PROGRAM ASSESSMENT GRANTS 2021 Project Reports





INTRODUCTION



To promote best practices in program-level assessment of student learning outcomes, in 2018 the Office of the Provost established the WSU Program Assessment Grant Program. The annual call for proposals invites Wayne State University faculty and staff to submit proposals to improve their academic or student services program's assessment efforts. The grant funds are available to assist in the piloting, creation, or significant revision of assessment instruments or processes, or to obtain professional development in program assessment. In this report you'll find descriptions of the 2021 grant projects.

Proposals are reviewed by a committee of faculty and staff volunteers who are experienced assessment practitioners from across campus. At least two reviewers independently evaluate each proposal using a <u>rubric</u>, and then reviewers meet to discuss and rank them. Priority is given to proposals with multiple participants that introduce innovative or experimental approaches to direct assessment or improved practices in student learning outcomes assessment at the program level, especially those that might serve as models for other programs.

Three projects were funded in 2021; each project's goals, activities, and impact are summarized in this report. Some highlights among the projects' efforts to improve their programs' assessment practices include:

- Professional development to build expertise in assessment
- Alignment of assignments, rubrics, and assessments with accreditation standards
- Improvement in interrater reliability
- Evaluation of different assessments' usefulness for identifying at-risk students
- Building sustainable assessment processes

For more information about the grant program, please see the <u>WSU Program</u> <u>Assessment Grants</u> page.

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Bachelor of Social Work (BSW) Capstone Integrative Seminar Assessment

Recipients: Norma Love-Schropshire, Neva Nahan, Debra Patterson, and Kendra Wells (Social Work), and Elizabeth Corah-Hopkins (formerly College of Education)

Description of project goals: The goal of our assessment grant was to improve interrater reliability on four benchmark assignments in the Bachelor of Social Work (BSW) capstone course. The BSW program assessment team proposed three steps to improve assessment: (1) assure alignment between the Council on Social Work Education (CSWE) accreditation standards and competencies with the curriculum and the capstone course, (2) improve the validity of the <u>rubric</u> used for grading the benchmark assignments in the capstone course, and (3) develop a training to improve interrater reliability in grading the four capstone Assignments.

Project activities: The project team completed the following activities for SW 4997, Integrative Seminar, the BSW capstone course:

1. Dr. Corah-Hopkins, Ph.D., was the Assistant Dean of Accreditation and Assessment at Wayne State University College of Education. Corah-Hopkins was hired as our consultant with more than fifteen years of experience and expertise in the areas of accreditation, program assessment, curriculum design and interrater reliability training. Before working on this project, she developed an interrater reliability training tutorial video lecture on rater error and bias.

2. In order to support our first goal to assure alignment between the Council on Social Work Education (CSWE) accreditation standards and competencies with the curriculum and the capstone course, in the Fall 2021 semester the syllabus and benchmark assignments for the BSW capstone course (SW 4997) were revised based on student feedback from the prior Winter semester.

3. The assessment team scheduled four faculty interrater reliability training sessions in addition to four team meetings and two 1-1 meetings with the BSW program director and our consultant. A timeline was determined and training agendas were created to organize and track the training process.



4. The assessment team drafted a preliminary standardized specification rubric with input from our consultant, Dr. Corah-Hopkins, to assess four benchmark assignments (Assignment One, Assignment Two, Assignment Three, and Assignment Four). Each level of performance expectations listed in the rubric point distribution scale were categorized/labeled as exceeds expectations (10 points), meets expectations (8 points), partially meets expectations (7.5 points), does not meet expectations (6.5 points), and is expected but not observed (0 points).

5. In November 2021, four instructors who were scheduled to teach the capstone course in Winter 2022 received interrater reliability training. The training began with Student Sample 1, a de-identified student response to capstone Assignment One. Faculty were asked to submit rubric-level grades in advance of the training. This was an effort to determine initial consistency using the rubric.

6. In December 2021, the faculty watched the consultant's interrater reliability training tutorial on rater error and bias.

7. The rubric grading tool results were discussed by the faculty. The syllabus was revised by the program director in response to the faculty feedback.

8. The group determined that there was good consistency on what constituted 'exceeds expectations' but that further work was needed to differentiate between 'meets' and 'partially meets' expectations.

9. Overall, four meetings were held where instructors independently graded two samples of student work across four benchmark Assignments (Assignments One, Two, Three, and Four). The faculty discussed how grades were assigned, and subsequently scored Sample 2 of each of the four assignments (a posttest) to determine if consistency improved, and the preliminary rubric was revised again by the program director in consultation with the consultant.

10. Notes were taken during all discussions that were used to improve the clarity of the rubrics. Before the Spring 2022 semester, the faculty determined that they needed a rubric accompaniment 'grading tool' to help align the assignment content and rubric criteria. Four 'grading tools' were developed that list writing prompts (instructions) and rubric categories.These were aligned with the four benchmark assignments and developed to decrease random error in grading.



11. Student assessment results from the Winter 2022 semester were analyzed separately from the Spring 2022 semester. Student grades and instructor feedback reflected improvement with the Spring semester version.

12. In Canvas, the assessment team developed and managed a master course template to share the revised rubric, syllabus, and four benchmark assignments with faculty. Faculty watched a tutorial video to learn how to import rubrics into their own courses.

13. Ultimately, we plan to integrate elements learned to improve faculty consensus across all courses in the curriculum.

14. Results will be written into the assessment section for our Council on Social Work Education (CSWE) self-study for program reaffirmation of accreditation.

How the grant funds were used:

The Manager of Research Support was paid to create a faculty tutorial video to show faculty how to import rubrics into the course, manage the Canvas template, analyze rubric data, and integrate rubrics into Canvas. We paid salaries for a consultant to collaborate with the program director to move the project forward. We paid the part-time faculty an hourly wage and fringe benefits for participation in the trainings (in accordance with the UPTF collective bargaining contract).

Program-level impact: By ensuring alignment between our accrediting standards, curriculum, and our capstone, and by improving the validity and reliability of our benchmark data, we gained confidence that our program builds student competencies, and our data reflect student competency. Improved and revised rubrics and consistent grading will continue to highlight where improvements can be made in response to program deficits. As a result of this project, we have a common rubric integrated across all sections of our benchmark capstone course, and it may become the official program-level rubric. We developed a process for building consensus among faculty teaching the course. We plan to train lead teachers of our curricular areas to build capacity and understanding with other faculty. The role of lead teachers will be to work with instructors to build consensus in grading. A program-level rubric will help students understand assessment expectations and make grading more consistent across the courses and sections.



Individual impact: The grant project (interrater reliability training and specifications rubric development) helped us to collect participant feedback at the end of this semester to create a sustainable feedback loop and inform the future of our program assessment and professional development of faculty. The assessment team learned how to build consensus in grading, and this will be used in the capstone course to improve future reliability in grading.

Recognition/Appreciation: The BSW program received consultation and guidance from Elizabeth Corah-Hopkins, the Assistant Dean of Accreditation and Assessment at the College of Education.



Impact of Schwartz's Portrait Value Questionnaire and Computerbased Assessment of Personal Characteristics Scores on Physical Therapy Program Learning Outcomes: A Pilot Study to Identify At-Risk Students

Recipients: Sara F. Maher (Health Sciences and Physical Therapy) and Vicky Pardo (Health Care Sciences and Physical Therapy)

Description of project goals: This project was designed to evaluate the impact of outcome measures used as part of the physical therapy (PT) program's admission process at WSU. Specifically, we wanted to determine which metrics provide the best assessment of 'at risk' students. Historically, for the PT program 'at-risk' students were considered those students with increased chances of being dismissed from the program or students who required several attempts to pass the national licensing examination.

Once admission and program data were collected and analyzed (end of the winter semester), we began the second goal for the project. The admission and curriculum committees reviewed the outcome analysis to determine a remedial plan for students considered 'at risk'. The plan was based upon recommendations from all PT faculty with consideration of best practices identified during conference attendance by the grant recipients.

Project activities:

Admission metrics and program outcomes were collected for students admitted as cohorts into the physical therapy program in 2020 (n=36), 2021 (n=37), and 2022 (n=41). Our admission process is holistic, and includes both cognitive (e.g., grade point average (GPA)) and noncognitive markers (e.g., CASPER situational judgement tests, Schwartz Value Portrait Questionnaire).

The inner circle of Figure 1 represents our core admission data: 1) demographics, 2) GRE scores (qualitative, verbal, and written); GPA for science, pre-requisite, and undergraduate classes; and interview scores, 3) CASPER situational judgement tests, and 4) Schwartz Portrait Value Questionnaire. Program outcome measures are shown as the outer boxes in Figure 1 and included 1) GPA for program years one, two, and three, 2) comprehensive examination scores at the end of program years one, two, and three, 3) grades in anatomy class and anatomy lab from the first year in the program, and 4) clinical decision making, a class in the third year in the program. All admission data was included in this study in an attempt to identify which program outcome measure(s) best identified 'at-risk' students. The classes which the greatest number of students struggled with were included as program outcome measures (e.g., anatomy).





FIGURE 1. ADMISSION METRICS AND PROGRAM OUTCOMES

Correlations were conducted between all admission metrics and all program outcomes shown in Figure 1. (Arrows represent each admission metric shifting to be compared to each program outcome.) Significant correlations were followed by multiple regression analysis to determine which admission variables were significant predictors of program outcomes (Table 1).

Program Outcome	Admission Metrics						
	Science GPA	Pre- Requisite GPA	Undergraduate GPA	GRE - Quantitative	GRE - Verbal	GRE - Written	Schwartz Portrait Questionnaire
GPA Yr.1							
GPA Yr.2			*				
GPA Yr. 3							
Comp Exam Yr. 1				*	*	*	Conformity
Comp Exam Yr. 2				*	*	*	
Anatomy							
Anatomy Lab							
Clinical Decision Making							Security*

Table 1.	Correlations	between	admission	variables and	program outcomes
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Blue Shaded = significant correlation, *Significant predictors determined by multiple regression



Five demographic variables (age, gender, race, Pell grant status, and family history of college) were also correlated with program outcomes to identify 'at-risk' students (Table 2). Only significant outcomes appear in Table 2.

Program Outcomes	Demographic Variables			
	Means by Sex	Means by Race	Means by Pell Grant	
			Status	
GPA1	Female = 3.37	White = 3.56		
	Male = 3.32	Minority = 3.32		
GPA2	Female = 3.44	White = 3.53	No Pell Grant = 3.66	
	Male = 3.36	Minority = 3.36	Pell Grant = 3.44	
GPA3			No Pell Grant = 3.50	
			Pell Grant = 3.39	
Comp Exam Yr. 3		White = 581		
_		Minority = 530		
Clinical Decision-Making			No Pell Grant = 3.67	
Class			Pell Grant = 3.33	

Table 2.	Significant Cor	relations betwee	en Demographic	: Variables and	Program Outcomes
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Blue shaded = significant correlation

Faculty reviewed data during curriculum meetings. Because performance on standardized testing (GRE) predicted performance on comprehensive examinations, a remedial plan was developed for students who failed the comprehensive examinations (score of less than 70%) offered in year 1 and 2 of the program. The goal was to decrease the number of students who fail the national licensing examination on the first attempt.

In 2020, no remediation was offered for students who failed the comprehensive examination. In 2021, the remedial plan involved consultation with only the faculty advisor. In 2022, in addition to faculty advisor consultation, the grant recipients paid student assistants to tutor all students who failed comprehensive examinations (mentees). Each student tutor watched four hours of asynchronous training modules provided by the Academic Success Center and met two hours per week with each assigned mentee throughout the summer semester.

At the beginning of the fall semester, all students who failed the initial comprehensive examination completed a retake examination. Scores from the retakes can be seen in Figure 2. Retake examination scores were significantly improved in 2021 and 2022 when remediation was offered. Although there was no statistically significant difference in the change scores between years, in 2022 (student tutoring), retake scores were the highest of all three years of data collection.







Changes to the project plan and next steps: We were not able to attend in-person meetings due to the continuation of COVID-19 impacting travel. We both switched to virtual conference attendance which allowed us to retrieve material for longer periods of time but impacted our ability to interact directly with presenters.

Long-term analysis on the impact of first-time pass rate on the national licensing was not completed due to the short duration of this project (one year). For example, students admitted in 2020 will not take the licensing examination until November 2022 or January 2023. In addition, implications from demographic data will need further long-term analysis.

How the grant funds were used: Our funds were used for three purposes: 1) to attend conferences to learn more about strategies to help at risk students, 2) to support Dr. Pardo with an additional service assignment for her work compiling data from our varied admission metrics, and 3) to support student tutors to help facilitate learning for students who did not pass comprehensive examinations during years 1 and 2 of the program.



Program-level impact: Following the success of the student tutors, the PT program will continue to pay student tutors every summer for students who do not pass the end of the year comprehensive examinations. The continued upward climb in retake scores is promising and we are hopeful tutoring will make a difference in first time pass rate of the PT national licensing examination.

Finally, we need to further assess the impact of sex, race, and Pell grant status on performance measures in our program. This is the first time we have looked at these demographic variables and found significant differences in several of our program outcome measures related to these variables. In addition, CASPeR situation judgement tests are designed to measure non-cognitive outcomes in students. We need to further assess how this tool can be used to identify at-risk students.

Individual impact: This study has helped to develop a new line of scholarly inquiry for us as well as several of our faculty peers. It is our intention to disseminate these findings both through conferences and publication. It has also become apparent to us of the need to further evaluate the potential impact of demographics on our student populations.

The grant writing experience led us to work with a multi-institution research consortium. The results of our first combined data sharing will be disseminated in October 2022 at a national conference for physical therapy educators. The collective work of this consortium is focused on addressing disparities in PT admissions, particularly identifying demographic differences in admission.

Recognition/Appreciation: The project team would like to recognize the following individuals:

- Cathy Barrette (WSU Director of Assessment) for her support, feedback, and reminders to keep us on target with this project.
- Kristina Reid (PT Program Director) and Marie Pepin (Chair, Curriculum Committee) for thoughtful insight and suggestions to develop a standardized training for our student mentors.
- Darin Ellis (Associate Provost for Academic Programs and Associate Vice President for Institutional Effectiveness) for enabling funding for our grant.
- Assessment grant reviewers for supporting this work and recognizing its benefit despite being slightly different than traditional assessment grants.



Plan for Assessment and Evaluation of Interprofessional Education and Collaborative Practice within a Doctor of Pharmacy Program

Recipients: Aline Saad, Justine Gortney, Francine Salinitri, Karen Gessler, Kristen Sears, and Sarah Agnihotri (Pharmacy Practice, Pharmacy Program)

Description of project goals: The Doctor of Pharmacy Program at the Eugene Applebaum College of Pharmacy and Health Sciences (EACPHS) has worked to maintain and expand interprofessional education and collaborative practice (IPE-CP) alongside other programs at Wayne State. This commitment stems from the value of IPE-CP in improving the quadruple aim of population health, patient experience, per capita cost, and healthcare provider work/life balance in all health care delivery settings. Our IPE-CP Education Plan was proposed and approved by the curriculum and assessment committees and the program leadership in April 2021.

The aim of the assessment grant is to facilitate the execution of our IPE-CP assessment and evaluation components such as data capture and quality improvement initiatives.

There are two main elements that needed improvement in our assessment practices related to interprofessional education to meet accreditation requirements and accordingly they constituted our project's goals. The first was to implement and refine some tools that we have identified that would provide longitudinal assessment of IPE for students. The second was to develop a sustainable plan for data capture and evaluation of all IPE-related metrics in our Comprehensive Pharmacy Assessment and Evaluation Plan.

Project activities: For every IPE activity, the following steps were completed in the order presented:

- 1. Mapping of the activity learning objectives to the IPEC Competencies (Interprofessional Education Collaborative, 2016)
- 2. Amendment of the syllabi based on mapping
- 3. Data analysis and evaluation of tools utilized for assessment
- 4. Recommendations for follow-up based on assessment findings

To complete step 1, supporting materials (presentation slides, cases delivered, and assessment tools) from every IPE activity were collected from the concerned faculty whose course housed the IPE activity being reviewed. A faculty (on the grant) and the research assistant completed the mapping of the learning objectives to the IPEC competencies and sub-competencies. Once mapping was completed, the syllabus was amended to show the respective IPEC sub-competencies covered (step 2). Ultimately, all mapped IPE activities were compiled into one master mapping sheet.



The goals from this activity were to identify 1) the depth of coverage of the IPEC competencies and 2) the breadth of their coverage throughout the curriculum. The master sheet visually showed the depth and breadth coverage of the IPEC competencies testifying to our commitment to have students be introduced to these competencies, then have an opportunity to reinforce the competencies through the curriculum before they implement them in experiential practice. Our mapping showed that the majority of the IPEC competencies are covered and that their breadth of coverage spans across the various years of the curriculum.

Step 3, data collection and analysis for individual IPE offerings within the curriculum, and step 4, recommendation for follow-up based on assessment findings, have been completed as detailed below:

IPE Offering 1: Didactic Courses

- Social Administrative Studies (SAS) I (PPR 4115), SAS II (PPR 4255), Patient Care Laboratory (PCL) VI (PPR 6145)
- Required Courses

Data assessment status: Completed

Assessment tool: ExamSoft- Multiple Choice Questions (MCQs)

Description: Students performed well with an average of 88% in SAS1 and 95% in SAS2.

- For SAS1, the score is evaluated based on 16 MCQs for a population of 92 students.
- For SAS2, the score is evaluated based on 6 MCQs for a population of 89 students.

Findings: Students in didactic courses are making positive progress in the 3 key concepts of IPE-CP:

- 1. Demonstrating respect, understanding, and values to meet patient care needs (VE2)
- 2. Defining clear roles and responsibilities for team members to optimize outcomes for patient care (RR1, RR9)
- 3. Analyzing and practicing effective communication (IC1, IC3)

- Capture data more granularly for PCL
- Ask faculty to confirm mapping as detailed in respective syllabi
- Repeat the cycle every 4 years to ensure consistency in findings.



IPE Offering 2: Interprofessional Team Visit (IPTV) (P2, P3)

- IPTV is embedded in: Early Introductory Pharmacy Practice Experiences (E-IPPE), Hospital Introductory Professional Pharmacy Experiences (H-IPPE)
- Required
- N = 141
- Included professions: Medicine, Nursing, Occupational Therapy, Physical Therapy, Physician Assistant, Social Work, Athletic Training, and Dentistry

Data assessment status: Completed

Assessment tool: ISVS2

Description: Data was matched by individuals pre/post. Students in both groups showed improvement in pre/post surveys in the 18-item survey based off the ISVS (King, et al., 2016). Of note, the 9A and 9B version performances were nearly equivalent.

Findings: Students in IPTV are making positive progress in the 3 key concepts of IPE-CP:

- 1. Roles (belief)
- 2. Client-centeredness (attitudinal items)
- 3. Conflict/negotiation (behavioral items)

- Consider using either the 9A or the 9B components of the ISVS tool to reduce the amount of question survey burden on the students based on the writing on the ISVS 2016 trial.
- Meet with Dr. Khalili (one of the tool authors) to optimize the use of ISVS in our setting.
- Revisit the content of IPTV for years P2 and P3 to ensure that P2 activities in IPTV prepare students for the P3 activities in IPTV and that activities truly reflect the interprofessional focus of IPTV.



IPE Offering 3: EACPHS IPE Event (P3)

- Required
- This activity is embedded in the Ethics course offered in Winter of P3 (PPR6245)
- All health sciences disciplines within the EACPHS are part of this activity: PT, OT, NA, PA, PAA, RT, RTT, CLS
- N = 283 (97 Pharmacy Students)

Data assessment status: Completed

Assessment tool: ICCAS (Archibald et al., 2014) and homegrown knowledge survey

Description: Data was collected on two outcome measures. Qualitative input from students was also collected to inform quality improvement (QI) of the program and its operations.

The knowledge assessment was designed to determine if understanding about each profession changed from pre- to post-workshop. A seventeen-question, multiple-choice or true-false quiz was developed by the investigators with specific questions about each of the five disciplines. The quiz was administered two times. The quiz was delivered via Qualtrics software.

The second outcome tool, the Interprofessional Collaborative Competency Attainment Survey (ICCAS), is a 20 question self-report instrument developed at the University of Ottawa, Canada to measure IPE skills' competency.

Findings:

- 1. There was a significant improvement in knowledge for the entire group, as well as within subjects of each individual program, from pre- to post-knowledge assessment.
- 2. There were significant changes in all five of the ICCAS constructs. There were no significant differences between the programs in different constructs.

- Continue delivering the program virtually as it has proven to be equivalent to in-person delivery.
- Review the objectives to emphasize the roles and responsibilities of different professions in pain management.
- Improve the presentation slides to keep it more engaging.
- Review the case to equally represent all disciplines and have enough content to engage them in discussion.
- Revise the knowledge-based assessment tool and the qualitative questions of the post-event survey.



IPE Offering 4: Patient Safety Curriculum (P3)

- Required
- This IPE activity is embedded in H-IPPE
- It is completed in collaboration with the School of Medicine
- N = 97

Data assessment status: Completed

Assessment tool: Homegrown tool capturing knowledge and IPE attitudes/beliefs

Description: This experience was modeled after the "Patient Safety Room of Horrors" published by Farnan and colleagues (2016) and modified for virtual delivery in an interprofessional setting.

- Prior to the session, students were provided a mock patient chart to review and asked to complete a pre-session assessment questionnaire.
- During the Zoom session, students were divided into small teams and sent to breakout rooms to review a set of 7 pictures of the patient in their room depicting common hospital-based safety threats.
- After reviewing the chart and room pictures, a team scribe documented the top ten medical errors/safety hazards identified and the team's choice of one hazard with its proposed quality improvement (QI) intervention to prevent its reoccurrence.
- The session concluded with a debrief and a post-session assessment questionnaire.

Findings: There was a 27% increase in QI theory knowledge while students reported a 53% increase in their self-perceived QI knowledge.

- 1. Almost all teams identified mislabeled medications, allergies, fall risk, and lack of personal protective equipment among the top ten errors.
- 2. Less than 10% of the teams reported inappropriate catheter use, deep vein thrombosis prophylaxis, and hand hygiene among the errors.
- 3. Teams proposed QI interventions for: patient misidentification, patient allergies, and oxygen tank storage.

- This offering was feasible and effective in engaging students with an interprofessional safety-focused content and improving their knowledge of QI and hospital-related hazards.
- Medical and pharmacy students can learn to recognize and address common safety hazards in a hospital setting within their teams.
- Add the simulated MedWatch reporting tool to the Room of Horrors experience.



IPE Offering 5: Interprofessional Practice (IP) Advance Pharmacy Practice Experiences (APPE) (P4):

- Required
- Ambulatory Care, Patient Care, and Inpatient Acute Care Advanced Pharmacy Practice Experiences

Data assessment status: Completed

Assessment tools: APPE Rubrics + iTOFTs tool (Thistlethwaite et al., 2016)

Description: Students' performance is assessed based on their preceptors' scoring on the APPE Rubric out of 4

APPE Rubric Key:

- 4= Trust without supervision
- 3= Trust
- 2= Developing Trust
- 1= Do Not Trust

The APPE Rubric was mapped to the iTOFTs tool

Findings: Students' average performance on the APPE Rubric was 3.53 which means trust/trust without supervision.

The following items received best scores:

- 1. Personal and Professional Development: Observe all requirements of the Health Insurance Portability and Accountability Act (HIPAA) as well as organizational policies and procedures regarding patient privacy.
- 2. Communicate with the patient or caregiver orally and/or in writing to educate/counsel on pertinent aspects of the care plan giving consideration for health literacy, economic and cultural parameters

The following competency scored below the set threshold performance:

1. Provide and utilize appropriate literature to develop and support the care plan and answer medication-related questions.



Recommendations:

- Address barriers to the preceptors' completion of APPE rubrics.
- Discuss with the Experiential Education Committee the competency that scored below set threshold.
- Develop effective communication tools and techniques, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function.

IPE Offering 6: Interprofessional Elective Course: (P3)

- Elective
- N = 6 pharmacy students

Data assessment status: Completed

Assessment tools: ISVS

Description:Student performance based on ISVS implemented pre- and post- course delivery.

Findings: There was an improvement in all the ISVS statement. Few provided supportive statements, which include:

- 1.I feel comfortable initiating discussions about sharing responsibility for client care Increased from 76% to 93%
- 2.1 believe that interprofessional practice will give me the desire to remain in my profession Increased from 56% to 93%
- 3.I feel comfortable debating issues in a team Increased from 72% to 93%

- Develop a Canvas page that introduces interprofessional faculty delivering the course
- Apply the weekly learning workplan consistently to all modules/weeks
- Further develop the simulation activity and revisit the plan for assessing this component of the course
- Include a participation evaluation form
- Discuss the integration of this course as a required foundational course for all disciplines



IPE Offering 7: IPE Telehealth (P2): Co-curricular offering

• N = 10 pharmacy students

Data assessment status: Completed

Assessment tools: Homegrown IPE pre- and post-surveys, TIPS-TC, GPKSA tools

Findings: Course modules completion and telehealth certification were accomplished by 75% of students.

- 1. Fifty percent of the students participated in the simulation component with 100% rating the encounter as the most valuable course component.
- 2. Students' attitudes, knowledge, and beliefs about collaboration and telehealth were augmented through learning modules and their interprofessional telehealth skills were reinforced by the SP simulation.

Recommendation:

• Transform this from a pilot co-curricular offering to an elective course that prepares students for interprofessional telehealth care delivery.

IPE Offering 8: IPE Telehealth (P2): Longitudinal Data

- P1 students for DOW
- N = 87
- P4 for Exit Interview

Data Assessment Status: Completed

Assessment tools: DOW tool (Dow et al., 2014) and P4 Exit Interview

Description: DOW is a 16-item tool that was introduced in 2021 to our P1 students and will be repeated as students prepare to go into their APPE (end of P3).

The P4 Exit Interview is a focus group interview that collected graduating students' input on various aspects of the curriculum. Questions were specifically added to capture IPE activities and achievement of outcomes.



Recommendations: DOW

- Students are over-confident with their baseline evaluation of skills/knowledge/attitude related to IPE. Consider discussing the value of "humble self-assessment/evaluation" with future P1 classes prior to taking this test.
- Consider administration of this tool at the beginning of P1 prior to completing SAS 1, SAS 2, and Summer IPPEs so that it is truly reflective of the baseline status. Current data was collected at the end of P1.
- Consider adding demographics to the survey and running some statistical correlations related to data and demographics.
- Consider adding a question collecting information on prior employment or internship in an interprofessional setting.

Recommendations: P4 Exit Interview

- IPTV assignments need to be revisited so they are interprofessional and collaborative.
- Optimize the logistics of the IPTV experience

Overall, this thorough analysis of assessment findings completed for each IPE activity allowed for the provision of assessment-driven recommendations for the improvement of the design, delivery, and assessment of the activities. For sustainability purposes, a cyclic approach to assessment will be adopted whereby, unless major changes are implemented to an activity, the assessment of the IPE competencies within activities will be repeated every 4 years. Knowledge-based assessment and feedback on logistics of the IPE activities would remain as is.

Similarly, progress has been made in collecting and analyzing the below listed program-related key performance indicators to triangulate input and enable better evaluation of the IPE education plan:

Data source: AACP Graduating Faculty and Student Surveys

Data assessment status: Completed. This data has been collected through AACP surveys, reviewed, and presented to the assessment committee.

Description: A standardized, national survey available through the American Association of Colleges of Pharmacy (AACP) that enables us to collect data from each graduating class and from faculty and compare it with peer institutions and nationally.



Finally, to evaluate the IPE-CP Education Plan and gather evidence enabling judgement of its effectiveness and value, the program is tracking the IPE curricular opportunities, student and faculty engagement in education, service/practice, and scholarship as detailed in the below table.

Curriculum	 # of hours dedicated to IPE activities per professional year # of IPE required vs elective vs co-curricular activities # of IPE didactic vs experiential activities 	Completed : This data has been collected from Canvas® and syllabi of courses.
Students	# of students engaged per IPE activity across education/service/research # of students engaged in IPE COVID vaccinations efforts/Clinics	Completed: This data has been collected from Canvas®, Qualtrics®, and CompMS®.
Faculty	# <u>of</u> faculty engaged per IPE activity across education/service/research # <u>of</u> faculty development sessions with IPE focus	Completed: This data has been collected from Canvas®, Qualtrics®, and CompMS®.
Scholarship	# <u>of</u> IPE publications # <u>of</u> IPE grants submitted # <u>of</u> IPE grants approved	Completed: This data is collected from faculty CVs/portfolios and search tool engines (PubMed)

All planned project activities were completed. However, based on our assessment findings, there will need to be follow-up with faculty and committees (curriculum, assessment, and experiential education) to implement recommendations driven from the assessment findings. In addition, next steps include data visualization and dissemination on the EACHS website along with an IPE manual development.

How the grant funds were used: Funds were used to support 1) a research assistant who completed the mapping of syllabi to the IPEC core competencies and analyzed data, and 2) a consultant honorarium who provided guidance to the process.



Program-level impact: This IPE assessment grant allowed us 1) to complete a thorough mapping of the IPE activities, review of related syllabi, an in-depth analysis of each activity's data, and 2) to develop assessment-driven changes for optimizing these activities. It also helped the team design a sustainable plan for the assessment of the IPE curriculum. Accordingly, we were able to achieve the a-priori set goals for this project.

Individual impact: This grant was instrumental in allowing the group of faculty who are heavily invested in IPE in our program to better understand and optimize the IPE assessment plan and its sustainability. Our knowledge and understanding of these IPE offerings deepened leading to significant recommendations for improvement.

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