The following report outlines the recommendations of the Teaching and Learning Modalities committee, including an overview of the existing modalities applied at the University of Louisiana Monroe, a brief survey of the 11 high impact practices shown to enhance student learning when applied by a university, and recommendations for how these various practices can be implemented in the classroom.

## **Defining our existing Modalities**

It is important to begin this discussion by defining the teaching modalities that exist within the university and describing their similarities and differences. Our committee identified four main teaching modalities that exist at the university: face-to-face, online asynchronous, hybrid, and Hyflex. Each of these delivery methods varies in the type and amount of teacher/student interactions that are occurring during the learning process. The definitions below address how the committee viewed each modality when compiling this document.

- Define face-to-face 100% of instruction occurs in the physical classroom, and classes meet at regularly scheduled times.
- Define online asynchronous Classes are delivered in an online format, and students are not required to attend at regularly scheduled times. Students can consume the content and engage in activities and assignments when they choose in compliance with course instructions.
- Define hybrid Hybrid learning is a combination of face-to-face and online instruction.
- Define Hyflex Hyflex instruction allows the student to choose to attend class in-person or complete course work online. This modality often also allows students to choose to participate in online synchronous and asynchronous sessions/activities.

# Survey of teaching modalities applied at ULM

As part of our investigation into the prevalence of these different teaching modalities, the faculty at ULM were asked to participate in a brief survey related to the modalities and instructional methods they currently employ. Out of 108 responses, 77.78% reported teaching face-to-face, 42.59% reported teaching online asynchronously, 28.70% reported teaching using the hybrid model, and 3.70% reported teaching using the Hyflex model. From this, it is clear that most faculty teach either face-to-face or online asynchronously, with a minority reporting to teach using a hybrid or Hyflex model. Additionally, it appears that most instructors are teaching a mixture of online classes and face-to-face or hybrid classes and are thus having to balance a variety of student interactions across their diverse teaching load. In addition to the teaching modality, we also polled faculty regarding the instructional method or methods they use while teaching within these modalities. We were pleased to see that of the 108 responses, in addition to the traditional lecture (87.96%) and discussion (79.63%) methods, most faculty were also utilizing alternative teaching strategies such as cooperative or collaborative learning activities (45.37%), problem-based learning (41.67%), research-based assignments and courses (40.74%), case-based assignments and courses (38.89%), flipped classroom methods (34.26%), team-based learning (22.22%), gamification principles and activities (21.30%), service learning (19.44%), and writing to learn (18.52%).

In the same poll, we also set out to assess which of these teaching strategies were the most interesting to faculty and what barriers, if any, were currently holding them back from adopting them to their courses. What we saw in the 48 responses was that instructors had varied interests with the top three responses being gamification (22.92%), flipped classroom (18.75%), and team-based learning (12.50%). However, faculty were in much more agreement when it came to their stated barriers, with "time" concerns being mentioned by 46.27% of the 67 respondents. The second most common answer category dealt with "knowledge", with 22.39% of instructors claiming that either a "[lack of] knowledge" or the "[lack of] resource availability" regarding these teaching practices were significant barriers for them. Other stated barriers included: being an online instructor (7.46%), technology limitations (7.46%), perceived student preparedness or willingness to participate (7.46%), current workload (5.97%), class size (5.97%), and lack of funding for training or software (4.48%).

As a final question, we asked the faculty, "Would you be interested in attending professional development sessions that explain different instructional methods and teaching modalities?" The survey showed that 78.70% of the 108 respondents were interested in these development sessions. Importantly, this could directly reduce the "knowledge" barrier reported by many of the faculty by providing a university funded and accessible workshop.

## **Investigation of 11 High Impact Practices**

The task of identifying and recommending the best teaching practices to employ across these various modalities is a very substantive endeavor. As a starting point, we looked at the well established high impact practices, or HIPs, identified by the American Association of Colleges and Universities (AAC&U). These 11 practices include: capstone courses and projects, collaborative assignments and projects, common intellectual experiences, diversity/global learning, ePortfolios, first-year seminars and experiences, internships, learning communities, service/community-based learning, undergraduate research, and writing intensive courses. These are evidence-based practices that are shown to support and enhance the education of university students when implemented institutionally. These practices span the entirety of the educational experience from first-year seminars to senior capstone courses and everything inbetween. Our committee sought to understand each independent practice and the interplay between each that ultimately leads to student success. In order to discuss these practices, we have broken them down into 4 major categories: lesson design, assessment techniques, student empowerment, and beyond teaching and learning. Keep in mind that most of these do not fall neatly into one of these categories and may exist within multiple, acting as connecting bridges. The assigning of categories was done strictly for providing some structured way of discussing these. Additionally, a helpful graphic has been attached at the end to demonstrate these connections. (Figure 1 - See page 8)

## Lesson Design

Beginning with the lesson design category, this category deals with the high impact practices that are brought into the classroom and incorporated as part of the learning experience. These include collaborative assignments and projects, writing intensive courses, and service or community-based learning. Collaborative learning is a practice that facilitates positive, interactive interdependence between learners in a social group setting where each member of the group is accountable for themselves and the group goal. This type of learning is flexible and can stand alone as a teaching practice in problem-based and team-based learning frameworks, or it can be used alongside lecture and discussion methods to complete coursework that is often perceived as too big, urgent, or requiring too much knowledge (<u>Cabrera et al., 2002</u>; <u>Kilgo et al., 2014</u>; <u>Laal & Godsi, 2012</u>). Various social, psychological, and academic benefits have been correlated with collaborative learning, including: building a social support system and learning community, strengthening diversity understanding, improving self-esteem and reducing anxiety, promoting critical thinking, improving student motivation and overall classroom results (<u>Kilgo et al., 2014</u>; <u>Laal & Godsi, 2012</u>).

Writing Intensive courses are those which focus on writing both as assessment and content. While these courses have traditionally functioned as English courses, as they often do at ULM, they can be utilized in other disciplines and as a way to bridge disciplines through interdisciplinary work or as a tool for team-taught courses. Writing intensive courses can exist in more formal arrangements, such as a WAC (Writing Across the Curriculum) program or a WID (Writing in the Discipline) program. WAC programs offer writing instruction across all programs and majors at a university, using writing as both content and, most importantly, as assessment. These programs have existed with varying levels of support and adoption, but the most successful ones integrate writing at each level, offering students opportunities to advance writing throughout their college career (Blumner et al., 2001). WID programs are a subset of WAC programs, focusing on the creation of writing assignments, assessments, and content centered on genres specific to the discipline in question. Strong English composition programs, while often the center of writing intensive courses in these models, are not the end of writing instruction, as writing becomes an important tool for assessment and instruction.

Community based learning and service learning include a variety of teaching methods and programs that strive to connect didactic learning with community issues, opportunities, and problems. The ultimate outcome is that the quality of both student learning and community service are enhanced. When students find purpose and value in what they are doing, they are more likely to work harder to accomplish goals. Community based and service learning are techniques that encourage students to identify meaning and significance in course work by linking didactic learning to issues and concepts that are more familiar and personally important to them as well as first-hand experiences. There is strong evidence supporting communitybased learning as a high-impact practice, including: enhanced cognitive skills, heightened selfesteem and motivation, improved class attendance, positive attitudes regarding institutions and programming, and higher course/teacher satisfaction (Novak et al., 2007).

### Assessment

Collaborative assignments and projects and writing intensive courses give way to rich formative and summative assessments, and act as the bridge, and segue, to discussing the Assessment category of high impact practices. One must also remember that bridges go both ways, therefore, it is important that the lesson design includes good formative assessments and that the results of formative assessments influence the way the course is taught. The only HIP that falls directly within the assessment category is the practice of offering capstone courses and projects, which are intended to be the ultimate summative assessment for graduating seniors. We also chose to include ePortfolios in this category, as it is intended to be a collection of summative assessments, however, it is mainly acting as our bridge into discussing student empowerment.

Capstone courses (senior seminar, senior experience) have been a component of higher education for many years. These courses are a culmination of a student's academic experience that links knowledge gained about a major and assists in the transition into a career or graduate education. They usually consist of a final project or presentation (ex: research paper, performance, portfolio of best work, exhibit of artwork, etc.) requiring the student to apply and integrate knowledge while demonstrating competency of the major's learning objectives. The objectives and methods of capstone courses have been well studied; however, there is no universal design or definition for them. Students who participated in this high-impact practice reported higher levels of learning and enhanced personal development in *Experiences That Matter: Enhancing Student Learning and Success* (National Survey of Student Engagement, 2007). The majority of capstone courses, transition courses, and career-planning courses.

An electronic portfolio (e-portfolio) is a purposeful collection of sample student work, demonstrations, artifacts, and reflections that showcases a student's learning progression, achievement, and evidence of what students can do. The collection can include essays and papers (text-based), blog, multimedia (recordings of demonstrations, interviews, presentations, etc.), or graphics (Berkeley Center for Teaching and Learning, 2023). Electronic portfolios can also provide counseling and career preparation and credential documentation (Carter, 2021). One of the largest studies on ePortfolios was the Connect to Learning (C2L) project that took place at 24 institutions and implemented a national community of practice. Some of the reported outcomes from the study included an increase in average student grades, an increase in the four-year graduation rate, and an increase in the first-to-second year persistence rate with the use of ePortfolios (Watson et al., 2016). Additional benefits that have been described include enhancing technological, communication, and organizational skills; student awareness of the learning journey; identification of strengths and gaps in student understanding; demonstration of theory in practice recognition and evidencing of soft skills, personal attributes, and other career-readiness traits (Carter, 2021)

### Student Empowerment

The high impact practices that fit within this category are associated with ensuring student success throughout their time in higher education and into their future careers. These practices include: first-year seminars, learning communities, and common intellectual experiences.

First-year seminars should empower the students in multiple ways to prepare them for the many instructional methodologies and teaching modalities. In addition, students should gain experience and learn valuable skills that are expected of them as they progress in their degrees. It is highly suggested that the instructors of the courses be faculty in the areas of discipline that the students are pursuing so that mentorship between the student and faculty of that area can begin. An adjusted model for the online UNIV course may be needed so that students who are not physically on-campus or cannot physically be on-campus are achieving these objectives as

well. In essence, students should be coming out of the UNIV 1001 course feeling well connected with services around campus that may aid them, acquiring skills for building a community with fellow students and mentorship with faculty, and class skills such as communication and writing skills that will aid them as they advance in their degree.

Learning communities are traditionally an integration of learning across two or more courses with a common theme(s) to allow for a group of students to work closely with the professors and each other or form a "community". Instead of having two or more courses, students/faculty can develop learning communities outside the classroom. These activities can include service activities or being housed in the same dormitory (<u>Center for Engaged Learning</u>, <u>2023</u>; <u>Otto et al.</u>, <u>2015</u>). The standard of practice is to integrate courses or activities with the same overarching theme. Some recruit students from a specific major or groups of majors, such as Liberal Arts (<u>Otto et al.</u>, <u>2015</u>). Other programs focus on a specific group of students, with a common cohort being those at risk for graduating due to specific demographic factors (<u>Engstrom & Tinto</u>, <u>2008</u>).

Common intellectual experiences developed from the same impulses that undergird the core curriculum: that each student benefits from a foundation of skills and content that prove useful beyond the freshmen and sophomore years (Kuh, 2008). In practice, these common intellectual experiences have focused on common reading or the use of common spaces, such as libraries and courses, such as Composition I or Freshmen Seminars. Suggestions for these experiences could be much broader, including the adoption of a yearly theme, such as "Resilience," which professors and staff could then center some or all of their activities around. In keeping with George Kuh's suggestion that students experience at least two high-impact practices during their college career, it is increasingly common to see common intellectual experiences paired with other HIPs, including learning communities (<u>Virtue, et al. 2018</u>).

In summary, first year experiences aim to supply incoming freshmen with the tools, knowledge, and support systems needed to achieve a higher level of learning. Often these support systems take the form of a learning community composed of students pursuing a similar degree and a professor in that specialty. And it would be the goal of the university to have students within these learning communities to undergo a common intellectual experience in the form of a standard curriculum. It is easy to see the relatedness of these 3 HIPs and how they work together to set students up for success and maintain that empowered state throughout their time at the university.

### **Beyond Teaching and Learning**

An additional way to empower students is by providing resources and opportunities to go beyond the traditional framework of teaching and learning. Which is why the last group of HIPs is the Beyond Teaching and Learning category. These include internships and undergraduate research.

Internships are experiential learning that applies knowledge from the classroom to a real-life practical work setting. The National Association of College and Employers (NACE) is the most common reference utilized for best practices for college internships (<u>NACE, 2018</u>). In their position statement, they include the following criteria needed for an internship:

- Place of internship should be an extension of the classroom
- Skills learned can be used in other settings

- Definitive timeline and job description
- Clear learning objectives and goals to complete
- Supervision by someone with expertise in the field
- Routine feedback
- Resources available to meet above criteria
- Most studies are conducted in specific countries and within specific professional settings which makes it difficult to apply the results to other settings

There must be career services professionals from the college that evaluate each internship for the above criteria on a regular basis (<u>NACE, 2018</u>).

Overall, the benefit of internships is the ability to practice in a real-life setting and to potentially acquire a job either from their practice site or through network connections related to their practice site. Many negative aspects that seem to come from internships are practice site specific, related to clear expectations, adequate time with a mentor, and life issues (transportation/cost of living/etc.) (Maertz et al., 2014).

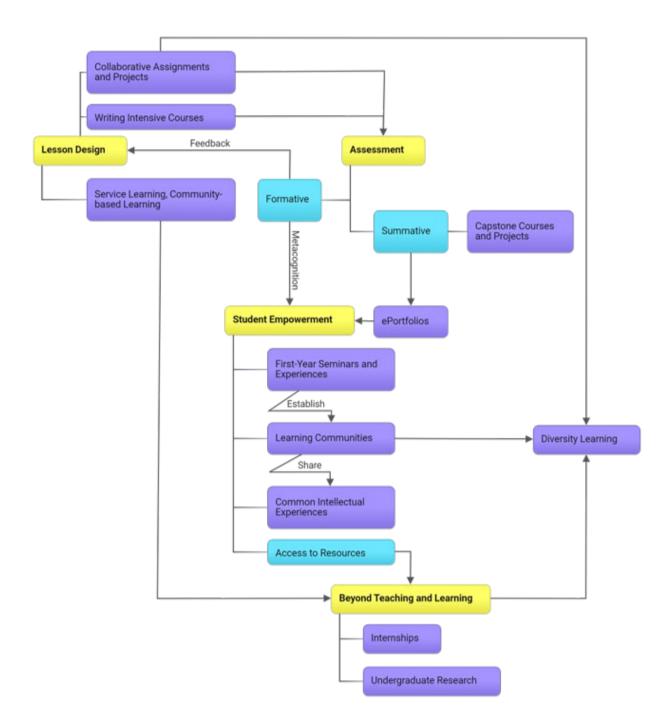
Undergraduate research is a mentored investigation or creative inquiry conducted by undergraduates that seek to make a scholarly or artistic contribution to knowledge (<u>Council on Undergraduate Research, 2021</u>). Undergraduate research in higher learning institutions is considered a high-impact learning method involving a mentor (<u>Lanning & Brown, 2019</u>; <u>Kuh & Kinzie, 2018</u>). Students who participated in undergraduate research experience benefited from data analysis and obtained skills of effective presentation and personal development (<u>Bauer & Bennett, 2003</u>. Students feel engaged because they are exposed to real-world problems, and the results obtained help them with the knowledge related to their subjects of interest. Some major impacts of undergraduate education is that it helps develop long-term relationships with mentors and peers, opportunities for networking, and career guidance. Research can help students decide on a career path, such as graduate school versus a job after undergraduate. Overall, a research-based learning experience supported by mentors helps a student develop a sense of belonging, and allows them to acquire ownership, responsibility, and care for peers, resulting in student well-being (<u>Walkington & Ommering, 2022</u>).

## **Diversity/Global Learning**

Diversity learning is the only practice that did not fall into any of these categories and instead is a core element of many of the HIPs mentioned, including: collaborative assignments and projects, service or community-based learning, learning communities, internships, and undergraduate research.

Diversity/Global learning is the exploration of differences whether locally, within our own nation, or abroad. From that broad spectrum, learning practices can focus on cultural, racial, ethnic, gender, or struggles regarding those differences. While elements like semesters of study abroad and different cultural study courses have traditionally been seen in this niche, recent trends have broadened the appeal and the scope of approaches to learning that deal with diversity both at home and globally(<u>AAC&U</u>).

At the institution level, there is a renewed emphasis and encouragement of providing these types of experiences but application at a course level can be difficult to envision and implement. First, an awareness of the perspectives represented within a course roster can go a long way into providing opportunities to engage those unique viewpoints (AAC&U 2005). Various and diverse perspectives speaking from their own experience of being are better than a third-party description of life from that viewpoint. Second, the recent increased online experience has been both a blessing and a curse as we are more separate and segmented by walls of digital anonymity, but there are more unique and varied perspectives able to come to the table and be heard as well. Opportunities for interaction digitally are critical, and the online experience is limited in not being able to see another person to interact and experience their culture and perspective(Linder, Hayes, Nelson, & Soto). Finally, while some attempts are made at artificial structures that force an individual to see from another's perspective, the better return on investment is when fertile opportunities are provided for those explorations to happen more organically(Diversity/Global Learning).



**Figure 1**. The flowchart establishes a clear connection between all of the 11 high impact practices (purple) by placing them into broad categories (yellow) that highlight a framework for thinking about course design that emphasizes student success and empowerment (central theme). Additional subcategories (blue) were added to clarify relationships between each of the main categories (yellow).

## Implementation Recommendations Based On Faculty Interest

Next, the committee wanted to provide recommendations based around the results of the faculty survey and our investigation into the 11 high impact practices. These include recommendations for both the university as an institution and the teaching staff and faculty that are developing courses and interacting with students.

It is important to start these recommendations off by recognizing the existing barriers of entry to implementing new practices at ULM as perceived by the teaching staff and faculty. As a reminder, 46.27% of the faculty responses from the survey indicated that "time" concerns were a significant barrier of entry for them to implement new teaching practices. Additionally, 22.39% of the responses indicated that a lack of knowledge and resource availability were barriers to implementing new teaching practices. It is our recommendation that ULM should prioritize and support its instructors by providing more access to teaching resources and optional, free training courses to interested staff and faculty. Additionally, there should be a way to incentivise the pursuit of continued education among staff and faculty when it pertains to improving the student experience at ULM. By providing easily accessible resources, the university will cut the amount of time it takes for instructors to learn about new practices or tools they can implement in their course. However, time (and energy) will always be a limited resource, and it is important that instructors value progress over completion. It is neither realistic for an instructor to design a course that requires no further development, nor beneficial to be of the opinion that a course requires no further development. And the same is true when it comes to the development of our teaching knowledge. Therefore, it is imperative that faculty be continually modifying and updating their courses by implementing new teaching practices and updating their existing teaching practices. These changes may not be a linear path, but should be driven by selfreflection and student feedback. Lastly, data has shown that students must have "buy in" for these programs to be successful. This includes appropriate marketing on a school and university level, a clear explanation of the method(s) being utilized and requirements throughout the course or activity, and a set schedule for both during and outside of school hours.

Below is a list of compiled resources for faculty or staff wishing to learn more about the 11 high impact practices:

# It Starts With Freshmen

- **First year experiences** and the establishment of **learning communities** sets the tone of a student's entire undergraduate experience.
  - First year experiences:
    - Different HIPS used in FYE courses
      - <u>https://www.austincollege.edu/wp-content/uploads/2021/03/FYS-as-High-Impact-Practice.pdf</u>
    - Methods of how to make FYEs successful
      - <u>https://www.sunybroome.edu/c/document\_library/get\_file?uuid=09</u> 67c549-1a52-42ea-a9c0-cedcea04efe3&groupId=44157
    - First Year Seminars across Modalities
      - <u>https://instructionalcontinuity.georgetown.edu/pedagogies-and-</u> <u>strategies/first-year-seminars-across-modalities/</u>

- Best Practices for implementing FYEs
  - <u>https://academy.psu.edu/documents/current/policy-proposals/2019/effective\_fys.pdf</u>
- Effects of different HIPS on FYEs
  - <u>https://scholarworks.iu.edu/dspace/bitstream/handle/2022/27205/</u> FYE 2022%20FYS%20HIP%20Qualities Outcomes%20Kinzie% 20and%20Wenger.pdf?sequence=1&isAllowed=y
- After completing the Freshman Year Seminar, the following should have been gained/created: 1) building a community, 2) developing confidence in discussion and participation habits, 3) providing writing practice, 4) receiving and implementing feedback, and 5) establishing strong habits and understanding of what is required of a student and the resources available (<u>Center for New</u> <u>Designs in Instruction and Scholarship</u>).
- For instructors, it is highly suggested that they incorporate the following steps in facilitating the course so that students can achieve the objectives listed above.
  - Constructing a Syllabus
    - Clear and concise syllabus laying out the expectations and requirements as well as support service
  - Teaching The Course:
    - Strategies For Classroom Instruction, Course Assignments, & Student Grading
    - Vary your methods to different styles as not every student is the same
  - Making The Student-Instructor Connection:
    - Building Rapport with Your Class
    - Bonding and mentoring especially when the major fields connect
    - Making The Student-Course (Subject) Connection:
      - Building Student Interest and Involvement in the Course
      - UNIV should be requiring the student to attend events around campus
      - Have mandatory sessions where they listen to someone from Financial Aid or the SSC concerning tutoring and study skills etc.
  - Building Student-Student (Peer) Connections:
    - Developing a Sense of Community among Classmates
    - Have students complete assignments that expand on their culture and have students try to connect how similar they are
    - Have students attend international events to get a better understanding and appreciation for their fellow classmates from outside the US
  - Making The Student-Campus Connection:
    - Designing Out-of-Class Assignments for the FYS
    - This can be mingled in with the above especially when trying to get the student immersed in cultural and general university

knowledge such as Financial Aid which many students find confusing

- Source: <u>https://www.sunybroome.edu/c/document\_library/get\_file?uuid=09</u> <u>67c549-1a52-42ea-a9c0-cedcea04efe3&groupId=44157</u>
- Learning Communities:
  - Definitions and featured resources:
    - <u>https://www.centerforengagedlearning.org/resources/learning</u> -communities/
  - Best Practices document:
    - <u>http://www.jossr.org/wp-content/uploads/2015/10/Learning-</u> <u>Communities-in-Higher-Education-JoSSR-submission-</u> <u>revised-10-26-2015.pdf</u>

# More Than An Expert: Becoming An Expert Designer Of Intellectual Experiences

- Create course outcomes and learning objectives that are meaningful and measurable
- Tailor assignments specifically towards achieving those course outcomes
- Utilize collaborative assignments and projects where possible
  - Ideas for collaborative assignments and projects:
    - https://tltc.umd.edu/instructors/resources/collaborative-learning
    - <u>https://tltc.umd.edu/instructors/teaching-topics/project-based-learning</u>
- Utilize written assignments and instruction where possible.
  - Guidelines for teaching writing intensive courses
  - <u>https://libguides.hofstra.edu/writing\_intensive</u>
  - https://knight.as.cornell.edu/indispensable-reference-fws-instructors
- Create a lesson design that can empower students and go beyond teaching and learning
  - Incorporate feedback aimed at increasing student metacognition
  - Service learning/community based learning implementation ideas
    - Rationale and Outcomes of community based learning. See Appendix B for Community-Based Learning Approaches.
      - <u>Community-Based Learning: Engaging Students for Success and</u> <u>Citizenship</u>
    - Challenges and benefits
      - <u>https://pilots.uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/community-based-learning</u>
    - Best Practices
      - <u>https://www.centerforengagedlearning.org/resources/service-learning/</u>
  - **Diversity learning** implementation ideas
    - An example from Texas A&M University of Lifelong Learning and Integrative Learning Outcomes questions to help guide reflection on

diversity/global learning experiences:

https://sites.google.com/a/tamu.edu/transformative-learning/facilitatinghigh-impact-activities/diversityglobal-learning

- Know your role/position in the **common intellectual experience.** 
  - Examples and expectations
    - <u>https://collegesofdistinction.com/advice/common-intellectual-</u> experiences-engage-outside-of-your-major/
- Using assessment to inform teaching practices
  - Try new things, acquire feedback, and modify teaching practices
    - Assessment by students
      - <u>https://teaching.pitt.edu/resources/assessment-of-teaching-collecting-student-feedback/</u>
    - Assessment by a third party
      - <u>https://teaching.pitt.edu/assessment-of-teaching/</u>
    - Self-assessment
      - <u>https://teaching.pitt.edu/resources/assessment-of-teaching-self-assessment/</u>
  - **Capstone courses** can inform future direction for the whole degree curriculum
    - ULM has several programs that currently require capstone courses for their major including atmospheric sciences (ATMS 3060), construction (CONS 4047), criminal justice (CJUS 4099), English (ENGL 4099), nursing (NURS 4090), pharmacy (PHRD 6001), psychology (PSYC 4099), and social work (SOCW 4022).
    - Types of capstone courses
      - <u>https://education.stateuniversity.com/pages/1812/Capstone-</u> <u>Courses-in-Higher-Education.html</u>
    - Best practices and resources
      - <u>https://registrar.oregonstate.edu/sites/registrar.oregonstate.edu/fil</u> <u>es/additional\_resources\_capstone.pdf</u>

# Student Access To Resources Inside And Outside Of The University

- Posted internship opportunities
  - National Association of Colleges and Employers Organization is the association that publishes the majority of best practices that is references in both primary literature and informational websites
    - Position Statement on U.S. Internships
      - <u>https://www.naceweb.org/about-us/advocacy/position-</u> <u>statements/position-statement-us-internships/</u>
    - Best practices
      - <u>https://www.naceweb.org/talent-acquisition/internships/15-best-practices-for-internship-programs/</u>

- Additional resources available with membership to NACE
- Survey study evaluating best practices in internships
  - <u>https://www.researchgate.net/publication/263338139 Building successful</u> internships Lessons from the research for interns schools and emp loyers
- Posted **Undergraduate research** opportunities
  - Implementation of undergraduate research for first-year students
    - https://pubs.acs.org/doi/full/10.1021/acs.jchemed.1c01065
  - Implementing undergraduate research in social sciences
    - https://www.mdpi.com/2227-7102/9/4/296
  - Different approaches for undergraduate research
    - https://files.eric.ed.gov/fulltext/EJ1093728.pdf
  - Article about particular method-Classroom undergraduate research experience
     https://academic.oup.com/femsle/article/368/6/fnab036/6206862
    - Models used and literature survey
      - https://www.sciencedirect.com/science/article/pii/S088303552200074X
- Posted community service opportunities to facilitate community relationships
- Professional development opportunities
  - ePortfolio help

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- How to create an ePortfolio:
  - <u>https://eportfolio.arizona.edu/how-do-you-do-eportfolios/how-create-eportfolio</u>
- ePortfolio platforms:
  - <u>https://eportfoliohub.ie/wp-</u> content/uploads/2016/08/examples-of-eportfolio-platforms.pdf
- o Job/career fairs
- Resume/CV help

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