

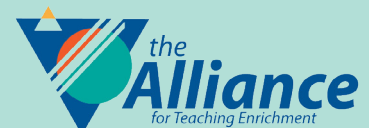
23

ALLIANCE TEACHING SHOWCASE



**WE DIDN'T START THE FIRE...
IGNITING A PASSION FOR LEARNING**

November 2, 2023
The Steel Dynamics Keith E. Busse
Alumni Center



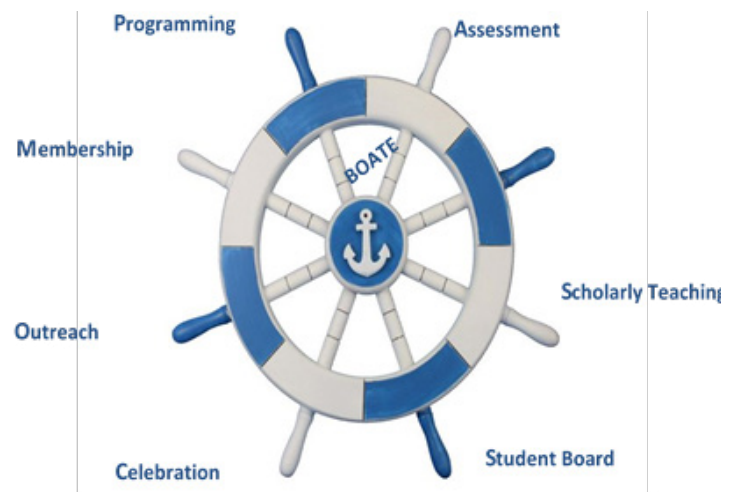
WELCOME ABOARD

MISSION STATEMENT

The Alliance is a community of educators committed to the celebration, development, and elevation of a diverse culture of teaching at Purdue Fort Wayne and in our region. We seek to enrich teaching and learning by fostering a collaborative community to serve faculty, staff, and students dedicated to the pursuit of authentic learning. The Alliance promotes creativity, boldness, enjoyment, and growth as pathways to excellence in teaching and learning.

VALUES

- Collaboration
- Boldness
- Diversity and inclusion
- Enjoyment
- Meaningful work
- Mutual service and support
- Creativity
- Organizational Structure



POSTERS & HANDOUTS 4:30 - 5:00 PM

* indicates handout only ** indicates poster and handout

1. **Collaboration - Dr. Yvonne Zubovic (FACET), Dr. Deb Huffman (FACET Leadership Institute), Adam Dircksen (CELT), Dr. Becca Essig (Alliance Student Team), Dr. Beth Christian (Alliance Outreach Team), Dr. Jane Leatherman (Alliance Scholarly Teaching Team): 2023-2024 Collaboration of Alliance, CELT, & FACET: Understanding the Impact of AI**

Purdue University Fort Wayne and Indiana University Fort Wayne are fortunate to have three organizations on campus dedicated to supporting teaching excellence: The Alliance for Teaching Enrichment (Alliance), The Center for the Enhancement of Learning and Teaching (CELT), and the Faculty Academy on Excellence in Teaching (FACET). For the 2023-2024 academic year, these organizations formed a collaboration around the theme of understanding the impact of AI in the classroom and in our students' future careers. This poster presentation highlights this collaborative effort including a brief explanation of each project.

2. **Dr. Rebecca Essig: Outdated Relic or Timeless Treasure: Investigating the effectiveness of traditional office hours**

Most universities mandate that instructors schedule and hold weekly office hours to encourage faculty-student interactions. Researchers and educators universally agree that students benefit from using office hours. However, the traditional office hours model was developed before communication support resources like email, instant messaging, and virtual meetings. After decades of most instructors using the same traditional office hours model, it is time to evaluate whether instructors and students would benefit from a modified office hours approach. This poster discusses the effectiveness of the traditional office hours format, which is the topic I will investigate during my sabbatical spring 2024. This project is a work-in-progress and focuses on the initial results after converting first-year engineering course office hours to a group, collaborative format instead of the traditional one-on-one.

3. **Collaboration - Dr. Kristin Bassett, Dr. Maria Hines, Dr. Tara Grier, Cara Walker: Incorporating the Neuman Systems Model in BSN Education to Improve Wholistic Assessments****

Purpose: To use the Neuman Systems Model (NSM) as a framework for developing wholistic assessments.

Problem: At the foundation of client-centered care is the need for a wholistic approach to client assessments. While nursing education has recognized and addressed this for some time, additional attention is necessary to shift nursing care from a biomedical practice model to a more wholistic one (Cordeau, 2022). Moreover, certain dimensions of wholistic care, such

as spiritual care, are often neglected, leading to practice gaps (Ali et al., 2018). As healthcare progresses to become more client-centered (Sinaiko et al., 2019), nursing education must reexamine the curriculum to integrate learning activities that develop students' ability to view clients holistically and determine integrative care approaches. In a new call to action, the American Association of Colleges of Nursing Essentials recognized the critical role theory plays in developing nursing knowledge and identified the need for preparing nursing faculty to incorporate theory into nursing programs (Gill & Wicks, 2023).

Intervention: The NSM is comprehensive, holistic, and focuses on wellness (Petiprin, 2020). The model is well-grounded in research, aligns with other disciplines, and emphasizes prevention interventions to uphold patients' movement toward wellness (Beckman & Fawcett, 2020). In three courses across the curriculum, students were given an overview of the NSM and were required to apply their learning through classroom activities. Students completed a survey evaluating their knowledge, perception, and confidence using the model as a framework.

Outcomes: Overall increase in knowledge, perception, and confidence using the NSM model.

Conclusion: Using the NSM to teach a holistic approach to client assessment helps nursing students understand their client on a deeper level. Students can find the root cause of the client's problems, rather than narrowly focusing on the client's chief complaint. Students can reflect on all current and potential stressors that impact their client's health and consider the primary, secondary, and tertiary prevention measures. This holistic approach, helps students identify all possible disciplines that should be involved in their client's care and the essential role that each discipline must assume to give the client the best possible outcome.

References

- Ali, Gulnar, Snowden, Michael, Wattis, John and Rogers, Melanie. (2018). Spirituality in nursing education: knowledge and practice gaps. *International Journal of Multidisciplinary Comparative Studies*, 5(1-3). 27-49. ISSN 2059-4976
- Beckman, S., & Fawcett, J. (2020). Chapter 11: Betty Neuman's systems model. In M. C. Smith & D. L. Gullett (Eds.), *Nursing theories and nursing practice* (5th ed., pp. 165-181). Philadelphia, PA: F. A Davis Company.
- Cordeau, M. A. (2022). Nursing history and the evolution of holistic nursing. In M. A. Blaszko Helming, D. A. Shields, K. M. Avino, & W. E. Rosa (Eds.), *Holistic nursing: A handbook for practice* (8th ed., pp. 3-22). Burlington, MA: Jones & Bartlett Learning.
- Gill, M. E., & Wicks, M. N. (2023). A call to action for preparing nursing faculty to teach nursing theory. *Journal of Nursing Education*, 62(4), 191-192.
- Petiprin, A. (2020). Neuman's Systems Model. *Nursing Theory*. <https://nursing-theory.org/theories-and-models/neuman-systems-model.php>
- Sinaiko, A.D., Szumigalski, K., Eastman, D., and Chien, A.T. (2019, August). Delivery of patient-centered care in the U.S. health care system: What is standing in its way? *AcademyHealth*. https://academyhealth.org/sites/default/files/deliverypatientcenteredcare_august2019.pdf

4. Dr. Claudio Freitas: Innovations in Teaching Introductory Programming in the Age of AI

Engineering Fundamentals II (ENGR128) at Purdue University Fort Wayne is a 4-credit course that covers logical reasoning, engineering design, and introductory programming. This presentation highlights updates to the course, introducing a Flipped Model, an Online Platform, and a new interactive textbook to enhance learning and collaboration in the age of AI in higher education.

5. Dr. Sam Koudsia: Active Learning and Student Engagement

Facilitation of learning is where the student leads the learning by facilitating a session on book chapters; the facilitator and participants engage in the learning process through active learning. Educators incorporate facilitation of learning to (a) ensure active learning exists, (b) enhance student engagement, and (c) champion student agency, which refers to the students being in charge of their own learning. The important work of Archer and Hughes (2011) indicated that engaging students in the classroom and allocating sufficient amounts of time for engagement impact student learning positively; additionally, learning increases when the learners are engaged and thriving. This showcase will introduce facilitation of learning and discuss how faculty could apply this technique to their classrooms.

6. Collaboration - Scholarlily Teaching Team of Teaching Alliance, Dr. Jane Leatherman, Dr. Rachel Ramsey, Farah Combs, Worth Weller, Dr. Laurel Campbell, Shannon Johnson: PFW Faculty Members Perspectives and Needs**

This poster session present results from the survey developed by the Scholarlily Teaching Team of Teaching Alliance, Faculty Survey about Course Writing Assignments. During spring 2023 we sent a 10-question survey to the faculty of PFW and IUFW. We received 102 responses to survey. Preliminary results display the most pertinent data. The data is supported by a QR code inked to possible resources. The Scholarlily Teaching team will be on hand to share the results and solicit information about how the Team can assist faculty with issues of writing assignments.

7. Dr. Melanie Gall - Evidence-Based Protocols Used to Ignite Active Learning in Nursing

After completing the project work required to obtain a terminal degree, educators may wonder how to apply their research in the classroom. There is growing support that active learning strategies create a deeper level of information processing than passively listening to a lecture (Bristol et al., 2019). Standardized protocols and specific skills are prioritized to effectively care for critical patients (Conceição et al., 2019). For the author's DNP project, an evidence-based protocol for the Extracorporeal Membrane Oxygenation (ECMO) patient population was implemented. Patient mortality, sedation levels, and nutrition improved after protocol implementation. Using this information, an active learning assignment has been created for nursing students to discover a protocol that relates to their patient(s) in clinical. Nursing students will investigate and report back to their clinical group in post-conference on the protocol's

necessity, compliance, and any areas for improvement. This active learning strategy hopes to create a stronger sense of community between faculty and students and cultivate a higher level of critical thinking skills (Bristol et al., 2019).

8. **Dr. Jeong il Cho: Active Learning and Positive Learning Environment Using Response Card Review Game (Handout)***
9. **Center for the Enhancement of Learning and Teaching (CELT): (Handout)***

PRESENTATION 5:00 - 6:15 PM

1. **Dr. Claudio Freitas: Innovations in Teaching Introductory Programming in the Age of AI**
2. **Dr. Jeong il Cho: Active Learning and Positive Learning Environment Using Response Card Review Game [Demo]**

An in-class low tech/no tech assessment tool I regularly use to monitor student learning is the Response Card Review Game. In this short teaching demonstration, participants (students) will experience a fun, rewarding, non-threatening, and collaborative review game that encourages the participation of all students. Each student receives one dry-erase board and one marker. On one corner of the board, they write down 5 numbers (1 to 100) and 3 rainbow colors and keep them unchanged throughout the game. The game uses PowerPoint slides with sound and visual effects. Following prompts, students write answers on their boards. They need to hold up the board and show the answers following my verbal prompt, "Show me the board!" One important rule is that 'Students shop around, look around, whisper, and help each other to find the right answer for each prompt, but should not yell out the answer in order to give all participants some time to think.' Once all raise their board, the slide shows the answer along with numbers/colors. Those students who have the right answer and matching numbers/colors receive coupons. Volunteers distribute coupons while participating in the game. Students write their names on coupons for the raffle. A coupon in the raffle bag is drawn and the owner of the coupon receives a "Free Exam Question Pass."

3. **Dr. Sam Koudsia: Active Learning and Student Engagement**

PRESENTATION & CONVERSATION WITH AWARD WINNING TEACHERS 6:30 - 7:30 PM

4. **CELT**

5. **FACET**

AWARD WINNING TEACHERS

1. **Dr. Nodir Adilov**

Outstanding Research Award - The recipient of the Outstanding Research Award is a tenured, full-time faculty member at Purdue University Fort Wayne. This award includes a \$2,500 stipend and special recognition from the campus community.

2. **Dr. John Egger**

Leeproxy Plastics, Inc. Award for Excellence in Undergraduate Teaching - The recipient of the Leeproxy Plastics, Inc. Award for Excellence in Undergraduate Teaching is a faculty member at Purdue University Fort Wayne. This award includes a \$1,000 stipend and special recognition at the CELT Teaching Conference.

3. **Teri Hogg**

Excellence in Online or Hybrid Teaching Award - The recipient of this award is a full or part-time instructor at Purdue University Fort Wayne. The award includes a \$1,000 stipend and special recognition at the CELT Teaching Conference.

4. **Dr. William Sauerland**

Excellence in Research (Featured Faculty) - The recipient of the Purdue Fort Wayne Faculty Award for Research is a full-time faculty member at Purdue University Fort Wayne. This award includes a \$1,000 stipend and special recognition from the campus community.

5. **Dr. Julia Smith**

Excellence in Engagement (Featured Faculty) - The recipient of the Purdue Fort Wayne Faculty Award for Research is a full-time faculty member at Purdue University Fort Wayne. This award includes a \$1,000 stipend and special recognition from the campus community.

*NOTE: Special thanks to Dr. Besty Berry and Prof. Kent Kauffman
for moderating our award-winning panel discussion.*

POSTERS



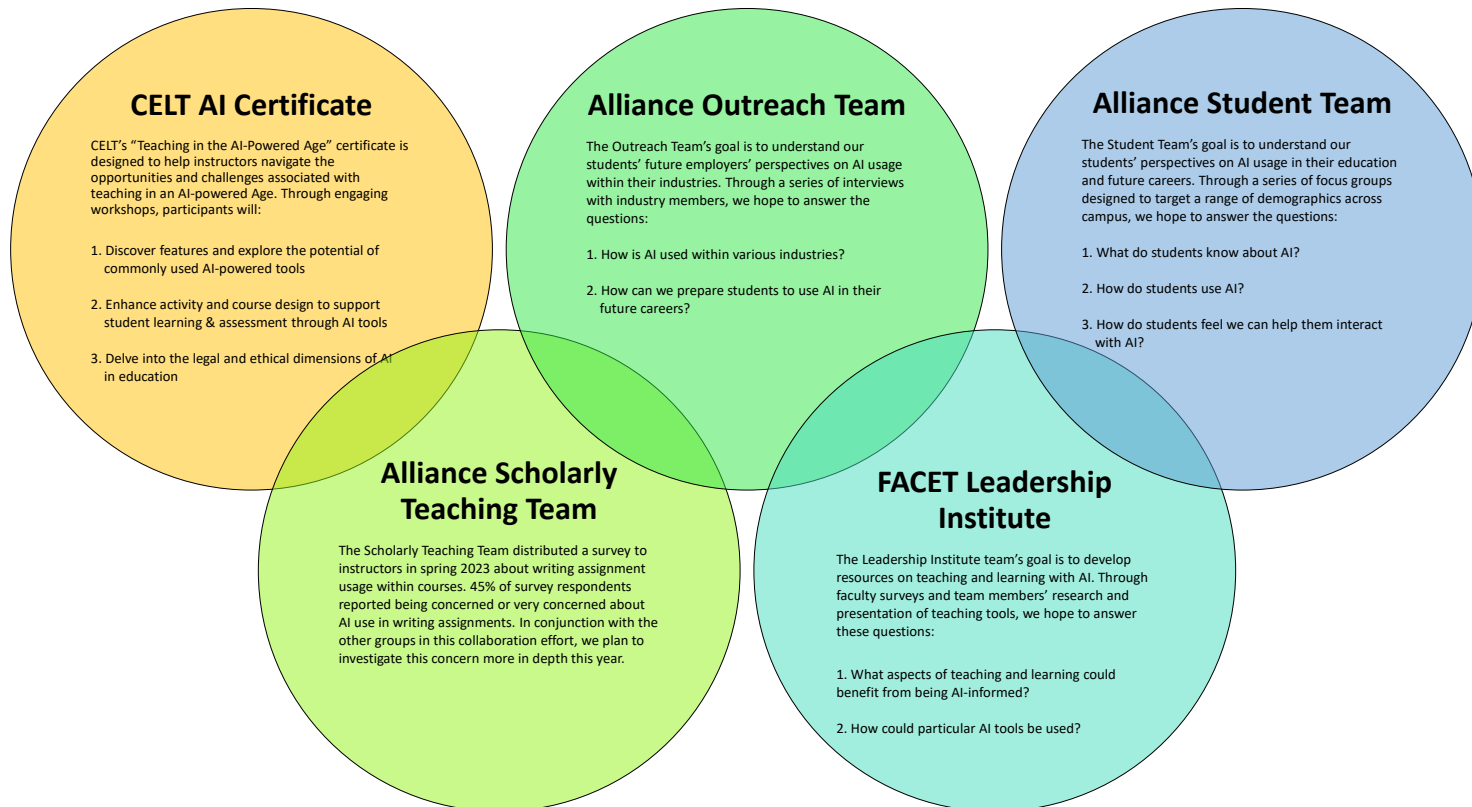
Understanding the Impact of AI

A Year-Long Collaborative Effort of Alliance, CELT, & FACET



Overview

Purdue University Fort Wayne and Indiana University Fort Wayne are fortunate to have three organizations on campus dedicated to supporting teaching excellence: The Alliance for Teaching Enrichment (Alliance), The Center for the Enhancement of Learning and Teaching (CELT), and the Faculty Academy on Excellence in Teaching (FACET). For the 2023-2024 academic year, these organizations formed a collaboration around the theme of understanding the impact of AI in the classroom and in our students' future careers. There are five projects within the collaboration, each led by a different organization or subcommittee including CELT, the Alliance Outreach Team, the Alliance Student Team, the Alliance Scholarly Teaching Team, and the FACET Leadership Institute. Each group developed a project idea with the goal of supporting the CELT certificate "Teaching in the AI-Powered Age," and each project is in its initial planning and implementation stages. Brief explanations of the projects are outlined below.



Outdated Relic or Timeless Treasure?

Investigating the effectiveness of traditional office hours by Rebecca Essig, Ph.D.

PROJECT INTRODUCTION

Increasing retention of students is a constant goal for universities. There are many factors believed to influence student retention. Some are outside the purview of the university such as family support, a student's minority status, socio-economic status, etc. [1]. However, other areas such as a student's usage of campus help resources [2] [3] and a student's relationships with other students and faculty [1] are addressable. Most universities mandate instructors schedule and hold weekly office hours with the intention of encouraging faculty-student interactions. A pilot study from Essig et al in 2018 showed a noticeable increase in exam performance and retention when students were assigned to attend any office hours as a course assignment [4]. However, despite it potentially improving student success [5], instructors often lament that their office hours are underutilized and scheduling them can feel more like just checking a box instead of offering a helpful tool.

With educators and researchers agreeing that office hours can greatly benefit students (if they use them), the question becomes **what can we do to encourage students to attend?** The traditional office hours model has been used for decades with minimal modifications. **Is there a way to adapt the structure of office hours to increase student utilization while also respecting instructors' time and workload?**

[1] L. Thomas, "Student retention in higher education: the role of institutional habits," *Journal of Education Policy*, vol. 4, pp. 23-442, 2002.
 [2] V. Timko, "Research and practice of student retention: What next?," *Journal of College Student Retention: Research, Theory, & Practice*, vol. 8, pp. 1-19, 2006.
 [3] G. Cradock, M. Magrory and L. Thomas, "Improving student retention in high education: Improving teaching and learning," *Australian Universities' Review*, vol. 31, p. 9, 2009.
 [4] R. Essig, K. O'Connor, S. Moor and S. Thomas, "Encouraging First-Year Engineering Retention through Course Help and Campus Community Engagement," in *First-Year Engineering Experience Conference*, Glasgow, New Jersey, 2018.
 [5] G. D. Kuh, J. Kinzie, J. N. Schuh and E. J. Whitt, *Student success in college: Creating conditions that matter*, John Wiley & Sons, 2011.



WHY I DITCHED TRADITIONAL OFFICE HOURS

- Knocking on a professor's door can be very intimidating no matter how friendly or welcoming they are.
 - This can be especially true for students from underrepresented groups.
 - All it takes is one experience that the student perceives as a little negative to make them hesitant to ever try it again.
- Many students feel they did not understand how to "correctly" use office hours.
 - Some students admit to not really knowing what the purpose of office hours are and that they are embarrassed to ask their instructors.
 - Students feel they can only go to office hours if they have a really important question because they are afraid of wasting their instructor's time.
- Engineering is a highly collaborative field, and it is important for students to learn how to work with colleagues as early as possible.
 - I want to encourage my students to get know each other outside of the classroom and become comfortable asking each other for help.
 - I want to create an informal setting for students to get to know me and for me to get to know them.
- Students have widely varying schedules, and it is impossible to find a small window each week that everyone has the ability to come to.

HOW I DITCHED TRADITIONAL OFFICE HOURS

Target Course: I teach and coordinate Engineering Fundamentals I (ENGR 127) each semester. ENGR 127 has a typical fall enrollment of 100-144 students and is a required course for all first-year engineering students at PFW. There are typically six sections of the course that meet four times a week, and there are usually five instructors who teach the different components.

Open Office Hours: At the beginning of the semester, the ENGR 127 instructors coordinate their schedules so that we are able to offer continuous office hours from 10am-8pm Wednesday and Noon-4pm Thursday each week. We moved the office hours out of our individual offices and hold them in a small meeting room near the engineering departments. We call these sessions "Open Office Hours," and students are encouraged to stop in during any time to ask questions, work on any of their homework, or talk to the instructor. In the traditional model, each instructor would individually hold a maximum of 6 hours per week and students would only have access to their one instructor. In the open office hours model, individual instructors staffed a maximum of 3 hours per week and students had access to 14 hours of help.

Benefits

- More timing options for students
- Less intimidating for students
- Less time commitment per individual instructor

Limitations

- Space availability
- Resistance to change
- Instructor scheduling conflicts

Did it work? We definitely think so. During the fall 2022 semester, there were 109 students registered for ENGR 127. Students signed into open office hours 129 times throughout the semester. Signing in was not required, so this number may be lower than what actually occurred. Of those 129 visits, 80% lasted more than an hour. Students used the time to work on homework for a variety of classes and talk with instructors about engineering majors and careers and their own experience as an engineering student.

SHOULD EVERYONE DITCH TRADITIONAL OFFICE HOURS?

Honestly, I don't know yet. For my sabbatical project in spring 2024, I will study the effectiveness of office hours by evaluating usage data and surveying faculty and students. The results of this analysis will be used to develop recommendations and modifications to try to maximize student benefit while minimizing demands on instructors. My project has the following research questions:

- How and how frequently are students using office hours?
- What are students' perceptions of the purpose and usefulness of office hours?
- What structure of office hours are instructors offering?
- What are instructors' perceptions of the purpose and usefulness of office hours?
- What structure of office hours would maximize student and instructor benefit?

For this project, the target demographic will be instructors of 100-level and 300-level courses and first-year and third-year students.

Should we all abandon traditional office hours? Should everyone adopt open office hours? Or online office hours? Or be available via texting 24/7? Probably not. The optimal solution is probably a mixture that will depend on the instructor and course and will change as our students change. But hopefully the results of this study will help instructors and administrators make better informed decisions and policies.





Incorporating the Neuman Systems Model in BSN Education to Improve Wholistic Assessments

Kristin Bassett, DNP, RN, CNE, EBP-C; Maria Hines, DNP, CNE, CCRN-K; Tara Grier, DNP, RN, CNE; & Cara Walker, MSN, WHNP-BC, RN, CNE

Purpose

To use the Neuman Systems Model (NSM) as a framework to develop wholistic assessments.

Background

At the foundation of client-centered care is the need for a wholistic approach to client assessments. While nursing education has recognized and addressed this for some time, additional attention is necessary to shift nursing care from a biomedical practice model to a more wholistic one (Cordeau, 2022). Moreover, certain dimensions of wholistic care, such as spiritual care, are often neglected, leading to practice gaps (Ali et al., 2018). As healthcare progresses to become more client-centered (Sinaiko et al., 2019), nursing education must reexamine the curriculum to integrate learning activities that develop students' ability to view clients wholistically and determine integrative care approaches. In a new call to action, the American Association of Colleges of Nursing Essentials recognized the critical role theory plays in developing nursing knowledge and identified the need for preparing nursing faculty to incorporate theory into nursing programs (Gill & Wicks, 2023).

Objectives

1. Integrate Nursing Theory consistently throughout the BSN curriculum.
2. Examine student perceptions of the effectiveness of Neuman's theory to facilitate wholistic client assessments.
3. Determine effective learning activities to apply the NSM as a framework.

Intervention

In 3 courses:

1. Lecture providing an overview of NSM
2. Activities were provided to apply learning
 - Semester 3: Motivational Interviewing with Role Playing
 - Semester 5: Case Study
 - Semester 6: Simulation
3. Survey evaluating knowledge, perception, and confidence using the model as a framework

Methods

Design: Mixed-Methods, Quasi-Experimental Pilot Study

Sample: Convenience sample of BSN student nurses (n=190) enrolled in their sophomore and junior year of the nursing program.

Variables: Participant demographics, perceptions of nursing theory, nursing knowledge, clinical practice experience, previous exposure to NSM,

Instrument:

- Investigator-developed Survey with Likert-Scale, Multiple Choice, and open-ended descriptive analysis questions.

Findings

Student Self-Perception

- Increase in Ability to Apply to Self: 89.5% – “Strongly Agree” or “Somewhat Agree”
- Increase in Confidence: 87% – “Strongly Agree” or “Somewhat Agree”
- Benefits of Nursing Theory: 90% – “Strongly Agree” or “Somewhat Agree”
- Increase in Knowledge: 2% – No Change; Majority 3 points or more

Multiple Choice Knowledge (75% benchmark)

- 3 Types of “Preventions as Interventions” – 89.5%
- Environments & Stressors – 73%
- Wholistic Variables – 43.55
- Concepts of a Nursing Metaparadigm – 24%

Themes

Application to Self	Application to Clinical Practice
<ul style="list-style-type: none"> • Self-Awareness • Focus on Self-Care • Ability to Identify Own Stressors and Interventions 	<ul style="list-style-type: none"> • Empathy • Wholistic Care • Patient-Centered Care • Communication – Active Listening, Asking Open-Ended Questions • Assessment • Root Cause & better understand our clients • Ability to Identify Client Stressors

Conclusions

Using the NSM to teach a wholistic approach to client assessment helps nursing students understand their client on a deeper level. Students can find the root cause of the client's problems, rather than narrowly focusing on the client's chief complaint. Students can reflect on all current and potential stressors that impact their client's health and consider the primary, secondary, and tertiary prevention measures. This wholistic approach, helps students identify all possible disciplines that should be involved in their client's care and the essential role that each discipline must assume to give the client the best possible outcome.

Recommendations

Research

- Innovative Activities to Apply Nursing Theory
- Faculty Perception of Nursing Theory
- Faculty Development

Education

- Faculty Education on the Value of Nursing Theory
- Coach Faculty on How to Effectively Integrate Nursing Theory into the Academic Setting

Practice

- Use of NSM to Perform a Wholistic, Patient-Care Assessment
- Integrative Care Interventions
- Continuing Education to Apply in Practice

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1. Ali, Gulnar, Snowden, Michael, Wattis, John and Rogers, Melanie. (2018). Spirituality in nursing education: Knowledge and practice gaps. *International Journal of Multidisciplinary Comparative Studies*, 5(1-3), 27-49. ISSN 2059-4976
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3. Cordeau, M. A. (2022). Nursing history and the evolution of holistic nursing. In M. A. Blaszkowski, D. A. Shields, K. M. Avino, & W. E. Rosa (Eds.), *Holistic nursing: A handbook for practice* (8th ed., pp. 3-22). Burlington, MA: Jones & Bartlett Learning.
4. Gill, M. E., & Wicks, M. N. (2023). A call to action for preparing nursing faculty to teach nursing theory. *Journal of Nursing Education*, 62(4), 191-192. 20230427120311391341448
5. Petiprin, A. (2020). Neuman's Systems Model. *Nursing Theory*: <https://nursing-theory.org/theories-and-models/neuman-systems-model.php>
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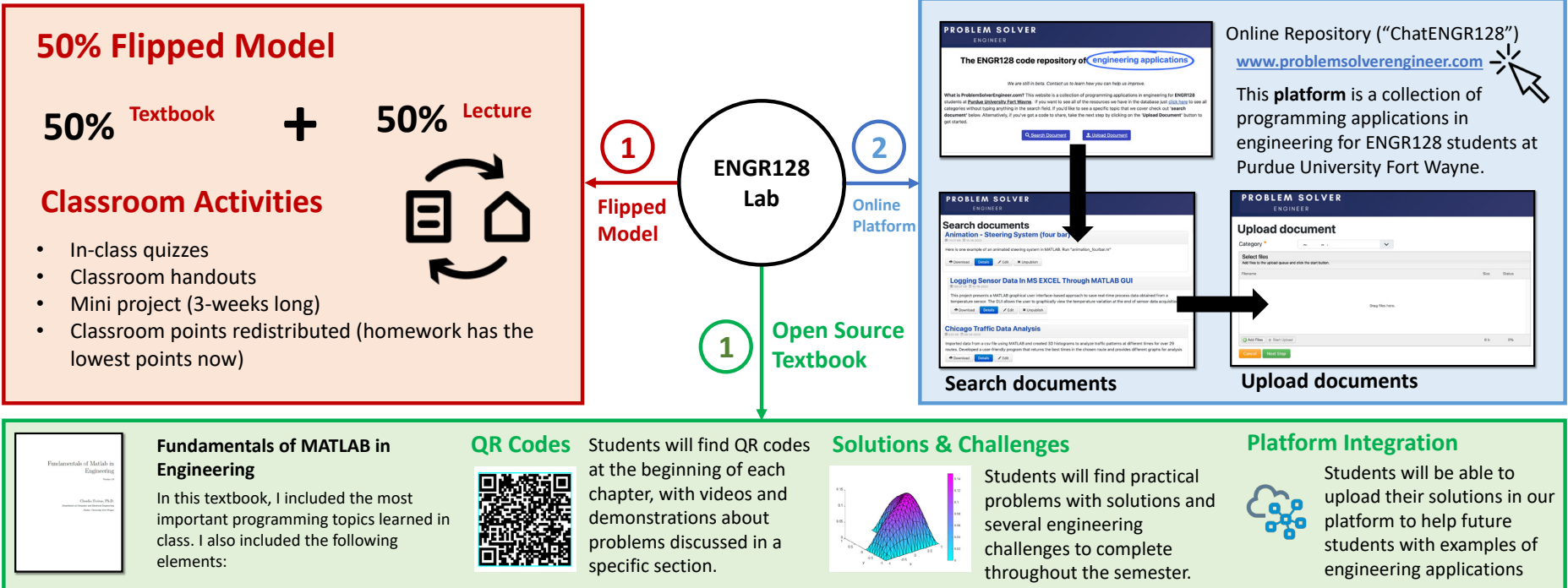


SCHOOL OF
NURSING
Indiana University

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Sarah Beckman, MSN, RN, Professor Emerita Purdue University, Neuman Trustee
Indiana University, School of Nursing Fort Wayne Faculty

Presentation Summary

Engineering Fundamentals II (ENGR128) is a 4-credit course offered to engineering students at Purdue University Fort Wayne (PFW). This course explores logical reasoning, applying mathematical principles to engineering, and computational thinking. The course is structured into three components: lectures, studios, and labs. During lectures, students grasp engineering theories and the use of mathematical concepts. In studios, the focus is on the engineering design process. Meanwhile, in labs, students take an introductory programming class to familiarize themselves with computational tools essential for resolving engineering challenges. **In this presentation, I will highlight the pedagogical changes introduced in the lab: Flipped Model, Online Platform, and Textbook.**





Writing Assignments: PFW Faculty Members' Perspectives and Needs

Jane Leatherman (Team Captain), Laurel Campbell, Farah Combs, Shannon Johnson, Rachel Ramsey, and Worth Weller.

Background

PFW faculty were surveyed about their use of, approaches to, and challenges with writing assignments.

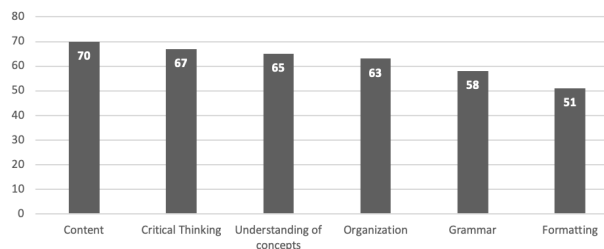
Of 105 respondents, > 90% used writing assignments in at least one course. Respondents reported a range of challenges and support needs.

Members of the Alliance's Scholarly Teaching Team analyzed faculty responses to identify and compile existing internal resources that can address common challenges.

Common Challenges

1. Helping students meet expectations
2. Preventing and identifying plagiarism
3. Providing effective feedback
4. Specifying grading criteria
5. Providing clear instructions

Common Evaluation Criteria



The most commonly evaluated aspects of writing were content, critical thinking, understanding, organization, grammar, and formatting.

Support Resources

The most preferred method of support was online resources.

A directory of existing resources was developed to help faculty conveniently identify and locate tools that can help them tackle the most common challenges associated with their writing assignments.



<https://tinyurl.com/Alliance-Writing-Assignments>



Evidence-Based Protocols Used to Ignite Active Learning in Nursing

Melanie L. Gall DNP, RN, CCRN

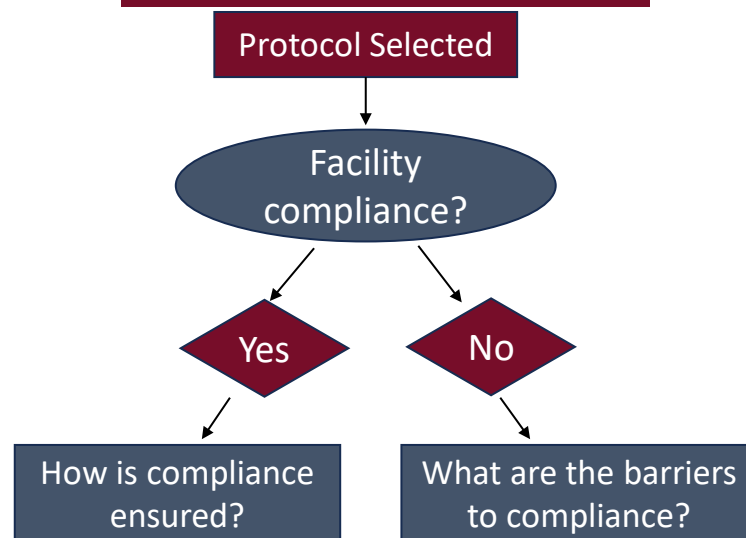
INFORMATION

- After completing the project work required for a terminal degree, faculty may wonder how to apply their research in the classroom.
- Evidence-based practice (EBP) in nursing involves providing holistic, quality care based on the most up-to-date research and knowledge (ANA, n.d.)
- A Nurse Faculty DNP student created and implemented an evidence-based practice protocol.
- The EBP implemented improved patient outcomes.
- Standardized protocols and specific skills are prioritized to effectively care for critical patients (Conceição et al., 2019).
- Active learning strategies incorporated in a partial or entirely flipped-classroom model can improve critical thinking skills in life science students (Styers et al., 2018).
- Active learning strategies create a deeper level of information processing than passively listening to a lecture (Bristol et al., 2019).

OBJECTIVES

- Create an active learning assignment that uses ideas from nurse faculty research projects. (i.e., EBP protocols)
- To develop a stronger sense of community between faculty and students and cultivate higher critical thinking skills (Bristol et al., 2019).

DECISION TREE



References:

- American Nurses Association (n.d.). *What is evidence-based practice in nursing?* <https://www.nursingworld.org/practice-policy/nursing-excellence/evidence-based-practice-in-nursing>
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STUDENT INSTRUCTIONS

- Select an EBP protocol that aligns with your assigned patient.
- List the elements of the protocol and describe how this protocol meets the needs of your patient.
- State the benefits of using the selected protocol.
- Complete the decision tree with your information on your protocol and facility compliance.
- List ways compliance can be improved (if needed) – these methods need to be evidenced based.
- Present your findings to your clinical group and instructor.

Next Steps:

- Gain IRB approval to gather student data.
- Create a quantitative survey to evaluate student knowledge pre/post-assignment
- Create a qualitative evaluation tool to assess student learning (i.e., reflection assignment).
- Prepare publication using a mixed methods approach.
- Disseminate findings.

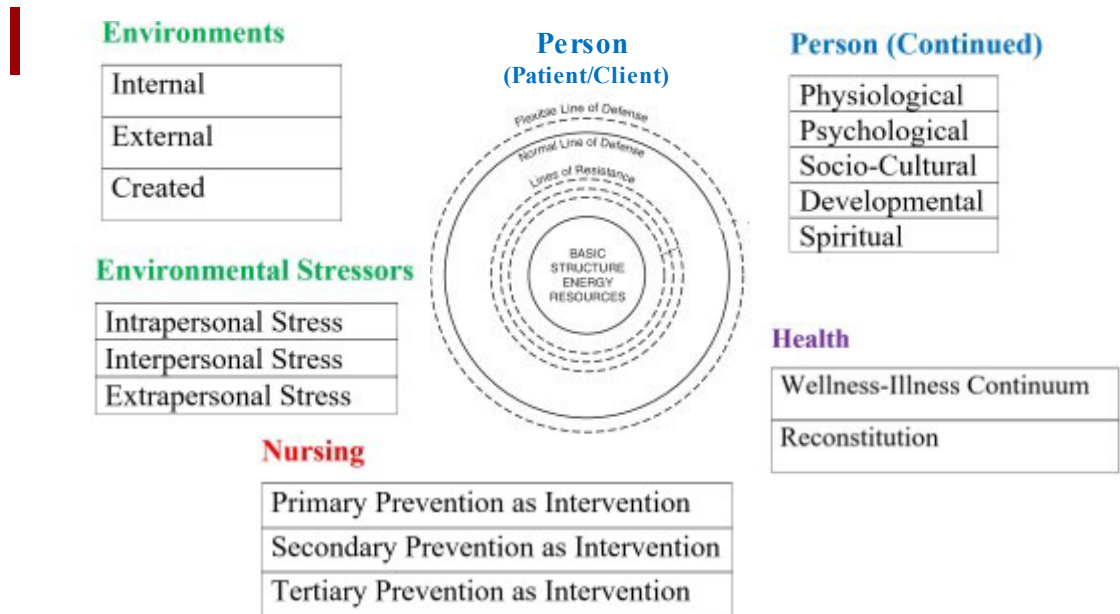


INDIANA UNIVERSITY
SCHOOL OF NURSING

HANDOUTS

Dr. Rebecca Essig: Outdated Relic or Timeless Treasure: Investigating the effectiveness of traditional office hours

Neuman Systems Model



Adapted by Sarah Beckman for education; Graphic design by Maria Hines

Writing Assignments: PFW Faculty Members Perspectives and Needs

Spring 2023 Survey data collected by the Scholarly Teaching Team: Jane Leatherman (Team Captain), Laurel Campbell, Farah Combs, Shannon Johnson, Rachel Ramsey, Worth Weller

The areas below represent the most common challenges faculty reported regarding the use of writing assignments in their courses.

The associated resources are a sample of a more comprehensive list of recommendations for addressing these challenges. Instead, they highlight the existing resources from trusted internal sources (i.e., CELT and Helmke Library) that are already available to PFW faculty.

Challenge 1: Help Students Understand and Meet Expectations

- **Provide clear guidance:** Make sure the assignment instructions include clear and detailed information about what you expect from students and their written work. Use this [sample assignment template](#) for inspiration and guidance on what to include.

Challenge 2: Prevent and Identify Plagiarism

- **Understand plagiarism:** Review the Helmke Library guide on “[What is Plagiarism](#)” to understand the meaning of plagiarism, along with its incidence, causes, and prevention strategies.

Challenge 3: Provide Feedback

- **Get tips on meaningful feedback:** Visit [CELT’s Assessment page](#) for information about making the most of your feedback.

Challenge 4: Specify Grading Criteria

- **Try a rubric:** Drafting a rubric can help you clarify for yourself and students how the writing assignment will be evaluated. Scroll to the bottom of [CELT’s Assessment page](#) to view information about the benefits of rubrics, and a guide for developing your own.

Challenge 5: Provide Clear Instructions

- **Try a Template:** Use this [sample assignment template](#) for inspiration and guidance on what to include in your assignment instructions.
- **Get Feedback:** [Book a Consultation](#) with the CELT Consultants to get feedback about the assignment instructions.

Challenge 6: Address AI

- **Outline your AI policy:** Visit CELT’s [Teaching in the Age of AI](#) page for example AI policy statements.
- **Learn how AI can benefit teaching and learning:** Explore the challenges and opportunities of AI through CELT’s [Teaching in the AI-Powered Age workshops](#).

Below is a sampling of PFW Faculty listed as Searchable data base of PFW Faculty scholarly publications

Cousik, Rama, Poetry across the Curriculum: New Methods of Writing Intensive Pedagogy for U.S. Community College and Undergraduate Education: A Book Review The Qualitative Report

Dehr, Karol A, Writing Partnerships: Theory into Practice.” Scholarlypartnershipsedu

Johnson, Shannon F Before You Write: Six Keys to Success--A Pilot Online Information Literacy Course for Graduate Nursing Students, Indiana Libraries

Lee, Cheu-jey G., Two plus four dimensions of critical literacy, Educational Philosophy and Theory

Lee, Cheu-jey G., A critical analysis of the four dimensions of critical literacy, Journal of Educational Thought

Maloney, David P, Teaching Critical Thinking: Sense-Making, Explanations, Language and Habits, The Physics Teacher

Marshall, Ann M., “That background knowledge”: What junior and senior undergraduate transfer students need from their libraries, The Journal of Academic Librarianship

Rodesiler, Lucas, Preparing pre-service English teachers for participatory online professional development, English Education

Weller, Worth H, Online Library Instruction for Distance Students: An Update on Librarian-Instructor Collaboration at IPFW, Journal of the Indiana Library Federation & the Indiana State Library

A directory of existing resources was developed to help faculty conveniently identify and locate tools that can help them tackle the most common challenges associated with their writing assignments.

<https://tinyurl.com/Alliance-Writing-Assignments>

Teaching in the AI-Powered Age

CELT Certificate

This certificate is designed to help instructors navigate the opportunities and challenges associated with teaching in an AI-powered Age. Through engaging workshops, participants will:

1. Discover features of commonly used AI-powered tools
2. Explore the potential of AI
3. Enhance activity and course design to support student learning and assessment through AI tools
4. Delve into the legal and ethical dimensions of AI in education

Workshops are offered through both the Fall and Spring semesters, and include:

- Introduction to AI-powered Learning Tools in Higher Education
- Will ChatGPT Pass My Assignments & Tests (Writing focused)
- Will Chat GPT Pass my Assignments & Tests (Coding & computing focused)
- Enhance Students' Writing Skills with AI-Powered Tools
- Potential Technical and Legal Considerations when Teaching in AI-Powered Age
- Leverage AI-Powered Tools to Support Student Learning
- Use Classroom Action Research to Assess and Inform Your AI-Informed Teaching

To indicate interest in this CELT certificate (others), complete the form found at the QR code. Once signed up, you will receive updates on your certificate progress as well as remaining workshops (with registration links) that will count towards your certificate:



If you need more AI workshop time options, we will be adding some additional workshops to our Spring offerings. Please help us determine the best days/times by completing the short survey at:



CELT Teaching Fellows

If you would like confidential support to enhance your teaching in face-to-face, online, or hybrid settings, our Teaching Fellows are ready to help! CELT Teaching Fellows are experienced and respected Purdue Fort Wayne faculty who have been trained to provide collegial, formative teaching consultations that will help you achieve your teaching goals.

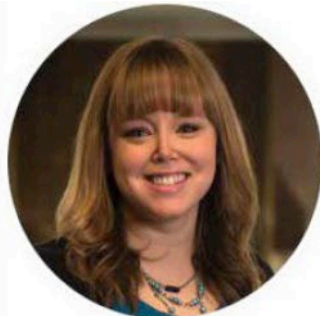
These consultation services are driven by your teaching goals and are tailored to meet your individual needs and interests. Teaching Fellows offer the following formative peer review services:

- Classroom observation
- Review of instructional materials and activities
- Syllabus review
- Small Group Instructional Diagnostic (SGID)
- Assessment of student learning
- Analysis of student feedback and evaluation data

To request a Teaching Fellow consultation, please complete the request form at the QR code:



Our CELT Teaching Fellows include:



Rebecca Essig

ASSOCIATE PROFESSOR
OF ENGINEERING



Kerrie Fineran

ASSOCIATE PROFESSOR AND
PROGRAM DIRECTOR OF
COUNSELOR EDUCATION



Jeong-il Cho

ASSOCIATE PROFESSOR OF
SPECIAL EDUCATION



Steven Cody

ASSOCIATE PROFESSOR OF ART
HISTORY



Kristin Barker


CLINICAL ASSISTANT PROFESSOR
OF HUMAN SERVICES



Karol Dehr

SENIOR LECTURER OF ENGLISH

PRESENTATIONS

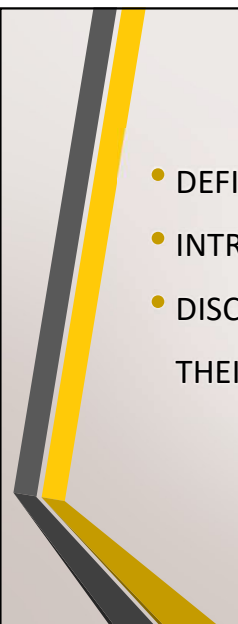


Purdue University Fort Wayne
Department of Organizational Leadership

Active Learning and Student Engagement

Sam Koudsia
11/2/2023

1



Learning Objectives

- DEFINE ACTIVE LEARNING;
- INTRODUCE FACILITATION OF LEARNING; AND
- DISCUSS HOW FACULTY COULD APPLY THIS TECHNIQUE TO THEIR CLASSROOMS.

2

2

ACTIVE LEARNING, DEFINED

- Active learning “ask[s] students to engage in their learning by thinking, discussing, investigating, and creating” (Cornell University Center for Teaching Innovation, n.d., para. 1).
- “Active learning engages students in the process of learning through activities and/or discussion in class, as opposed to passively listening to an expert. It emphasizes higher-order thinking and often involves group work” (Freeman et al., 2014, para. 25).

3

3

WHAT IS FACILITATION OF LEARNING?

- Facilitation of learning (FoL) is where the student leads the learning by facilitating a session on a book chapter.
- Facilitation* is expected to last 45 to 60 minutes including a 15-minute activity (i.e., an exercise/quiz, etc.).

* The FoLs I assign.

4

4

LET'S TALK ABOUT SOME BASIC STEPS

- Basic steps of FoL:
 - **Faculty assigns a book chapter to facilitator.**
 - **Facilitator prepares for the FoL:**
 - Additionally, facilitator is expected to incorporate an **activity** during the FoL.
 - **Facilitator leads the learning** (i.e., facilitates the book chapter):
 - Facilitator and participants engage in the learning process and are involved actively through the creative use of role play, simulations, group exercises, quizzes, etc. Thus, active learning exists.

5

5

WHY INCORPORATE FoL?

- Ensure active learning exists;
- Enhance student engagement; and
- Champion student agency, which refers to the students being in charge of their own learning.

6

6

WHY INCORPORATE FoL? CONT.

- According to Freeman et al. (2014), “data indicate that active learning increases student performance across the STEM disciplines” (para. 5):
 - Additionally, analyses showed that active learning (a) rises concept-inventories scores more than course-examinations scores and (b) seems to be effective across class sizes, especially across classes with less than or equal to 50 students (Freeman et al., 2014).

7

7

WHY INCORPORATE FoL? CONT.

- The important work of Archer and Hughes (2011) indicated that engaging students in the classroom and allocating sufficient amounts of time for engagement impact student learning positively; additionally, learning increases when the learners are engaged and thriving.
- According to the University of Washington (2020), involving the learners in the learning process triggered their motivations and improved their concentration and curiosity.

8

8

References

Archer, A. L., & Hughes, C. A. (2011). Exploring the foundations of explicit instruction. In *Explicit instruction: Effective and efficient teaching*. The Guilford Press.
<https://explicitinstruction.org/download/sample-chapter.pdf>

Cornell University Center for Teaching Innovation: *Active Learning*. (n.d.).
<https://teaching.cornell.edu/teaching-resources/active-collaborative-learning/active-learning>

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences (PNAS)*, 111(23).
<https://doi.org/10.1073/pnas.1319030111>

University of Washington. (2020). *Center for Teaching and Learning: Engaging students in learning*.
<https://teaching.washington.edu/topics/engaging-students-in-learning/>

9

9

Questions/comments?

Thank you for your time and attendance!

10

10

What I do to prepare the students for their facilitation of learning (FoL)–

In the beginning, I:

Introduce FoL and answer questions;

Provide the students with resources (i.e., instructions and a video) regarding FoL;

Go through the instructions and video;

Assign book chapters to facilitators (i.e., students);

Post the FoL schedule on Brightspace; and

Create an assignment link on Brightspace for students to submit their FoL file(s).

In-between:

I support the students and answer questions.

During the FoL:

I listen actively; take notes; make corrections if need be; contribute to the conversation by incorporating my knowledge and experience; raise questions; and/or emphasis certain concepts when need be. I take more of an active listening role and ensure active involvement exists.

After the FoL:

I provide feedback and offer recommendations.

FoL Instructions

Contents

FoL Characteristics and Notes.

FoL Video: Facilitation 101.

FoL Schedule Template.

FoL Characteristics and Notes

Each facilitator will lead the learning in class by facilitating a session on a book chapter.

Please note the following **characteristics** of the facilitation:

Criteria
Correct, complete coverage of the book chapter.
Thorough facilitation of the book chapter.
Thoughtful discussion of the <i>relevance</i> of the book chapter to real life and/or work situations.
Effective class discussion and dialogue among all learners as much as possible.
Active involvement of learners via the creative use of role play, simulations, group exercises, quizzes, etc.
Use of humor (appropriate humor of course). :)
Creative, effective use of visual media and/or handout(s).
Professionalism: Timing*, attribution of sources used, and overall appearance.

Facilitator's Notes

Please note a facilitation is not a learner lecture. Instead, present, discuss, and **engage**. One of the main goals is to **engage actively** all learners as much as possible. While facilitating, ensure incorporating your life and/or workplace experiences.

While a PowerPoint Presentation (or other presentation software) may be used during a facilitation, it can easily become a gateway to a lecture format with “a passive audience.” If used, it should be used appropriately. **It is recommended that you first plan on how you will engage actively the class via discussion and activities, and then determine if a PPP is helpful.**

**Each facilitation is expected to last 45 to 60 minutes including a 15-minute activity (i.e., an exercise/quiz, etc.).*

INNOVATIONS IN TEACHING INTRODUCTORY PROGRAMMING IN THE AGE OF AI

CLAUDIO FREITAS

ASSISTANT PROFESSOR OF FIRST-YEAR ENGINEERING
PURDUE UNIVERSITY FORT WAYNE

PURDUE
UNIVERSITY
FORT WAYNE

1

Agenda

- Introduction
- Online Repository
- Textbook
- Flipped Model
- Takeaways

2

Introduction

- Engineering Fundamentals II (ENGR128)
 - 4-credit course offered to engineering students at Purdue University Fort Wayne (PFW)
 - This course explores logical reasoning, applying mathematical principles to engineering, and computational thinking.
 - The course is structured into three components: **lectures, studios, and labs**. During lectures, students grasp engineering theories and the use of mathematical concepts. In studios, the focus is on the engineering design process. **Meanwhile, in labs, students take an introductory programming class to familiarize themselves with computational tools essential for resolving engineering challenges.**

3

Online Repository

- This **repository** is a collection of programming applications in engineering for ENGR128 students at Purdue University Fort Wayne.

- Website Platform: **Joomla 4.0**



Multiple education extensions

4

PROBLEM SOLVER ENGINEER

The ENGR128 code repository of **engineering applications**

We are still in beta. Contact us to learn how you can help us improve.

What is ProblemSolverEngineer.com? This website is a collection of programming applications in engineering for ENGR128 students at **Purdue University Fort Wayne**. If you want to see all of the resources we have in the database just [click here](#) to see all categories without typing anything in the search field. If you'd like to see a specific topic that we cover check out "search document" below. Alternatively, if you've got a code to share, take the next step by clicking on the "Upload Document" button to get started.

[Search Document](#) [Upload Document](#)

Search documents
Animation - Steering System (four bar)
 Here is one example of an animated steering system in MATLAB. Run "animation_fourbar.m"

[Download](#) [Details](#) [Edit](#) [Unpublish](#)

Logging Sensor Data in MS EXCEL Through MATLAB GUI
 This project presents a MATLAB graphical user interface-based approach to save real-time process data obtained from a temperature sensor. The GUI allows the user to graphically view the temperature variation at the end of sensor data acquisition.

[Download](#) [Details](#) [Edit](#) [Unpublish](#)

Chicago Traffic Data Analysis
 Imported data from a csv file using MATLAB and created 3D histograms to analyze traffic patterns at different times for over 29 routes. Developed a user-friendly program that returns the best times in the chosen route and provides different graphs for analysis

[Download](#) [Details](#) [Edit](#)

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5

Home Dashboard | Content | Menu | Components | Users | System | Help

Joomla! Document Manager: Documents

+ New | Actions | Options | Batch

Dashboard | Categories | Documents | License | Others | Configuration

Search | Filter Options | 20

□	+	Status	Title	Category	Access	ID
□	+	✓	Sudoku Solver Allows sudoku solver Sudoku Solver.docx - 21.28 KB	C/C++	Public	6
□	+	✓	Animation - Steering System (four bar) Allows animation steering system fourbar Animation - Steering System.zip - 113.37 KB	MATLAB	Public	17
□	+	✓	Logging Sensor Data in MS EXCEL Through MATLAB GUI Allows logging sensor data in excel through matlab gui Logging Sensor Data in MS EXCEL Through MATLAB GUI.zip - 198.37 KB	MATLAB	Public	19
□	+	✓	Chicago Traffic Data Analysis Allows Chicago traffic data analysis Chicago Traffic Data Analysis.mxd.zip - 43.0 KB	MATLAB	Public	5
□	+	✓	Climate-Change-Map	MATLAB	Public	18

<https://www.joomla.org/4/en-us/>

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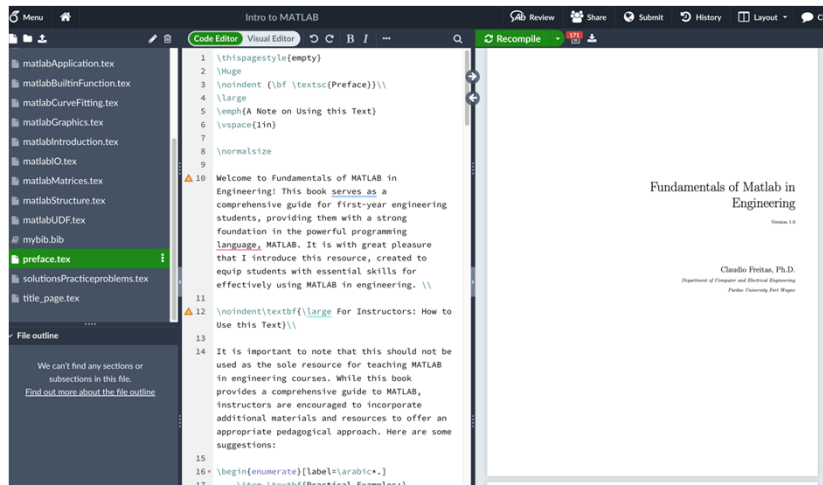
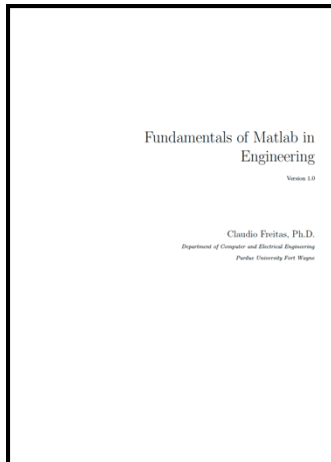
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Options available to create online platforms

	WordPress	Joomla!	Drupal
# DOWNLOADS	140 million	50 million	15 million
FREE THEMES	2500+	900+	1900+
FREE PLUGINS	3100+	8000+	2500+
EASE OF USE	★★★★ easy to configure	★★★ relatively easy	★ steep learning curve
SEO	★★★★ strong SEO capabilities	★ not very SEO friendly	★★★★ strong SEO capabilities
SCALABILITY	★★ great for small to medium sites - doesn't handle large amounts of content well	★★ very enterprise friendly - built to manage large amounts of content	★★★★ extremely scalable
COMPANIES	People, CNN, Ford	Ikea, Barnes & Noble, MTV	Harvard, Sony Music, AOL
BEST USED FOR	blogs, corporate websites, small-medium sized websites	ecommerce, social networking sites	one size fits all

Textbook

Platform: Overleaf (Free)



Course Content

QR Code

Solutions

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Chapter 2

Matrices

Matrices are incredibly useful in engineering and here is a list of applications of matrices in different engineering fields:

- **Electrical Engineering:**
 - Circuit analysis and solving systems of linear equations.
 - Digital signal processing for filtering and transforming signals.
- **Mechanical Engineering:**
 - Finite element analysis for structural analysis and modeling.
 - Control systems and robotics.
- **Civil Engineering:**
 - Structural analysis and design of buildings and bridges.
 - Geotechnical engineering for soil and foundation analysis.
- **Computer Engineering:**
 - Image and video processing for computer vision applications.
 - Cryptography and data encryption algorithms.

Here is a video that gives you an idea of what how MATLAB manipulate matrices [\[3\]](#)



14

10.5. SOLUTION - CHAPTER 5 98

10.5 Solution - Chapter 5

```

1. function area = calculateCircleArea(radius)
    area = pi * radius^2;
end

2. function distance = calculateDistance(x1, y1, x2, y2)
    distance = sqrt((x2 - x1)^2 + (y2 - y1)^2);
end

x1 = 2;
y1 = 3;
x2 = -1;
y2 = 5;
distanceAB = calculateDistance(x1, y1, x2, y2);
disp(['The distance between points A and B is: ',
num2str(distanceAB)]);

3. function volume = calculateCylinderVolume(r, h)
    volume = pi * r^2 * h;
end

radius = 2;
height = 6;
cylinderVolume = calculateCylinderVolume(radius, height);
disp(['The volume of the cylinder is: ',
num2str(cylinderVolume)]);

4. function interest = calculateSimpleInterest(P, r, t)
    interest = P * r * t;
end

principal = 1000;
interestRate = 0.05;
timePeriod = 3;
simpleInterest = calculateSimpleInterest(principal,
interestRate, timePeriod);
disp(['The simple interest accrued is: $',
num2str(simpleInterest)]);
    
```

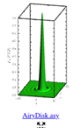


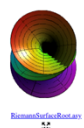
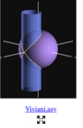
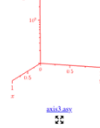
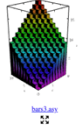
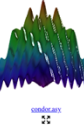
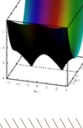
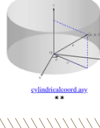
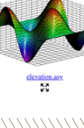
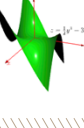
PURDUE UNIVERSITY FORT WAYNE 9

9

Future Changes

Incorporating 3D/interactive graphics.

<https://asymptote.sourceforge.io/gallery/3Dgraphs/>

<https://asymptote.sourceforge.io/>

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10

Platform Integration

PROBLEM SOLVER
ENGINEER

The ENGR128 code repository of **engineering applications**

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10.5 SOLUTION - CHAPTER 5

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2. function distance = calculateDistance(x1, y1, x2, y2)
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end
    x1 = 2;
    y1 = 3;
    x2 = -1;
    y2 = 3;
    distanceAB = calculateDistance(x1, y1, x2, y2);
    disp(['The distance between points A and B is: ',
    num2str(distanceAB)]);
3. function volume = calculateCylinderVolume(r, h)
    volume = pi * r^2 * h;
end
    radius = 2;
    height = 4;
    cylinderVolume = calculateCylinderVolume(radius, height);
    disp(['The volume of the cylinder is: ',
    num2str(cylinderVolume)]);
4. function interest = calculateSimpleInterest(p, r, t)
    interest = p * r * t;
end
    principal = 1000;
    interestRate = 0.05;
    timePeriod = 3;
    simpleInterest = calculateSimpleInterest(principal,
    interestRate, timePeriod);
    disp(['The simple interest accrued is: $',
    num2str(simpleInterest)]);
        
```

Fundamentals of Matlab in Engineering

Version 1.0

Claudio Freitas, Ph.D.
Department of Computer and Electrical Engineering
Purdue University Fort Wayne



10.5 SOLUTION - CHAPTER 5

```

1. function area = calculateCircleArea(radius)
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    disp(['The simple interest accrued is: $',
    num2str(simpleInterest)]);
        
```

PURDUE UNIVERSITY FORT WAYNE

11


“Flipped Classroom”

A flipped class is one that inverts the typical cycle of content acquisition and application so that:

- students gain necessary knowledge before class, and
- instructors guide students to actively and interactively clarify and apply that knowledge during class.

Challenges

- **A high number nontraditional (NTS) students**



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12

“Flipped Classroom”

- 50/50 model due to my NTS student population
- Classroom handouts
- Quizzes during the first 10 minutes of class
- Classroom points distributed
- Mini project (3 weeks long)

13

Mini Project

- Visual interface

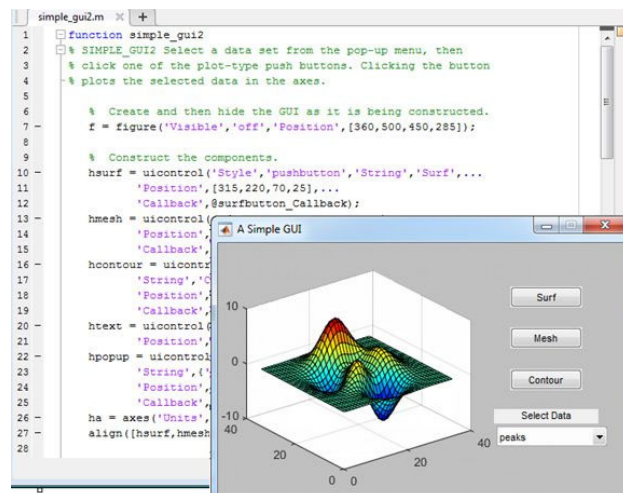


Image source: <https://www.mathworks.com/videos/gui-building-in-matlab-97169.html>

14

Takeaways

- Students can use the **platform** as a 'controlled ChatGPT.' Instructors must moderate content.
- Considering the NTS student population at PFW, caution should be exercised when implementing the **flipped model**. During the first two weeks, instructors should foster a culture of self-efficacy and help students develop a positive self-concept.
- The course must be fully integrated with the **textbook** to motivate students to read it.
- The **mini-project**, implemented with 'Visual Project', is AI-proofed.

CONNECT WITH COLLEAGUES 4:30 - 7:30

Enjoy food and conversation!

Fun: Food, drink (including cash bar) and collegial conversation

Want to join the Alliance?

If you are interested in joining The Alliance for Teaching Enrichment, just complete the 5minute application telling us about your commitment to teaching here: <https://www.pfw.edu/alliance>



