

Skills Test (CCST) (Insight Assessment, n.d.) and found that the articulated student learning outcomes did not directly align with any of these nationally-normed tests of critical thinking. Despite this lack of direct alignment, several of these tests include the skills that comprise the context specific outcomes and the California Critical Thinking Skills Test appeared to be most appropriate for UM. The University will pilot the use of at the California Critical Thinking Skills Test in Spring 2019. The QEP and IREP staff will develop sampling plan that ensures a representative group of students completes the test and every effort will be taken to encourage student motivation.

In addition to this broad-based measure, critical thinking skills will also be directly assessed in courses and programs redesigned by faculty and professional staff participating in the FACT Institute and/or receiving CTR grants. Faculty who participate in FACT Institute agree to assess critical thinking outcomes and share those formative and summative assessment results at an institute assessment meeting. The FACT Institute will include specific training on assessing critical thinking skills with special attention paid to assessment techniques appropriate for large enrollment classes. As part of the FACT Institute, faculty will determine which critical thinking student learning outcome(s) will be included in their course and plan an appropriate assessment for that outcome(s). With support from the QEP and IREP staff, faculty may choose to use the AAC&U Critical Thinking VALUE rubric (Association of American Colleges and Universities, 2009), the Critical Thinking @ UM Checklist (see Appendix N), embed selected-response items designed to test critical thinking in course exams, and/or develop pre- and post-test measures of critical thinking. Because the courses are typically taught twice during the grant period, faculty also have an opportunity to incorporate assessment findings from the first term into the course taught during the second term and reassess to determine the impact of those changes (Fulcher, Good, Coleman, and Smith, 2014).

Similarly, faculty, librarians and student affairs educators implementing a CTR grant also agree to assess students' critical thinking skills. Participants will identify which student learning outcome(s) will be taught as part of their course or program and create context-specific methods of measuring those outcomes. Professional staff and faculty providing activities and events to foster critical thinking in the learning communities (Action 6) will also assess student learning using appropriate direct methods. The QEP Assistant Director will provide support for the identification and development of appropriate assessment methods.

Direct assessment results indicated **30%** of evaluated instances of critical thinking skills failed to meet the acceptable level. *Surveys* also showed **87%** of faculty indicated critical thinking needed improvement.

Indirect Assessment of Student Learning Outcomes

UM administers the National Survey of Student Engagement (NSSE) on a triennial cycle and will continue that cycle for the duration of the QEP. The NSSE includes items asking students to indicate the extent to which they engage in activities that promote or enhance critical thinking skills.

IREP staff will pilot the California Critical Thinking Disposition Inventory in Spring 2019 at the same time as California Critical Thinking Skills Test. The QEP Advisory Board will examine the resulting data and make recommendations for the continued use of the most appropriate standardized assessment methods. The scores on the standardized critical thinking measure will be analyzed in the context of the students' critical thinking disposition scores to understand more fully gains in skills relative to students' readiness to think critically during the QEP implementation period.

UM also administers student evaluations of instruction each semester and items related to critical thinking skill development will be included on these evaluations. Results from the evaluations can be analyzed across effected courses and compared to courses not effected.

Graduating students complete the locally-developed graduating student survey and are asked to indicate the extent to which UM contributed to their critical thinking skill development. We will continue to administer this survey for the duration of the QEP and review the results of those items annually.

Professional staff and faculty providing activities and events to foster critical thinking in the learning communities will also assess student perception of their own learning. For example, the QEP staff may assist those hosting activities in developing brief surveys, interviews with individual students, or focus groups that focus aspects of the relevant learning outcome(s) (see Critical thinking @ UM Checklist Appendix N)
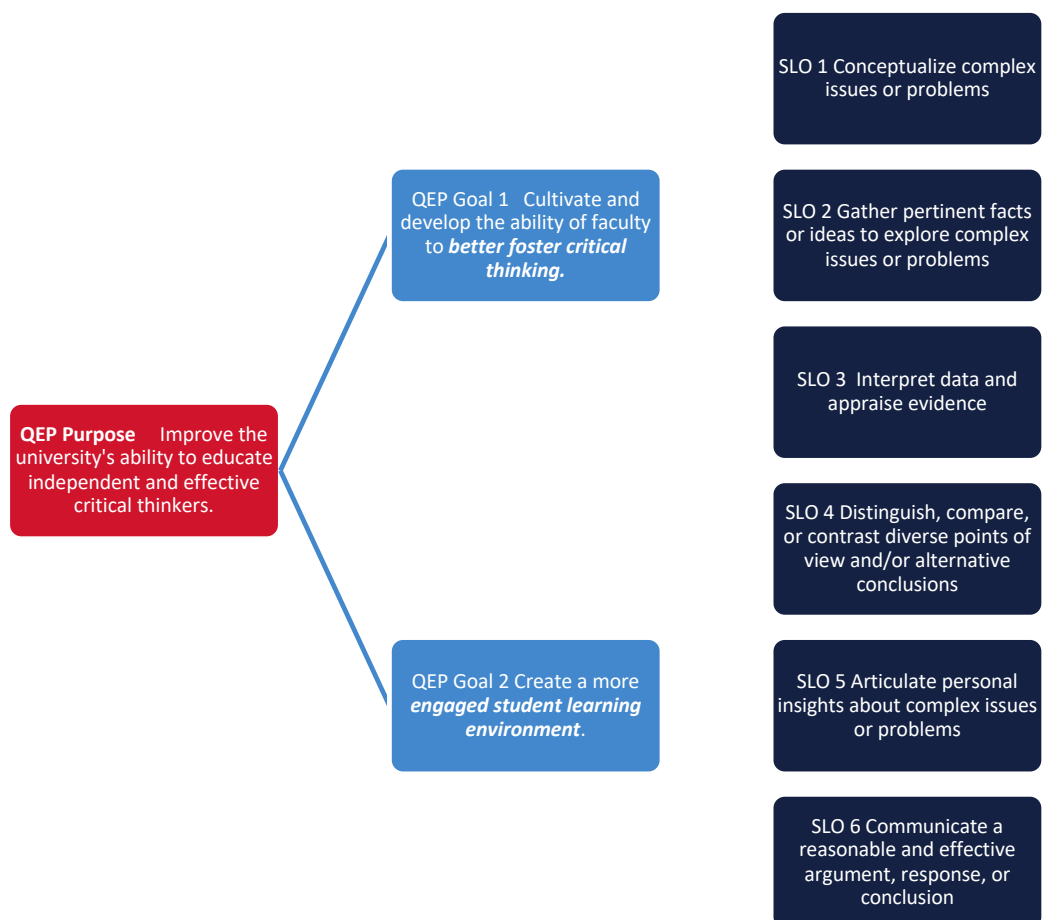
Figure 7. QEP goals and student learning outcomes

Evaluation of QEP Goals

In addition to assessing the six student learning outcomes, the two QEP goals will be evaluated to determine the effectiveness of the QEP. Faculty and students will be asked to complete a QEP satisfaction and priorities survey and a qualitative examination of the physical student learning environment will be conducted.

Evaluation of QEP Goals

Faculty Development

The QEP Assistant Director will develop methods of evaluating the success of the supports for faculty and professional staff (i.e., those participating in FACT Critical Thinking Institute, Critical Thinking Redesign Grants). The QEP Assistant Director and IREP staff will conduct a qualitative review of the assessment plans and implementation developed by participating faculty and professional staff. This will focus on assessing participants' ability to identify relevant student learning outcomes, align learning activities to those outcomes, and develop appropriate assessment strategies (see Appendix O for an example). The QEP Assistant Director will survey faculty and professional staff at least annually about their perceived ability to teach and assess critical thinking. These surveys will also solicit feedback about potential improvements to the QEP activities.

Student Learning Environment

The QEP Advisory Board will conduct qualitative examination of the physical student learning environment and observe a sample of the targeted courses for implementation fidelity. The QEP Assistant Director will solicit at least annual feedback from faculty, professional staff, and students using a QEP satisfaction and priorities survey.

Monitoring QEP Actions

Hire Personnel

Working with Human Resources, the QEP Advisory Board will record dates of hire, duration of employment, and qualifications for all QEP personnel. Evaluation of ongoing performance will be conducted according to during the University's performance review process.

Create FACT Critical Thinking Institute

QEP personnel will keep data logs of the number of applications, the number of participants, and the number of redesigned courses/sections for each of the summer institutes. The QEP personnel will maintain records of frequency that of each of the six student learning outcomes are identified by faculty as a focus for their courses. The FACT Institutes will also result in direct assessment of faculty and student learning (see above). The faculty are responsible for submitting evidence of fidelity of implementation to ensure appropriate interpretation of the student learning outcome data.

Align Existing CETL Teaching and Learning Development Activities with QEP

QEP & CETL personnel will track the number of courses with supplemental instruction, the number of students participating, the number of faculty actively participating, and grades for participating students.

Launch Critical Thinking Redesign Grants (CTR)

QEP personnel will keep data logs of the number of applications, the number of participants, and the number of redesigned activities for CTR grants. The QEP personnel will maintain records of the frequency of each of the six student learning outcomes targeted by the CTRs. The grants will also result in direct assessment of faculty and student learning (see above).

Create Critical Thinking Teaching and Learning Guide

QEP professionals will monitor the number and home department of contributing collaborators and the

number of downloads. These data may be used to target departments with participation, to highlight the work of those strongest contributors, and to evaluate the overall use of the guides. Additionally, the QEP Advisory Board and professionals will regularly solicit feedback from faculty about the guides.

### Build Critical Thinking Student Cohorts

The QEP personnel will work with relevant Student Housing and cohort staff to monitor the number and diversity of students participating in cohorts. These data may be used to direct marketing and selection efforts. QEP professionals will assist program personnel in measuring student learning outcomes for a sample of these students using direct and indirect measures (see above).

Redesign Physical Classroom Spaces to Support Critical Thinking

The QEP professionals will monitor the number, capacity, and use of redesigned classroom spaces. Additionally, faculty and students using these spaces will provide feedback about the physical spaces. The QEP Advisory Board will conduct qualitative examination of the physical student learning environment and observe a sample of the courses in redesigned spaces to determine optimal use of the space.

Responsibilities for Assessment

The QEP Assistant Director will provide leadership and oversight for assessing the QEP student learning outcomes and goals. The assistant director, a member of the Office of Institutional Research, Effectiveness, and Planning, will be embedded within the QEP infrastructure for the duration of the QEP and coordinate all assessment efforts to identify and monitor where QEP assessment is taking place across campus. The Assistant Director will provide quarterly summaries of assessment activities and results to the QEP Director and IREP professionals, and at least annual summaries to the QEP Advisory Board.
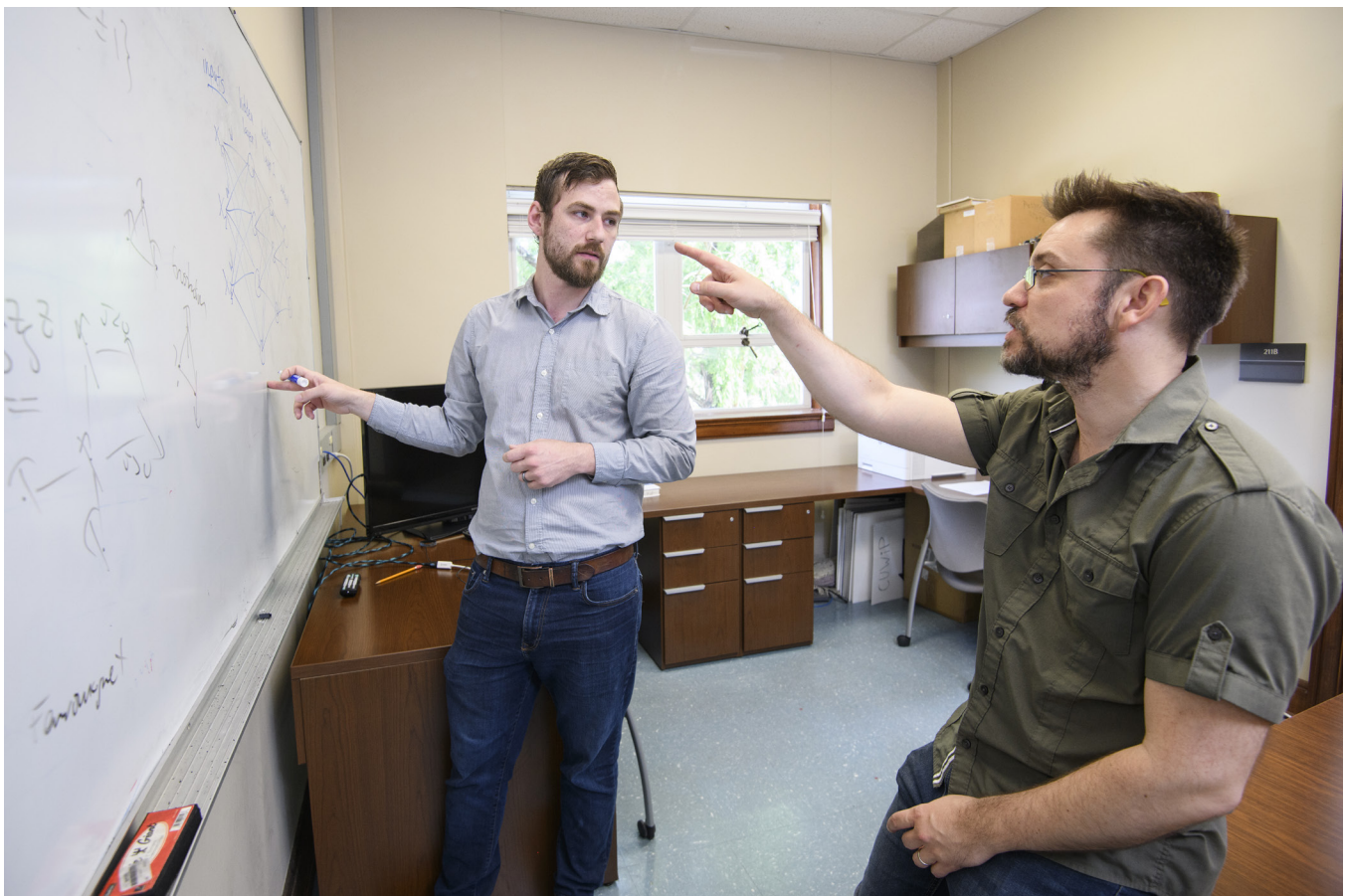
CHAPTER 6: INSTITUTIONAL RESOURCES

The University of Mississippi is committed to responsibly supporting the initiatives tied to **Think**FORWARD, our critical thinking QEP. These funded initiatives will enhance critical thinking skills among students in lower-division courses. The funding amounts were carefully discussed by the QEP Development Committee to assure adequacy for achieving our goals.

QEP Budget

The budget table below summarizes the funding levels across six categories and over five years of the QEP. Overall, projected QEP expenses (relating to items 1- 7) sum to over $3.6 million. The first table column, "Year 0," constitutes a planning year and associated transition costs which we include as part of the total institutional commitment toward the QEP. The purpose of this initial funding is to provide baseline data for assessment purposes, to pilot the FACT Institute, and to begin hiring essential personnel.

All of these QEP-related financial commitments have been approved by the Provost and Executive Vice Chancellor for Academic Affairs, Vice Chancellor for Administration and Finance and Chancellor and will be funded from the appropriate recurring and non-recurring funding sources. In-kind support may also be provided by different offices on our campus. A letter of commitment appears in Appendix P for the five-year QEP budget which formally began in July, 2018, and indicates University senior leaders are excited by and committed to the QEP. They pledge continuing support of the priorities identified in the strategic plan, including the contribution of the QEP to enhancing student success.

The QEP Director, in consultation with the Office of the Provost and QEP Advisory Board, may shift or reevaluate funding levels to assure the success of the QEP. This preliminary budget, though, will be the baseline for moving forward in our QEP implementation and is sufficient to support to completion.

Altogether, the $3.6 million budget plan presents a significant and ongoing financial commitment to the success of our QEP. The QEP Development Committee determined that this funding level is necessary to achieve the desired outcomes. Additionally, the QEP Development Committee reviewed peer institutions with comparable QEPs to assure best practices, overall funding levels, and most effective distribution of these funds.

QEP Budget

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	5-year Totals
1. Personnel							
QEP Director and Assistant Director	$107,200	$214,400	$220,832	$227,457	$234,281	$241,309	$1,245,479
2. Programming							
A. FACT Institute Stipends	$60,000	$125,000	$125,000	$125,000	$125000	$125000	$685,000
B. FACT Institute Implementation	$12,500	$25,000	$25,000	$25,000	$25,000	$25,000	$137,500
C. Critical Thinking Redesign Grant Program		$37,500	$37,500	$37,500	$37,500	$37,500	$187,500
D. Graduate Instructor Training Program	$25,920	$54,000	$54,000	$54,000	$54,000	$54,000	$295,920
TOTAL PROGRAMMING							$1,305,920
3. Student Learning Assessment Support -							
A. Standardized Critical Thinking Assessment Tests	($10 x 500) $5,000	($10 x 1000) $10,000	$10,000	$10,000	$10,000	$10,000	$55,000
B. Assessment Training, Materials, Scoring, and Reporting		$8,000	$8,000	$8,000	$8,000	$8,000	$40,000
4. Places							
A. Classroom redesigns		$100,000	$100,000				$200,000
5. Peer Tutoring and Learning Community Expansion							
A. Peer Tutoring	$12,500	$25,000	$25,000	$25,000	$25,000	$25,000	$137,500
B. Learning Communities	$12,500	$25,000	$25,000	$25,000	$25,000	$25,000	$137,500
6. QEP Operating Funds							
A. Travel/Discretionary Funds	$6,000	$18,000	$18,000	$12,000	$12,000	$12,000	$78,000
B. CT Library resources & technology	$2,500	$5,000	$5,000	$5,000	$5,000	$5,000	$27,500
TOTAL OPERATING, ONE-TIME FUNDS	$136,920	$432,500	$432,500	$326,500	$326,500	$326,500	$1,981,420
TOTAL QEP FUNDS	$244,120	$650,920	$658,558	$558,253	$565,205	$572,492	$3,226,899

The following listed items describe and justify costs associated with each of the budget sub-categories from the table.

1. **Personnel –** To ensure adequate administrative and direct program support, the budget includes support for two positions. With an anticipated QEP start date of Fall 2019, the University will strive to recruit and fill all positions no later than August 2019. The personnel budget in the preceding table includes salaries and benefits for the following positions:

    1A. QEP Director is a 12-month, permanently funded, faculty appointment that begins no later than August 15, 2019 (see Appendix Q for job characteristics). The projected compensation as QEP Director is $100,000 (plus a 34 percent fringe benefit rate and a projected 3 percent salary annual increase).

    1B. QEP Assistant Director is a full-time, 12-month staff position that supports assessment of the QEP and critical thinking general education learning outcomes at UM. Through an open recruitment process, the University will fill this position as part of IREP. The individual will be assigned to work with the QEP Director for the duration of the QEP to direct the proposed assessment plan. The budgeted annual salary is $60,000 (plus a 34 percent fringe benefit rate and a projected 3 percent salary annual increase).

2. **Programming.** The largest programmatic component of the proposed budget will be toward faculty development. The University commits resources of over $1.3 million toward four faculty development functional areas.

    2A. FACT Institute Stipends will incentivize and support faculty participating in the FACT Institute with additional support occurring after satisfactory completion of project deliverables. All faculty – tenure-track and instructional – are eligible for these stipends and participation in the FACT Institutes. One pilot session of the FACT Institute will occur in 2019, the transition year, Year 0. This single session will include 12 faculty participants, with the benefit of developing institutional knowledge and support for later FACT Institutes. Faculty Fellows (discussed in 2B below) will be recruited from this pilot session. In years 1-5, we will host two FACT Institute sessions each summer with 12-13 faculty participants per session. The budget includes a $4,000 stipend (including a 25% fringe benefit rate) for 25 participants per year. As discussed in earlier sections, faculty participants will be paid half ($2,000) for participation in a three-day summer institute. A second $1,000 payment will be made upon delivery and presentation of the faculty action plan, due to be presented at an August FACT Institute action plan meeting. A final $1,000 payment will be made to the faculty member upon delivery and presentation of an assessment report at a January or May FACT Institute assessment meeting.

    2B. FACT Institute Program Implementation Support. The QEP Director, working with the QEP Advisory Board, will recruit a maximum of four well-qualified Faculty Fellows with diverse experience and training in critical thinking pedagogy from among our faculty. The Faculty Fellows will each assist the QEP Director in the preparation delivery of the FACT Institute. Adequate funds are available for FACT Institute honoraria and other implementation support.

    2C. Critical Thinking Redesign (CTR) Grant is to support course development, student access, institutional capacity, and infrastructure for critical thinking development in the curriculum and co-curriculum. These unit-level grants will be offered to departments, librarians, student affairs educators, or interdisciplinary faculty units. The purpose of the grants is to broaden impacts (beyond faculty pedagogical support) and capacity for critical thinking development by redesigning existing programs. Broadly, these redesigns should better enable and support students to develop their critical thinking skills. The QEP Director will issue a "Call for Proposals" in Years 1-5 to department chairs,

deans, and administrative directors (for library and student affairs offices). The QEP Director will define the amount, scope, and selection process of these institutional awards. The budget allows $30,000 (with a 25 percent fringe rate added) per Years 1-5.

2D. Graduate Instructor Critical Thinking Program. The Graduate Instructor Critical Thinking Program will be an abbreviated version of the FACT Institute (1.5 days). It will target primarily second- and third-year Ph.D. students who teach introductory courses at UM. The program will provide $2,000 stipends for each of 12 graduate instructors participating in the program in Years 1-5.

3. Student Learning Assessment – The assessment of student learning began in the 2018-2019 academic year with pre-intervention baseline testing of first-year students in lower-division classes. Costs associated with baseline testing and scoring are indicated in Year 0 and the total QEP budget includes continuous support for the assessment of student learning outcomes throughout the five years of the study.

3A. Standardized Critical Thinking Assessment Tests. QEP planners determined that the California Critical Thinking Skills Test (CCST) and California Critical Thinking Disposition Inventory (CCTDI) designed by Insight Assessment are best suited as direct and indirect assessment measures of critical thinking, respectively. The QEP requires baseline testing in Spring 2019, followed by an assessment schedule in which IREP and the QEP Assistant Director will test a sample of students in the impacted classes. Testing will involve about 500 students in Years 1 and 5 for both pre- and post-test assessment.

3B. Assessment Training, Scoring, and Reporting. Assessment training and scoring serves as part of the faculty development process for participants. Cost projections assume a "train-the-trainer" and workshop approaches in which several faculty will receive training support to implement scoring rubrics. These faculty will, in turn, provide on-campus training and facilitation for the scoring sessions. Scoring sessions will last three days, in Years 1-5 with faculty receiving compensation of $250 for each day of scoring.

4. Active-Learning Classroom Redesign – The University commits $200,000 to redesign at least four existing classrooms to active-learning classrooms. These classrooms will be distributed across different Schools and locations on our campus to assure broad access. The University will replace fixed seating, lecture-style classrooms with flexible furniture arrangements to facilitate a variety of learning modes.

5. Peer Tutoring and Learning Community Support – UM will supplement existing resources for peer-tutoring programs and learning community programs to allow these programs to expand and integrate with critical thinking initiatives.

6. QEP Operational support – The QEP Director's office requires on-going operational support throughout the project. During the intensive first two years, the budget also provides operational support for CETL, and this budget indicates support for the QEP to completion.

6A. Travel – The budget supports travel in each year of the project; however, the heaviest investment is in the first two years to reflect the intensive costs of training faculty fellows, working with first-year students, mentoring, curriculum development, and assessment. The QEP Director must develop a thorough understanding of SACSCOC expectations for QEPs and strategies for successful implementation. The budget anticipates conferences, visits to other programs, and participation in workshops and training events for the QEP Director and Faculty Fellows.

6B. Library and Technology Support – The University's J.D. Williams Library will develop resources in consultation with the QEP Director that will serve our broader academic community. Additionally, these funds may supplement technology costs that enable critical thinking initiatives.
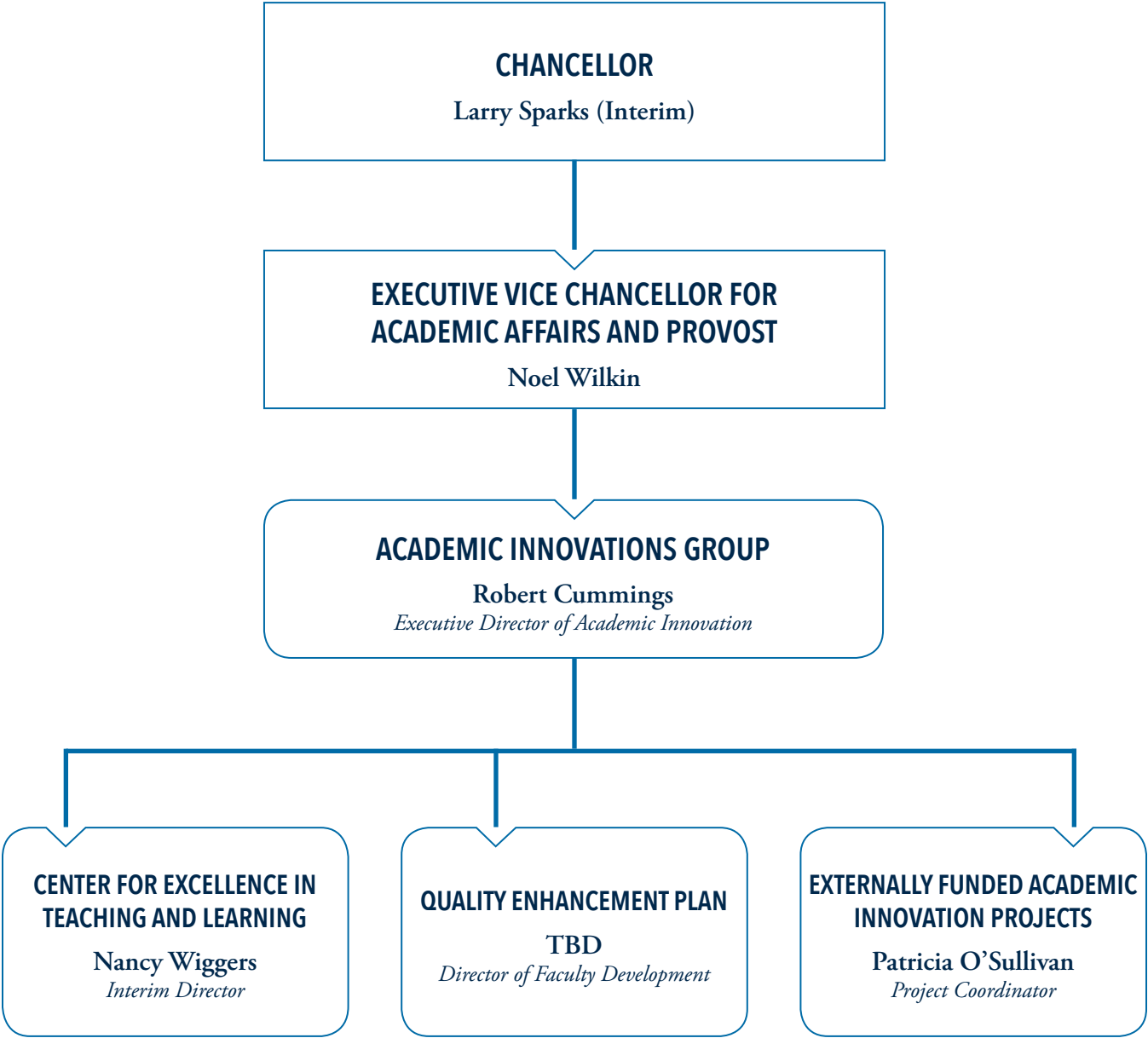
QEP Administrative Structure

The QEP will be administratively housed with academic innovation which reports directly to the Office of the Provost. The QEP director is an accomplished faculty development professional preferably with experience at a research university. The QEP director will oversee implementation of the QEP and will also be responsible for planning, managing and reviewing the QEP budget. As part of this function, the QEP Director will be the signatory officer on QEP-related internal funds.

The QEP director has strong faculty experience, ability to establish relationships across campus, and capacity to plan and implement faculty development initiatives including the FACT Institute. The director will also identify and partner with campus offices to support the QEP.

Organizational Structure for Proposed Academic Innovations Group

CHANCELLOR
Larry Sparks (Interim)

EXECUTIVE VICE CHANCELLOR FOR ACADEMIC AFFAIRS AND PROVOST
Noel Wilkin

ACADEMIC INNOVATIONS GROUP
Robert Cummings
Executive Director of Academic Innovation

CENTER FOR EXCELLENCE IN TEACHING AND LEARNING
Nancy Wiggers
Interim Director

QUALITY ENHANCEMENT PLAN
TBD
Director of Faculty Development

EXTERNALLY FUNDED ACADEMIC INNOVATION PROJECTS
Patricia O'Sullivan
Project Coordinator

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THE UNIVERSITY OF MISSISSIPPI

Memorandum

OFFICE OF THE CHANCELLOR
University, MS 38677 - 1848
Phone: (662) 915-7111 Fax: (662) 915-5935

TO: Distribution List

FROM: Dr. Jeffrey S. Vitter, Chancellor

DATE: September 28, 2016

SUBJECT: Quality Enhancement Plan Topic Selection Task Force

The development of a Quality Enhancement Plan is an important opportunity for the University to coordinate efforts of our academic community toward enhancing student learning in new, creative, and meaningful ways. The SACS Commission on Colleges has included the development of such a Quality Enhancement Plan as an important component of our reaccreditation process. The QEP is intended to be implemented over a five year period and to have definite and measurable student learning outcomes. In addition to meeting this reaccreditation requirement, we should strive to make this QEP project one that truly transforms the learning process at this institution.

Dr. Maurice Eftink continues to serve as our SACSCOC liaison and he, along with Provost Morris Stocks, Senior Associate Provost Noel Wilkin, and Director of Institutional Research, Effectiveness, and Planning Katie Busby, will serve as a leadership team to make sure that all components of our reaccreditation report are properly prepared. With the QEP project being such an important part of our overall report, we want to seek broad-based input from students, faculty, and staff in the selection of the topic for this QEP. The University administration has no preconceived preferences as to this topic, other than we want it to be transforming and achievable.

This is an extremely important task force, and I hope that the individuals on the distribution list below will be willing to serve on the task force to select the QEP topic. Dr. Eftink will call the group together for its initial meeting.

I ask that the task force submit to me and the leadership team no more than three options for a QEP topic and that you submit these options by the middle of the Spring 2017 semester. The write ups for the individual options need not be more than a few pages in length but should include a clear statement of the learning goals, cogent arguments for the impact of the topic, a

Distribution List
Page two
September 28, 2016

general description of how we might achieve and assess these learning goals, and a rough estimate of the needed resources.

I thank you in advance for your efforts to imagine the future of our University and to set in motion our eventual QEP project.

Distribution List:
Dr. Adam Smith, Chemical Engineering
Dr. Alicia Bouldin, Pharmacy Administration
Dr. Amy Wells Dolan, Leadership and Counselor Education
Dr. Andre Liebenberg, Finance
Dr. Colin Jackson, Biology
Dr. Danielle Ammeter, Management
Dr. Debra Barker, English
Mr. Dewey Knight, Center for Student Success and First Year Experience
Dr. J Shaw, Accountancy
Dr. Ken Sufka, Psychology
Dr. Kirk Johnson, Sociology and African American Studies
Dr. Laura Sheppardson, Mathematics
Mr. Lionel Maten, Student Affairs
Mr. Michael Barnett, Theatre Arts
Dr. Nancy Wiggers, Center for Excellence in Teaching and Learning
Dr. Stephen Monroe, Liberal Arts

Student Member (TBD)

Non-Voting: Dr. Kate Kellum, Dr. Katie Busby, Dr. Maurice Eftink, Dr. Charlotte Fant Pegues, Dr. Tony Ammeter

cc: Dr. Morris Stocks
         Dr. Noel Wilkin
         Dr. Maurice Eftink
         Dr. Charlotte Pegues
         Dr. Katie Busby

APPENDIX B
QEP COMMITTEE MEMBERS

NAME	DEPARTMENT	Topic Selection	Implementation	Development
Dr. Danielle Ammeter	Management	X	X	
Dr. Tony Ammeter	Associate Provost and Director of Outreach and Continuing Studies; Dean of General Studies	X		
Dr. Debra Barker	English	X		
Mr. Michael Barnett	Theatre Arts	X		
Dr. Alicia Bouldin	Pharmacy Administration	X	X	
Dr. Katie Busby	Institutional Research, Effectiveness, and Planning	X	X	X
Mr. John Chappell	Undergraduate Student	X		
Dr. Robert Cummings	Executive Director of Academic Innovation and Associate Professor of Writing and Rhetoric			X
Dr. Amy Wells Dolan	Leadership and Counselor Education	X		
Dr. Maurice Eftink	Associate Provost Emeritus and SACSCOC Liaison	X	X	X
Dr. Michelle Emanuel	University Libraries	X	X	
Dr. Rich Forgette	Associate Provost		X	X
Dr. Colin Jackson	Biology	X	X	
Dr. Kirk Johnson	Sociology and African American Studies	X		
Dr. Kate Kellum	Institutional Research, Effectiveness, and Planning	X	X	X
Mr. Dewey Knight	Center for Student Success and First Year Experience	X		
Dr. Andre Liebenberg	Finance	X		
Mr. Lionel Maten	Student Affairs	X		
Dr. Stephen Monroe	Liberal Arts	X	X	X
Dr. Charlotte Fant Pegues	Assistant Provost and Registrar	X		
Ms. Kristina Phillips	Outreach and Continuing Education		X	
Ms. Kathryn Rowe	Undergraduate Student	X		
Dr. J. Shaw	Accountancy	X		
Dr. Adam Smith	Chemical Engineering	X		
Dr. Ken Sufka	Psychology	X		
Dr. Nancy Wiggers	Center for Excellence in Teaching and Learning	X	X	
Dr. Debra Young	Honors College		X	

APPENDIX C
QEP TOPIC SELECTION COMMITTEE
SUMMARY OF MEETINGS

Date	Summary
10/13/2016	Overview of the QEP, its role in reaffirmation of accreditation by the SACSCOC, the process by which a QEP should be selected and developed, and the key components of an effective QEP. Members to review chapter 2 of 2009 QEP
10/20/2016	Discussed efforts related to the 2009 QEP Topic Selection Process, methods of ensuring broad-based involvement, and sources of data for committee use. Committee requested data summaries and specific guests for future meetings.
10/27/2016	The chair reported that the Associated Student Body appointed an undergraduate student to serve on committee. Examined and discussed data from the National Survey of Student Engagement and the graduating student survey. The first year experience course coordinator reported suggestions from FYE instructors.
11/03/2016	Undergraduate student joined the committee. The 2009 QEP Director and Director of the Writing Center shared a summary of outcomes from that QEP. The committee requested additional data summaries and asked for a survey of faculty and staff.
11/17/2016	Reviewed and made suggestions for the draft survey. Determined that student input would be gathered separately. Requested survey to be distributed during the last several weeks of the semester.
02/02/2017	Reviewed results of the QEP Topic Survey. Members to research QEP topics and develop a 2-3 sentence summary of a possible topic. Requested assessment data summary related to critical thinking and a protocol for student focus groups.
02/09/2017	Reviewed general education assessment data. Discussed possible QEP topics generated to date. Decided to develop and provide 3 approaches to improving critical thinking to the Chancellor and Provost. Subcommittees were appointed to explore methods of improving critical thinking
02/16/2017	Discussed progress to date and Provost suggested committee develop a brief report with recommendations for Chancellor
02/23/2017	Development of the QEP Topic Selection Report; Subcommittees met separately to further develop suggestions and draft assessment plans, submitted these to the chair for summarizing

Minutes from each meeting are available for review.

APPENDIX D
INSTITUTIONAL AND SURVEY DATA REVIEWED BY TOPIC SELECTION COMMITTEE

Direct Measures of Student Learning

Data from Academic Program Assessment

All undergraduate academic programs participate in a biennial system of institutional effectiveness that requires (among other things) programs to link at least one of their learning outcomes to at least one of the University's General Education Outcomes. The programs set "criteria of excellence" and compare student performance to these criteria. Programs typically have multiple means of assessment for each outcome with results from multiple years. Please note, each result includes data from at least a sample of students for that program.

The figure below shows the percent of entered results from 2011-2016 that met or exceeded the criterion for excellence with the total number of entered results by related outcome.

Program-level Means of Assessment with Criteria Met by General Education Outcome
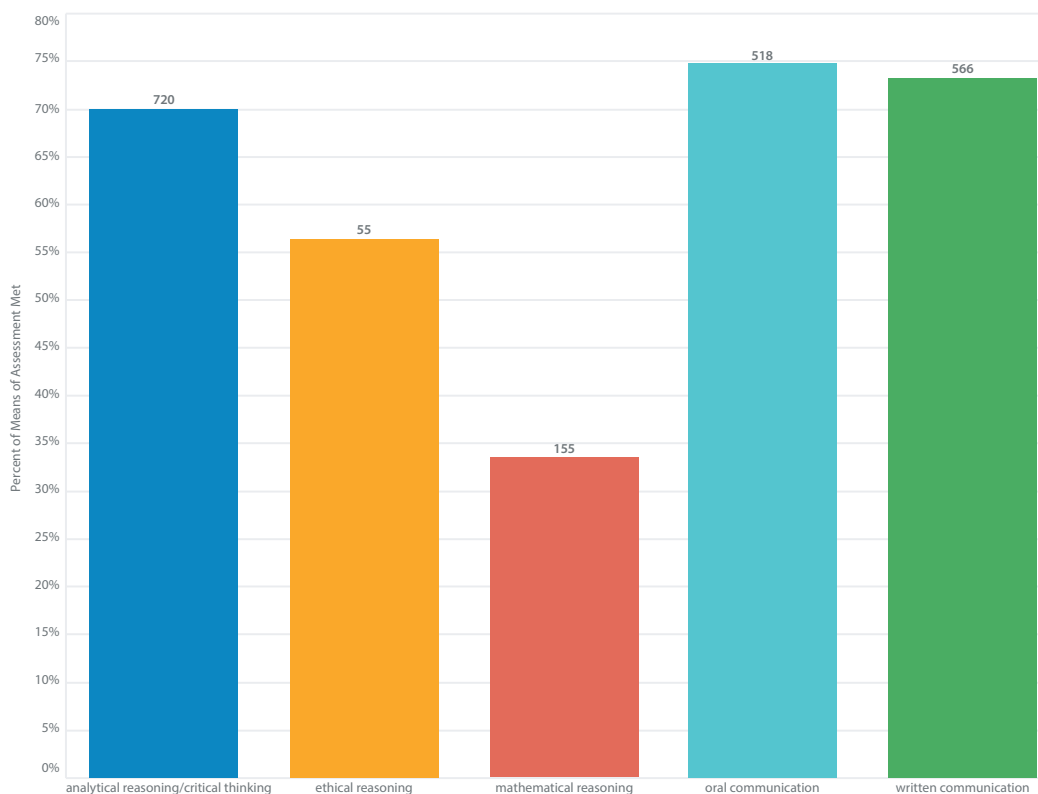


Data from General Education Classes (Academic Year 2016-17)

Beginning Fall 2016, the General Education Committees requested that departments offering courses included in the general education curriculum submit student-learning data. Faculty linked at least one student artifact to at least one of the University's General Education Outcomes. Most of the faculty linked multiple student-learning artifacts (e.g., several questions on a exam, multiple items on a rubric) and provided the number of students attempting the artifact as well as the number of students demonstrating the expected level of success. Data were submitted from nearly 500 sections of classes with results for over 100,000 learning opportunities (where learning opportunities = the number of students x number of artifacts).

The figure below shows the percent of learning opportunities that students demonstrated the expected level of success with the total number of opportunities by outcome.

Opportunities Students Demonstrated Outcome
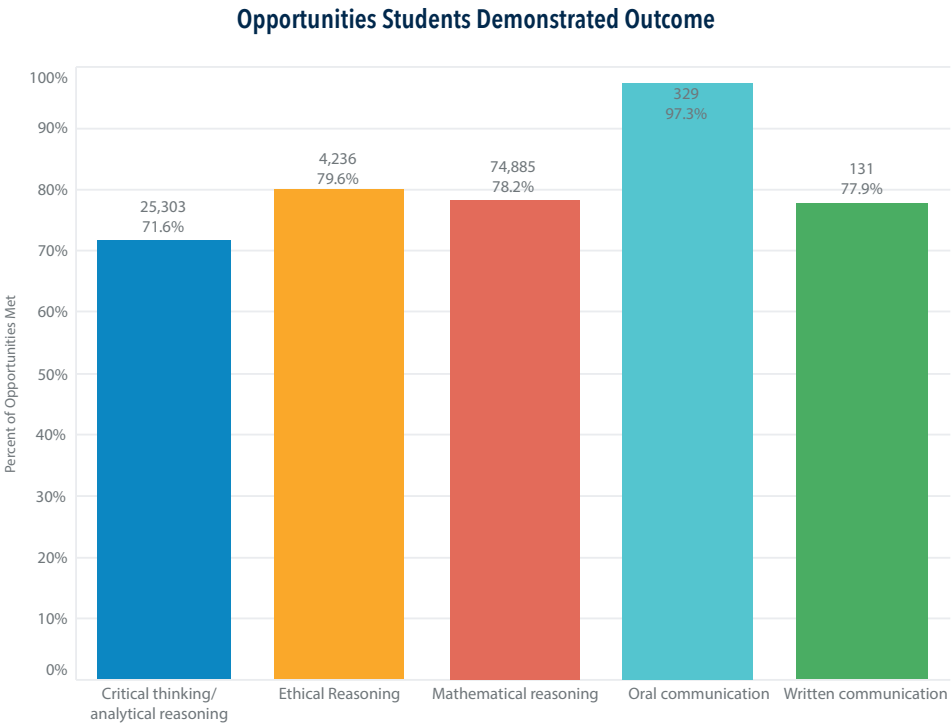
Data from ETS Proficiency Profile

Until Fall 2016, students from a selection of courses with mostly first year and courses with mostly seniors completed the ETS Proficiency Profile. According to the publishers this tests measures, "academic skills developed, as opposed to subject knowledge taught, in general education courses." Additional reports are available for the committee in box.

The figure below shows the percent of students scoring at each proficiency level for each skill from 2009-2015. The comparison group includes students from institutions with high and/or very high research activity (i.e., R2 and R1). Differences of more than 5% are noted and Red is used to note areas where fewer UM students performed well than the comparison group.
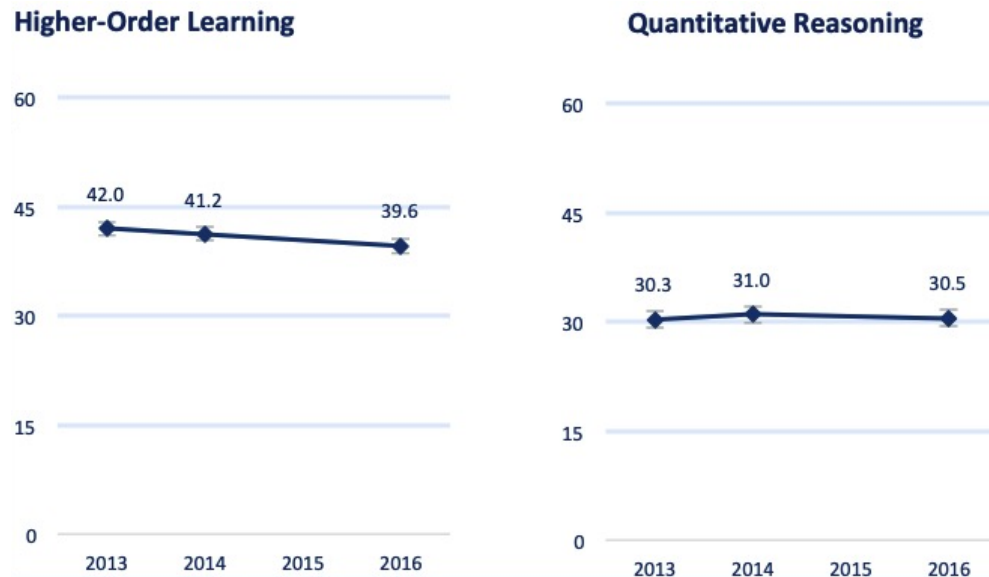
Percent of students who scored:	Proficient		Marginal		Not Proficient	
	UM	Comparison	UM	Comparison	UM	Comparison
Reading Level 1	62%	73%	26%	17%	12%	13%
Reading Level 2	40%	42%	16%	20%	44%	38%
Critical Thinking	8%	8%	20%	21%	72%	71%
Writing Level 1	67%	67%	25%	24%	8%	9%
Writing Level 2	27%	23%	35%	37%	39%	40%
Writing Level 3	14%	10%	27%	28%	59%	62%
Mathematics, 1	57%	60%	28%	23%	15%	17%
Mathematics, 2	30%	34%	27%	26%	43%	41%
Mathematics, 3	7%	10%	18%	19%	76%	72%

Indirect Measures of Student Learning

National Survey of Student Engagement

The University has participated in the National Survey of Student Engagement regularly since Spring 2006. First year students and seniors from are invited to participate in this indirect measure during the spring semester during administration years. The NSSE survey provides data on UM students and comparative data for Southern University Group (SUG) schools and the University's Carnegie Group schools who participated in the survey. Reports for each year are available to the committee in box.

The figure below displays a summary of senior's responses from 2013-2016 for key categories (from the 2016 NSSE Multi-Year Report).

Higher-Order Learning

42.0   41.2   39.6

2013   2014   2015   2016

Quantitative Reasoning

30.3   31.0   30.5

2013   2014   2015   2016

Graduating Student Survey

As students apply for graduation, they complete a graduating student survey. The survey includes a common pool of questions and has a nearly 95% response rate among graduating students. The response scale ranges from strongly agree (5), to strongly disagree (1). Reports for additional years and questions are available to the committee in box.

The table below summarizes data from all undergraduate respondents from AY 2015, 2016, & 2017 for key questions related to student learning (from highest to lowest).

While at the university, I acquired …	Average	Percent Agree or Strongly Agree
A basic knowledge in the liberal arts	4.30	86%
Ability to write effectively	4.25	84%
Ability to evaluate reliability of sources	4.25	84%
Ability to express myself effectively through speaking	4.23	83%
Multicultural and global perspectives	4.08	74%

Alumni Surveys

Beginning Fall 2014, the University developed the practice of annually surveying undergraduate alumni at three, five, and ten years post graduation. The response scale ranges from strongly agree (5), to strongly disagree (1). Reports for additional questions are available to the committee in box.

The table below summarizes data from all undergraduate alumni respondents from for key questions related to student learning (from highest to lowest).

While at the university, I acquired …	Percent Agree or Strongly Agree
Ability to define and solve problems	89%
Ability to gather, analyze and interpret data	88%
Ability to work in teams	87%
Ability to analyze and evaluate contradictory ...	86%
Good presentation skills	85%
Good listening skills	85%
Ability to find, use, and document sources	85%
Ability to write effectively	82%
An increased awareness of ethical responsibility	82%
Ability to think globally.	76%
An increased understanding of diversity	75%
Ability to demonstrate effective mathematical …	74%

APPENDIX E
Topic Selection Survey and Focus Group Results

QEP Focus Group Executive Summary

Student focus group was held on March 2, 2017, to ascertain students' opinions on critical thinking and their experiences with critical thinking at UM. Amy Wells Dolan facilitated the discussion and Katie Busby took notes. No audio or video recordings took place.

Five students participated in the focus group. There were three women and two men, all appeared to be White/Caucasian.

Amy Wells Dolan provided the introduction as outlined in the focus group protocol.

Why do students have difficulty with critical thinking? Why is critical thinking important?

Students have difficulty with critical thinking early in their college career because critical thinking is not integrated into the classroom, especially lecture-based courses with tests that emphasize rote memorization.

Students need to engage in critical thinking early in their college career. Some selected programs (e.g., Honors College) or courses (e.g., EDHE 105) might engage lower-division students in critical thinking.

Do a lot rely on that format (i.e., lecture-based format)?

Engaged or discussion-based courses at the lower division level occur within the Honors College. Engaged or discussion-based courses occur more frequently at the upper division level. Many lower division courses in science and technology are lecture based and many larger classes lack engagement. Students recognized the value of teamwork in a class, although they did not particularly care for it. Students also recognized that learning is better in a class that lectures and engages in critical thinking at the same time.

What co-curricular and extra-curricular experiences have you had that encourage critical thinking

- Honors College conversations
- Student media center
- Extra credit by going to activities/brown bag lunches and writing about it
- Documentary film activity
- Debate

What opportunities do students have at UM to engage in critical thinking in their junior and senior years?

Junior and senior years were seen as the main time to engage in critical thinking through smaller classes and out of gen ed classes.

What activities do you think improve students' critical thinking – such as internships/study abroad/ service learning, etc.?

Service learning, philanthropy were the primary activities associated with improving critical thinking.

Teaching emerged as important part of critical thinking experience.

Students indicated the important role the instructor plays in creating an engaged classroom that emphasizes critical thinking. They do not want a "go, sit down, leave" kinds of class.

What activities do you hear about from friends at other schools that involve critical thinking that you would like to see at UM?

- University of Tennessee at Knoxville program: Paid London internship in spring of sophomore year with academic classes so you stay on track for graduation.
- Students receive $10,000 to establish and manage stock market portfolio.

What do you wish for?

Ideas mentioned include service learning, alternative spring break (e.g., Mizzou) and "lost arts" such as woodshop or sewing.

Final Thoughts

Students were pleased that critical thinking is being discussed as the QEP topic and thought it was a good follow up to the writing QEP. They expressed concern that critical thinking might sound too harsh and suggested creative thinking as an alternative. They also recognized that the time commitment is an obstacle to critical thinking for students and faculty. Students commented that those who participated in the focus group have more experience with smaller classes. Students suggested having another focus group as the group was rather homogenous in terms of personal characteristics and participation in campus activities.

QEP Topic Selection Committee

Topic Selection Survey Results

February 2, 2017
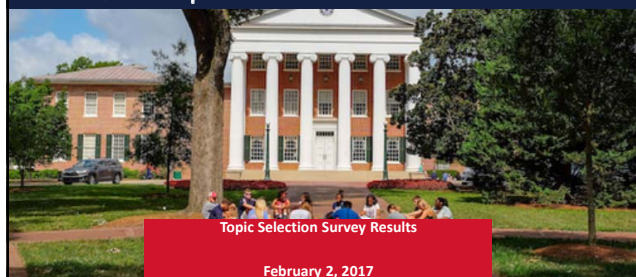
About the QEP Survey

- Developed by QEP Topic Selection Committee
- Administered by Office of Institutional Research, Effectiveness, and Planning
- Online, anonymous survey available December 2016-January 2017
- Faculty and staff invited to participate in survey
  - Advertised in UM Today
  - Via personal email with committee members
 - Via departmental listservs

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QEP Survey

Please consider the following QEP topic areas and indicate how important you think it is for the topic to be developed into a QEP. Also, indicate to what extent you believe the topic area needs improvement.

	Improvement	Importance
Critical Thinking		
Reading		
Multicultural Perspectives		
Ethical Reasoning		
Quantitative Reasoning		
Research, Creativity, Innovation		
Oral Communication		
Digital Proficiency		
Teamwork		

QEP Survey

- **Critical thinking** has been described as an ability to question; to acknowledge and test previously held assumptions; to recognize ambiguity; to examine, interpret, evaluate, reason, and reflect; to make informed judgments and decisions; and to clarify, articulate, and justify positions.
- **Digital Proficiency:** Students demonstrate digital proficiency through effective collection and dissemination of information supported by technology.
- **Reading (Enthusiastic Analytical Reading):** A topic of this type would develop a "campus of readers"; promote an enthusiasm for reading; enhance skills for lifelong learning, intellectual curiosity, and reading; and build upon the common reading program beyond entry into the university.
- **Ethical Reasoning** requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas and consider the ramifications of alternative actions.
- **Multicultural Perspectives:** A topic of this type would enable students to develop multicultural or intercultural awareness and understanding, respect of perspectives other than own, global awareness, and empathy.
- **Oral Communication** includes, but is not limited to prepared, purposeful presentations designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.
- **Quantitative Reasoning** is the application of mathematical skills to the analysis and interpretation of quantitative information in the context of a discipline or interdisciplinary problem to draw relevant conclusions.
- **Research, Creative, or Innovative Scholarship:** Students would develop abilities to generate, communicate, and disseminate originally developed scholarship, art, or performance. May include experiential, applied, or integrated learning as well as interdisciplinary or trans-disciplinary learning.
- **Teamwork** provides opportunities for students to work collaboratively with others and work with others who are different from themselves. This topic may include activities that promote peer tutoring, peer mentoring, or peer learning. Faculty may include active and collaborative learning experiences in the curriculum and utilize learning spaces to promote team-based learning.

Respondents

Respondents by Role

9%
16%
75%

Faculty   Staff   N/A
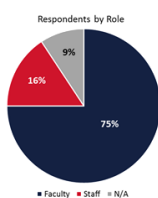
- Approximately 1350 faculty and staff invited to participate in survey
- 452 individuals responded to all or some of the survey questions
- 33% response rate

Findings

- Critical Thinking was identified as most important and most in need of improvement
  - CT was described, but not specifically defined.
  - Respondents indicated that CT was difficult to define, but acknowledged it was important
- Reading and multicultural perspectives were the second highest rated categories
- Open-ended comments supported quantitative results
- Teamwork was the identified as the least important and the least in need of improvement
- There were some differences between faculty and staff responses

Overall
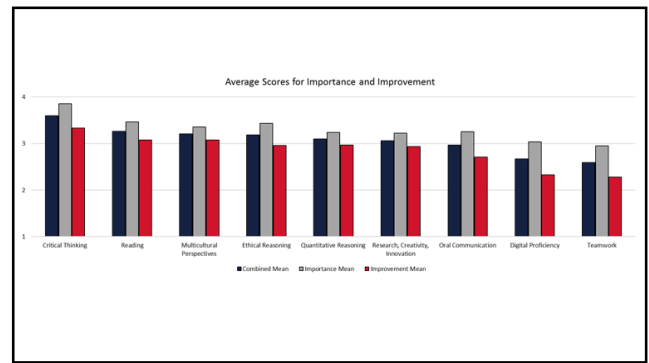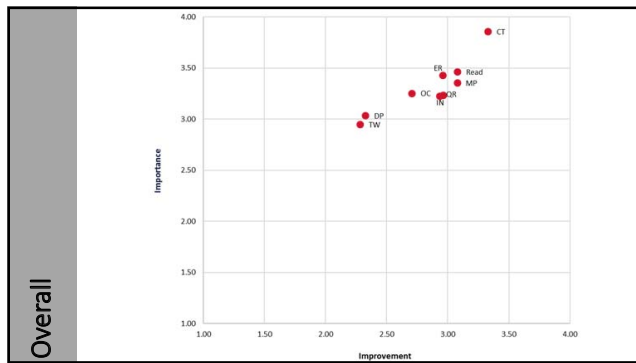
Average Scores for Improvement & Importance

	Combined Mean	Improvement Mean	Importance Mean
Critical Thinking	3.60	3.33	3.86
Reading	3.26	3.08	3.46
Multicultural Perspectives	3.21	3.08	3.35
Ethical Reasoning	3.18	2.96	3.43
Quantitative Reasoning	3.09	2.96	3.23
Research, Creativity, Innovation	3.06	2.93	3.22
Oral Communication	2.97	2.71	3.25
Digital Proficiency	2.67	2.32	3.03
Teamwork	2.59	2.28	2.95
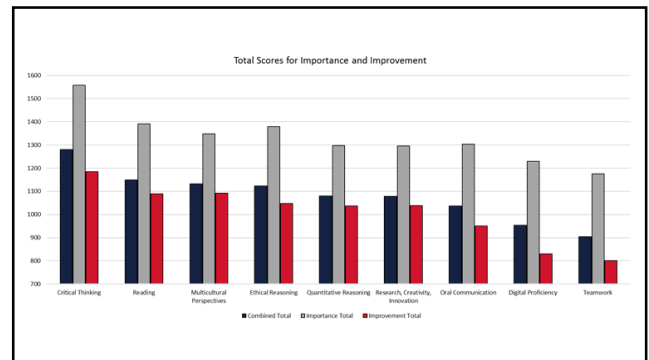
Total Scores for Improvement & Importance

	Combined Total	Improvement Total	Importance Total
Critical Thinking	1280	1185	1558
Reading	1149	1089	1392
Multicultural Perspectives	1132	1092	1348
Ethical Reasoning	1123	1047	1379
Quantitative Reasoning	1080	1037	1297
Research, Creativity, Innovation	1079	1038	1296
Oral Communication	1036	950	1304
Digital Proficiency	953	830	1229
Teamwork	905	801	1176

Frequency of Importance & Improvement

| Number of Respondents Who Ranked Item Very Important and Greatly Needs Improvement				
	Total	Faculty	Staff	N/A
Critical Thinking	169	148	21	
Multicultural Perspectives	120	104	14	2
Reading	112	102	9	1
Ethical Reasoning	97	79	16	2
Quantitative Reasoning	79	75	4	
Research, Creativity, Innovation	77	72	5	
Oral Communication	54	44	10	
Teamwork	30	20	10	
Digital Proficiency	22	18	4	

Additional Feedback

- Respondents were given an opportunity to share their feedback openly and offer additional QEP topics.
- Overall, comments were thoughtful and germane to the topic selection process.
- Ninety-two (92) respondents offered comments.
- Education graduate students analyzed the comments.

Visualization of Comments

Combined Mean Scores by Role

Importance Mean Scores by Role

Improvement Mean Scores by Role
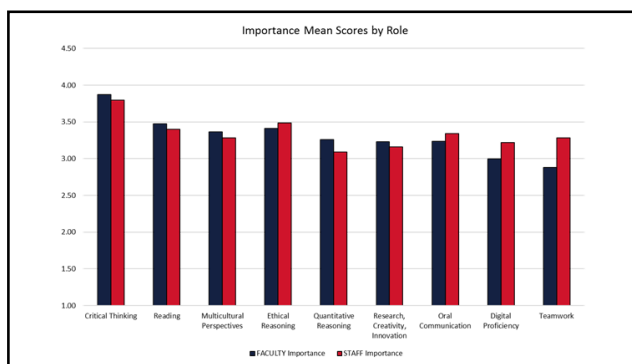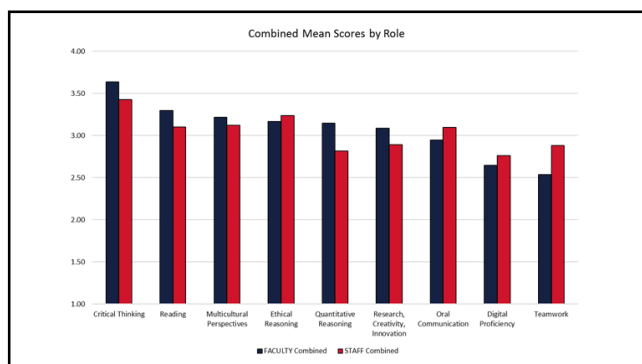
Mean Scores by Role

	FACULTY Improvement	STAFF Improvement	FACULTY Importance	STAFF Importance	FACULTY Combined	STAFF Combined
Critical Thinking	3.40	3.04	3.87	3.79	3.63	3.43
Reading	3.13	2.86	3.47	3.40	3.30	3.10
Multicultural Perspectives	3.10	2.96	3.36	3.28	3.22	3.12
Ethical Reasoning	2.94	3.04	3.41	3.49	3.17	3.24
Quantitative Reasoning	3.04	2.61	3.26	3.09	3.15	2.82
Research, Creativity, Innovation	2.98	2.70	3.23	3.16	3.09	2.89
Oral Communication	2.68	2.89	3.24	3.34	2.95	3.09
Digital Proficiency	2.33	2.30	2.99	3.22	2.65	2.76
Teamwork	2.24	2.54	2.88	3.28	2.54	2.88

Next Steps

- Gather Student Feedback
  - Consider focus group discussions around top six topics
- Consider how QEP ideas complement other institutional initiatives
- Develop proposal drafts for consideration

Questions

Katie Busby, PhD
Director, Institutional Research, Effectiveness, and Planning
kbusby@olemiss.edu
662-915-5026

APPENDIX F
SUMMARY OF REPORT OF THE
QUALITY ENHANCEMENT PLAN TOPIC SELECTION COMMITTEE
Presented to: Chancellor Jeffrey S. Vitter
March 21, 2017

Executive Summary

The Quality Enhancement Plan (QEP) Topic Selection Committee identified critical thinking as the area of undergraduate student learning that is the most important and in need of improvement. Critical thinking is a broad area and students' critical thinking skills can be developed, nurtured, experienced, and assessed in myriad ways. Three QEP recommendations each emphasize a different approach to critical thinking, but all include opportunities for students to engage in academic and co-curricular experiences designed to enhance critical thinking and all afford students opportunities to demonstrate their learning.

Overview of the Selection Process

In Fall 2016, Chancellor Vitter appointed the Quality Enhancement Plan Topic Selection Committee (committee) and charged the committee to identify a maximum of three QEP topic ideas for consideration by university leaders (QEP Topic Selection Task Force Memo, Vitter, 9/28/2016).

Amy Wells Dolan, Associate Dean and Associate Professor of Leadership & Counselor Education, led the 22-member committee that included faculty, staff, and students. The group met 8 times during the 2016-2017 academic year. The committee reviewed the SACSCOC QEP guidelines and examined UM's 2009 QEP to understand the scope and requirements of the QEP. To inform their decision-making process, committee members read QEPs from peer institutions, examined best practices related to enhancing student learning, reviewed institutional assessment data, and discussed their findings. The committee identified nine areas of student learning through this process and sought feedback on these topics from faculty, staff, and students via survey and a focus group discussion. Critical thinking emerged as the area of student learning that is most important and also the area of learning that is considered to be in need of improvement.

Topic Recommendations

The committee recognized that critical thinking is a broad area of student learning and can be implemented in myriad ways. Similarly, critical thinking outcomes can be difficult to measure if not clearly defined. Therefore, the committee divided into three sub-groups and each sub-group developed an approach to enhancing critical thinking among UM undergraduates. The committee respectfully recommends critical thinking as the focus of the QEP and submits three QEP topic proposals for consideration.

Conclusion

Committee members were dedicated and purposeful in their approach to identifying possible QEP topics. Each member contributed significantly to the process and understood that this work was simply the first phase of developing the Quality Enhancement Plan. The committee welcomes feedback on this report and looks forward to further development of the QEP. To that end, committee members gathered resources and organized their working documents in a manner that will facilitate a smooth transition to the second phase of the QEP development.

Full report available for review.

Memorandum

OFFICE OF THE PROVOST

University, MS 38677-1848

Phone: (662) 915-5137 Fax: (662) 915-5280

TO: QEP Implementation Team

FROM: Noel E. Wilkin, Interim Provost and Executive Vice Chancellor

DATE: May 11, 2017

SUBJECT: Charge to the QEP Implementation Team

In Fall 2016, Chancellor Vitter appointed the QEP Topic Selection Committee and charged the group to submit a maximum of three options for a QEP topic. This 22-member committee completed the charge in Spring 2017 and recommended critical thinking as the QEP topic. Chancellor Vitter and the leadership team received that recommendation and endorsed critical thinking as the QEP topic.

The QEP Implementation Team will continue the QEP development process by refining the focus of the QEP topic and developing recommendations for improving critical thinking of UM undergraduate students.

I ask that the QEP Implementation Team develop a white paper that establishes the scope, framework, and proposed strategies of a critical thinking QEP including a statement of student learning outcomes, a description of how the learning outcomes can be assessed, and estimated costs to implement the recommended QEP. The paper should be no more than 20 pages in length and submitted to me and the leadership team by the middle of the Fall 2017 semester.

Thank you in advance for your thoughtfulness and dedication to advancing this important process.

QEP Implementation Team:

Dr. Danielle Ammeter, Management
Dr. Alicia Bouldin, Pharmacy Administration
Dr. Michelle Emanuel, Libraries
Dr. Colin Jackson, Biology
Dr. Stephen Monroe, Writing & Rhetoric/College of Liberal Arts
Ms. Kristina Phillips, Outreach & Continuing Education
Dr. Nancy Wiggers, Center for Excellence in Teaching and Learning
Dr. Debra Young, Honors College
Dr. Katie Busby*, Institutional Research, Effectiveness, and Planning
Dr. Maurice Eftink*, Associate Provost Emeritus and SACSCOC Liaison
Dr. Rich Forgette*, Associate Provost
Dr. Kate Kellum*, Institutional Research, Effectiveness, and Planning

APPENDIX H
QEP IMPLEMENTATION TEAM
Summary of Meetings

Date	Summary
05/11/2017	Overview of the QEP, the process by which it should be developed, and the key components of an effective QEP. Members to review QEP Topic Selection Report and definitions of critical thinking (broadly and within field).
05/31/2017	Discussed important characteristics of critical thinking, various definitions, and potential methods of assessing critical thinking.
06/07/2017	Discussed the challenges of incorporating critical thinking activities, assignments, and exams in large, lecture courses; the relationship between high impact practices and critical thinking; and where to focus (lower-level or upper-level). Members to suggest titles and rough draft of 1-2 student learning outcomes.
06/14/2017	Came to consensus that the topic name is Critical Thinking (not analytical reasoning or other) and that the QEP will likely have a large Faculty Development component. Members to discuss critical thinking activities, barriers, and ideas for improvement with colleagues.
06/21/2017	Discussed findings from conversations with colleagues. Reviewed initial draft of student learning outcomes and potential actions.
06/29/2017	Reviewed work of the AAC&U Impact Practice Institute participants.
07/05/2017	Reviewed draft documents from committee members. Came to consensus that the QEP would focus on developing critical thinking in lower division courses.
07/12/2017	Came to consensus that the QEP would focus on both curricular and co-curricular improvements with enhanced Faculty Development and improved physical spaces.
07/27/2017	Overview of SACSCOC Summer Institute. Discussion of graduate teaching assistants (GAs/TAs) professional development.
08/03/2017	Drafted and refined UM definition of critical thinking.
08/16/2017	Reviewed supplemental instruction at UM and other institutions. Came to consensus on a UM definition of critical thinking and the resulting 6 student learning outcomes. Outlined potential actions.
08/31/2017	Received presentations by LTC Josh Taylor and Dr. Patti O'Sullivan about ongoing critical thinking activities.
09/07/2017	Reviewed proposed initiatives and classified as core and complementary to the QEP
09/14/2017	Reviewed proposed initiatives of the QEP, suggested additional initiatives, identified the need to combine student environment QEP goals.
09/21/2017	Reviewed and suggested edits to draft report
10/05/2017	Approved report pending several suggested edits. Committee dismissed.

Minutes from each meeting are available for review.

APPENDIX I
QEP IMPLEMENTATION TEAM SURVEY

What Undergraduate program is this for:

What is your name:

https://www.aacu.org/leap/hips

Please indicate the portion of the **undergraduate majors in the program** who participate in these capstone activities, the degree to which you believe these can contribute to critical thinking, whether they result in a student product that could be evaluated, and the courses in which they happen.	Approximate Percent of Majors who participate	To what degree do you think this experience helps develop critical thinking	Do students complete paper, presentation, or performance that is (or could be) evaluated for Critical Thinking?	If this occurs in a course or courses, please list the course number(s)
Internship				
Juried Fine Art Performance or Exhibition				
Practicum/Field Experience				
Portfolio				
Research with Faculty				
Senior Paper or Thesis				
Study abroad				
Study USA				
Other Capstone Experiences, List below:				

Please indicate the portion of the **undergraduate majors** in the program who participate in these collaborative learning activities, the degree to which you believe these can contribute to critical thinking, whether they result in a student product that could be evaluated, and the courses in which they happen.	Approximate Percent of Majors who participate	To what degree do you think this experience helps develop critical thinking	Do students complete paper, presentation, or performance that is (or could be) evaluated for Critical Thinking?	If this occurs in a course or courses, please list the course number(s)
Flipped Classrooms				
Problem-Based Learning				
Service Learning Courses				
Team-Based Learning				
Writing Intensvie Course				
Other Active Learning, List below				

https://www.aacu.org/leap/hips

Does this program require a comprehensive exam/Major Field Test?

What other activities/experiences do your majors engage in that promote **Critical Thinking**

How do you currently measure the extent to which majors are able to engage in **Critical thinking?**

What (if any) modifications have the faculty made to the program with the aim of improving **Critical thinking** in the last 2-3 years?

What activites/experiences do your majors engage in that promote **Ethical Reasoning?**

How do you currently measure the extent to which majors are able to engage in **Ethical Reasoning?**

What (if any) modifications have the faculty made to the program with the aim of improving **Ethical Reasoning** in the last 2-3 years?

This is intended to help us develop a curricular map - if you have this in another format - please feel free to send that to assessment@olemiss.edu

In what classes do your undergraduate majors demonstrate the following general education outcomes?	Approximate Percent of Majors who participate	Please list the course numbers	Briefly describe how students demonstrate the outcome (e.g., paper, text)
Mathematical Reasoning			
Written Communication			
Oral Communication			
Analytical Reasoning/Critical Thinking			
Ethical Reasoning			

APPENDIX J
SUMMARY OF THE REPORT OF THE
QUALITY ENHANCEMENT PLAN IMPLEMENTATION TEAM

Presented to: Provost and Executive Vice Chancellor, Noel E. Wilkin, Ph.D.
October 23, 2017

Executive Summary

The Quality Enhancement Plan (QEP) Implementation Team defined critical thinking as the ability to conceptualize problems, gather pertinent information, interpret data, appraise evidence, distinguish diverse points of view, and articulate personal insights, in order to present reasonable and effective arguments, responses, or conclusions. The Implementation Team prioritized the need to enhance critical thinking skills among first- and second-year undergraduate students and identified lower-division, general education courses and co-curricular learning opportunities as the key opportunities for QEP initiatives to enhance critical thinking.

Overview of the Process

In Fall 2016, Chancellor Vitter appointed the Quality Enhancement Plan Topic Selection Committee and charged this group to identify a maximum of three QEP topic ideas for consideration by university leaders (QEP Topic Selection Task Force Memo, Vitter, 9/28/2016). The committee recommended critical thinking as the QEP topic (QEP Topic Selection Committee Report, 3/22/2017), and Chancellor Vitter and the leadership team endorsed that recommendation on March 24, 2017.

In Spring 2017, Interim Provost and Executive Vice Chancellor Noel Wilkin appointed the QEP Implementation Team (team) and charged the team to "continue the QEP development process by refining the focus of the QEP topic and developing recommendations for improving critical thinking of UM undergraduate students" (QEP Implementation Team Memo, Wilkin, 5/11/2017).

The 12-member team included faculty and staff, some of whom also served on the QEP Topic Selection Committee. The group met 16 times during Summer 2017 and Fall 2017 terms. The team reviewed the QEP Topic Selection report to understand the topic and scope of the QEP. To inform their decision-making process, team members reviewed critical thinking QEPs from peer institutions, examined best practices related to critical thinking, and discussed related engaged educational practices ("high-impact practices"). Research on the engaged practices that were discussed indicates those efforts positively impact students' critical thinking skills. Additionally, team members interviewed faculty colleagues to ascertain how critical thinking is defined within their disciplines. The team also administered a survey to department chairs to determine the prevalence of engaged educational practices within individual academic programs. Furthermore, the team met with the directors of two programs that advance critical thinking to understand more fully their approaches to enhancing critical thinking skills. Through thoughtful exchange, the team identified the scope, framework, and proposed strategies of the critical thinking QEP to fulfill its charge.

Introduction

This report constitutes completion of the work by the QEP Implementation Team (team). The team received a charge from Interim Provost Noel Wilkin on May 11, 2017, to "continue the QEP development process by refining the focus of the QEP topic and developing recommendations for improving critical thinking of UM undergraduate students" (QEP Implementation Team Memo, Wilkin, 5/11/2017).

We present a plan "that establishes the scope, framework, and proposed strategies of a critical thinking QEP including a statement of student learning outcomes, a description of how the learning outcomes can be

assessed, and estimated costs to implement the recommended QEP" (QEP Implementation Team Memo, Wilkin, 5/11/2017). The proposed plan intentionally seeds active learning into lower-division, general education courses to challenge students to solve problems and to think creatively in classroom and co-curricular activities. Our goal is for our students to become independent and effective critical thinkers who are prepared to succeed in their majors—and beyond. The initial section of this report defines critical thinking as a skill that is developed by students and fostered through thoughtfully infusing active-learning exercises into courses. We next evaluate the institutional strengths, barriers, and opportunities for this course-centered approach. We then propose outcomes, goals, and actions for achieving critical thinking development.

Scope of the QEP – Definition and Focus

A fundamental task of the QEP Implementation Team was to define the scope of the overall QEP. The team completed that task by first defining critical thinking in the context of the UM QEP as it relates to undergraduate learning development and identifying the population of undergraduate students on whom the QEP will focus. Next, the team developed a framework for the QEP by articulating QEP goals and student learning outcomes. The goals and outcomes guided the development of the QEP implementation strategies. As a result, the team proposes faculty development, curricular, and co-curricular QEP initiatives and clearly links the suggested initiatives to specific challenges facing UM undergraduate learning.

Definition

The QEP Implementation Team examined different approaches, traits, values, and standards related to critical thinking and evaluated existing critical thinking definitions. The academic frameworks for defining and developing critical thinking (CT) are diverse and grounded in different disciplinary approaches: cognitive psychology, developmental education, educational psychology (learning theory), moral reasoning, logical fallacies, and human decision making. Despite their diverse approaches, these different frameworks share core ideas that are formative to understanding critical thinking skills. Notably, critical thinking is a skill that can be developed by students and is fostered through engaging learners with problem-based exercises.

Fundamentally, our QEP must have a broad but practical definition of critical thinking. Nilson (2017) argues that students only achieve significant improvements in critical thinking when faculty intentionally infuse CT skill development exercises into discipline-based courses. In other words, taking a theoretical course in "critical thinking" or assuming critical thinking occurs naturally across the curriculum is less demonstrably effective than incorporating CT exercises into existing disciplinary courses. Critical thinking development is skills-based and requires faculty to intentionally design exercises *within their own disciplinary* courses for improving these skills.

With this premise of disciplinary-based development, we define critical thinking as

> *the ability to conceptualize problems, gather pertinent information, interpret data, appraise evidence, distinguish diverse points of view, and articulate personal insights, in order to present reasonable and effective arguments, responses, or conclusions.*

Students improve their higher-order thinking competencies through learning exercises such as critical evaluation, creative thinking, and reflection. These exercises should be infused within courses and co-curricular opportunities to provide students opportunities to apply these skills.

Strengthening students' CT abilities begins by faculty designing learning exercises within their courses that require students to analyze and evaluate discipline-based problems. Nilson (2017) states that these learning exercises begin with faculty presenting "claims" – questionable statements in which course-related evidence is ambiguous. The broad concept of claims include uncertain scientific hypotheses, contentious literary interpretations, and competing moral or philosophical frameworks. The common element to any "claim,"

according to Nilson, is that learners must go beyond course facts. They must integrate and evaluate course-related evidence to address a problem-based, disciplinary claim.

Focus

The QEP Implementation Team recommends a focus on lower-division (100-200 level) general education courses and co-curricular learning experiences as the key opportunities for QEP initiatives to enhance critical thinking. The team recognizes that upper-division, disciplinary curriculum and co-curricular experiential learning activities are important elements to critical thinking development. We are particularly drawn to "high-impact practices" (HIPs) that research indicates differentially improve critical thinking and degree completion for academically less-prepared students. High-impact practices include teaching and learning practices such as learning communities, writing intensive courses, undergraduate research, diversity/global learning, and internships (AAC&U, n.d.). Still, the team believes that a focus on lower-division curriculum presents the most immediate and unique challenge to the University of Mississippi.

Framework of the QEP- Goals, Outcomes, and Actions

The proposed framework for promoting critical thinking integrates the QEP goals, learning outcomes, actions, and assessment strategies. The purpose of this framework is to establish a general structure for further development, implementation, and evaluation of the QEP. The framework encompasses the intersections of students, faculty, and the learning environment for improving critical thinking; addresses institutional challenges; builds on institutional strengths; and anticipates environmental opportunities identified by faculty as appropriate for improving students' critical thinking skills.

Goals

The QEP produces independent and effective critical thinkers by:

- Cultivating faculty who foster critical thinking
- Providing an environment where students have more engaged learning opportunities

Student Learning Outcomes

The plan identifies six student learning outcomes that are distinct but related to developing higher-order, critical thinking skills. These six outcomes present a developmental path through which students are likely to acquire advanced critical thinking skills.

As critical thinkers, students will be able to:

1) Conceptualize complex issues or problems.
2) Gather pertinent facts or ideas to explore complex issues or problems.
3) Interpret data and appraise evidence.
4) Distinguish, compare, or contrast diverse points of view and/or alternative conclusions.
5) Articulate personal insights about complex issues or problems.
6) Communicate a reasonable and effective argument, response, or conclusion.

Recommended Actions

The QEP Implementation Team identified five specific actions to achieve the QEP goals and student learning outcomes.

QEP Goal I: Cultivate faculty who foster critical thinking

- Provide tangible support and developmental opportunities to faculty to enhance courses or co-curricular activities with critical thinking emphases.

QEP Goal II: Provide an environment where students have more engaged learning opportunities.

- Develop or expand cohort-based learning communities for first- and second-year students with strong critical thinking components.
- Extend co-curricular critical thinking opportunities to more students in 100- and 200-level courses.
- Extend curricular critical thinking opportunities to more students in 100- and 200-level courses.
- Provide opportunities for students to develop a personal plan for applying critical skills.

Suggested Initiatives

As the team members developed the QEP goals and student learning outcomes, they discussed numerous initiatives that exemplify and support critical thinking. The team includes the suggested initiatives for review in the third phase of the QEP development.

1. Identify opportunities for faculty to develop capacity to incorporate critical thinking in courses or teach critical thinking skills. (Goal 1 Action)
    a. Campaign among faculty/departments to involve them in enhancing lower division, large courses to include more critical thinking
    b. Seek interested volunteers, identify courses ready for enhancement

2. Institutionalize and expand faculty development programs that encourage critical thinking pedagogies, particularly in large-enrollment courses. (Goal 1 Action)
    a. PLATO and other active and collaborative learning programs
    b. Funding for departmental retreats focused on active pedagogies

3. Provide faculty grants to support faculty who develop curricular and co-curricular learning activities per year that align with QEP goals and student learning outcomes. (Goal 1 Action)
    a. Learning initiatives will be assessed and assessment results disseminated and used to inform QEP efforts.

4. Provide opportunities for graduate instructors to develop capacity to incorporate critical thinking in courses or teach critical thinking skills. (Goal 1 Action)
    a. English graduate instructors teaching 200-level literature courses
    b. Develop endorsement for graduate instructors who participate in critical thinking instructional development activities.

5. Expand established learning or living-learning communities such as FASTrack, Luckyday, Honors, or use those programs as a model for new cohort-based programs that emphasize critical thinking. (Goal 2 Action 1)

6. Partner with campus housing to promote critical and creative thinking within our residence halls. (Goal 2 Action 1)

7. Promote existing co-curricular opportunities such as summer lab experiences, evening problem-solving series, undergraduate research, supplemental instruction, and existing programs such as Grove Scholars, Jumpstart, Biology Boot camp, Model UN, debate to students. (Goal 2 Action 2)

8. Showcase and reward student work in the institutional repository that demonstrates critical thinking, e.g., exhibits around campus and news stories. (Goal 2 Action 2)

9. Create problem-solving contests to build community among students with common interests and to celebrate and publicize critical thinking and creative achievement, e.g., copy engineering model of team challenges such as the bridge with balsa wood contest; escape room challenge; student organization academic challenges. (Goal 2 Action 2)

10. Redesign classrooms to accommodate more active or problem-based learning courses (such as those planned for the new STEM building). (Goal 2 Action 3)

11. Develop a curriculum review process in which instructors who teach general education classes could request "CT Intensive" designation.

12. Enhance academic advising resources for disseminating information to students about co-curricular opportunities that foster critical thinking, e.g. financial planning for study abroad. (Goal 2 Action 4)

13. Develop and implement an advising sheet that enables students to create a curricular and co-curricular learning plan focused on critical thinking. (Goal 2 Action 4)

    a. Students will complete an academic goal plan that emphasizes critical thinking through curriculum and co-curricular activities to include a list of activities as well as reflections relating activities toward goal achievement.

14. Encourage students to seek out and reflect upon capstone experiences which facilitate/encourage/foster critical thinking, e.g. Study Abroad and Study USA. (Goal 2 Action 4)

Recommended Actions for Further QEP Development

The QEP Implementation Team considered topics within the scope of their charge, but also identified some needs for future consideration as the QEP develops.

- Include incentives or requirements for students to participate in critical thinking co-curricular activities. Additionally, the QEP Director and involved faculty should devise plans to manage expectations of students who engage in problem-based learning.

- Use art, posters, table tents, etc. regularly to promote critical thinking environments.

- Utilize social media and a common hashtag (#think) to raise awareness about opportunities related to critical thinking across campus.

- Involve students in promoting QEP and QEP-related activities.

Assessment of Student Learning Outcomes and QEP Goals

The University of Mississippi will evaluate the QEP goals and assess the QEP student learning outcomes as part of its existing continuous improvement process. The complete assessment plan will be developed simultaneously with the development of the suggested initiatives during the third QEP development phase.

Evaluation of QEP Goals

The QEP goals will be evaluated using key performance indicators and indirect measures. The performance indicators will be established during the third QEP development phase and may include participation rates in faculty development programs and frequency of engaged learning activities. Additional measures may include survey results from students, faculty, and student affairs educators.

Assessment of Student Learning Outcomes

The six student learning outcomes will be assessed using both direct and indirect measures. Direct measures of assessment should include a nationally-normed critical thinking test such as the California Critical Thinking Skills Test. In addition to a standardized measure of critical thinking skills, the student learning outcomes will be assessed using locally-developed, course-based measures. These measures will be articulated as the initiatives are developed and will be refined using established psychometric procedures. Indirect measures of assessment will involve student surveys including nationally-administered instruments such as the National Survey of Student Engagement (NSSE) and locally-developed instruments of student achievement.

Budget Rationale

We request the University provide initial funds to support the QEP during the planning/transition year (2018-2019) as part of an established QEP budget and recommend a letter of commitment for the five-year QEP budget, beginning in July 2018. In sum, the University of Mississippi's commitment of support for this QEP should be approximately $4-6 million. The Provost's letter pledges continuing support of the priorities identified in the QEP devoted to enhancing student success and critical thinking development.

We briefly summarize and justify spending in each of the budget categories:

Personnel

We expect key personnel positions for the QEP would include a QEP Director and positions to support programming, administrative duties, and assessment. The next phase of QEP development should specify the personnel requests linked to the QEP success.

Faculty Development

A primary goal of the QEP proposal is to support faculty development toward promoting critical thinking within existing courses. We expect to achieve this through the following:

- Course Innovation Grants -- Course innovation grants commensurate with other similar grants would be awarded over the five-year QEP period,
- Winter and Summer Institutes – These funds would provide support for faculty development institutes during the winter and summer breaks and may include stipends for travel to attend faculty development meetings or honoraria to host speakers on campus.
- Faculty Learning Communities – These funds would support programming expenses tied to supporting faculty learning communities integrated around critical thinking skill development.

Student Learning Assessment

The assessment of critical thinking student learning outcomes will begin in Fall 2018 with pre-intervention baseline testing of first-year students in classes similar to those in Phase I of the project. Costs associated with testing and scoring will appear in the "transition planning year" budget for 2018-19. The total QEP budget should include continuous support for the assessment of student learning outcomes throughout the five years of the study.

Operational and Classroom Costs

The operational costs associated with QEP include student support and advising resources. These funds would allow expansion of co-curricular activities such as cohort programs, supplemental instruction, and summer early-entry programs. Support for advising resources includes improved integration of data analytics and student goal plans. Classroom costs include the renovation of 2-3 existing classrooms into active-learning environments.

References

American Association of Colleges and Universities. (n.d.). High-Impact Educational Practices. Retrieved from https://www.aacu.org/leap/hips.

Nilson, L. B. (2017, July). Critical thinking unmasked: How to infuse it into a discipline-based course. Presentation at the SACSCOC Institute on Quality Enhancement and Accreditation, Austin, TX.

THE UNIVERSITY of MISSISSIPPI

Interoffice Memorandum

OFFICE OF THE PROVOST
University, MS 38677
Phone: (662) 915-5974 Fax: (662) 915-5280

TO: QEP Development Committee

FROM: Noel E. Wilkin, Provost and Executive Vice Chancellor

DATE: January 29, 2018

SUBJECT: Charge to the QEP Development Committee

In Spring 2017, Chancellor Vitter and the senior leaders endorsed critical thinking as the QEP topic upon recommendation of the QEP Topic Selection Committee. In Fall 2017, the Office of Academic Affairs endorsed the refined the scope, framework, and proposed strategies of the critical thinking QEP upon recommendation of the QEP Implementation Team.

I ask that the QEP Development Committee prepare a draft QEP proposal that satisfies the requirements of SACSCOC Principle 7.2 (Quality Enhancement Plan). The draft proposal should adhere to all SACSCOC requirements and be submitted to me and the leadership team by the June 15, 2018.

Thank you in advance for your thoughtfulness and dedication to advancing this important process.

Sincerely,

Noel E. Wilkin, Ph.D.
Provost and Vice Chancellor for Academic Affairs

QEP Development Committee:

Dr. Katie Busby, Institutional Research, Effectiveness, and Planning
Dr. Maurice Eftink, Associate Provost Emeritus and SACSCOC Liaison
Dr. Rich Forgette, Associate Provost
Dr. Kate Kellum, Institutional Research, Effectiveness, and Planning
Dr. Stephen Monroe, Writing & Rhetoric

APPENDIX L
QEP DEVELOPMENT TEAM
Summary of Meetings

Dates   Summary

01/05/2018   Orientation to task, planning listening tours

01/26/2018   Logistics of our work, feedback from Council of Academic Advisors

02/09/2018   Review of Linda Nilson's recommendations. Identified professional development opportunities for the committee

02/16/2018   Feedback from listening tour (library, faculty senate, and Writing & Rhetoric)

02/23/2018   Discussion and refining of QEP initiatives

03/09/2018   Discussion of on site review process, identified authors to draft QEP chapters

03/16/2018   Discussion and refining of QEP initiatives

03/23/2018   Discussion and refining of QEP initiatives

04/13/2018   Discussion and refining of QEP initiatives and personnel

04/20/2018   Discussion and refining of QEP initiatives and personnel, review of drafts to date

04/27/2018   Discussion and refining of QEP initiatives and personnel, review of drafts to date

06/20/2018   Preparing for June 22 Assessment Planning meeting with faculty measuring Critical Thinking

07/06/2018   Review of Assessment Planning Session

07/20/2018   Discussion of potential organizational charts and QEP Director job characteristics

08/03/2018   Discussion with Provost about potential organizational charts

Minutes from each meeting are available for review.

APPENDIX M
PROPOSED QUALITY ENHANCEMENT PLAN GOALS, OUTCOMES, ACTIONS

The University of Mississippi senior leadership endorsed a Quality Enhancement Plan (QEP) topic focused on enhancing critical thinking skills among first- and second-year undergraduate students and identified lower-division, general education courses and co-curricular learning opportunities as the key opportunities for QEP initiatives to enhance critical thinking.

QEP – Definition

Critical thinking development is skills-based and requires faculty to intentionally design exercises *within their own disciplinary* courses for improving these skills. With this premise of disciplinary-based development, the definition of critical thinking for the QEP is

> *the ability to conceptualize problems, gather pertinent information, interpret data, appraise evidence, distinguish diverse points of view, and articulate personal insights, in order to present reasonable and effective arguments, responses, or conclusions.*

QEP – Goals, Outcomes, and Actions

The QEP framework encompasses the intersections of students, faculty, and the learning environment for improving critical thinking; addresses institutional challenges; builds on institutional strengths; and anticipates environmental opportunities identified by faculty as appropriate for improving students' critical thinking skills.

Goals

The QEP produces independent and effective critical thinkers by:

- Cultivating faculty who foster critical thinking
- Providing an environment where students have more engaged learning opportunities

Student Learning Outcomes

As critical thinkers, students will be able to:

1) Conceptualize complex issues or problems.
2) Gather pertinent facts or ideas to explore complex issues or problems.
3) Interpret data and appraise evidence.
4) Distinguish, compare, or contrast diverse points of view and/or alternative conclusions.
5) Articulate personal insights about complex issues or problems.
6) Communicate a reasonable and effective argument, response, or conclusion.

Recommended Actions

QEP Goal I: Cultivate faculty who foster critical thinking

- Provide tangible support and developmental opportunities to faculty to enhance courses or co-curricular activities with critical thinking emphases.

QEP Goal II: Provide an environment where students have more engaged learning opportunities.

- Develop or expand cohort-based learning communities for first- and second-year students with strong critical thinking components.
- Extend co-curricular critical thinking opportunities to more students in 100- and 200-level courses.
- Extend curricular critical thinking opportunities to more students in 100- and 200-level courses.
- Provide opportunities for students to develop a personal plan for applying critical skills.

APPENDIX N
CRITICAL THINKING @ UM ASSESSMENT CHECKLIST

UM Definition - Critical Thinking involves the ability to conceptualize problems, gather pertinent information, interpret data and appraise evidence, distinguish diverse points of view, articulate personal insights, in order to present reasonable and effective arguments, responses, or conclusions.

The QEP Development team constructed this sample rubric from a variety of rubrics (including the AAC&U VALUE rubric) with the intention that it be modified to fit targeted aspects of the learning outcome(s). Faculty and staff may use any part of this rubric, add or remove aspects of any outcome, modify the language of this rubric, and/or create other assessment methods.

Conceptualize complex issues or problems

Aspects of Outcome	Exceeds expectation	Meets expectation	Does not meet expectation
Issue/problem to be considered critically is stated clearly and comprehensively			
Description includes subsidiary, embedded, or implicit aspects of the issue are described			
Description identifies integral relationships essential to analyzing the issue			
Explains why/how the issues are problems or questions			

Gather pertinent facts or ideas to explore complex issues or problems

Aspects of Outcome	Exceeds expectation	Meets expectation	Does not meet expectation
Includes credible sources appropriate for the assignment			
Does not include inappropriate sources for the assignment			
Includes an accurate evaluation of the appropriateness of the sources			
Includes sufficient data/information to allow exploration of the issue			

Interpret data and appraise evidence

Aspects of Outcome	Exceeds expectation	Meets expectation	Does not meet expectation
Rigorously evaluates all important evidence offered			
Provides new data or information for consideration			
Examines evidence and questions accuracy and relevance			
Recognizes and describes bias			
Viewpoints expressed in sources are questioned appropriately			
Clearly analyzes information for accuracy, relevance, and validity			

Distinguish, compare, or contrast diverse points of view and/or alternative conclusions

Aspects of Outcome	Exceeds expectation	Meets expectation	Does not meet expectation
Thoroughly (systematically and methodically) analyzes own assumptions			
Thoroughly (systematically and methodically) analyzes others' assumptions			
Carefully evaluates the relevance of contexts when presenting a position			
Addresses diverse perspectives from a variety of sources to qualify analysis			
Any analogies or metaphors are used effectively			
Analysis of other positions is accurate and respectful			

Articulate personal insights about complex issues or problems

Aspects of Outcome	Exceeds expectation	Meets expectation	Does not meet expectation
Identifies and discusses conclusions			
Identifies and discusses implications, and consequences of conclusions			
Evidence of reflection and self-assessment			
Considers context, assumptions, and evidence			
Specific position (perspective, thesis/hypothesis) is clear			
Specific position takes into account the complexities of an issue			
Acknowledges limitations of position			
Acknowledges objections and rival positions			
Provides convincing replies to objections and rival positions			

Communicate a reasonable and effective argument, response, or conclusion

Aspects of Outcome	Exceeds expectation	Meets expectation	Does not meet expectation
Sequence of presentation reflects clear organization of ideas			
Conclusions & related outcomes are logical			
Conclusions & related outcomes reflect the student's informed evaluation			
Conclusions & related outcomes reflect ability to place evidence and perspectives discussed in priority order			
Language clearly and effectively communicates ideas			
Includes appropriate transitions			
Language is nuanced and eloquent			
Sources are cited and used correctly			
Style is appropriate for audience			

APPENDIX O
FACULTY & STAFF CAPACITY TO TEACH AND ASSESS CRITICAL THINKING @ UM

UM Definition - Critical Thinking involves the ability to conceptualize problems, gather pertinent information, interpret data and appraise evidence, distinguish diverse points of view, articulate personal insights, in order to present reasonable and effective arguments, responses, or conclusions.

The QEP Development team constructed this sample rubric with the intention that it be modified to fit targeted aspects of faculty and staff training.

Skills	*Demonstrates exemplary understanding and skills*	*Demonstrates requisite skills*	*Does not fully demonstrate requisite skills*
Selects relevant student learning outcome(s)			
Identifies relevant aspects of the outcome(s)			
Describes/designs learning activities that align with the targeted aspects of the outcome(s)			
Describes/designs learning assessments that align with the learning activity			
Describes/designs direct learning assessments that align with the targeted aspects of the outcome(s)			
Describes/designs indirect assessments that align with the targeted aspects of the outcome(s)			
Demonstrates analysis of assessment data that may inform potential improvements			
Demonstrates potential improvements based on analysis of assessment data			
Identifies plan to reassess after implementing planned improvements			

APPENDIX P
LETTER OF COMMITMENT

THE UNIVERSITY of
MISSISSIPPI
OFFICE OF THE PROVOST

Dr. Michael Hoefer, Vice-President
Commission on Colleges Southern Association of Colleges and Schools
1866 Southern Lane
Decatur, Georgia 30033-4097

Dear Dr. Hoefer:

We commit ourselves to the success of the University of Mississippi's *Think Forward* Quality
Enhancement Plan. On behalf of our senior leadership team, the University of Mississippi will
provide the financial, administrative, and personnel resources needed to make this a successful
QEP.

Think Forward lays out an ambitious set of actions to enhance students' critical thinking skills
and the university intends to commit appropriate resources over the full implementation period to
support this important initiative. The University has already allocated over one-fifth of the total
five-year budgeted funds and initiated the search process for the QEP Director.

Thank you very much for the attention you are giving to the University of Mississippi's
reaffirmation of accreditation process. We look forward to hosting the On-Site Review
Committee and sharing our QEP vision with them.

Sincerely,

Larry Sparks
Interim Chancellor
University of Mississippi

Noel Wilkin
Provost and Executive Vice Chancellor for Academic Affairs
University of Mississippi

137 Lyceum | P.O. Box 1848 | University, MS 38677-1848 | (662) 915-5974 | Fax: (662) 915-5280 | olemiss.edu

QEP DIRECTOR JOB CHARACTERISTICS

Director of Faculty Development - University of Mississippi

The University of Mississippi seeks a Director of Faculty Development to promote faculty success initiatives and to oversee the University's Quality Enhancement Plan (QEP) on critical thinking. The University supports faculty excellence through its strategic plan by providing opportunities to foster innovations in teaching, research and scholarship, engagement, and administrative leadership. The Director of Faculty Development will help promote faculty excellence as a key member of the Academic Innovation Group and will report to the Executive Director of Academic Innovation. The Director of Faculty Development collaborates closely with the Center for Excellence in Teaching and Learning (CETL) and provides strategic leadership, program management, supervisory duties for faculty development in critical thinking pedagogy and related areas.

Responsibilities:

The Director of Faculty Development will be responsible for coordinating faculty development initiatives across campus. This responsibility requires the successful candidate to be highly collaborative, engaging with faculty, staff, academic and administrative leaders, and institutional units across the University. The Director will also be responsible for overseeing and implementing the University's Quality Enhancement Plan—a 5-year, $3 million investment to promote faculty development and students' critical thinking across disciplines. The successful candidate will share our commitment to faculty and student success, diversity and inclusion, and interdisciplinary collaborations. The candidate will also have a robust knowledge in the scholarship of teaching and learning (SoTL), active learning, critical thinking, and be committed to data-informed decision-making and assessment. Finally, the new Director will be for a key contributor in fostering academic innovation through a collaboration with others in our Academic Innovation Group. This will require the successful candidate to be supportive of all faculty and engage in interdepartmental initiatives to promote faculty success. On a continuous basis, the Director will oversee unit assessment and evaluation efforts.

Qualifications:

- An earned doctorate or other terminal degree from an accredited university
- Three years' experience in faculty or educational development
- Supervisory experience
- Record of teaching excellence in a university setting
- Eligible for a faculty appointment in either a tenured, tenure-track, or instructional position. Applicants holding an appropriate terminal degree with a demonstrated scholarly record commensurate with appointment to a tenure position and currently holding tenure will be eligible for appointment of tenure in the applicable department.
- Experience in program development, data analysis, and assessment
- Excellent oral, written, and interpersonal communication skills
- Robust knowledge of salient research, effective pedagogical practices, active learning theories, instructional design, and critical thinking
- Demonstrated expertise in enhancing face-to-face, hybrid, and online teaching and learning
- Demonstrated success in grant writing/ submission
- Experience in providing instruction and consulting with faculty on effective student-centered teaching and learning

- Experience developing educational programs with broad campus collaboration
- Knowledge and/or experience with major course redesign or transformation initiatives.

To ensure full consideration, please submit the University's online application along with a letter of interest, a current vita, and a list of 3 to 5 references. Review of materials will begin on March 21. Applications will be accepted until an adequate pool of candidates has been established or until the position is filled. Upon hire, faculty members of the University must provide an official transcript. Request an official transcript to be mailed directly to Human Resources: University of Mississippi, Attn: Human Resources, P.O. Box 1848, University, MS 38677-1848.

The University of Mississippi provides equal opportunity in any employment practice, education program, or education activity to all qualified persons. The University complies with all applicable laws regarding equal opportunity and affirmative action and does not unlawfully discriminate against any employee or applicant for employment based upon race, color, gender, sex, sexual orientation, gender identity or expression, religion, national origin, age, disability, veteran status, or genetic information. The University of Mississippi is committed to providing a safe campus community. UM conducts background investigations for applicants being considered for employment. Background investigations include a criminal history record check, and when appropriate, a financial (credit) report or driving history check.