Golden Opportunity through Active Learning (GOAL)

A Tale of Two Students
Sarah’s graduation was the proudest day of her life. Having double majored in Film Production and English she believed she was a shoo-in for an entry-level position at a television station. During the interview, she was told that her film production classes did not give her the experience needed to shoot and edit on the equipment used by the station. Without that experience, she would not be eligible for the job. Sarah found what she believed would be the perfect opportunity—a job at her local library. In the interview, Sarah was told that she was “over-qualified.” The same day, she applied for, and received a job as a crewmember at a fast food chain. As she put on her work uniform to start training for her new job, she wondered if the time and effort she put into college had been worth it.

Andrew enrolled in college to learn how to write code and develop software. While working through his program, Andrew developed an application that was implemented and used across campus. Later, he accepted a summer internship at a national company. In his senior year, he was offered a job with that company and made plans to go to work for them directly after graduation. Andrew’s plans were interrupted a few months later when a startup company offered him twice the salary to work for them.

The owners of the startup offered Andrew a deal he couldn’t turn down. “Come work with us for one month. If it is a good fit, stay. If not, you can always take the other job,” they said. Andrew agreed. Upon graduation, Andrew knew that he would enter the job that would be best for him.

Sarah and Andrew graduated from the same university, but their post-graduation experiences are strikingly different. What could Sarah have done during her time in school that would have enhanced her job prospects after graduation? Many studies suggest that internships and other forms of experiential learning lead to greater career opportunities for college graduates.

Working Concept: The Golden Opportunity through Active Learning (GOAL) mission is simple; to incorporate life-skills, field experiences, and career-oriented experiential learning opportunities that engage students in such a way that learning becomes both thought provoking and meaningful. Thus, we strive to empower scholars to take “ownership” of their path to academic and professional success through cooperative education, cultural immersion, institutional projects/initiatives, internships, practicums, service learning and student research activities. Many of these components of experiential learning are currently being performed through academic and institutional support departments on campus today. The departments that engage students through active learning have laid the groundwork for the development of an experiential learning collaborative at Southern Miss that is desperately needed. Strengthening a student’s knowledge and providing opportunities for building field experience will be necessary for scholars to excel in their professional careers.

We propose to support an efficient mechanism of producing competent and readily deployable graduates through realigning internal resources and leveraging external constituents. The proposed mechanism will positively impact various facets of students’ life in a systemic way. We will clarify and improve the existing pathways, implement new pathways, and expanding opportunities with the goal of retaining and graduating competent graduates to meet our growing employment need in the Gulf South region and beyond. We believe that individual departments and colleges know the best about what makes their graduates the most competitive and competent in their respective fields. Our proposed mechanism will guide each department to select critical student learning components, identify internal and external resources, and implement and monitor programs. We do not anticipate accomplishing program changes through major restructuring of any programs or addition of any major resources, but through effective and efficient uses of resources and applying best practices. Most of the improvements can be embedded through program requirements, course requirements, capstone projects, and extracurricular activities. The proposed mechanism will address at least the top four tenets of the QEP survey results: Retention, graduation and student success; Experiential learning, student research, service learning, internships, etc.; Critical thinking and problem solving; Career preparation and professionalism leverage. Teams will provide resources and support for faculty to teach individuals or groups of students. Resources that exist today in separate “bubbles” will come together to create an edu-sphere. This edu-sphere will function as a multidisciplinary learning environment within which students can experience education through guided action and problem solving.

Rationale for the Topic/Problem Statement/Opportunity for Growth:
Student-driven experiences: Long gone are the days when a diploma in hand was all that was needed to land a great job after graduation. Employers are looking for experienced personnel. While there are many academic departments that offer opportunities for internships, co-ops, and service learning, there are departments lacking hands-on opportunities which hinder the students’ ability to participate in experiential education. Experiential opportunities will set a scholar apart from their peers. (Burnsed. 2010) Student engagement through faculty/student research has been shown to be effective in promoting student retention and academic success. Acting alone, there is no one unit or office that can enhance the overall quality of large numbers of students, especially with a wide spectrum of different needs and characteristics. So the effort and dedication of everyone on campus is needed.

Educational research indicates that graduates are more competent when they are exposed to real life work environments during their study through various programs including co-ops, internships, research experience, professional mentorship, industry visit, professional society associateship, workshop participation, case competition, etc. All these opportunities provide firsthand real life experience and boost confidence among fresh graduates. Each department can determine what programs and how many programs are enough for their graduates. Most of the experiential scenarios will require no additional resources. Departments can leverage their Industry Advisory Council (IAC) and alumni network to provide these programs for their students.

For Southern Miss, having an active research environment is a critical recruitment tool for attracting quality graduate and undergraduate students and is a primary objective of our President and Provost. Furthermore, exposure to research is known to facilitate job security for those graduates with a USM diploma who conducted mentored research projects. If selected, this project will provide students with unique training and experience essential for their future career development and professional growth. Our proposed project will provide experiential learning via hands-on research, students will develop skills to critically read research literature, acquire and interpret data, integrate and implement technology, write reports and present findings at the USM graduate and undergraduate research symposia.

**Expected Outcomes/Impact on Student Learning or the Student Learning Environment:**

Students will direct their learning by making choices about their projects and deciding how to present their project outcomes in both written and oral formats. We imagine a full research environment involving faculty, undergraduate, masters and doctoral students. Teams will be created with the full spectrum of team-learning and team-teaching where all students are co-learning with and from each other. As a result we would like to increase student retention and academic success and experience shared leadership among administrators, students, faculty and staff.

The proposed multidisciplinary approach will play a major role in enhancing the current efforts to strengthen its curriculum. Already well known for its undergraduate study aboard program, the extension of this program in research opportunities will represent a significant step forward.

- Establishing a recognized undergraduate research program at Southern Miss
- Creating a global workforce to add value
- Technology development
- Career development
- Capacity building at Southern Miss - GOAL would provide an opportunity for improved career paths for students with hands on research experience. Southern Miss faculty would also have the opportunity to seek extramural funding for multidisciplinary programs

The role of a mentor does not include only supervision; a mentor provides direction, evaluation and support through advocacy, rewarding, celebrating successes and guiding through adversity and disappointment. Some basic underlying principles to keep in mind in developing one's own approach to mentoring include credibility, integrity, confidence, and skills development in professionalism, communication, citizenship, and collaborative practices.

As a part of this initiative, student research participants become fully integrated in the Southern Miss research community, interacting with faculty mentors and fellow undergraduates while participating in research seminars and other networking events. Student researchers learn how to collaborate effectively in research settings, within a specific discipline while investigating research interest areas. Students are also encouraged to present findings at professional conferences or meetings in their disciplines with institutional assistance for travel funds for this purpose. Ultimately, student research opportunities provide: involvement in exciting research/activities within a specific discipline, contributing to the advancement of scholarship in an area of interest, and empowering students to gain practical skills and
knowledge for both advanced study and post-graduation careers.

This project is expected to impact the following number of individuals and organizations:

<table>
<thead>
<tr>
<th>Program Impact Metrics</th>
<th>Measures</th>
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<tbody>
<tr>
<td>Faculty Engagement</td>
<td>100% of teaching and 50% of research faculty within 5 years</td>
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<tr>
<td>Resource Realignment</td>
<td>Identify and utilize (20%) all Southern Miss resources towards this project</td>
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<tr>
<td>Retention &amp; Graduation</td>
<td>Increase retention &amp; graduation by 20% in the next 5 years</td>
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<tr>
<td>Faculty Training thru QEP</td>
<td>At least 1 faculty per department per year</td>
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<tr>
<td>Student Engagement</td>
<td>75% of Southern Miss students within 5 years</td>
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<td>Industrial Network</td>
<td>200 corporations in the region</td>
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<tr>
<td>Professional Mentor Pool</td>
<td>2000 professional mentors from local industry practitioners</td>
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**Strategies/Actions to Be Implemented**

*Service Learning and Volunteerism:* A focus would be to use public service as an avenue to increase student participation in experiential learning. Volunteerism and service learning have steadily increased over the years. Research shows that internships are, by far, the best way for students to gain the necessary skills needed to perform successfully in today's competitive, professional environments. Tulane University currently offers public service internship with over 400 community partners. These public service internships partner with every academic college to assure correlation with the students’ academic goals and program plan. UNC Chapel Hill also provides a good model for these programs as internships and other types of experiential education are directly related to our students’ ability to secure employment. In addition, summer sessions present the opportunity for students to participate in these experiences. This fits well into the universities focus on increasing summer school participation as increased focus on experiential education can draw students to summer registration for experiential experiences. We will assist students to explore and develop research opportunities bridging between their career, community service and global culture that will impact their lives well beyond graduation. Our university will have a commitment to building a shared responsibility for student research success where administration, faculty and staff work together for experiential excellence in and out of the classroom. Under the guidance and supervision of qualified faculty and staff, students will engage in research projects that challenge and enhance learning through the stages of pre-experience preparation and planning, ongoing guided reflection, and post-experience public showcasing by their research supervisor. Students will be encouraged to seek financial support for the project (external or institution), and the research supervisor will receive a modest stipend for overseeing the project. Some of these projects will be connected to credit-bearing courses, while others do not carry academic credit.

*Develop and Produce USM Graduates Whom Meet Industry Standards:* Following are a few examples that are being practiced by some of our departments and can be used as a model for other departments.

**Partner Industry Network (PIN)** consists of local Gulf Coast industries that are part of an IAC. These companies continue to offer co-ops, internship opportunities and access to capstone research to Southern Miss students. This program benefits both the participating industries and the students. Huntington Ingalls Industries, Trinity Yachts, Chevron and Signal International are just a few participants in this network. Each department can create its own PIN that will not only provide opportunities for its students but also provide feedback for its program improvement. This type of network is effective for career preparation and increasing retention for all students especially for STEM fields (Do et al. 2006). **Professional Mentorship Program (PMP)** pairs professionals who will serve as mentors with students. This unique relationship widens the knowledge of students and helps them prepare for professional careers. PMP has shown to increase retention particularly in STEM fields (Williams, 2008). Florida State University, University of Iowa and Monash University have all implemented successful professional mentoring programs. The PMP program includes telephone conversations, email, face-to-face meetings, and portfolio reviews, to help guide students with term projects, capstone projects, career advising, and job searching. The professional mentorship program can be implemented in two ways: creating mentors or through professional society associateship.

**Practical Integrated Learning (PIL)** consists of various practice-based learning mechanisms that link classroom theories with real life applications and provide comprehensive understanding. The lack of PIL in specific disciplines has been identified as one of the major competency gaps in higher education (Sarder & Nagshpour, 2012). Our proposal is a direct response to this issue. It involves the coordination of realistic practice based learning activities in targeted courses around the unifying theme of integrated learning.
The PIL includes facility tour, internship, hands-on learning, expo and trade show participation, case analysis, team project, subject matter expert interaction, etc.

**Inquiry-Based Learning with Research:** Each program or course can develop research goals or project goals so that a framework can be created to achieve these goals. The project structure should be organized in a way that mentoring by either facilitators or subject matter experts can take place as well as peer mentoring among class members. In some cases, students may not follow-through on conducting research or implementing a solution, but will gain experience in research methodology or a problem-solving process. Student-directed discovery allows students to ask questions and step beyond the limits of current knowledge. When students take intellectual ownership of their work, they gain the self-confidence and a readiness to take on more demanding projects. (Bascom- Slack et al. 2013) Student collaboration to solve societal problems has been used at the University of Minnesota. (Wick et al. 2013) While the projects take place in the area of biology, the same ideas of synthesis, evaluation and creation can take place in many other programs. We can ask scholarly teams to solve issues that relate to social needs, energy, business, manufacturing, health and many more. Solving problems as a team necessitates many of the qualities that hiring companies will look for in our graduates such as constructive feedback, organization skills, initiative and communications. To help with mentoring efforts, faculty can train a core group of students who can then help mentor other students. Rigorous training for the student mentors is important to keep the quality of instruction up across all sections and throughout the projects. (Fukami. 2013) The project support teams would meet several weeks before the course or project begins to learn the project goals and methods that will be employed.

**Suggestions for successful integration of teaching and research:** (Fukami. 2013)

- Low barrier of technical expertise for students to collect data
- Established checks and balances to ensure student mistakes will not compromise research quality
- A diverse set of variables that present many choices for students to investigate without overwhelming the instructional team
- A central database into which students can upload data
- Assessment measures that are representative of real-world processes
- Involvement of instructors and industry partners with expertise in the study system
- Cultivation of a communal experience among students by keeping project teams small. Inquiry-based learning is most effective when a small number of students work in a collaborative environment, exchange ideas and ask interrelated questions.

These project support teams that collaborate can begin to foster interdisciplinary goals and become a catalyst for new ideas. As we discover that some areas of the university need more experiential opportunities, these new collaborations can be the spark that lights the way for proposals that generate new funding.

**Student Cohort:** All Students

**Measurement/Assessment:**

Most significant is the ongoing overall program assessment based on learning outcomes that are observable and measurable. Administration, faculty, staff and students collectively will assess the program to determine whether or not we are achieving the unified mission for the experiential learning initiative and work with a new advisory board to make appropriate recommendations for change.

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<tr>
<th>Research Questions</th>
<th>Supports &amp; Mechanisms</th>
<th>Measurements &amp; Assessments</th>
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<tbody>
<tr>
<td>a. In what way does professional mentoring and enhanced advising benefit USM students?</td>
<td>1. Mentoring by professionals in the field (Students matched to mentor through web based program)</td>
<td>Survey students (Relationship with mentors; Peer tutoring; Financial incentives)</td>
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<td>b. How and in what ways are students using the USM resources?</td>
<td>2. Motivate students through close academic advising *</td>
<td>Internship (Performance evaluation from supervisor; Required student report)</td>
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<td>c. In what way does internship experience direct the student to a career path?</td>
<td>3. Monthly guest speaker series</td>
<td>Log of Early Alert System detecting students in academic trouble.</td>
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<td>d. How are students motivated to complete their degree requirements in a timely fashion?</td>
<td>4. Peer Led Team Tutoring</td>
<td>Interview students individually to discuss program specifics</td>
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<td></td>
<td>5. Early Alert System</td>
<td>Assemble course evaluations, student comments, and feedback about delivery method.</td>
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<td>6. Alternate course delivery</td>
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<td></td>
<td>*Currently ongoing efforts</td>
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Phase #2 - Develop graduates who meet our industrial partners’ expectations

| a. In what ways should communication be facilitated between industry and academia to best support curricular improvements? | 1. Mentorship Program
2. Internship Program* (Student reports)
3. Industry Advisory Council*
4. University – Industry partnership program

*Currently ongoing efforts |
| b. What weaknesses/gaps do industrial partners identify in the training of graduates and how can these be effectively communicated to all institutions? |
| c. How can Southern Miss improve these strategies to prepare competent graduates? |
| • Personal communication with industrial partners
• Surveys of the industrial partners and mentors
• Council notes and surveys
• Exit surveys for graduates (USM Survey; Program Survey)
• Exit Interview with USM Advisor
• Compilation of student GPAs |

An example of how the program can be used in Arts and Letters or other non-science programs: Liberal Arts degrees are often the most difficult to translate into the job market. Many times this is not due to the skills learned but to the ability of the student to demonstrate to a potential employer how those skills will be useful to a particular company. To remedy this, we would like to propose that within the next 5 years, half of the degree programs in the College of Arts and Letters would require some aspect of experiential learning, preferably internships, as a prerequisite for graduation. Currently, the College of Arts and Letters offers 51 degree programs. We would like to propose that at the end of 5 years, 26 of those programs require experiential learning components. Today, ten of these programs allow for a student teaching component. They are: Dance B.F.A. (Dance Edu); English B.A (licensure); Foreign Language B.A (licensure); Art B.A; Art B.F.A (Drawing and Painting); Art B.F.A (Graphic Design); Art B.F.A (Sculpture); History B.A (social studies); Music B.M. Ed (Choral); and Music B.M. Ed (Instrumental). In addition to the programs where student teaching is available, 7 programs currently recommend an internship. They are: Advertising, B.A.; Dance B.F.A. (Performance and Choreography); Economics B.A (Social Science); Journalism B.A (Public Relations); Political Science B.A; Sociology B.A; and Sociology B.S. In total, 17 programs currently allow for the level of experiential learning that we are recommending. We would need to add internship requirements to 9 additional degree programs within the next 5 years. We could do this in two phases. In Phase 1, we would shore up and enhance the internship components of the 17 majors that currently have them available. This may take up to two years. In Phase II, to be carried out in years 3 through 5, we would add internship requirements to 3 programs per year. At the end of the 5th year, we would be able to reach our goal of 26 programs within the College of Arts and Letters that require a substantial experiential component.

Resources to support team-teaching:
There are people, departments and tools that could be involved in developing the team-teaching approach or be a permanent part of teams that should not be considered final and all-inclusive: Writing Center, Speaking Center, Career Services, Learning Enhancement Center (Think Center), iTech Student Software Development Team, Libraries, Lab equipment, software (databases), Center of Community and Civic Engagement, Center for Undergraduate Research (CUR), Student Success Center, McNair Scholarship Program, Department of Biological Sciences, Lake Thoreau Environmental Center, Transmission Electron Microscopy facility, Herbarium, Student Employment, Math Zone, Tutoring Centers, Workplace Learning and Performance Institute, Office of Vice President for Research, Mississippi INBRE (msinbre.org), High Performance Computing Center (School of Computing), Department of Chemistry and Biochemistry research core facility, School of Polymer Science core facility, and many more.

Generations of graduates, instilled with a new sense of personal accomplishment, academic success and community connection; will rise to the Top of their fields because of their participation in the Golden Opportunity and Experiences initiative. At The University of Southern Mississippi, our strong history is evident by the commitment to quality programs, facilities, research, activities and most importantly our scholars. Every student that enrolls and graduates from Southern Miss becomes part of our history, our family and our commitment to academic success.

References cited in this document are available by contacting the QEP Director.