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A New Paradigm for Improvement: Student-Faculty partnership in Learning Outcomes Assessment

Nicholas A. Curtis

A dissertation proposal submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

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Table of Contents

Acknowledgements	
Table of Contents	v
List of Tables	.viii
List of Figures	
Abstract	
Chapter 1: Introduction	
Program-level Student Learning Outcomes Assessment in the United States	2
Program-level Student Learning Outcomes Assessment Around the World	
Student-Faculty Partnership	4
Statement of the Problem	5
Chapter 2: Literature Review	8
Purpose of the Literature Review	8
Program Assessment Instead of Program Improvement	8
Defining Improvement	12
Program Theory and Improvement	13
The Evolving Concept of Validity	16
Prior to 1950	17
1950 until 1970	17
1970 until early 1990's	18
Contemporary views	19
The Broken Chain of Validity	20
Student-Partnerships and Improvement	23
The Benefits of Student-Faculty Partnership	24
Literature Review Summary	25
Research Questions	26
Chapter 3: Methods	28
Foundations	28
Research Design	29
Design Phase I Qualitative Data Collection.	29
Participants	
Interview Protocol.	
Procedure.	
Design Phase II Data Analysis and Further Data Collection	
Design Phase III Framework Generation.	
Chapter 4: Results	
Organization of the Results	
Original Research Questions	
Who are the people in higher education engaging in student-faculty partnership work?	
How do people become interested in student-faculty partnership work?	37
What do experts identify as the benefits to partnering with students?	38
What do experts identify as the challenges to partnering with students?	39
Is there a common developmental pattern to student-faculty partnership work?	40
What work is being done at the classroom level that might be scaled up?	41
What work is being done at the program-level that might be adapted to assessn work?	
Do experts in student-faculty partnership think that student-faculty partnership	
program-level assessment is viable?	
Emergent Research Themes	42

How to move the practice of student-faculty partnership forward	43
Defining the term partnership is problematic.	44
Other factors in higher education impact student-faculty partnership efforts.	
Participants have a general interest in program-level thinking and assessmen	
Broad differences between higher education systems in the U.S. and U.K	
Summary of Results.	
Chapter 5: Discussion	
Organization of the Discussion	
Original Research Questions	
Who are the people in higher education engaging in student-faculty partners	
work?	
How do people become interested in student-faculty partnership work?	
What do experts identify as the benefits to partnering with students?	
What do experts identify as the challenges to partnering with students?	
Is there a common developmental pattern to student-faculty partnership wor	
What work is being done at the classroom level that might be scaled up?	
What work is being done at the program-level that might be adapted to asses	
work?	
Do experts in student-faculty partnership think that student-faculty partnersh	
program-level assessment is possible?	
Emergent Research Themes	
How to move the practice of student-faculty partnership forward	
Defining the term partnership is problematic.	
Other factors in higher education impact student-faculty partnership efforts.	
Respondents have a general interest in program-level thinking and assessme	
Broad differences between higher education systems in the U.S. and U.K	
Summary of Discussion	
The framework for developing student-faculty partnership in program-level stud	
learning outcomes assessment	
Pre-Prototyping	
Defining student-faculty partnership in program-level student learning outcomes	
assessment.	
Considering the challenges of partnership work in program-level assessment	
Considering other higher education factors.	
Considering differences between the U.S. and U.K. higher education systems	
Protoyping	127
What are the expected benefits and outcomes?	
Use the improvement model to highlight partnership and make improvement mo	
likely	
Use partnership efforts to increase interest in program-level work	
Build an initial structure based on the organization of student-as-consultant prog	
recruit well, and find easy successes.	
Seed ideas with which we can begin our efforts.	
Use initial framework to generate future ideas for representative partnership effo	orts in
program-level assessment	
Post-Prototyping.	
Build network of theory and practice.	
Consider benefits of developmental pattern of partnership leaders	
Apply the information gained from partnership to the validity argument made fo	
interpretation of program-level assessments.	
Limitations	<i>13</i> 6

Importance to the discipline of program-level student learning outcomes assessment	ent.
	138
The validity argument.	138
Integrating program assessment, improvement, and partnership efforts	139
Plans for future work	. 141
Outcomes	. 141
Creating educational experiences linked to objectives	
Measurement of student learning	
Data analysis	
Sharing interpretations	
Using interpretations for improvement	
Conclusion	
Figures	145
Figures References	
References	162
References Appendices	162 178
ReferencesAppendices	162 178 <i>17</i> 8
ReferencesAppendices	162 178 <i>17</i> 8 <i>17</i> 9
ReferencesAppendices	162 178 <i>178</i> <i>179</i> <i>181</i>
References	162 178 <i>179</i> <i>181</i> <i>182</i>
References	162 178 <i>178</i> <i>179</i> <i>181</i> <i>182</i>
References	162 178 179 181 182 188
References	162 178 <i>179</i> <i>181</i> <i>182</i> <i>188</i> <i>190</i>
References	162 178 <i>179</i> <i>181</i> <i>182</i> <i>188</i> <i>190</i> <i>192</i>

List of Tables

Table 1. Research design map.	29
Table 2. Proposed Student Outcome Measures.	183
Table 2. Proposed Student Outcome Measures.	

List of Figures

Figure 1. Example of an assessment cycle	. 145
Figure 2. Program Theory Example.	. 146
Figure 3. Visualization of overall coding.	. 147
Figure 4. Visualization of 'roles and jobs' theme	. 148
Figure 5. Visualization of 'what inspires partnership' theme	. 149
Figure 6. Visualization of 'benefits of partnership' theme	. 150
Figure 7. Visualization of 'challenges of partnership' theme	. 151
Figure 8. Visualization of 'partnership leader changes' theme	. 152
Figure 9. Visualization of 'examples of partnership' theme	. 153
Figure 10. Visualization of 'program-level ideas' theme	. 154
Figure 11. Visualization of 'moving partnership forward' theme	. 155
Figure 12. Visualization of 'partnership has many meanings' theme	. 156
Figure 13. Visualization of 'other higher education factors' theme	. 157
Figure 14. Visualization of 'respondents have a general interest in program-level assessment	,
theme	. 158
Figure 15. Visualization of 'broad differences between US and UK higher education' theme	. 159
Figure 16. A framework for moving student-faculty partnership in program-level assessment	
forward	. 160
Figure 17. Learning Improvement Stages (James Madison University, 2018)	. 161

Abstract

In the United States, higher education institutions assess the impact of programlevel educational experiences through the process of program-level student learning outcomes assessment. The final step of the assessment cycle is to use assessment interpretations to make changes to educational programming. Nevertheless, few programs can demonstrate the use of assessment results in this way. Perhaps assessment work is missing a key perspective: that of the students it assesses. Cook-Sather, Bovill, and Felton (2014) define student-faculty partnership as "a collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision making, implementation, investigation, or analysis" (p. 6-7.). Research and practice into student-faculty partnership work has demonstrated many positive effects on the teaching, learning, and classroom assessment process. Yet, no work has focused on partnership efforts in program-level assessment. The purpose of this study was to explore the potential to partner explicitly with students in the program and institutional level student learning outcomes assessment process.

A grounded theory-based qualitative method was used to generate a framework for practitioners who wish to engage in partnership efforts in program-level assessment. Fifteen experienced higher education professionals and experts in student-faculty partnership provided more than 20 hours of interview and field note data. These data resulted in 6,258 lines of open line-by-line coding. These open codes were consolidated using focused coding, into 191 secondary-level themes. These secondary-level themes were consolidated using focused coding, into 11 primary-level themes. The themes are

discussed in relation to their applicability to future student partnership work in program-level assessment and a framework for engaging in this work was developed. This framework was used to outline tentative examples of how student-faculty partnership work might be organized within program-level assessment practices. While in the early stages of prototype efforts, student-faculty partnership has the potential to radically alter the way we engage in program-level assessment.

Chapter 1: Introduction

Imagine spending thousands of dollars on a program, only to have your assessment process show the program doesn't work? Or does it? Take for example an institution that has spent several years and several thousands of dollars to enhance students' ethical reasoning abilities. After designing and implementing a program that includes numerous specific interventions, the program-level assessment process shows students do not significantly improve their abilities. When these data are presented to the institution's faculty and administrators, the inference drawn from these data is that the program does not work. However, this is only one inference that might be drawn. Imagine instead a scenario where the very students being assessed are also involved in the review and interpretation of these data. When presented with these data, students point out that while they did remember the lessons presented in the various interventions, they also were presented with multiple other approaches to ethical reasoning in their courses, making it difficult to know which method the institution wanted them to use on the assessment. Through this inclusion of students in the broader assessment process, the institution now has a better understanding of what is and what is not working and can make more accurate inferences.

In all areas of higher education, the main goal is to produce students who have developed the knowledge, skills, and abilities necessary for a particular field of study. What exactly should every graduate of a higher education program know, think, or do given the extensive training they have received? The process of developing program-level student learning outcomes begins to answer this question. Statements such as, "upon graduation from the engineering program, students should be able to describe the impact

of anthropogenic sources on environmental quality," lay out exactly what all students are expected to learn in the program. This statement alone, however, is only wishful thinking. All stakeholders in the process (e.g. students, faculty, administrators, industry leaders, and accreditors) don't simply want to know what should be learned, they want to know what has been learned. This is where program-level student learning outcomes assessment becomes important. As Brown and Knight (1994) so aptly note, "The idea of learning without some form of assessment of what has been learned is inconceivable" (p. 9). Yet, the approach to program-level assessment has almost unilaterally been planned, executed, and interpreted from the faculty/staff perspective. Thus, assessment results represent the assumed student experience through a faculty/staff lens. The current approach to program assessment, however, is quite different in different parts of the world.

Program-level Student Learning Outcomes Assessment in the United States

In the United States (U.S.), program-level student learning outcomes assessment often requires large, cross-disciplinary teams working together to combine content expertise with expertise in assessment. It is common to organize this work into a framework known as an assessment cycle. The process involves defining objectives, mapping curricula, assessing students, analyzing data, sharing information, and finally using the information to make changes to educational experiences. The number of steps and content of the cycle varies between regions and institutions; however, it generally consists of some variation of Figure 1. Other examples of variations on the assessment cycle can be found at various university sites (GWU, 2016; Marquette, 2016; UNI, 2016) and regional accreditation sites (SACSCOC, 2016). Since the mid 1980s, the use of

program-level assessment has steadily increased (Ewell, 2009). In the U.S. today, it would be uncommon for a college or university not to engage in program-level assessment work.

Program-level Student Learning Outcomes Assessment Around the World

Outside of the U.S., the assessment of program-level student learning outcomes is often situated in a different context. In the United Kingdom (U.K.), program-level student learning outcomes assessment, as defined in the U.S., does not occur. Through the process of constructive alignment (Biggs & Tang, 2013) classroom-level objectives are aligned theoretically to the program-level objectives. Thus, if classroom-level objectives are achieved, the program-level objectives are also assumed to have been achieved.

A process related to program-level outcomes assessment is a quality assurance mechanism overseen by the Quality Assurance Agency for higher education (QAA; QAA, 2014). Program-level student learning outcomes are judged by alignment with degree-level (bachelor's, master's, doctoral, etc.) qualification profiles that define the *level* of learning required across all such degrees. In a sense, the level of complexity of the learning outcome is judged rather than the content. In this sense, student learning outcomes are those outcomes that a student *must* demonstrate before they are awarded a degree. These outcomes are not differentiated by program; however, they are differentiated by the complexity of the learning that must be demonstrated.

The state of affairs in Australia is similar to that in the U.K.. The Tertiary

Education Quality and Standards Agency (TESQA), similar to the UK model, requires

program-level objectives align with degree-level qualification profiles. The higher

education standards framework (TEQSA, 2015) also requires that "the expected learning

outcomes for each course of study are specified," and that the "methods of assessment are... capable of confirming that all specified learning outcomes are achieved" (p. 4). In both cases, outcomes assessment is focused on summative evaluation of the student, usually at the classroom level, and are not formative evaluations of the educational experience.

Many countries in Europe, Central America, and South America have attempted to define degree-level student learning requirements through the tuning process (Bologna Tuning Process, 1999; Tuning Latin America Projects, 2004). The tuning process attempts to define common student learning outcomes within a single discipline (e.g., history, chemistry). While all of these efforts have student-learning outcomes at their core, none of them work to assess such outcomes with the goal of improving the educational experiences at the program-level. If educators care about high-level student outcomes that cannot be acquired within a single course, attention to assessment at the program-level is key. Outcomes such as critical thinking, ethical reasoning, and oral communication, to name only a few generalizable examples, are not simply a sum of the experiences within separate courses. They are the result of building on prior information and constructing new understandings at different levels. While there are undoubtedly institutions and programs throughout the world that implement student learning outcomes assessment for improvement of educational experiences, such efforts are not systematic.

Student-Faculty Partnership

While student learning outcomes assessment for the improvement of educational experiences may not be common outside of the U.S., there are other areas in which international practices outpace those in the U.S.. One such area is the forming of

intentional partnerships with students in the educational experience. Research and practice into student-faculty partnership work has demonstrated many positive effects on the teaching, learning, and assessment process (see: Astin, 1993; Baker & Griffin, 2010; Bain & Zimmerman, 2009; Bain, 2012; Chickering & Gamson, 1987; Cook-Sather, 2010; Cook-Sather, 2011; Cook-Sather, Bovill, & Felton, 2014; Gibson, 2011; Healey, Flint, & Harrington, 2014; Sambell & Graham, 2011; Stoloff, Curtis, Rogers, Brewster, & McCarthy, 2012; Werder, Thibou, & Kaufer, 2012).

In the U.S., there are a few examples in the literature of partnering with students in the teaching, learning, and assessment process. However, the examples are too few given the size of the higher education system. Outside of the U.S., particularly in the U.K., where there are fewer institutions compared to the U.S., there are a greater number of examples of partnership in the literature (e.g. see Bovill, 2013, Bovill, 2017; Bovill & Bulley, 2011; Cliffe, A., Cook-Sather, A., Healey, M. Healey, R., Marquis, E., Mathews, K, & Woolmer, C, 2017; Duah & Croft, 2011; Deeley & Bovill, 2017; Moore & Gilmartin, 2010; Sambell & Graham, 2011).

Statement of the Problem

In the U.S., higher education institutions assess the impact of program-level educational experiences through a process of program-level student learning outcomes assessment. In essence, this practice answers the question, "Is the program effective at providing the necessary educational experiences to assist students in meeting the program-level student learning outcomes?" If the answer is no, the idealized practice of assessment would dictate that the information collected during the assessment process be used to inform changes to the program that might logically improve the educational

experience for students. However, this practice of using assessment results to strive for the improvement of educational experiences is rarely actualized (Banta & Blaich, 2010).

Outside of the U.S., this process of program-level assessment for improvement is rare. In the U.K., student learning outcomes are conceptualized at a program-level but then assessed at the individual classroom level. Student learning outcomes are concerned with the achievement of individual students. Student learning outcomes are not explicitly utilized to inform changes to program-level educational experiences. However, a push for student-centered teaching and learning practices in the classroom (Wright, 2011) has evolved into a plethora of student-faculty partnerships with the explicit aim to improve student learning in the classroom. What is more, there is evidence that these practices do, in fact, work to improve learning (Cook-Sather, Bovill, & Felton, 2014; Gibson, 2011; Healey, Flint, & Harrington, 2014; Werder, Thibou, & Kaufer, 2012). As of yet, the benefits of student-faculty partnership have not been explored within the realm of program-level assessment.

Recall that the final step of the assessment cycle is to use the results of assessment interpretations to make changes to the educational programming. Nevertheless, few programs can demonstrate the use of assessment results in this way. Though it is good that academic programs value student outcomes enough to assess them, doing so without critically applying the resulting information is a waste of time and effort. Why aren't programs using the results of program-level assessment to improve educational experiences? Perhaps the answer is that program-level assessment work is missing a key perspective. If students are expected to learn and demonstrate their learning, they should be involved in the assessment of that learning too. When Banta and Blaich (2010) noted

that better assessment information wasn't enough to spur programs into using such information for improving educational experiences, they were undoubtedly right.

Perhaps, instead, we require a different approach to our established processes, a different viewpoint, and different partners with which to frame our work in program-level student learning outcomes assessment. The purpose of this study was to explore the potential to partner explicitly with students in the program and institutional level student learning outcomes assessment process.

In this dissertation, I:

- Explored cross-national efforts to partner with students at the classroom and program-level.
- Provided a framework in which program- and institutional- level student learning outcomes assessment partnerships might be grounded in an effort to improve large-scale student learning in higher education.
- Proposed and called for student-faculty partnership prototype projects in program- and institutional- level student learning outcomes assessment.

Chapter 2: Literature Review

Purpose of the Literature Review

The purpose of this literature review was to justify the integration of program-level student learning outcomes assessment with student-faculty partnership work. Such partnerships are hypothesized to help facilitate large-scale improvements to education experiences. I began my review by situating the study firmly in the program assessment literature and efforts to use program assessment for improvement. Second, I situated efforts to use program assessment for improvement within the larger realm of program theory and development. Third, I framed the lack of improvement resulting from program-level assessment as a break in the validity argument for such claims. As a component of this section, I provided an overview of the progression of the concept of validity since the mid 1980's. Finally, I explored the literature on student-faculty partnerships, the component of this dissertation novel to program-level assessment practice.

Program Assessment Instead of Program Improvement

The call for program-level student learning outcomes assessment began in the U.S. in the 1980s and institutions have gradually adopted the practice as commonplace since that time (Ewell, 2009; Kuh, Jankowski, Ikenberry, & Kenzie, 2014). The practice is often idealized as a process of defining, mapping, assessing, analyzing, sharing, and then using the information to improve the educational experiences within an academic program.

In this process of assessment, program faculty first work to clearly define the most important things that students should know, think, or do as a result of engaging with

the educational experiences provided across the entire program of study (Center for Assessment and Research Studies, 2017; Erwin, 1991; Kuh et al., 2014). This process of defining the objectives of a program of study is essential to every step of program assessment work. These objectives are the intended outcomes of the program-level curriculum and guide the curriculum, assessment, and evaluation of the program.

Following the statement of program-level objectives, programs work to create educational experiences (or link established experiences) to the objectives (CARS, 2017; Erwin, 1991; Kuh et al., 2014). For a program-level objective focused on student writing abilities, the program would establish sound educational experiences designed to help students improve their writing abilities. The logic of this step of the cycle can be encapsulated by considering the experiences a program provides that would lead us to believe that students have the opportunity to achieve the objective.

The third step of the assessment cycle requires programs to decide how students can demonstrate their proficiency with respect to each objective (CARS, 2017; Erwin, 1991; Kuh et al., 2014). The assessment tool selected can take any number of forms (e.g., multiple choice test, writing samples, oral presentations, demonstration of skills, simulation, etc.). However, the assessment tool should align with the level of the desired program objective. For example, as Sally Brown (2017) stated:

If you want to assess the ability to ride a unicycle, you don't give a multiple choice exam on the parts of the unicycle, you don't ask for an essay on the history of the unicycle, and you don't have an oral exam on the proper technique for riding a unicycle. Those are all fine things, and perhaps important, but none of

them answer your question. If you want to assess the ability to ride a unicycle, you have someone ride a unicycle.

Thus, it is important to ensure that the assessment tool used to assess the program objective matches the level of knowledge or skill outlined in that objective.

Once the assessment tool has been selected, that tool must be implemented in a systematic way to collect high-quality information about student learning (CARS, 2017; Erwin, 1991; Kuh et al., 2014). The goal in designing rigorous data collection procedures is to defend one's inferences based on an analysis of the data. Thus, data should be collected in ways that eliminate or minimize construct-irrelevant noise that would compromise the interpretations of the data. Issues such as motivation, sampling, distractions, confounding variables, cheating, and many others must be considered. All else being equal, the higher the quality of the data collection, the higher the quality of the inferences made from the data.

The next step of the assessment cycle requires programs to analyze the collected assessment data (CARS, 2017; Erwin, 1991; Kuh et al., 2014). The purpose of this step is to transform the raw data into something that is both able to be interpreted and used. Thousands of individual scores on a test may not be particularly interpretable; however, using a statistical technique to examine change over time or comparing scores to an established criterion for success makes the data more interpretable. Just as high quality assessment design is necessary to support the validity of the interpretations, so is high quality data analyses. Issues such as the assumptions of different analyses, the communicability of the results of an analysis, and whether the analysis will provide useful information must be considered.

Even the best data analyses are wasted if no one knows about the results (CARS, 2017; Erwin, 1991; Kuh et al., 2014). Thus, the penultimate step in the program assessment cycle is to disseminate the findings. Interested stakeholders may include teaching faculty, administrators, students, parents, advisory boards, etc. Without getting the information to the correct people, the final step of the assessment process, using the interpretations of assessment data, is not possible.

The final component of the program assessment process is to use the information (CARS, 2017; Erwin, 1991; Kuh et al., 2014). This requires a concerted effort to use the interpretations of the data, in relation to expectations for each objective, to design logical interventions to improve student learning. Recently, higher education has experienced a renewed push to see such improvement (Banta & Blaich, 2010; Blaich & Wise, 2011; Fulcher, Good, Coleman, & Smith, 2014). Such an improvement effort, while commendable, is proving difficult to achieve. Banta, Jones, and Black (2009) found that only 6% of the 146 nationally representative exemplary reports of assessment they reviewed evidenced true program-level learning improvement. Even at James Madison University, where there have been multiple-decade intentional efforts to demonstrate learning improvement at the program and institutional level, only a handful of examples can be documented (Fulcher, Smith, Sanchez, Ames, & Meixner, 2017).

Many more institutions than the 6% noted by Banta, Jones, and Black (2009) might say they use the results of their assessments. However, most efforts to use assessment results have focused on getting better assessment information. As Banta and Blaich (2010) note, such efforts are predicated on the idea that poor assessment information is the hurdle one must overcome to improve educational experiences. If

assessment information were better, faculty and programs would use it more intentionally. Unfortunately, this assumption did not hold then and does not hold now. There are many examples of programs conducting exemplary assessment work but never using the results of that work to make informed programmatic changes. In sum, the gap between the current practice of assessment and idealized version is wide. So wide in fact that current practice does not achieve assessment's most important purpose: improvement. If the goal of program-level student learning outcomes assessment is student learning improvement, perhaps we are all missing something important.

Defining Improvement

One barrier to using program assessment interpretations for program improvement is a lack of consensus concerning what improvement actually is. Fulcher, Sundre, Russell, Good, and Smith (2014) suggested the following as a rigorous definition:

Strong evidence, from direct measures, supporting substantive learning improvement due to program modifications. This program responded to previous assessment results, made curricular and/or pedagogical modifications, RE-assessed, and found that student learning improved. The rationale and explanation of the modifications leading to the change are clearly laid out. The methodology is of sufficient strength that most reasonable alternative hypotheses can be ruled out (e.g., sampling concerns, validity issues with instrument or student motivation). In essence, the improvement interpretation can withstand reasonable critique from faculty, curriculum experts, assessment experts, and external stakeholders."

To rephrase Fulcher, et al. (2014) in research terminology: programs need to implement a rigorous A-B-A design with appropriate quasi-experimental controls in order to provide sufficient validity evidence to support the interpretation of a change as an improvement. Only then can a program be sure that what they did actually improved student learning. Building on a metaphor provided by Fulcher et al., programs need to weigh the pig, feed the pig (on a strict diet and exercise program), and then weigh the pig again. Only then can you be sure that what you did caused the pig to become bigger. It is important to consider that the validity evidence necessary to support these inferences requires not only strong theoretical background for the intervention, but also for the program structure itself.

Program Theory and Improvement

Both the program assessment process and the process of improvement described above are predicated on the idea that academic programs are designed based on a coherent program theory. In the U.S. system of higher education, an academic program is defined as "any combination of courses and/or requirements leading to a degree or certificate, or to a major, co-major, minor or academic track and/or concentration" (Temple University, 2017). Program theory is the rationale for how and why a program is supposed to work (Bickman, 1987). A program theory explicitly defines the theoretical causal links between designed experiences and desired outcomes (Funnel & Rodgers, 2011). The process of defining the causal links within a program also highlights the major assumptions that must be tested in order to support such claims. These assumptions provide clarity on what must be assessed and when to assess it in order to provide support for the program. This idea can be applied directly to the program-level assessment

process. Given a particular program objective, what sequence of educational experiences are present that would logically lead to students meeting that objective?

Consider program theory within the following concrete, fictional, example. The psychology program at General University established several program-level objectives for their graduating students. One of those objectives states: Graduating students will demonstrate scientific reasoning and problem solving by interpreting, designing, and conducting psychological research at the level of an entry level graduate student in psychology. The GU psychology department decided to embed many educational experiences across the entire range of their program using a coherent program theory to link each experience. Figure 2 illustrates GU's program theory for this objective. The program faculty used logic to sequence the experiences appropriate to the knowledge and skills of students at each level of the program. The faculty members also aligned the classroom level experiences with evidence based practices in teaching such as frequent practice at retrieval, varying conditions of learning, having student re-represent information in new formats, and building on prior knowledge (Halpern & Hakel, 2003). Given this strong program theory, the faculty and staff of the GU psychology department are confident that their students will graduate having achieved this objective. Even so, the faculty and staff can only be sure once they have strong evidence from their welldesigned assessment of student learning.

Developing and implementing a strong program theory requires a great deal of time and effort. Asking faculty and staff to commit to such an effort requires knowledge of why the process is beneficial. Bickman (1987) noted several functions that program theory can serve. While all of the functions are important, the most relevant features for

the current work are: 1. discriminating between theory and program failure, 2. providing implementation description, and 3. improving the formative use of evaluation.

Discriminating between theory and program failure is essential if one wishes to choose an intervention that is likely to work (Bickman, 1987). If students are not achieving a learning objective and the sequence of educational experiences is not occurring as planned, this points to a failure in the program. The first intervention in this situation is simply to increase fidelity to the planned program. If the students are not achieving a learning objective and the sequence of educational experience is occurring as planned, this points to a failure in the theory. The intervention in this situation requires more thought and the adoption, or creation, of a new theory of learning for that objective.

Providing a description of the implementation of the educational experience is an important component of program theory and is highly related to differentiating between program and theory failure (Bickman, 1987). Given that an educational program is built on a solid theory of the intended program, the program should also be able to lay out the critical aspects of that program that 1. if left out would cause the program to fail; and 2. can be measured and assessed for fidelity. Such a process could lead to, but does not necessitate, a formal process of assessing the implementation fidelity of a program (i.e., directly examining the delivered programming for the degree of deviation from the intended programming).

Improving the formative use of program assessment is one of the main goals of the program assessment process. Implemented correctly, programs would engage in a process of continuous improvement to the educational experiences designed to help students learn. A strong program theory supports such efforts by clearly laying out the program "as-is", which allows information to inform how the program might be adjusted in many different areas (Bickman, 1987).

There are many benefits of strong program theory to guide educational practice within an academic program. Nevertheless, it is often the case in higher education that academic programs are based on a few, often implicit, assumptions made by the original program developers. It is likely that program-level outcomes assessment and student learning improvement practices would be enhanced should all academic programs adopt a strong program theory approach. However, even if a program has a strong program theory, the validity evidence for the interpretation of the student experience of that program is still in question.

The Evolving Concept of Validity

Validity is one of the most critical, yet widely misinterpreted, ideas in educational measurement, research, and evaluation (Hathcoat, Curtis, Saunders, & Liu, 2018; Sireci, 2009). The term itself has multiple meanings and definitions across and within disciplines. To some, validity is a measure of how 'true' something is. To others, validity is a legal term denoting acceptability in a legal sense (Merriam-Webster, 2018). The validity of our interpretations and use of program-level assessment information is of paramount importance to this study. I argue that without student-faculty partnerships, we risk misinterpreting and misapplying assessment information. Thus, to situate readers to this argument within the most up-to-date conceptualization of validity, before detailing the definition of validity used in the current study, I provide a brief history of the concept as it relates to psychological and education measurement. I divide this history into four

sections: prior to 1950, from 1950 until 1970, from 1970 until the early 1990's, and contemporary views from the late 1990's until the present.

Prior to 1950. Prior to 1950, the discussion of validity was spurred by a desire to legitimize educational and psychological measurement as a science (APA, 1952; Hathcoat, Curtis, Saunders, & Liu, 2018; Sireci, 2009). These early practices centered on the then novel practice of computing correlation coefficients. Correlation coefficients indicate how strongly variables relate to one another. Thus, tests were considered valid for measuring anything with which they correlated. Educational researchers, however, quickly identified the perils of ignoring test content in making judgments concerning the appropriateness of a test. This led to the emergence of 'construct validity' in the early 1950's.

publishing what would come to be known as the *Standards for Educational and*Psychological Testing (APA, 1952). This first publication did not provide an overall definition of validity. Rather, it specified that there were four types of validity that one might discuss (Predictive, Status, Content, and Congruent). This conceptualization of validity still relied heavily on correlation but began to acknowledge the importance of content. Beginning with the initial publication of the standards and continuing through to the present edition, one of the biggest departures from earlier thinking was that validity is a property of inferences, not tests. Thus, it is the interpretations of test scores that must be evaluated using whichever criteria were set forth in each edition of the Standards. This is the reason that most educational researchers dissuade people from making such

statements as, "this test is valid" (see Borsboom, Mellenbergh, & van Heerden, 2004 for a notable exception).

In 1955, Lee Cronbach and Paul Meehl published a seminal article defining construct validity, a type of validity not present in the original *standards*. Cronbach and Meehl defined construct validity as the investigation of what psychological qualities a test measures. This type of validity and definition was incorporated into the next revision of the standards (APA, 1954). Over the next two decades (APA, 1966; APA, AERA, & NCME, 1974), *The Standards* came to view validity primarily through the lens of what is known as the *three C's:* content validity, criterion validity, and construct validity. These validities refer to evaluating how well a test estimates a person's performance on a larger number of tests (content); how well a test score represents a person's ability on some other related variable (criterion); and, how well a test estimates the psychological characteristic in question (construct). It is noteworthy that, until 1985, researchers were required to consider multiple forms of validities in order to justify their use of a test.

Association, the American Psychological Association, and the National Council on Measurement in Education co-published the fifth edition of *the Standards*. In this revision, the idea of multiple validities was replaced by the view that validity was a single, unified judgment of the interpretations made from tests (AERA, APA, NCME, 1985). While many prominent educational researchers contributed to this change in emphasis, one in particular, Samuel Messick, was particularly influential. Messick (1989) believed that all validity evidence (construct, criterion, content, etc.) was simply additional evidence to consider whether the scores from a test had a defensible and

interpretable meaning. Consistent with this view, since 1985, educational researchers should no longer discuss types of validity; rather they should discuss varying types of validity-related evidence that support interpretations of test scores.

Contemporary views. In 1999, AERA, APA, and NCME published the sixth edition, and in 2014 the seventh edition, of *The Standards*. The definition of validity in both remains largely the same and aligns with how validity is treated in modern educational research. The Standards define validity as "...the degree to which evidence and theory support the interpretation of test scores entailed by the purposed uses of tests" (AERA, APA, & NCME, 2014, p. 11). This definition builds on the earlier idea of validity as a unified concept by attempting to make the work of validation more practical. Building on the work of Michael Kane (2013), the process of validation is concerned with the accumulation of evidence to support an argument for score-based interpretations. Kane (2013) usefully describes the process of collecting evidence as building a chain of validity evidence to link test scores with the inferences we make from them. The Standards (AERA, APA, NCME, 2014) include five sources of potential evidence: test content, response processes, internal structure, relations to other variables, and test consequences. It is important to note that the validity of inferences is not an all-ornothing concept nor are there types of validity. The validity of any interpretations increases with more and better evidence and decreases with less and poorer evidence.

In the current research, I am primarily concerned with the use of program-level assessment information to inform intentional changes to educational programming.

Because such a use is more consistent with measurement and testing than with pure research aims, I will employ the definition of validity set forth in the most current edition

of the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014, p. 11). The term tests, in the realm of program-level student learning outcomes assessment, encompasses any method of obtaining information about student performance toward program outcomes. This includes multiple-choice examinations, essay responses, performance assessments, portfolios, and any other assessment methods.

The Broken Chain of Validity

In the present case, the proposed use of test information is to inform intentional changes to the educational experiences designed to enhance student learning across an entire, well-developed, program of study. Thus, a strong validity argument could be made if:

- multiple sources of evidence suggested that information could be interpreted as reflective of student learning;
- 2) there is a plausible and sensible program theory; and,
- the information is used in ways that lead to program-wide student learning improvement.

On the whole, however, higher education institutions currently cannot support such claims (see the aforementioned evidence in Banta & Blaich, 2010; Blaich & Wise, 2011; Fulcher, Good, Coleman, & Smith, 2014). Without this support, the task becomes identifying specific threats to the validity argument for such claims.

Messick (1995) discussed two types of threats to a validity argument: construct-irrelevance and construct underrepresentation. Construct-irrelevant variance is a threat when aspects outside of the intended construct contribute to the interpretation of test scores. This is a threat to our interpretations because test scores are still interpreted as

representing only the intended construct. Construct-underrepresentation is a threat when only a small part of the overall construct contributes to the test scores. This is a threat to our interpretations because the test scores are interpreted as representing the entire construct. In higher education program-level student learning outcomes assessment and student learning improvement efforts, it is possible that both threats exist.

In every step of the process of program assessment, faculty and/or staff are asked to make implicit assumptions about the experience of students. In our current system, faculty and staff assume that the instruction in various courses aligns with the program objectives appropriately and constructively (Biggs and Tang, 2011) In our current system, faculty and staff assume that items on an assessment instrument map to both student instruction and objectives. In our current system, faculty and staff assume that students interpret assessment items in the same way as each other and in the same way as those who designed the assessment. In our current system, faculty and staff assume that our educational experiences are delivered in the ways we intended. Additionally, in our current system, faculty and staff must assume that student performance on assessment measures reflects the impact of our educational experiences. To the extent that these assumptions do not reflect actual student experiences, the validity of any inferences produced from the program assessment process is compromised. The lack of congruence between the assumptions made and actual student experience represents both construct underrepresentation (the actual student experience, what we intend to measure, is under represented) and construct irrelevance (faculty/staff perspectives replace the actual student experience and are not what we intend to measure). This point is a key component of this dissertation. If we make changes to our program based on incorrect

information (i.e., interpretations with poor validity evidence), we should not be surprised if our changes do not result in improvement. Thus, a specific threat to the validity of program-assessment interpretations is the lack of student voice in our processes.

If we assume that our assessments reflect actual student experience, a second threat to the validity of our inferences still remains. All inferences made from programassessment information are based on the belief that the information will be used to inform logical changes to academic programs. If the information is not used for improvement, then the inferences we make are again based on a false assumption. If program assessment data is used for another purpose or not used at all, then the inferences made from the assessment process change and different forms of validity evidence may be required. Consider a program that wishes to improve the critical thinking skills of its graduates. The program wants students to improve; however, the results of the critical thinking assessment are used to justify funding from the university (i.e., 70% of students must "pass" the assessment to continue to receive funds). Given this, the department faculty construct the assessment in such a way that they are sure most students will pass. Consequently, the assessment instrument is no longer aligned to the goal of improvement nor the educational experiences that assist students in meeting it. The alignment of outcomes to assessment methods has been identified as a major threat to demonstrating learning at the individual course level (Fink, 2013). At the program-level, the threat to learning is magnified by the scope of assessment work. Thus, a specific threat to the validity of program-assessment interpretations is a lack of using program assessment information for formative changes to academic programs.

Research suggests that while many programs want to improve student learning and most are under some pressure from administrative forces to demonstrate such improvement, it rarely materializes (Banta & Blaich, 2010; Banta, Jones, & Black, 2009; Blaich & Wise, 2011; Fulcher, Good, Coleman, & Smith, 2014). Banta, Jones, and Black (2009) were correct that better assessment practice does not necessarily lead to better student learning. However, it may be that we in higher education have been concentrating on improving the wrong aspect of our assessment practice. Perhaps we have spent too much time concentrating on our established practices instead of seeking new paths. One such path waiting to be explored is student-faculty partnership in program-level student learning outcomes assessment.

Student-Partnerships and Improvement

Cook-Sather, Bovill, and Felton (2014) define student-faculty partnership as "a collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision making, implementation, investigation, or analysis" (p. 6-7). Healey, Flint, and Harrington (2014) provide a complimentary definition of student partnership: "a relationship in which all involved... are actively engaged in and stand to gain from the process of learning and working together... partnership is a way of doing things, rather than an outcome in itself (p. 12)." The authors continue by stating, "partnership works... to acknowledge differentials of power while valuing individual contributions from students and staff... (p. 15)." Both definitions highlight that partnership requires collaboration, the opportunity to engage, and acknowledging that different players bring different contributions to the table.

It is important to emphasize from the beginning that while these models of student-faculty partnership differ from the traditional power structure (professors sharing some of their knowledge with students), such projects do not swing completely in the other direction to give students unchecked power. Rather, these partnerships allow for a more equal and efficient use of both student and faculty perspectives to come to a better resolution than either could alone. Examples of student-faculty partnership include student involvement in course design and redesign (e.g., revising course objectives and materials), classroom-level assignment design (e.g., collaborative essay writing, collaborative selected response creation), students as teaching and learning consultants (e.g., observe teaching and give feedback from student perspective), student co-teaching (e.g., selected topic presentations), and peer grading and feedback mechanisms.

The Benefits of Student-Faculty Partnership

Research consistently suggests that meaningful faculty interaction is a strong correlate of success in higher education (Astin, 1993; Baker & Griffin, 2010; Chickering & Gamson, 1987; Stoloff, Curtis, Rogers, Brewster, & McCarthy, 2012). Student-faculty partnerships are among the strongest examples of student-faculty interaction and it is not surprising that research suggests positive outcomes of such work. Cook-Sather, Bovill, and Felton (2014) describe the outcomes for students and faculty in partnership as threefold. First, student-faculty partnerships lead to student benefits related to enhanced engagement: confidence, motivation, enthusiasm, and engagement in process over outcomes (Cook-Sather, 2010; Cook-Sather, 2011; Healey, Flint, & Harrington, 2014; Sambell & Graham, 2011). Second, student-faculty partnerships lead to student benefits related to enhanced awareness: improved metacognition and a stronger sense of identity

(Bain & Zimmerman, 2009; Bain, 2012; Cook-Sather, 2014). Finally, student-faculty partnerships lead to student benefits related to enhanced learning experiences: more active learning, understanding pedagogical intent, and taking responsibility for learning (Gibson, 2011; Healey, Flint, & Harrington, 2014; Werder, Thibou, Kaufer, 2012). The benefits of student-faculty partnership, however, are not limited to students.

Research suggests that student-faculty partnerships can lead to faculty outcomes similar to those achieved by students. First, partnerships lead to faculty benefits related to enhanced engagement: transformed thinking about pedagogy, understanding of learning from different viewpoints, and the conceptualization of learning as collaboration (Bovill, 2014; Bovill, Cook-Sather, & Felton, 2011; Werder & Otis, 2010). Second, partnerships lead to faculty benefits related to enhanced awareness: improved metacognition and deeper identity as a teacher-scholar (Cook-Sather, 2011; Cook-Sather & Agu, 2013). Finally, student-faculty partnerships lead to faculty benefits relating to enhanced teaching experiences: increased reflective and responsive practice and creation of collaborative classrooms (Felton, Bagg, Bumbry, Hill, Hornsby, Pratt, & Weller, 2013; Werder & Otiz, 2009). Given that these outcomes are expected from student-faculty partnerships at the classroom level, what might be the outcomes of student-faculty partnerships tied to program-level student learning outcomes assessment?

Literature Review Summary

Program-level student learning outcomes assessment should be able to inform efforts to improve program-level student learning. However, there is little evidence to suggest that information is used in this way. Rather, assessment results are more often used for accountability or improvements to assessment processes. A majority of higher

education programs would undoubtedly benefit from a stronger theory of their educational programming. However, even with a stronger program theory, the chain of necessary validity evidence will remain at best weakened and at worst incomplete. It is certainly possible that, using our current practice of faculty-driven assessment that we happen upon better student learning experiences. However, with students as partners in the process, we might be more intentional in our assessment processes and the resulting educational interventions. The interpretations of the program theory and the assessment of student learning rest on the assumption that each accurately reflects the student experience of learning. The only way to provide evidence for this assumption is for students themselves to become involved in each stage of assessment. A growing body of research suggests that student-faculty partnership in various aspects of higher education leads to benefits for both students and faculty. Unfortunately, there are too few program-level examples and no explicit theories to guide the empirical evaluation of student-faculty partnership in program-level student learning outcomes assessment.

Research Questions

Without solid theories of student-faculty partnership in higher education program-level assessment, it is impossible to generate rigorous empirical support for student-faculty partnership work. Thus, in this dissertation, I propose a framework for developing student-faculty partnership practice in higher education program-level assessment. To inform this framework, this study explored patterns evident in student-faculty partnership work in other areas of higher education, specifically:

1. Who are the people in higher education engaging in student-faculty partnership work?

- 2. How do people become interested in student-faculty partnership work?
- 3. What do experts identify as the benefits to partnering with students?
- 4. What do experts identify as the challenges to partnering with students?
- 5. Is there a common developmental pattern to student-faculty partnership work?
- 6. What work is being done at the classroom level that might be scaled up?
- 7. What work is being done at the program-level that might be adapted to assessment work?
- 8. Do experts in student-faculty partnership think that student-faculty partnership in program-level assessment is viable?

While these questions guided the initial inquiry, given the qualitative nature of this work, additional lines of inquiry inevitably emerged. These not-yet-known 'organic' themes were also explored as emergent research questions during this study.

Chapter 3: Methods

Foundations

Grounded theory is a general qualitative, exploratory research method with the explicit purpose of producing a theory based on available data (Walsh et al.., 2015). Grounded theory methodology requires careful, systematic collection and analysis of data (Strauss & Corbin, 1994). The process may be conceptualized as discovering what drives people to engage in a specific action. A grounded theory approach is appropriate as there are no current theories to guide student-faculty partnership at the program-level.

Grounded theory work relies on six central tenants that define the methodology and distinguish it from other qualitative methods (e.g., content analysis; Charmaz, 2006; Corbin & Strauss, 2008; Strauss & Glaser, 1967; Heist, 2012; Merriam & Tisdell, 2015; Sbaraini, Cater, Evans, & Blinkhorn, 2011). The first tenant is that the research should progress using an inductive process; collecting specific information and using it to develop ideas about larger constructs. Using an inductive process requires an openness to change. Because the larger picture is unknown, the focus of a grounded theory study might change mid-study. Second, the analysis of the data begins during the process of data collection. In this way, data analysis informs further data collection efforts. Third, coding, comparison, and comments are key analytical techniques. Coding is the process of labeling small components of qualitative data in a meaningful way. Constant comparison of codes from one case with codes from other cases will allow for the generation of an overarching framework or theory. Comments from the analyst (also termed memos or diagrams) throughout the coding and data collection process help to document the progression of thoughts that will eventually form the initial framework or

theory. Fourth, theoretical sampling should be employed such that additional participants are identified based on the need for data. If a certain perspective is required to fill in a gap in the development of a framework or theory, someone with that perspective should be sought out. Fifth, saturation of information is a necessary prerequisite before the final analysis of data can occur. Saturation in grounded theory research is analogous to sample size in many quantitative research methods. Finally, the outcome of grounded theory research is the expression of a framework or theory.

Research Design

Table 1. Research Design Map

Design Phase	Dissertation Component
I) Qualitative Data	In-person and remote semi-structured interviews with experts in
Collection	student-faculty partnership.
II) Qualitative Data Analysis and Results	Transcripts from semi-structured interviews will be analyzed and coded using a grounded-theory approach (Walsh, Holton, Bailyn, Fernandez, Levins, & Glazer, 2015).
III) Interpret Qual. Results and Use to Inform Interventions	The grounded theory approach will inform a framework of implementation for student-faculty partnership in student learning outcomes assessment. This framework will be used to guide pilot projects and course-development in student-faculty partnership.

Design Phase I Qualitative Data Collection.

Participants. Participants in phase I were faculty and staff members in the U.S. and the U.K. who have engaged in student-faculty partnerships to gather assessment information at the program or classroom level. Participants were identified using purposeful sampling based on a thorough review of available literature on the topic. Literature was collected through various educational and psychological research databases, online searches using various search engines, and discussions with researchers in the realm of student partnership. Purposeful sampling is a process of identifying

participants based on their specific area of expertise. Additional participants were identified using theoretical sampling. Theoretical sampling is used to identify additional experts who are likely to provide perspectives on a topic needed for saturation. Thus, initial participants were authors in the realm of assessment and student-faculty partnership and subsequent participants were authors, teachers, or administrators with applied experience in student-faculty partnership work. At the end of the interview process, 9 participants were based in the U.K. and 6 were based in the U.S..

Interview Protocol. A semi-structured interview protocol was drafted that focused on identifying key information about student-faculty partnership work. The interview was structured to align with the research questions while also remaining conversational. The protocol also partially aligned with archival interview data collected during a preparatory phase of the study. It consisted of open-ended questions and probes designed to prompt participants to discuss the key features. Participants were given license to discuss topics in addition to those listed in the protocol. The full protocol can be found in Appendix A.

Participants in the U.K. experienced the full interview protocol as presented. The participants in the U.S. had already engaged in conversations with the author about this topic. While the questions during these conversations were similar, they were not identical. Thus, participants in the U.S. were contacted a second time and asked a subset of the questions in Appendix A. Specifically, participants were asked questions B2, C5, C6, C7, C8, and D10 on the protocol. Consequently, for participants in the U.S., data analysis focused on a combination of field notes and interview transcripts. For participants in the U.K., data analysis focused on full transcripts of the interviews.

Procedure. The initial group of UK participants were contacted via email and invited to participate in the study. Secondary contact occurred via phone or video call. During the call, participants were asked to participate in either an in-person or remote semi-structured interview in order to gather systematic information on student-faculty partnership. Participants gave permission to audio record the interviews for review, analysis, and use of quotations. If a participant declined the recording, we intended to proceed with manual transcription only, however, this never occurred. For in-person interviews, an informed consent form was collected in-person prior to the interview (Appendix B). In-person interviews largely occurred in faculty offices at various universities. Theoretical sampling is a process of identifying participants based on the need for certain perspectives in the data. Phone and video interviews occurred in a private room. For phone and video interviews, a verbal consent process (reading the entire consent form) was offered and, once permission to record was granted, the responses were recorded.

Initial data for the participants in the U.S. were drawn from archival field notes from previous conversations. In order to address the gaps in information from the field notes, an additional conversation was requested and granted by all participants. U.S. participants gave consent for both the archival and updated field notes to be used in this study.

Design Phase II Data Analysis and Further Data Collection. A professional transcriptionist transcribed all interview transcripts and the researcher transcribed all field notes. All transcriptions were coded and analyzed by the researcher in accordance with grounded theory methods (Corbin & Strauss, 2008) using NVivo qualitative analysis

software (2017). Coding is the process of "naming segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data" (Charmaz, 2006). A second researcher repeated the coding process for a random sample of the full data set: two from the UK and 2 from the US. First, the data were coded using open, line-by-line, coding to identify concepts, themes, and possible meanings of these data (Strauss & Corbin, 1990; Charmaz, 2006). Open coding attempts to develop codes that describe the concepts of interest in the study. By summarizing the data sources in a line-by-line fashion, it minimizes the amount of bias present in the analysis. As concepts were identified in each data source, they were compared to previous coding using a constant comparative method. In addition to helping to recognize commonalities, the constant comparative method helps the researcher to reflect on the data. In qualitative analyses, "One attempt to help minimize the effects of the researcher bias on the study is reflexivity" (Kolb, 2012; pg. 85).

Once several data sources were coded openly, focused coding was applied.

Focused coding is a process of synthesizing and explaining larger segments of the data.

Focused coding helps identify the most significant and/or frequent codes generated through open coding. Data collection, open coding, and focused coding did not happen sequentially or in isolation. One process informed the other and previous codes were reexamined and adjusted based on subsequent information.

In addition to coding, memo writing was another key component of analysis in the grounded theory framework (Charmaz, 2006). Memos were written informally to detail the evolving thoughts of the researcher during the analysis process. These thoughts may include comparisons, connections, questions, new ideas, or insights during the process of

data collection and coding. They allow the researcher to answer questions such as: what is going on, what are people doing, what is a person saying, what do participant's comments take for granted, how do structures relate to the content, and what connections can be made. The memos serve as a record of the framework development process and provide strong evidence for that process.

Interviews were conducted until evidence of saturation was obtained. Saturation in qualitative research occurs when new data, themes, or coding are unlikely given a new participant. Saturation also indicates that it is possible to replicate these data, themes, or coding with new participants (Fusch & Ness, 2015). Saturation, not sample size, is the most relevant component to a strong claim in qualitative research. Saturation will be considered to be reached when new concepts cease to emerge, concepts become redundant, and a majority of the participants are represented by each of the main concepts.

In addition to saturation of the data, the research design ensures the trustworthiness of these data by employing "triangulation" using several methods (Williams & Morrow, 2009). First, the research design and analytic strategies are clearly laid out to enable replication. Second, a diverse set of viewpoints was sought across multiple countries and types of institutions. Third, multiple checks of the analysis were conducted, including a random sample check coding by a separate researcher. Fourth, the author and second coder independently conducted an initial bracketing of biases and assumptions with a common third researcher. This process is an attempt to make biases and assumptions about the topic explicit. The process will aim to set aside preconceptions to allow the data to guide our interpretations. Fifth, the author generated memos

throughout the analysis to continue to identify biases and assumptions. Sixth, direct participant quotes are presented along with final interpretations. This allows the participant voice to shine through the interpretations.

Design Phase III Framework Generation. As is common in grounded theory work, the analysis of interview transcripts occurred throughout the interview process using a constant-comparative method. The constant-comparative method informed continuous revisions to the focus of the developing framework. Once major themes were identified, the themes continually guided the development of a framework of student-faculty partnership development at the program-level. The framework was built on established practices in the U.S. system of program-level assessment as well as the scholarship of teaching and learning, and best practices in student-faculty partnership in other areas of higher education. The development of this framework was the primary goal of this dissertation.

Chapter 4: Results

Fifteen experienced higher education professionals provided more than 20 hours of interview data. These data resulted in 6,258 lines of open line-by-line coding. These open codes were consolidated using focused coding, into 191 secondary-level themes. These secondary-level themes were consolidated using focused coding, into 11 primary-level themes (percent of total coding coverage in parentheses):

- 1. Examples of partnership (14%),
- 2. The benefits of partnership (14%),
- 3. The challenges of partnership (13%),
- 4. Interest in the benefits and challenges of program-level work in general (12%),
- 5. How to move partnership forward (10%),
- 6. Similarities and differences between the US and UK systems of higher education (9%),
- 7. Roles and jobs of those who practice partnership (8%),
- 8. How other higher education practices and policies affect partnership (7%),
- 9. Program-level partnership ideas (5%),
- 10. Partnership has many meanings (4%),
- 11. Inspirations for engaging in partnership (4%).

See Figure 3 for a visual representation of the coding themes in this study.

Evidence of saturation was achieved as all participants addressed all themes and participants quickly began to support each other's comments and repeat information.

Each of these themes will be discussed within the relevant sections below.

Organization of the Results

Although the primary focus of this study was to provide information relevant to the original research questions, it became clear during the analysis that there were other questions and issues that the original questions did not address. Thus, the results will be organized into two sections. First, I provide information relevant to the original research questions. Once these questions are addressed, additional questions and themes that emerged during the course of the study will be presented and discussed.

Original Research Questions

Who are the people in higher education engaging in student-faculty partnership work? The theme labeled 'Roles and Jobs' is directly related to this research question. This theme contains 18 broad subcategories that describe the breadth of the roles and responsibilities of the participants in this study. See Figure 4 for a visual representation of the coding for this theme. The majority of participants worked, at least in part, as educational developers; twenty percent of this theme's codes described formal educational development work under a variety of names (e.g., academic development, faculty development, educational development). Educational development is the "enhancement of the work of colleges and universities often with a focus on teaching and learning" (POD network executive committee, 2016). Educational developers often work directly with faculty members to improve the teaching and learning activities that occur within a classroom. Similarly, 18 percent of codes described current or former work as a higher education teacher. The disciplinary focus of teaching varied (e.g., chemistry, education, communication). Fifteen percent of codes referred to current or former work in higher education leadership (e.g., pro-vice chancellor, assistant provost, department/program head, director of student affairs). Nine percent of codes referred to a

formal role at the institution in which respondents were tasked to engage themselves or others in student-faculty partnership efforts. Most of these roles were incorporated into educational development such that when working with faculty, participants were incorporating elements of partnership into such work. Nine percent of codes referred to work as consultants to other higher education institutions (e.g., student-faculty partnership work, external examination, designing assessments, and educational development). Seven percent of codes referred to engaging in research as a primary role. Fewer than five percent of codes referred to work in assessment, educational technology, student support, serving as leaders of higher education focused organizations, pre-college teaching, and quality assurance work.

How do people become interested in student-faculty partnership work? The theme labeled 'Inspirations for Partnership Work' is directly related to this research question. This theme contains 12 broad subcategories that describe the breadth of the inspiration for partnership work for the participants in this study. See Figure 5 for a visual representation of the coding for this theme. The most common inspiration was formative educational experiences, representing twenty percent of this theme's codes (e.g., having a former teacher use partnership, fundamental orientation of disciplinary training, desire for students to have as great of a higher education (HE) experience as participant did). Sixteen percent of codes referred to the opportunity to work with like-minded people as an inspiration. Fifteen percent of codes referred to initial successes with partnership efforts (e.g., seeing the effects of partnership encouraged more work, institution had other successful partnership efforts prior to own work). Similarly, fifteen percent of codes referred to trying to improve one's own teaching and learning (e.g., responding to a lack

of teaching training, wanting to know if students were learning). Another common inspiration, representing 11 percent of the codes, was reading research literature on student-faculty partnership. Seven percent of the codes referred to a personal desire to engage students more meaningfully. Six percent of the codes referred to initially engaging in partnership due to some expectation of them. Fewer than five percent of the codes referred to wanting to engage faculty members, desire to develop additional skills, logic, to do research, and trying to be more clear in setting expectations for students.

What do experts identify as the benefits to partnering with students? The theme labeled 'The benefits of partnership' is directly related to this research question. This theme contains 15 broad subcategories that describe the perceived benefits of partnership for the participants in this study. See Figure 6 for a visual representation of the coding for this theme. Eighteen percent of codes in this theme referenced that studentfaculty partnerships result in better teaching, learning, and assessment. Seventeen percent of codes also suggested that student-faculty partnerships provide information to students and faculty members that they could not get in other ways (e.g., students get to see "behind the scenes" of higher education, faculty members gain information about student experiences). Sixteen percent of codes referenced that engaging in student-faculty partnerships qualitatively changes the way students and faculty members approach higher education (e.g., partnership is a threshold concept, faculty members do not want to go back to traditional, non-partnership methods). Fifteen percent of codes referenced that student-faculty partnerships allow students to develop important knowledge, skills, and attitudes (e.g., sense of belonging, confidence, research skills, metacognitive awareness, motivation, agency in learning). Twelve percent of codes referenced the idea that

engaging in student-faculty partnerships allows different perspectives to converge to provide a better understanding of higher education (e.g., conversations between students and faculty members occur that are crucial to understanding, greater insights are achieved through converging perspectives). Less than five percent of codes referenced themes such as ownership of education, balancing power, countering the consumer model of higher education, developing a common language, fostering connections, fostering inclusivity, and encouraging program-level thinking. Also included in infrequently referenced themes was the idea that faculty enjoy partnering with students.

What do experts identify as the challenges to partnering with students? The theme labeled 'The challenges of partnership' is directly related to this research question. This theme contains 19 broad subcategories that describe the perceived challenges of partnership efforts for the participants in this study. See Figure 7 for a visual representation of the coding for this theme. Sixteen percent of codes in this theme referenced that partnership is difficult to accomplish within the current systems of higher education (e.g., faculty reward and tenure structures, modularized curriculum, all power with faculty members). Thirteen percent of codes referenced that a major challenge to student-faculty partnership work was time, resources, and logistics (e.g., funding, student and faculty scheduling, need for extended period of time to do partnership correctly). Twelve percent of codes referenced the challenge inherent in the power, knowledge, and experience differential (e.g., between faculty members and students, between students at different levels). Nine percent of codes referenced the difficulty of achieving representativeness in a partnership effort (e.g., which students are included or recruited, how can they speak for all students). Eight percent of codes referenced that it is

challenging to convince others that partnership is worth doing (e.g., getting students or other faculty to engage in partnership, administration to support partnership). Seven percent of codes referenced that student faculty partnerships often make faculty uncomfortable and vulnerable to criticism. Less than five percent of codes referenced themes such as training and recruitment, other issues taking precedence, cultural difficulties, lacking a shared vocabulary, the students as consumers model, low confidence in some students, dealing with unwilling students and faculty members, the perception that students are doing faculty jobs, student turnover, no shared practice, and tokenistic representation.

Is there a common developmental pattern to student-faculty partnership work? Within the theme labeled 'The benefits of partnership' there is a subtheme labeled 'Partnership leader changes' that is directly related to this research question. This subtheme contains 5 broad subcategories that describe the perceived changes in partnerships work for the participants in this study. See Figure 8 for a visual representation of the coding for this theme. Thirty percent of codes in this theme referenced a change in level for participant's partnership work (e.g., doing it in own classroom to helping others do it in different classrooms). Twenty-three percent of codes referenced the belief that participants did not know much about how to engage in partnership when they started and they have grown into the practice. Fifteen percent of codes referenced improvements over time of the training and preparation of others to engage in partnership work. Ten percent of codes referenced that participant's reasons for engaging in partnership changed over time (e.g., started doing it because it sounded good

but now do it because the information is critical). Less than five percent of codes referenced an increase level of comfort with the power dynamic of partnership over time.

What work is being done at the classroom level that might be scaled up? The theme labeled 'Examples of Partnership' is directly related to this research question. This theme contains 24 broad subcategories that describe examples of partnership work as relayed by the participants in this study. See Figure 9 for a visual representation of the coding for this theme. Many of the subcategories in this theme are related to specific examples of partnership efforts. Thirty-one percent of codes referenced extensive details on various institutions' students as consultants programs. Fourteen percent of codes referenced student-faculty partnerships in classroom-level assessment. Twelve percent of codes referenced other classroom level partnerships. Ten percent of codes referenced student-faculty partnerships in the co-creation of educational experiences. Less than five percent of codes referenced themes such as report writing, partnership with high school students, general research, peer-to-peer partnership, and co-publication.

What work is being done at the program-level that might be adapted to assessment work? None of the themes generated during the course of this study relate to this research question. This does not mean that program-level partnership is not occurring. Rather it suggests that program-level partnership is at least rare enough that the expert participants in the current study were unaware of the details of any specific examples.

Do experts in student-faculty partnership think that student-faculty

partnership in program-level assessment is viable? The theme labeled 'Program-level

Partnership Ideas' is related to this research question. This theme contains 14 broad

subcategories that describe ideas for partnership work at the program-level as relayed by the participants in this study. See Figure 10 for a visual representation of the coding for this theme. Broadly, all participants agreed that partnership at the program-level and in program-level assessment was a good, but challenging idea. Each participant agreed with the idea quickly and moved on to explore examples, thus, it is largely these examples that I discuss here. Twenty-seven percent of the codes referenced that each of the steps of the assessment cycle was an opportunity for student-faculty partnership (i.e., objectives, mapping, instruments, data collection, analysis, sharing, and improvement). Many of the participants specifically suggested involving students in setting program-level objectives. All participants shared that this dissertation work interested them and made them think more about program-level teaching, learning, and assessment (i.e., developing a theory of program-level student learning outcomes assessment partnership and applying it) and 22 percent of the codes in this theme reflected this fact. Fifteen percent of the codes referenced that participants were unaware of any partnership work at the program-level. Seven percent of codes referenced implementing a student as consultant program at the program-level. Less than five percent of codes referenced themes such as involving recent graduates of programs in partnership work, at all levels, and a general suggestion that classroom level partnerships might be scaled up to the program-level.

Emergent Research Themes

In addition to the original research questions discussed above, several other themes and questions emerged from conversations with participants. These themes and relevant information are presented below.

How to move the practice of student-faculty partnership forward. A theme labeled 'How to move the practice of partnership forward' emerged out of the coding process. This theme contains 22 broad subcategories that describe ideas for furthering student-faculty partnership practice in multiple domains. See Figure 11 for a visual representation of the coding for this theme. Eighteen percent of codes in this theme represented the belief that efforts to engage in student-faculty partnership should aim at 'low-hanging fruit.' Participants believed that implementing student-faculty partnership is easier in some areas of higher education practice than others (e.g., program-level over institutional-level, certain academic departments more amiable than others). Seventeen percent of codes represented the idea that student-faculty partnership practitioners should collect, create, and use research and theory (e.g., collect data and publish evidence that partnership works based on a priori theories). Several participants specifically pointed out that most partnership literature is based on trial-and-error practice that does not provide a strong base to convince others. Eight percent of codes represented a belief that student partners should be from a different context than the one in which they are working (e.g., a student working in partnership with a faculty member should not also be a student in that faculty member's class). This recommendation was made for higher-level partnerships (e.g., course design, program-level assessment, etc.), not for those within a single classroom. Seven percent of codes represented a belief that practitioners of partnership must explicitly recognize challenges to student-faculty partnership and work to address them (see challenges section for examples). Six percent of codes represented specific suggestions for recruiting students to partnership efforts (e.g., use 'chain-recruiting', don't partner with the same students every year, recruit students with fewer

commitments, recruit students based on motivation). Five percent of codes represented a belief that partnership practitioners should find, encourage, and connect with other practitioners. Less than five percent of codes represented themes such as making partnership an expectation, having a practical plan and goals, focusing on curriculum design, introduce partnership to first-year teachers, shifting culture through leadership, trying to be as representative as possible, developing a shared vocabulary, and having confidence that partnership will work.

Defining the term partnership is problematic. A theme labeled 'Partnership has many meanings' emerged out of the coding process. This theme contains 9 broad subcategories that describe various ways the term student-faculty partnership is used and problems associated with those various terms. See Figure 12 for a visual representation of the coding for this theme. Thirty percent of codes represented a general acknowledgement that lacking a common definition of student-faculty partnership causes issues (e.g., student engagement has become a connected buzzword without meaningful work, some people say they are doing partnership because it sounds good, the literature uses partnership inconsistently). Twenty-nine percent of codes for this theme represented the issue of confounding true student-faculty partnership efforts with efforts to increase student representation (e.g., include students on institutional committees). This was especially prevalent for participants in the U.K. as student representation on institutional committees is mandated for all institutions Thirteen percent of codes represented the belief that gathering input from students is different than partnership with students. Along a similar line, twelve percent of codes represented the belief that consulting with students is different than partnership with students. Less than five percent of codes represented

themes such as the quality of partnership defines the nature of it, partnership work is often done before the term is known, partnership looks different in different contexts, and that partnership might be a threshold concept.

Other factors in higher education impact student-faculty partnership efforts.

A theme labeled 'other higher education issues affect partnership' emerged out of the coding process. This theme contains 12 broad subcategories describing other higher education factors in higher education that affect student-faculty partnership efforts. See Figure 13 for a visual representation of the coding for this theme. Twenty-one percent of codes in this theme represent the belief that changes in the overall culture of higher education and have a large impact on student-faculty partnership efforts (e.g., a stronger quality assurance culture in HE leads to needing better information from the student perspective, access to HE has expanded and diversified the perspectives of those who engage in HE, the movement towards assessment for learning encourages partnership efforts, the movement towards a focus on the student experience encourages partnership). Twenty percent of codes represented the idea that charging tuition and fees discourages student-faculty partnership work and promotes the student as consumer model. Thirteen percent of codes represent the belief that the size and focus of an institution affect student-faculty partnership efforts (e.g., partnership efforts in research-heavy institutions might want to focus efforts on research, smaller institutions tend to have better studentfaculty connections which can lead to partnership efforts). Eleven percent of the codes represented the belief that the political climate has an impact on student-faculty partnership work (e.g., if student engagement is a politically popular issue, institutions are more likely to explore partnership; when politicians take notice of HE then faculty

and staff become interested). Six percent of codes represented the idea that HE policy organizations (e.g., Higher Education Agency, Quality Assurance Agency in the UK, NILOA, AALHE, AAC&U, and regional accreditors in the US) can impact partnership practices through their policies and materials. Less than five percent of codes represented themes such as the belief that top-down initiatives may not encourage partnership efforts, that partnership may create too much on top of the already heavy workload placed on faculty, and that the lack of teaching training for Ph.D. candidates makes partnership efforts even more valuable.

Participants have a general interest in program-level thinking and assessment. A theme labeled 'Interest in the benefits and challenges of program-level work in general' emerged out of the coding process. This theme contains 15 broad subcategories describing participants' interest and thoughts on program-level work in higher education. See Figure 14 for a visual representation of the coding for this theme. Although prompted briefly during the interviews, participants were not guided to discuss program-level work in the depth exhibited here and participants were not program-level assessment specialists. Seventeen percent of codes in this theme represented the belief that there is a heavy divide between those who think at the course-level and those that think at the program-level. For participants in the UK, one term in particular arose from this theme, constructive alignment. Sixteen percent of codes represented participant's desire to work with assessment more at the program-level than the course level. Fourteen percent of codes represented specific examples of high-profile program-level initiatives (e.g., the PASS and TESTA programs in the U.K.). Twelve percent of codes represented the belief that program-level assessment of learning is rare in the U.K.. Less than five

percent of codes represented themes such as the belief that key disciplinary and crossdisciplinary skills require a program-level perspective, that program-level work could be about providing a coherent student experience, that assessment and improvement are not always the same, and that program-level work is difficult.

Broad differences between higher education systems in the U.S. and U.K.. A theme labeled 'similarities and differences between the U.S. and U.K. systems of higher education' emerged out of the coding process. This theme contains 22 broad subcategories describing similarities and differences in the way the U.S. and U.K. approach higher education. See Figure 15 for a visual representation of the coding for this theme. While content was largely from participants in the U.K., all U.S. respondents were globally-minded and informed and also contributed to this theme. Twenty-five percent of codes in this theme represented a lack of shared meaning regarding common higher education vocabulary. Seventeen percent of codes represented descriptions of and opinions about the U.K. National Student Survey. Ten percent of codes represented the belief that there is as much difference between institutions within a country as there is this between countries. Less than five percent of codes represented themes such as the U.K. external examiner system, the Teaching Excellence Framework, the role of accreditation, differences in degree program length, grading versus assessment, tuition differences, general education, and student representation on committees.

Summary of Results. In order to consolidate the information from the results of this study into a working framework of student partnership in student learning outcomes assessment, each of the themes detailed above will be examined for their contribution to such a framework. Additional research literature will be examined to fill any perceived

gaps in the available information and a plan for moving student-partnerships in programlevel student learning outcomes assessment forward will be detailed.

Chapter 5: Discussion

Organization of the Discussion

Following the organization of the results, the discussion will be organized into three sections. First, I discuss the relevance of information related to the original research questions. Second, I discuss the relevance of the additional questions and themes that emerged during the course of the study. Finally, I use these interpretations to build a framework for future work on student-faculty partnerships in program-level student learning outcomes assessment.

Original Research Questions

Who are the people in higher education engaging in student-faculty partnership work? To build a system of student-faculty partnerships in program-level student outcomes assessment, it is necessary to know who the faculty in the relationship might be. The overwhelming answer to this question from current experts in partnership work is: educational developers. In a way, this overlap makes sense; the role of educational development is to help improve student learning. For those that endeavor to improve student learning, it is logical that they would seek student perspectives on such learning. In fact, student-faculty partnership work may encourage faculty to move toward educational development roles. As one respondent noted,

I was moving into an educational development role I was always integrating it [student-faculty partnership] into educational development, and as I was doing that, I was stepping in some ways away from the classroom and my own teaching and more into the educational development.

Not surprisingly, all of the experts in student-faculty partnership currently were or had been teachers in higher education. It is those in the 'trenches' of higher education classrooms that are in the best position to engage in student-faculty partnerships. Such partnerships also have the potential to fill-in some of the pedagogical training gaps for faculty members. One respondent noted about a first teaching opportunity:

I was getting my PhD... and I think because of that I got invited by a local university to teach a graduate course on college teaching. But, I didn't know anything about teaching and I certainly didn't know about all of these different disciplines that were different than my own; so, I worked directly with the students to figure out what was best to do.

Even respondents who no longer teach in the classroom still tend to see themselves as teachers. As one respondent noted,

in the last second half of my career, most of my students have been staff; most of my students have been lecturers.

A majority of respondents noted that they had served in a leadership role at their institution. All respondents noted the influence of leadership positions in student-faculty partnership work. When student-faculty partnership advocates are in positions of leadership, they can serve as catalysts for others engaging in such work. One respondent observed,

leadership is the term that is coming strongly across here, but that's right. So, I think it's about culture shift, for me, so it's absolutely about conceptual development.

Many of the respondents in leadership positions have a specific charge to encourage or enact student-faculty partnership work at their institutions. One respondent noted,

[my department] is staff facing [i.e., works directly with teachers], so my job is to get staff working in partnership with the students.

Many respondents shared that they work as consultants to other higher education institutions. Consultancy on student-faculty partnership work is seen as a great way of

encouraging more widespread engagement in such activities. There was a common warning when discussing consultancy in student partnership. If the practice is introduced harshly as a correction to the old, incorrect ways, it may be rejected as an affront to faculty professionalism. For example, one responded stated,

so sometimes it is about acknowledging there's a problem, but still saying that you're [the consultant] not here to be the police; I'm here to help you. Sometimes it's about saying, 'I'm here to keep you out of jail, not put you in', kind of thing.

Student-faculty partnership is sometimes a radical shift in the practice of higher education. Another respondent framed it in a different way, you are

trying to get people to understand you are here to help and work with them and you're not there to do things to them.

By framing the conversation in a more positive light, faculty are more likely to see the benefits to shifting their practices rather than focusing on the threat of changing.

Asked about their current roles, most respondents mentioned having an active research agenda in student-faculty partnership. Though the practice of student-faculty partnership efforts will be the driving force toward positive outcomes, doing so without a solid foundation of theory and research risks the success and spread of such work. Respondents agreed that work such as this dissertation was necessary for the continued evolution of student-faculty partnership efforts. Not surprisingly, respondents in this study engage in research with students as partners and often, but not always, on student-faculty partnership itself.

I'm also supposed to remain research active, which is great because most of my research is around the co-creation of learning and teaching; that's the term I use, but I talk also about student partners.

It is also not uncommon for additional research questions and projects to emerge from student-faculty partnership work.

...then what I do in my sort of day job is kind of doing the long-term enactment of some of the recommendations of things that come out from [student-faculty] projects like that, the kind of things that sometimes take multiple years to embed in processes and systems.

Moving forward, student-faculty partnership work in program-level assessment should seek to involve as many stakeholders as possible. As each brings a unique perspective and set of knowledge and skills, each will be valuable to such efforts. At a minimum, we will need partners who are students, faculty, assessment experts, and educational developers.

How do people become interested in student-faculty partnership work? To build a system of student-faculty partnerships in program-level student outcomes assessment, it is necessary to know how to successfully engage people in the idea of student-faculty partnership. The most prevalent common catalysts for respondents in this study were their own formative educational experiences.

...and I think I also had, as an undergraduate and then as a graduate student... I had teachers who really thought a lot about teaching, so they were really good models for how to be in a classroom and a university. I didn't have many lecturers who used the banking models or who stood up and talked at us.

Another respondent noted,

I come back to my philosophy, I guess, because otherwise it's not education; it's just a mill. It's putting a heart and soul into the educational enterprise; I firmly believe it. Going to university absolutely changed my life because it changed the way I saw the world, and that's what I want for students.

Across all respondents, there seemed to be a common underlying theme of falling into student-faculty partnership work by happenstance. The happenstance, though, was always focused on a good educational experience where student perspectives and agency were valued. Going forward, we have the opportunity to help develop future educators (i.e., our current students) purposefully into student-faculty partnership practitioners by purposefully providing educational experiences (including program-level assessment) that are grounded in partnership.

Respondents also noted that their willingness to engage in student-faculty partnership efforts was enhanced by working with like-minded people. One respondent told the story of how partnership efforts unfolded at their institution:

The year I became director of the [educational development] center, we also hired a new provost from outside the institution, which is not usual for us. We happened to get a wonderful person... who was part of the first cadre of faculty members who [were trained at another institution and had already] partnered with students. So, our provost had direct experience with this ... and loved it and thought that [we] ought to try it.

Support from those at one's own institution can be instrumental in the success of a new project. Support from outside of one's own institution can be helpful as well. Another respondent told of his/her initial interest in partnership work,

...at that meeting, I met [name redacted], who was also getting really interested in partnership and student engagement work. So, I think it was probably the early days with those enthusiasts together who were thinking what might be seen as sort of quite radically about some fairly interesting topics.

Whether the support is internal or external to one's institution, what is clear is that it needs to come from somewhere. Student-faculty partnership efforts are novel and, in some cases, run counter to traditional methods of teaching, learning, and assessment. In

these circumstances, it is difficult to engineer the systems change necessary on one's own. Moving forward, we should seek to develop networks of research and practice to support partnership work in program-level assessment.

Respondents tended to agree with the old adage, 'success breeds success.'

Respondents noted that successful first efforts in partnership led to additional, often more complicated and broad efforts.

...and that [a small student-faculty research project] worked wonderfully and so I started bringing that approach into my undergraduate teaching, so students as partners or student partnership, that was not the language I was using at that time.

Another respondent noted that copying an existing model from another university led to more innovative ideas for student-faculty partnership.

It's evolved to trying to think about more and more spaces – creating more and more spaces and opportunities for partnership beyond the original 'teacher/student working together on pedagogy' concept.

The theory of success driving future success has some empirical support in the research literature across several domains (Flaig & Stadler, 1994; Santoro, 2000; Van de Rijt, Kang, Restivo, & Patil, 2014). Moving forward, the idea of capitalizing on success can be leveraged by making sure that partnership efforts are set up to succeed. In order to do so, research such as this current work is necessary to identify crucial aspects that underlie successful efforts.

Respondents revealed that often, their initial venture into student-faculty partnership was driven by a desire to improve their own teaching practice. One respondent noted engaging in partnership to fill in the gaps in their own teaching training.

I didn't know anything about what I was doing [when trying to teach] and I didn't feel like I was qualified to evaluate courses in biology and

chemistry, you know, anything else, except maybe my own field. So, I began by thinking about this [student-faculty partnership] in my own teaching.

Another respondent noted that they felt an anxiety that they were not living up to their potential as a teacher.

I think things are kind of a reaction and I think partnership sort of grew out of an anxiety, if you like, that the educational principles were getting leeched out of teaching and learning, and it was a sense of trying to hold onto the important things that we'd got from our own educational experience that encouraged me in this work [student-faculty partnership].

A common theme across all respondents is that while the benefits to students, institutions, and educational systems are acknowledged, there are also benefits to faculty-members who engage in this work. Future attempts to engage faculty members in student-faculty partnership efforts may be enhanced by highlighting these benefits (discussed in detail in subsequent sections).

A majority of respondents highlighted specific literature on student-faculty partnership efforts that further encouraged their own exploration of partnership work.

Eventually, we came across a book called 'Engaging Students as Partners in Teaching and Learning,' [Cook-Sather, Bovill, & Felton, 2014] and our faculty, led by my teaching center, decided to read the book together.

This respondent continued on to describe how the book encouraged faculty members to engage in partnership efforts across the campus. Yet, because partnership is often so different to the established practice, the initial reactions to partnership literature are not always positive.

...he [a supervisor] gave me some stuff to read, some of the Healy stuff [i.e., Healey, Bradford, Roberts, & Knight, 2010; Healey, Flint, & Harrington, 2014]. That was kind of the first course I recall. And when I first read about it, it didn't really [make sense], it was a little bit odd.

For those that can get past any initial feelings of discomfort, partnership often begins to make sense. The same respondent continued,

you start thinking about it and you get into it and you actually think, this makes really good sense. So, it was really from that, just kind of an evolving interest.

Moving forward, selecting and sharing clear and persuasive literature on student partnership may help proliferate partnership efforts.

Respondents also referenced a personal desire to engage students in a more meaningful way. This sentiment most often emerged from those in educational development or leadership positions as a way of directly working with students:

So, I mean, that's sort of self-serving a little bit, but I also enjoy teaching and working with students, so it was a way to fill that in.

I really enjoy working with the students, so it's sort of a personal – you know, like, how do I, in my assessment work, still get to have some student contact.

Moving forward, the idea of directly working with students might be leveraged to encourage educational developers and administration that don't often have the chance to do so.

A smaller group of respondents candidly shared that they first engaged with student-partnership efforts because they were expected to do so:

I was just asked to do this [student-faculty partnership]. I didn't even know what it was so my associate head of student experience asked me to look at this here [at my institution].

Because there's no way of not being involved because it's [student representation] an expectation of our quality framework.

Although a smaller number of respondents shared this type of experience, those who experienced it were passionate that why they started engaging in partnership work is different than why they continue to engage in such work. The first respondent above continued,

at first I was told, we need to make you do this and we would like you to do it. You know, now, thinking I really like this and is what I want to be involved in. It's a really good idea and we need more of it.

The second respondent above continued,

but it's also such a no-brainer in terms of how you want to be working. So after being forced to start, we have deliberately pushed for more of it because it is advancing everybody's interests.

Traditional higher education 'wisdom' might suggest that a top-down initiative (i.e. a directive to engage in partnership from the administration) will be met with resistance. However, at least in the case of a few now-experts in student-faculty partnership, this was not the case. Even so, since a majority of respondents became experts in partnership willingly, moving forward, a top-down approach need not be the only option explored.

What do experts identify as the benefits to partnering with students? To build a system of student-faculty partnerships in program-level student outcomes assessment, it is necessary to define the anticipated benefits to doing so. These benefits will not only serve to help convince others to do such work but can also serve as measurable outcomes for empirical research on partnership efforts. Building on the benefits to partnership work in the literature (outlined in the introduction to this document), respondents were adamant that student-faculty partnerships improve the teaching, learning, and assessment process generally, no matter the level at which such efforts are applied. Several respondents stated this sentiment directly:

It shouldn't be some big revelation to the world that when we create a sense of inclusion and community, certain things happen better

So, you would be pretty stupid if you didn't develop your understanding on the basis of what the experience in that stakeholder is. It is just better teaching and learning for everyone,

Some respondents went further to say that not engaging in partnership isn't a viable option:

Well, I think that's the only way to kind of get it right for students.

I don't think we can afford not to engage them for the quality [of teaching, learning, and assessment]. If you want quality, they've [students] got to be in there.

A number of respondents posited why student partnership was so helpful in the teaching, learning, and assessment process:

Well, number one is that you develop an authentic curriculum; that is, a curriculum that is fit for purpose, that maps against students' needs.

So, that sort of development of meta-cognitive awareness that both student and faculty partners go through that really enhances everybody's learning.

...if they [students] trust you, if they feel that you are on their side, they will do all sorts of things. If they feel that you are lording it over them, you are treating them as inferior then they won't do anything, they will do the minimum to get by.

A number of respondents gave particular attention to the benefits for teaching:

And then for staff, it's a quality enhancement, if you like. Because you're getting feedback on what you're doing,

So a big benefit that's right away apparent to me is the way partnering with students has shaped my attitudes and practices of teaching,

[partnership] Helps to enhance the learning environment on campus. Provide ideas for teaching that go beyond just reading an article, etc.

For many faculty members, teaching, learning (and assessment, even if unknowingly) is the main business and goal of higher education. Moving forward, if we can make a convincing case that student-faculty partnerships can demonstrably improve the effectiveness of learning experiences, we will have little trouble convincing faculty of the value inherent in partnership. More than the potential to serve as a recruiting tool, if student-faculty partnership can in-fact meaningfully improve teaching, learning, and assessment practices, widespread implementation of such practices will result in the betterment of student learning throughout higher education.

In addition to general comments about improving the teaching, learning and assessment process, respondents also dove into some of the more specific benefits of partnership work. Respondents highlighted the ability of student-faculty partnership to provide novel and unexpected information to both students and faculty members.

Discussing a series of learning conversations that occurred between students and faculty, one respondent stated,

in essence it was to get us and the students talking to each other. That's quite eye opening sometimes. I remember one around formative assessments... finding out that some students were just given extra pieces of work to do that they did and never heard anything of again. And, in the minds of some teaching staff, that was formative assessment.

Discussing the co-creation of the student-evaluation of a course, one respondent shared,

the focus in some of their evaluations were things that I hadn't even thought to ask about and I think that's that alternative perspective, that if you are prepared to open yourself up to hearing those things.

Drawing on their own experiences partnering with students, respondents consistently highlighted student's ability to uncover new previously inaccessible information:

Faculty are always surprised at how much they don't perceive during a class session.

And they [students] uncover things that I think, you know, academics wouldn't uncover in researching student experience themselves.

Each campus has its own culture. Learning community within each campus is different. By doing assessment with students, you get exactly what the classroom needs are.

Student-faculty partnerships also provide novel information to students:

And they [students] know how things work in a way that they don't if they are imposed on them by a lecturer.

It also gives them the opportunities to see how things are 'behind the scenes', those kind of things.

I think the partnership works because students see behind the scenes. They see these aspects of academic life that they didn't even know existed...

By taking a teacher's perspective or thinking more closely about a teacher as a partner, a faculty member as a partner, they start asking questions about their own role as a student too.

So, it's difficult to say this without making it sound patronizing, but actually, the students don't necessarily have all the scholarly knowledge upon which to base the choices they're attempting to make, and actually, sometimes the academics do know better.

...because I think one of the bigger challenges with higher education is that a lot of the good work that institutions try and set up, if it's not made explicit to students they don't know it's happening.

In addition to students and faculty members, student-faculty partnerships have the potential to reveal new information to other stakeholders, such as administrators.

But I think what really shocked them [upper administration] was the findings were quite different from what they thought.

If student-faculty partnerships provide novel, but important and relevant, information to faculty members and administrators, by virtue of being novel, such information could not previously have been used to inform teaching, learning, and assessment practices. If the information, as is often the case in classroom level work, results in changes to educational practices, the prior practices were misinformed at best. Moving forward, we, as educators, have a duty to provide the best opportunities for learning that we are able to provide. Without all the information, we simply cannot do so.

Respondents shared various examples of a common idea that students and faculty members irreversibly change their approach to higher education teaching, learning, and assessment once they have engaged in student-faculty partnership efforts. Respondents made references such as:

That's just fantastic. I would never have expected that. Because it kind of makes us think, it shapes our foundations so there is that, how do we do it going forward, element.

I don't know what it's like for other academic staff. For me it now just feels really fundamental and important to work in partnership with my students when I walk into a classroom.

[students and faculty] don't always partner in all things, but they won't be able to unlearn some of what they've learned by partnering.

So they will cross that threshold in some way that will shape what they do even if they are not formally partnering with students.

Faculty are sometimes kind of lonely to go back to teaching on their own if they don't have a student partner to be talking with regularly, and so there's a kind of a dissatisfaction with their previous way of being teachers and learners.

It's a challenge but it's sort of a result of the benefits, which is that after faculty and students have participated in partnership it's really hard for them to go back to not being in those kinds of relationships.

What respondents are describing in these conversations is student-faculty partnership as a threshold concept. A threshold concept is a term that describes a concept or perspective that once learned, reveals novel things not previously available to the learner (Meyer, Land, & Baillie, 2010). Once learned, a threshold concept transforms the way of understanding or interpreting something. A threshold concept is of such importance that within a field, without grasping the threshold concepts, a learner cannot continue learning new or more complex information. Threshold concepts are transformative, irreversible, and integrative (i.e., reveal connections not previously made; Land et al., 2005), and often conflict with conventional wisdom. In fact, Cook-Sather (2014) wrote an article in which she states her belief that student-faculty partnership work is a threshold concept in teaching, learning, assessment and educational development work. In this work, the author makes convincing arguments that student-faculty partnerships meet the criteria for a threshold concept in that they:

- conflict with current practice (students do not have enough knowledge or experience to inform teaching practice);
- 2. are transformative for teaching practice. Engaging in student-faculty partnership necessitates shift one's own role (student or teacher);
- 3. are irreversible and integrative in affecting the ways faculty approach teaching.

 Once students have helped shed light on the student's different perspective on the classroom and that information has been integrated into the faculty member's

view, the faculty member cannot go back to viewing the classroom simply from their own lens.

If, in fact, student-faculty partnership in teaching, learning, and assessment in the classroom is a threshold concept, and, the status of partnership efforts as a threshold concept holds at the program-level, then moving forward, we simply need to convince faculty members to engage in meaningful and successful efforts in order to encourage sustained practice. Once stakeholders engage in student-faculty partnership in program-level assessment, they would not be able to return to their previous ways of thinking and acting. Once this shirt occurs for a critical number of stakeholders, partnership in program-level assessment may become the norm.

Respondents continued discussing the benefits of partnership work focusing on the specific benefits to students. Building on the benefits outlined in the literature, respondents often referenced that partnership helped students take responsibility for their own learning:

...students taking responsibility for their own learning and that in theory is the ideal partnership.

It leads to a lot of self-reflection, it leads to a lot of sense of agency, in the importance of having a sense of agency about education rather than just having education being received.

Respondents also highlighted the benefits of partnership to involvement, connectedness, and belonging:

I think students are way more engaged, they're way more excited about things. They are way more likely to get more engaged, they feel more engaged in the institution. They feel part of it.

I think it's also an additional way for them to feel connected institutionally.

...helps students to feel like they belong to something that's bigger than themselves. So, they're doing it for the rest of their lives, not just as they're sort of 'passing through' kind of model.

Respondents also spoke about partnership developing student confidence and empowerment:

The perhaps more surprising benefit is that students have become much more empowered and they have learned to find their voice and to understand themselves as important change agents at the college and beyond.,

And I think they also, this is what students have said to me is that they find academic staff less intimidating because they work more closely with one.

Respondents continued by listing other specific benefits to students. One respondent captured many of these at once, stating that student faculty partnership results in

active listening and reflection, recognition of their unique perspective, more comfortable taking risks in learning, gain confidence, gain metacognitive awareness, gain the ability to talk coherently to people with more power than themselves, and can also learn new skills such as those in research, learning, teaching.

Again, higher education is in the business of educating and developing students through the teaching, learning, and assessment process. Given the evidence available in the literature and the supporting statements of respondents here, it seems likely that students stand to benefit both educationally and developmentally from engaging in partnership efforts. As educators, we should consider these benefits to students as a primary driver of such work.

Respondents communicated the idea that student-faculty partnerships allow a merging of different perspectives that provide better information than either could alone. One respondent noted,

so keeping that in mind of realizing you're actually in this process, you would be holding staff and students to account for different things.

It is the accountability and expertise in these different things about the same topic that make partnership efforts meaningful. Another respondent reflected,

it is not about finding what is wrong. The job [efforts in partnership] is to reflect back what the student sees and what the faculty see and have those perspectives in dialogue.

This dialogue informed by different perspectives drives meaningful interpretation of and actions based from partnerships.

That kind of bringing together of different angles of vision on what's happening in the classroom is, first of all, the definition of perspective.

Again, student-faculty partnership efforts provide novel, important and relevant information, which by virtue of being novel, could not previously have been used to inform teaching, learning, and assessment practices.

What do experts identify as the challenges to partnering with students? To build a system of student-faculty partnerships in program-level student outcomes assessment, it is necessary to anticipate potential challenges and work to avoid them. The most commonly referenced challenges to student-faculty partnership work in this study were perceived conflicts with the current systems of higher education:

I mean, it really threatens the whole system that keeps everybody in their place and keeps everything functioning as it has – not that that's been the best idea.

There are institutional rules and structures in place that make it really complicated to have partnerships.

Other respondents noted that there are both differences and similarities to how the current system discourages students or faculty members from engaging in partnership:

Students can feel excluded by the sort of academic processes to which they are subject

It's a big shift for staff I think to move to the position where they're prepared to ask or open themselves.

Typically, the incentives for both students and faculty are not there to do this kind of work.

Respondents also discussed the system challenges at the program development and redesign level.

You know, if you've got a blank canvas, you're fine, but you never — even when it looks like you've got a blank canvas because you're going through a reevaluation so the program can be completely refreshed, there's never really that much time to do it.

In general, respondents believed that the current system of higher education (e.g., class structures, rewards, program structures, etc.) are not set up to support partnership efforts. Instead, respondents felt that these systems sometimes actively work against partnership efforts. Moving forward, in order to successfully build a widespread system of student-faculty partnership, we must consider how to work with or change the systemic factors working against partnership.

Another commonly identified challenge to partnership work was navigating the time, resources, and logistic support necessary for success. Respondents often pointed out various aspects of temporal challenges such as respecting student time:

They [students] are here, first of all, to obtain their own education, and so we need to work around their availability and sometimes that's convenient and sometimes it isn't [convenient].

Respondents pointed out strains on faculty time:

I [the coordinator] have to often provide a lot of support and work a lot of the logistics.

It's really not practical to have more than, say, ten student partners meeting with me per week or there wouldn't be enough time for everybody to share what's going on

Respondents also highlighted the need for adequate collaborative time:

If you are going to try to do something collaboratively and collectively, it always takes longer than if you are going to make it dictate from the top down

They're just not a quick fix [partnerships], and I think there's a 'quick fix' mentality in higher education right now.

One other challenge identified by respondents was the need for adequate funding in times of less funding:

I can see down the road that the challenge will be funding this, because it's very expensive

There is also a challenge in the current climate which is about funding costs and institutions saying they have less and less resources to fund the sorts of things while they are being recognized as being more and more important. So it's hard to know how to run these programs without it having resource implications in terms of staffing.

Moving forward, we will need to identify what time, resources, and logistic support is necessary to engage in meaningful student-faculty partnership work. Once identified, the necessary time, resources, and logistic support must be secured and maintained through demonstrating the value of such work (i.e., through thoughtful definition and meaningful demonstration of the benefits to partnership work).

By definition, those faculty members working in true partnership with students recognize the power, knowledge, and experience differential in partnership work.

Respondents in this study were sensitive to this challenge and referenced several specific aspects of these challenges. Respondents often stated the inequities quite plainly:

The fact is they are students, they have insights but they don't, they haven't engaged with the literature on learning and teaching, their life experience is reasonably short, most of them

I think it's probably not fashionable to talk about it because that sounds like you are establishing an inequity between staff and students, but the reality is there is a distance in knowledge and in standing.

However, even given their candid view on the power dynamic, respondents went on to state that knowing the state of affairs and accepting them without question are separate things:

We have to be mindful of that but that's not a reason not to be inclusive and not to think partnership

[We have to] try to find authentic ways of sharing power. Knowing that we are never going to have a completely equal sharing of power in the classroom because that's impossible.

Several respondents highlighted a specific issue in the perceived sharing of power in student-as-representative models (i.e., student members of committees).

So for example, if you have a lone student on a panel of crusty old academics, I think it's questionable in terms of how much leverage or influence you can have in that kind of situation depending on who you are but it shouldn't be reliance on students being really good at meetings and persuading people

The problems created by power and experience dynamics are not limited to the students in partnership work.

We found huge issues emerging around power and control and particularly of new staff, who sometimes were still PhD students who were teaching or had just finished PhDs, feeling quite novice.

For student-faculty partnerships to succeed, we need to find practical and effective ways of acknowledging the inherent power and experience differentials between students and faculty members while working to balance such power and the ability of all to make meaningful contributions.

Many student-faculty partnership efforts take place with only a select number of students. Given that the biggest contribution students often make to partnership efforts is to bring their own perspective as a student, issues of representativeness often occur. One respondent summed this up saying,

If partnership is done right, an ordinary student should be able to go into a situation and be heard. I don't think that is the case right now.

Respondents in this study highlighted several issues within this challenge to student-faculty partnership efforts. Respondents highlighted another challenge to the student-as-representative model:

So, are you [the institution] having one student in a non-representative capacity represent lots of students' voices? That's another challenge

I think one of the concerns is about how we can make such engagement meaningful because I'm not absolutely convinced that student representatives are indeed representative.

The other big disadvantage or challenge is that on occasions students will take a particular line that matters a lot to them based on their own idiosyncratic problems or negative experiences they've had and keep going back to it, and it isn't representative of the group as a whole.

Respondents were also concerned about a lack of engagement with students who do not volunteer or are not recruited to work in partnership efforts:

But then there is the criticism that those are the super involved students. What about the other 98 students that were in that class of 100? Do they have any buy in to or sense of what's going on, are they happy because the

other students involved and consulted or are they thinking, hang on, why didn't I get a chance to get involved in that?

The next challenge, and I haven't got an answer for it at the moment, is kind of to say how we can get students that haven't engaged with students as partners involved. The ones, for example, that didn't apply to be partners. Because those are the ones that we really want to kind of reach out to

Student-faculty partnership efforts seek to introduce novel, important perspectives to the teaching, learning, and assessment conversation. If our partnership efforts, even after including some additional perspectives, fail to include those who can most benefit, we will would fall short of the potential of our efforts. Moving forward, student-faculty partnership efforts should seek to ensure that individual students are not taken to align with the perspectives of all groups of students. The students in partnership efforts should align with the larger group of student for which interpretations are made.

Respondents saw the task of convincing others that student-faculty partnerships are valuable in higher education. Respondents felt that student-faculty partnerships can only have the impact we desire if we can convince others.

Some of this is going to be about winning over the various departments as well so you might be sold on this idea but you've got to somehow sell it to others the value of the student contribution in these areas.

Even so, respondents were up-front about the difficulty of convincing some people, that some stakeholders will likely never embrace partnership, and how fatiguing it can be to try:

You know, some people never get past it, but many, many people do, and so that's definitely a drawback.

...and trying to get lots of staff engaged across really large, diverse institutions you will find pockets of people, but to make it something that's kind of run of the mill just off staff interest wouldn't happen.

There was a shared frustration across respondents that even with a highly logical and evidence-based argument, some people will not be moved to change.

...and I just feel - I'm beginning to feel quite tired now that you can't change people's minds by reasoning or evidence.

Respondents also discussed the challenge of convincing students of the value in partnership.

Students generally take a bit longer to understand how much they are getting out of the experience than faculty.

Respondents highlighted the idea that we may only get one chance to present partnership in the best light. One respondent described their experience trying to convince a department to engage in research using student-faculty partnership after a previous person had implemented such an effort poorly:

Because I remember, doing some of the follow-up and trying to persuade the health center to take part in research that was going to work in a more valid way, again, as partners when they are really defensive, and they wouldn't go for it.

Finally, respondents cautioned that in the process of trying to convince others to change their own, often longstanding, practices, we might make ourselves unpopular.

I've made myself unpopular by trying to demolish trust in some of the established things. Especially essays and exams, but they only measure certain things and those things are getting less and less relevant these days. So I try to knock down the walls that are up there and get people to build better ones.

Moving forward, if we want to shift large-scale assessment practices to a partnership model, we will need to tackle the problem of convincing others to engage in these ways. We will need to build both an evidence- and logic-based argument alongside an emotional one. Even after convincing others, we will need to recognize that we may only get one chance to keep stakeholders engaged. Thus, we need to ensure that our initial efforts are likely to succeed. Finally, we need to prepare ourselves to receive criticism for attempting to change established practices.

Respondents highlighted the challenge that partnership, by definition, diminishes faculty power and increases student power. While this change of power does not give students more power than faculty or even equalize power, the act of changing power can be threatening to faculty. Respondents warned to be careful with how the term partnership is used with faculty.

Because actually to use the term partnership with some staff, it really puts them off and I think we have to be quite careful with that sometimes.

Respondents believed that the challenges to power dynamics were particularly salient for early-career teachers.

...students coming in with 'expert voices' was quite undermining to them just trying to develop their authority in the classroom.

Skepticism of partnership efforts is not limited to one's own experiences. One respondent shared their experience of other faculty questioning the use of partnership in their own classroom.

A lot of my colleagues said 'are you sure, you are just going to let them ask anything'? and I said, 'what do you think they are going to ask or say? What could possibly be so scary?' To me that highlights the sense that some people are nervous of what is going to come up in this kind of feedback.

Respondents also highlighted challenges around power for other stakeholders.

One respondent shared the experience of educational developers in partnership efforts.

It was also particularly challenging to the academic developers who thought they were the pedagogical experts and quite struggled with students coming in and saying what they thought.

Another respondent related the power dynamic issue to faculty, students, and institutions as a whole.

Power sharing and power threatening and power dismantling and all of what partnership has the potential to do is pretty scary to certainly some faculty and to some students, and to some institutions.

Another respondent highlighted the potential for disconnect between how the institution looks and how it operates.

You can imagine how vice chancellors think about that. On the one hand, they're thinking yes, we can do this and it will look good, but when you delve down into thinking about what that really means, it's pretty terrifying for people. And so one of the reasons it doesn't happen is to really get students involved in those ways would be to share power. ways that people are quite uncomfortable with.

Finally, respondents advised caution in exploring student-faculty partnerships in the realm of assessment. Respondents believed that assessment is one of the

most highly guarded and protected aspects of higher education and one of the last holdouts of sole faculty ownership.

We kind of hear much less about assessment partnerships, I think because it takes people too far beyond their comfort zone to allow – and I'd say students too – to start to opening up – people will open up the black box of assessment

Moving forward, in order to develop meaningful student-faculty partnerships, we will need to acknowledge and manage the challenges faced by all stakeholders in

balancing and redistributing the power around teaching, learning, and assessment practices. We will need to identify ways to make faculty, students, educational developers, and administrators comfortable with taking the necessary risks to engage in partnership efforts. In order to avoid negative associations with failed efforts, it will be important that partnership efforts are set up for success through careful planning and strategy.

Is there a common developmental pattern to student-faculty partnership work? To build a system of student-faculty partnerships in program-level student outcomes assessment, it may be beneficial to understand how experts in partnership efforts developed their own practice over time. Respondents described much of their work in partnership as moving from focusing on their individual practices to focusing on influencing the practices of others.

So I moved from my own practice in the classroom with students to trying to help develop partnerships, help my colleagues develop partnerships with their students.

As many of the respondents in this study were established members of the educational community, it is important to consider that it is possible that the move to have a greater influence would have happened regardless of partnership efforts. Even so, the trend of participants in this study to move from individual partnership work to working to encourage others to do partnership work is encouraging. Moving forward, if many supporters of partnership make their way into leadership positions, we may be able to leverage such influence to support partnership efforts more widely.

Respondents also described an acceptance that people start out in partnership efforts without much knowledge in how to successfully engage in such efforts:

I didn't know what I was doing when I started, so I've figured out how to do this through experience and working with them [students].

I was going a little bit on autopilot for the first year or two. But I think we've kind of come into our own here.

The beginning of it was an exploration. It was really about how to do a lot of this. Now I feel I know what works best for us and how to best work with it [partnership].

These observations by respondents are both positive and negative. One the positive side, these comments indicate that faculty and students with little to no evidence or support will attempt partnership in their own practice. On the negative side, if partnership efforts are not set up based on what we suspect works based on prior research, theory, and practice, they are more likely to fail. If partnership efforts fail, they might proliferate the perception that they are not worth the risks. Moving forward, we should try to support student-faculty partnership efforts based on the accumulated evidence that suggests certain methods of partnership work better than others.

Respondents also shared that their ability to train others in partnership efforts has gotten better over time:

Now, we provide them with structure that makes them comfortable but also still allow for their ideas and their voices and them for be able to shape.

I would say we have done better at assessing needs than we did before, meaning needs for training, and we really tightened and honed in on the most important parts of the student training.

Again, moving forward, we should leverage the collective experience of those that have worked in partnership for a long time. There is no reason to continually start our training

programs from scratch. Although each effort undoubtedly needs to be adapted to each institution's culture, we can still learn from the guidance of past efforts.

Finally, respondents shared that over time their personal reasons for engaging in partnership efforts have changed:

I wouldn't say it [needing student perspectives] was necessarily high on my mind when I first started doing it, but now that would probably be my argument for why I continue to do it.

It's just how I've developed really, I suppose. When I think about the start, at first I was told, we need to make you do this and we would like you to do it. You know, now, thinking I really like this and it is what I want to be involved in. It's a really good idea and we need more of it.

Moving forward, we can leverage this information by realizing that we do not necessarily need to convince all stakeholders of each of the benefits to such work. We simply need to convince them of the few benefits that will encourage them to begin engaging in the work. If we can get stakeholders to meaningfully and successfully engage in the work, the other benefits will reveal themselves over time.

What work is being done at the classroom level that might be scaled up? To build a system of student-faculty partnerships in program-level student outcomes assessment, we can model practices on those that have been successful at the classroom-level. In order to ensure confidentiality and anonymity of participants in this study, no institutions or organizations will be named. In some cases, this will result in broad generalizations in order to capture the spirit of the various partnership efforts. A number of respondents discussed student-as-consultant programs as an adaption of partnership efforts. In such programs, students work with selected faculty members to

observe, interview, survey, and reflect back the classroom to faculty members from a student perspective.

These programs share some general components yet differ in some of the specific practices. All programs involved training students as pedagogical consultants to work directly with faculty members on their classroom-specific practices. There were only two methods of training and compensation discussed by the respondents.

The first method was to give credit through traditional courses.

We have a 1.5 hour weekly course meeting involving reading, writing, and discussion of pedagogy and consultation skills.

The second method was paying students for meeting time.

The students are paid for 5-7 hours of work per week which includes a once a week meeting together with me [the coordinator].

Most programs run during the typical school year, yet, some programs require a summer training component.

The training schedule starts in the summer in order to build the skills necessary for beginning work at the beginning of the Fall.

There is a salient developmental theme for several consultant programs in which the program began as a course but transitioned to paying students for their work.

We started by giving course credit in a pass/fail model but we transitioned to paying students because of the amount of work and it is easier to work with.

Importantly, all student-as-consultant work within these programs are voluntary for both students and faculty members.

...in all cases, these partnerships between students and staff are voluntary. Either the student or staff can stop the work at any time.

Several of the student-as-consultant programs have an educational research component to them in which students will help collect, analyze and report data dealing with a specific pedagogical research topic. One respondent described the school's consultant program in student affairs work.

Ultimately, the purpose of the [the program] is to 1) meaningfully engage [our] undergraduates in the collection of institutional data on their experience, 2) provide 'SA' and the broader [campus] community with qualitative data on the experiences of [our] students, 3) to produce ongoing research that will identify characteristics of a positive campus climate.

All of the student-as-consultant programs have a similar structure: they all have a faculty coordinator, they all have a class or meeting each week, they all train students to work in partnership, they all provide some type of compensation to students (i.e., money or course credit). Moving forward with creating a system of student-faculty partnership at the program-level, we will need an organizing structure for work across different programs. The structure of the student-as-consultant models, adapted to ensure that true partnership occurs between students and faculty, could serve this purpose well. The only difference is that students would act in partnership with the faculty who are engaged in the program-level teaching, learning, and assessment process. We could, for example, create a class using the frameworks outlined here to provide basic knowledge and skills in program level assessment, pedagogy, and educational development so that students could work more equally with faculty.

Respondents also shared some of their own experiences with partnership in classroom-level assessment. One respondent shared his experience of teaching a course in which the learning outcomes were set, yet, students

had to work out how it would be most sensible for them to go towards achieving those learning outcomes and what the evidence would be, what they would show for it... That was put forth in a learning agreement which was approved or modified by the team which was running it.

The respondent described the creativity of student-generated educational experiences as often "surprising in the best way." Another respondent described their experience partnering with students in the evaluation of a portfolio assessment.

The student self-assessed it, assessed the criteria, made judgments as to if the criteria were fulfilled; not met, partially met, fully met... But they had to go to somebody else on the program to assess this evidence on the same things. but the participants got the peer to do this in good enough time to be able to modify it on the basis of the peer assessment. So one of the things in the binder included changes and additions and things I would do differently next time based on what my peer assessment recommended.

The respondent noted that both the self and peer assessments were always insightful and helpfully critical in ways that faculty assessment often were not. Another example involved the creation of multiple choice questions for an exam.

I used to do in the days of overhead projectors and transparencies, I would get the students into groups of four or so, five and ask them to design a multiple choice questions on a curriculum area we were doing on an overhead. But they have to on an overlay overhead have a response to each of the options... And so I get them to design the question and design the response to each and then test that question on the rest and we'd have a point system which turned out to be the best question that had the best discrimination index. These questions quite often turned out to be much better than my own.

Another example involved a thought exercise about novel ways of assessment.

...show people in groups to think of how you would normally assess the achievement in a subject which might be an exam or other method. And then, in groups, for one student in the group to defend that. And the other people in the group put a series of questions up to challenge it. What else could you do, why does this work, what could go wrong with this, that sort of thing... Now think of another, different way you could assess this, a rational, feasible, not radical way of assessing but one that it's different. Then think of a third way you could assess this that is off the wall, it's crazy, a crazy way of assessing this but going around the groups and

looking at the alternatives. very often the crazy ones, the off the wall ones, they're full of promise, full of ideas and you say why not do it this way? It just liberates people from the box of you have to assess this sort of outcome, this sort of way.

Another respondent shared their experience of student-faculty partnership in research focused on how students experience assessment feedback from faculty.

[The results] can be quite different than what the sort of educational literature says... sometimes, [we were] quite shocked, but a lot of students, for example, in [a specific class] just take multiple-choice questionnaire tests and they don't even get to find out [what was right and wrong], I mean, they just kind of get a score at the end. So, when they say, 'This isn't helping me learn,' they're actually quite smart for realizing that.

Moving forward in developing partnerships in program-level assessment, the best ideas are yet unknown because they will emerge out of the partnerships themselves. Yet, in these examples, we can begin to develop ideas that might inform practice in the future. It is possible that, for some programs, program-level learning agreements could be developed. Self and peer assessment practices could be adapted to the program level. Students can undoubtedly help us develop assessment items that both match our intended outcomes and use language that is clear to students. Program-level research on novel assessment methods for our outcomes can be conducted in partnership with our students and we could find ways of incorporating meaningful formative feedback for our students from our program-level assessments.

Respondents also shared examples of classroom-level partnerships outside of assessment work. A respondent noted that a common in-class feedback tool is start, stop, continue. Educators who employ this framework periodically ask students,

What would you like me as a tutor to stop doing, what would you like me to start doing that I'm not doing already and what would you like me to continue doing that's working for you?

The respondent expanded on this idea.

There is the stop start continue, the traditional one, and at the bottom [of the page] is what are you as a student going to stop, start and continue? This is not just about what I do in the class; we have a joint responsibility for what goes on. What could you start doing or stop doing that helps you learn but also help the people around you learn?

Another respondent shared their experience with partnering with students to make classroom-level outcomes meaningful.

I got them to spend 10 minutes just writing a note to themselves about what really motivated them being in the classroom? What really is it they want to get out of it? Then we put them all in an envelope but I also talked about what brought me to the classroom, why was I there, what was I trying to do.

The respondent made the conversation two sided and allowed students to talk about the similarities and differences that came out of the discussion.

And we returned to that conversation regularly throughout the course. And in as far as possible, we modified the curriculum to align with learning goals.

At the end of the year, the respondent returned the original notes and students reflected on how their learning had progressed.

And they were really positive about that.

Once again, moving forward, these examples of partnership at the classroom level could be adapted to the program level. We could, for example, have students give some thought to what they are trying to learn and how they are going to do that at the beginning of their program of study. The best examples, though, will still likely emerge from future student-faculty dialogues about such work.

Respondents also discussed student-faculty partnership efforts specific to the cocreation of classroom-level learning experiences. One respondent shared the experience of co-creating the final weeks of a course with students.

So as we moved through the year, what were things that had piqued their interest or what were the things we hadn't covered and what did they think they needed and wanted to be able to meet those learning goals that they had for themselves. Then students would say these are the activities we want to do as a group. But this is the information that you have that we need you to bring to the group.

Another respondent shared an experience working to redesign an education course in partnership with students.

Faculty considered the course to be important, but students didn't like it at all. So instead of guessing why students didn't like it, we brought them into the discussion. Students and faculty worked in partnership to redesign the course description, syllabus, course materials, assignments, and tasks.

The co-creation of program-level educational experiences may be further down the road for student-faculty partnerships in the program-level assessment process; yet, the idea is full of promise. If we can find ways of building in student-faculty dialogue into the process before we get to steps such as designing measures and making interpretations, those later steps likely become much easier.

What work is being done at the program-level that might be adapted to assessment work? To build a system of student-faculty partnerships in program-level student outcomes assessment, we may benefit from building on partnership efforts in other areas of program-level work. In an effort to gather an accurate portrayal of how student-faculty partnership work at a program level is viewed by a group of experts in

program-level assessment, respondents were given the chance to highlight any efforts they were aware of in this area. While a few respondents thought that work must have been done in this area, none of the experts in this study were able to provide explicit details of any such efforts during our conversations. This is likely indicative of only a small overlap in the practice of those that work intentionally at the program-level of teaching, learning, and assessment and those that work in student-faculty partnership (i.e. generally students, faculty, and educational developers). Moving forward, we should work to close this gap in practice in order to explore how each area might benefit from engaging with the other.

Once the dialogues with experts were concluded, further research into programlevel partnerships revealed a limited number of examples, at the program- or institutional-level, that are relevant to this work.

Allen (2016) provides an overview of the institutional quasi-partnership work done at Alverno College. Alverno is well known for their innovative approach to the assessment of learning in higher education (i.e., they do not assign grades; see Allen, 2016 for more information). Less well known, however, is Alverno's practice of requiring students to engage in self assessment of their own work. Students are also asked to periodically review the work of and provide feedback to other students. Alverno's efforts to engage students as partners in the assessment feedback process have been successful in helping students to develop. Yet, such an effort is predicated on changing their entire system of assessment, a change that is likely not going to occur at a majority of higher education institutions. Moving forward, though, we should consider how

similar systems of self and peer assessment feedback might work in our current systems of higher education.

The Center of Inquiry at Wabash College, led by Charlie Blaich and Kathy Wise, works to strengthen liberal arts education through evidenced-based practices. As a part of this mission, the Center provides workshops on various topics with the goal to enhance the interpretation and use of assessment information in higher education. One of these, entitled 'Students Engaging Students to Improve Learning: Using Student-Led Focus Groups to Gather and Make Sense of Assessment Evidence' focuses on empowering undergraduate students to conduct and interpret student focus groups (Center of Inquiry, 2016). During the workshop, teams of faculty and students spend three days working towards implementing a student-led focus groups program at each of their institutions. The workshop has resulted in several successful student-faculty partnership initiatives.

One such initiative, the Wabash-Provost Scholars Program (WPS), was implemented at North Carolina A&T University (NCAT, 2016). The WPS program prepares students to conduct focus group sessions, surveys, and other assessment activities at the university. Each year, students participate in the program as student researchers, led by two staff coordinators, on various projects. The WPS program focuses on one institutional issue per semester and topics have included:

- Gaining deeper insights into the results of a national survey,
- Assessing supplemental instruction,
- Exploring intellectual climate,
- Recommendations for improving transfer student enrollment and retention

Many of the student-written reports are available on their website. While the WPS program is not directed at program-level work, it is aimed more at the institution-level, the program is evidence that student-faculty partnerships are possible at a larger scale. The WPS program is also a successful example of applying the organizational structure common to student-as-consultant models to a larger student-faculty partnership effort. Moving forward, this example can be used to further inform the organization of efforts in program-level outcomes assessment.

The Provost Assessment Scholars program at the University of Scranton is another partnership initiative to emerge from the Center of Inquiry's training workshop (Truncale, Calk, Pellegrino, & Kermmerling, 2017). In the program, students are recruited and trained to work in partnership with faculty to both design and conduct student focus groups focused on institutional-level assessment topics, and also analyze, interpret, and present the results of the focus groups to institutional stakeholders. Students participate in a two-day training along with Collaborative Institutional Training Initiative certification to work with human subjects in research. The program is now limited to students with high GPA and no history of academic or conduct issues. Students in the program earn a non-credit, transcript recognition for their work in the program. The authors continue to support the benefits of student-faculty partnership efforts highlighting the benefits to the institutions/faculty (e.g., students have a different perspective, can better judge authenticity of responses, provide novel information) and to students (e.g., students can impact practice, they engage in a year-long research experience, and improve their skills such as writing, time management, critical thinking, and teamwork). The authors also highlight challenges that align with those reported by participants in this

study (e.g., logistics). The Provost Assessment Scholars program is another successful example of applying the student-as-consultant framework to a larger student-faculty partnership effort. Student-faculty partnerships in conducting qualitative work to support assessment and improvement efforts should be considered as potential work within the larger student-faculty partnership framework in program-level assessment.

Another program-level partnership initiative, the Departmental Change Initiative (DCI), was coordinated by a national network of higher education teachers and educational developers within the UK Higher Education Academy's Geography, Earth, and Environmental Sciences (GEES) Subject Centre. The DCI, brought together four GEES departments in different universities to consider program-level changes to each of their curricula (Healey, Bradford, Roberts, & Knight 2010). The departments were housed at Aston University, Bath Spa University, Lancaster University, and the University of Newcastle. The initiative took place from early 2009 to 2010, which consisted of a 48-hour development event and a six-month implementation phase. Within this process, the most explicit student-faculty partnership efforts occurred during the 48hour development event. Supported by educational development experts, teams of faculty and students worked to consider changes designed to improve student learning across their entire program of study. Teams also worked across their groups to provide critical feedback and suggestions for other groups. The call for proposals required student participation and as a result, some participants found themselves pleasantly surprised with the students. "...I included them because you told us to...but they were an incredibly helpful part of our team" (Healey et al., 2010, p 13). The DCI initiative has broad implications for future attempts to develop student-faculty partnership in programlevel assessment practices. Given this precedent for cross-institutional program-level work, it is not infeasible to consider cross-institutional program-level assessment work. Such work would benefit from multiple faculty and student perspectives and would likely benefit all stakeholders in ways not possible without such diverse collaboration. Moving forward, a goal of this work may be to encourage such collaborative efforts.

Tiring of the traditional model in which students are simply sources of data, the University of Western Australia implemented the Undergraduate Learning and Teaching Research Internship Scheme (ULTRIS) (Partridge & Sandover, 2010). The ULTRIS program develops student-faculty partnerships in the Scholarship of Teaching and Learning (SoTL). Experienced students are selected and paid to work with a faculty member on a SoTL research project. Further supporting the benefits of partnership efforts, students in the ULTRIS program reported high satisfaction along with demonstrating improved problem-solving, research, time-management, and communication skills (Partridge & Sandover, 2010; 2015). Staff participants in the ULTRIS program reported a better understanding of the institution's learning environment and some closure of the gap between the shared understanding of learning experiences between staff and students. Moving forward with partnership work in program-level assessment, it is not unreasonable to consider all program-level improvement efforts as a form of action-based SoTL research work. In such work, we set objectives (and hypothesize how students will do), we apply interventions (e.g., pedagogy, curricula) we design methods and instruments, we gather data, we make interpretations, we share our interpretations, and finally use those interpretations to take

action. Partnering with students in any and all of these steps is feasible and perhaps desirable from a SoTL research perspective.

Barron and Butler (2011) briefly describe their direct efforts to engage students in program assessment work at their institutions. In this work, psychology students were engaged in an independent study of assessment literature and then engaged in different aspects of the assessment process (e.g. data collection, analysis, sharing). While no explicit efforts were made to examine the benefits of this work, anecdotal evidence suggested that this work

- Provided needed time and resource support to the departmental assessment coordinator
- 2. Built student skill sets in research, data-analysis, and assessment
- 3. Increased the value students see in the assessment process.

This work is perhaps the most direct attempt at student-faculty partnership in the program-assessment process to date. Moving forward, we may wish to build upon this initial and successful effort to incorporate other important components (e.g., educational development, measuring explicit outcomes, partnership in intervention).

Do experts in student-faculty partnership think that student-faculty partnership in program-level assessment is possible? To build a system of student-faculty partnerships in program-level student outcomes assessment, those that might engage in the work must believe it is possible. All respondents in this study agreed that such efforts are possible and suggested ways in which partnership work might manifest. Respondents, after talking through a typical program-level assessment cycle, believed that student could become partners in each of the established processes:

This is where the partnership could come in because of course, you have the potential then that the students can own certain aspects of this cycle.

You have got this neat plan of how you go about doing program assessment with all the different parts of that and I see each of those parts as an opportunity for partnership.

Many respondents highlighted the opportunity for partnership in setting, revising, and understanding program-level student learning objectives:

Doing something with the program objectives might be good for student partnership.

I would be happier if they had the influence on the objectives...because that affects everything else.

One respondent offered a concrete suggestion for how partnership in the objectives might work.

What I'd say since you are making [program objectives/outcomes], half the official learning outcomes on the inner back cover, the ones that were agreed [by the faculty] and on the inner front cover, what this means this year is; and you have a translation that there has been negotiated with the students... You don't want to say we're not doing the original program or people will be saying that's not what I signed up for... but say we are translating that to what it really means

Other respondents were interested in student-faculty partnership focused on how well the measures of learning were doing what they were supposed to do and if there might be a better way:

I wonder if we could be working with students to develop our assessments.

I suppose what I would be interested in in particular is how well students thought that their achievement of the objectives had been measured; And what other way of measuring their achievement might have been better, that's the question I would always ask students, what other way of finding out how you done would be better than what we did.

Respondents also highlighted the potential for student-faculty partnership efforts in the interpretation and reporting of results.

I think that's something [partnership] that could be done with reports, could students be part of the discussion that talks about what's the meaning of these outcomes? What kind of improvements could be made? Can we have some student perspectives feeding into that process.

Drawing from their own experience of partnering with students to support classroom assessment results a respondent shared,

I think it had much more of an impact coming directly from students about their actual experiences at the institution than it would if I'd written a report... and also helped to get leeway when working with [individuals] who kind of said, 'Oh, no. That doesn't happen here,' and we could say, 'Oh, yes it does, and here's some quotes from students on how they experience it'

These ideas and examples highlight ways that we might embed student-faculty partnership within our current systems of assessment. These are undoubtedly innovative ideas from knowledgeable and expert faculty trying to involve students in our processes. Yet, even the best ideas generated from only our own perspectives are not likely to match the impact of those we develop in partnership with our students. Moving forward, we should consider these ideas as seeds for dialogue and potential prototype projects with our student partners as we work to develop even more meaningful and impactful ideas in partnership with students.

Respondents were collectively interested in this dissertation work and its impact on both assessment and partnership practices:

I think what you're looking at [how to improve program-level learning through partnership] is a really key point.

I'm certainly very encouraged by what you are trying to do. To find out what's working and feeding improvements.

I think it [this work] just involves entering a whole new space and sets of processes, and so I think there's pockets where people are quite interested in that.

This collective interest in program-level partnership from experts in partnership at the classroom level is encouraging for the future of such work. A major challenge to student learning improvement at the program level is 'the level problem.' Faculty members in our current system of higher education are primarily responsible for and concerned with the students enrolled in the faculty member's own classes. Yet, for interventions to have an effect large enough to impact program-level outcomes (i.e., those that cannot be achieved in a single class), the interventions must occur at the program-level. This would necessitate faculty members taking additional ownership and responsibility for the program as a whole rather than only their own classes. Fulcher et al. (2017) succinctly notes, "Ultimately, program-level learning improvement cannot be achieved without a 'program-level's worth' of faculty participation" (p. 58). Perhaps student-faculty partnership is a bridge that will connect faculty not only to their own classrooms but also to the program-level teaching, learning, and assessment processes.

Respondents suggested implementing a student-as-consultant model in programlevel assessment work.

A consultation model could work at the program level. However, it would be much more complicated.

Most respondents conceptualized a consultant model as students working with faculty on program-level assessment within a program. A few respondents conceptualized a consultant model as students becoming interns in the assessment office

working directly in partnership with the assessment professionals that support programlevel assessment work.

In terms of student partnership, you could look at things like having interns in your office; they could provide a different perspective on the work that you already do.

Moving forward, as one component of student-faculty partnership efforts in program-level assessment, implementing a student-as-consultant system may be beneficial. Yet, we also must consider the issue of representativeness inherent in asking a handful of students to provide the perspective of all students to our processes. One way to address this challenge is to implement multiple partnership efforts, some which are limited to a few students and some that seek to incorporate all students.

Emergent Research Themes

How to move the practice of student-faculty partnership forward. To build a system of student-faculty partnerships in program-level student outcomes assessment, we may benefit from the advice of student-faculty partnership experts who have already advanced such practices. Respondents suggested that future efforts aim at the combination of factors most likely to produce success; an idea that many respondents labeled "low-hanging fruit." Respondents first highlighted suggestions for engaging with particular programs or disciplines:

...social sciences, humanity subjects tend to be more discursive and...probably much more likely the students will engage in enhancing the quality of their own experience.

To me that makes a lot of sense to psychologists because they understand what educational psychology is.

Some subjects [are] more engaging of students than others... it's very difficult to come out of a medical or dental education without having had lots of face-to-face, hand-on support.

...partnership-like work is often popular in the philosophy departments.

Respondents also suggested that some assessment practices would be more conducive to partnership than others:

Get students thinking about what kind of activities are going to help them demonstrate their capabilities to the best effect.

if you start with a set of intended outcomes as we often do, it would be great if we have the confidence to negotiate those with the students.

You may find there are points in your circle that are easier to do and I don't think there's anything wrong with saying maybe we tackle one of these that we think we've got the idea of how we can do it, let's try and if that brings the student perspective in at that point, great.

Interestingly, some participants also believed that partnership at the program level might be easier, or less threatening, than at the classroom level.

The place [for partnership] may be more on the programmatic level, you know, trying to get students--because they experience the big picture and then aren't necessarily talking about 'your' teaching.

Moving forward, it makes sense to target the 'low-hanging fruit' in our early attempts at student-faculty partnership in the program-level student learning assessment. For reasons highlighted previously, we need our first efforts to be successful in order continue building future partnership work.

Respondents highlighted the importance of generating theoretical and empirical research and using research as the base for further partnership efforts and research. There was a common desire amongst respondents to build up a joint body of knowledge around

student-faculty partnerships. Respondents shared a belief that strong research evidence can help decrease resistance from those in academia.

I think if you want to change people in universities--they are academics. They do rely on that kind of approach and they're more willing to listen if they don't think that you're just making it up or telling them to do something because that's what you fancy.

Another respondent highlighted the benefit to having a research base for engaging with institutions that historically focus on research.

[Research-heavy institutions] are starting to change. it's been really hard to change, and so we started the change more by changing the discourse around students becoming emergent researchers through this idea of partnership research.

Despite the belief that a strong research base would be helpful, respondents do not believe that the current state of research is good enough. One respondent shared concerns about the present state of partnership practice.

So we may be a little further ahead in the student partnership stuff, but we are still making sense of what the hell we are doing. It's like we've all launched in then we're going hang on a minute, we're talking about completely different things.

Another respondent shared this concern and expanded the fear of partnership being misappropriated,

I'm quite deeply concerned about the lack of theorizing we do around partnership work. We have a growing body of literature which is largely based in practice and we have a growing interest among the higher education institutions, vice chancellors, especially the ones responsible for student experience in partnership work because it ticks a lot of boxes for them. One of the things I'm concerned about is if we don't start really theorizing some of this and really thinking contextually about partnership work, that we make ourselves open to co-optation. So that partnership work becomes sort of window dressing for an institution without really having to get into how you do that in a meaningful way.

Moving forward, more theoretical work must be conducted on student-faculty partnerships that can then be empirically examined by other researchers and used by practitioners to develop strong, effective partnership efforts. While work in practice has slowly developed a small following of partnership practitioners, only by engaging in a strong program of theory development and testing will we be able to convince a large portion of higher education to begin working in partnership with students to improve learning. Some of this work has already started with issues of educational research journals dedicated to student partnership and, in fact, an entire research journal dedicated to the topic (i.e., the International Journal for Students as Partners). This dissertation work fits well into this idea. It is an attempt to establish a framework that will move student-faculty partnership in program-level assessment forward.

Respondents encouraged faculty to partner with students from different programs or disciplines rather than from their own (e.g., a faculty member in psychology should partner with students from chemistry, music, or education). Respondents gave several reasons for this suggestion. One reason was the value of cross-disciplinary perspectives.

I think this cross-discipline thing is really useful because if you have a law program being looked at by lawyers they will approach it from the same perspective.

Another reason was to make sure that partnerships are about teaching, learning, and assessment processes rather than content.

If you have mathematician students in the psychology program or chemist students in the music program, they're not blinded by the subject, they don't know the subject as well but they see the process better.

A final reason spoke to the value of reducing the influence of unequal power dynamics and conflicts of interest.

When student partners are not enrolled in the class [or discipline], they are therefore not under the same... power dynamics as students enrolled in classes and discipline, so there are some spaces between them.

Moving forward in the process of student-faculty partnership work, such cross-disciplinary partnerships may be valuable. Since the primary contribution of students to a partnership effort is not content knowledge, such knowledge may in fact hinder students from contributing fully in the most meaningful ways. Partnering faculty and students from different disciplines allows each person to bring their own area of expertise (i.e., content knowledge and knowledge and perspective of student experiences of learning) to the partnership. It also somewhat reduces the issue of unequal power as the students would never be expected to know about content knowledge.

Respondents encouraged future practitioners of partnership work to both recognize the inherent challenges in partnership (e.g., unequal power, knowledge, and experience) and work to address them in productive ways. Discussing pedagogical knowledge and experience gaps, one respondent noted,

that's not trying to belittle them [students], it's just a reflection on where they are at in their life, the amount of experience and world savviness that they got as opposed to what their focus is around that. But what then happens is in working with students, you work to try to bridge that gap and to make sure they are supported in making and contributing to decision-making processes.

A few respondents offered the same practical advice for further rebalancing power.

Part of me wants to have at least two students so that you are at least balancing the footing in numbers.

Another respondent, discussing the issue of the difficulties achieving adequate student representation at the program level continued,

I'll just say just because it's not easy doesn't mean it's not worth doing, but I think that's why a lot of projects, you know, it often takes one person with a lot of goodwill and gung-ho-ness, but I've certainly struggled thinking about it.

Moving forward in program-level partnership work, practitioners can likely expect both similar challenges to those encountered at the program level and also challenges unique to this level of work. It will be important to address these challenges openly and productively rather than trying to work around them or ignoring them.

Respondents believed that some efforts to recruit students into partnerships are more productive than others. Several participants referenced the need for higher structure for students in the beginning of their partnership work.

The first time we allowed students to choose their own project to work on and that failed. We found that students need more structure and a framework at the beginning.

Another participant shared,

[Novice] students work best with boundaries because obviously they're not experts in this [partnership] so I think sometimes it's giving them some context to work in, so that's often quite interesting as to where you set those boundaries and how you negotiate them, which comes with some of the politics in working on this with students.

Respondents also suggested that recruitment criteria should not be based on prior skills or knowledge.

Recruit less off skills that they might have, if they've done things like this before, but more off their, passion and interest and how they feel this could benefit them or other students.

Discussing their own recruitment method another participant shared,

...we're not necessarily like, 'Oh, you have to have this experience already.' We're going to train you, right? And that's really our model and I feel like those students end up being most committed.

Finally, respondents suggested that students might be the best at finding other students that would work well in partnership efforts.

...then start to ask the student partners, 'Can you recommend people that you think would be good at this?' and then that expanded to include a different set of people and then every time we'd get a new batch of student or faculty partners we ask them for recommendations.

This idea is similar to the process of chain-sampling in research methods, so, I am going to term it chain-recruiting in the context of student-faculty partnership. Moving forward, these suggestions should be incorporated into student-faculty partnership work in program-level assessment. Initial recruitment should be based on interest and passion rather than previous knowledge and skills. An initial structure or framework could be developed to scaffold students to a level in which they are comfortable working in partnership and generating their own ideas. Current student partners, in addition to continuing to recruit based on interest, could identify future student-partners.

Respondents also discussed the importance of finding, encouraging, and connecting others engaging in student-faculty partnership work.

And we've got to go and find the other people who are doing really impressive work in extending and trying to push more towards partnership.

Another respondent noted,

[we could] sort of start this group practice, so there's actually exceptional practice going on, but people kind of aren't in the culture of sort of saying, 'Hey, I'm doing this, it's great'.

A respondent also pointed out that people that work in assessment and people who work in partnership or engagement don't necessarily interact.

The engagement people tend to write about those things. I think it's really interesting [that they don't talk]. They're quite different communities and it's really important to get them together.

Moving forward, it may be helpful to create opportunities for people interested in student-faculty partnership in program level assessment to connect both within and across institutions and also within and across countries. If we can provide spaces for collaboration and showcasing great practices, we can all benefit from the resulting practices. Additional efforts should be made to involve researchers and practitioners in assessment, partnership, engagement, and educational development to talk, together with students and with one another about these partnership efforts.

Defining the term partnership is problematic. To build a system of student-faculty partnerships in program-level student outcomes assessment, we will need to agree, as a community of research and practice, on what partnership means. What does and does not count as partnership (i.e., what does and does not result in the benefits outlined previously)? Among experts in student faculty partnership (include those who participated in this study), the two most commonly cited definitions are those presented by Cook-Sather, Bovill, and Felton (2014) and Healey, Flint, and Harrington (2014). However, respondents highlighted many challenges in how the term is currently used in general higher education practice.

Respondents stressed that the lack of a common definition for student partnership, no matter what the definition actually is, causes problems. Respondents pointed out that when they have discussions with others or read articles, they are often "not quite sure

whether [they should] put the label of partnership on it." Thus, respondents have trouble deciding not only whether partnership occurred, but also whether any of the positive or negative outcomes are the result of partnership efforts. Another participant shared the same feeling of frustration specific to assessment work,

So, when you see people doing that, you're never quite sure what they're talking about. Are they still just talking about involving students in, understanding, if you like, how the assessment process works, which might be seen as assessment literacy development, or are they actually coconstructing the nature of the assessment diet?

Respondents continued to worry that the lack of an agreed upon definition or standard will lead to misuse of the term.

A lot of people almost valorize or fetishize student partnership and engagement and there's been sort of a pushback, I think, of some people not quite understanding where [partnership] comes from, of thinking, of critiquing it, of perceiving it to be very prescriptive, demanding certain types of activities.

Moving forward in this work, building a strong research base is impossible if everyone is using a slightly different shape of brick. What I mean here is that if everyone is engaging in research and practice surrounding student partnership, but, what each person means by student partnership is different, we cannot talk about, for example, the collective benefits and challenges of partnership. It may be useful to define, now because we are in the formative stages of such work, what student-faculty partnership in program-level assessment is and is not.

Respondents were specifically concerned with tendencies to confound student-faculty partnership efforts with general efforts to increase student representation. These concerns largely seemed to arise from a specific quality assurance/enhancement expectation in the U.K..

Every committee in this institution, including nominations for senior staff, for strategy committees, Senate, all of them, they all have student representation... I think you will find that's the same everywhere [in the UK]. I'd be surprised if places were operating and not following that.

While no respondents expressed the belief that student representation is a bad practice, many questioned the effectiveness of such representation.

I don't know how effective having students on these panels is from a real partnership perspective, in terms of getting student voices and students asking questions.

Another respondent tried to explain their hesitation to call representation efforts partnership.

Part of it is that I think at the heart of good partnership practice is the ability to have conversation and negotiation. And most committee review structures, they are not really designed for a lot of conversation and negotiation. The terms are already set before students arrive. So they don't get to negotiate the terms.

Many respondents believed that partnership and representation efforts could work together:

You want it to happen on both sides of that coin, so you want [representation] to improve things generally, but you also want students to be [partnering] with you to enhance their learning.

I don't tend to put too much time on representation but I speak a lot to colleagues who do that and I think it's important we work together.

Moving forward in developing student-faculty partnerships in program-level assessment, we will need to be careful that we do not slip into a purely representative model. In the U.S., many program-level assessment practices are firmly enmeshed into their existing structures. It would be easy to require a single student from each program to sit on an assessment committee meeting with faculty who are discussing program-level

assessment. Yet, this type of representation is not likely to lead to the same the benefits we seek through partnership efforts. It is the efforts to engage in true partnership with students in which the benefits will accrue. We must strive to ensure that our efforts are collaborative, give all stakeholders the opportunity to engage, and recognize that each stakeholder has something unique to bring to the dialogue.

Respondents were also concerned that partnership efforts are often confused with efforts to include student input in the evaluation of higher education practice.

[It's a] fashionable term – 'partnership,' – at the moment. And so some of the things that are being promoted as partnership work strike me, sometimes, when you read them, as simply involving students in generating feedback.

Respondents were particularly concerned about the use of the term partnership in quality assurance processes:

...quality culture has grown up in the last 10 years around student voice, not necessarily partnership.

The ides of student participation [not partnership] in quality is an ingrained, formalized part of the national system [in the UK].

One respondent stated a major difference between partnership and input-gathering methods.

Or are you just interested in students' experiences of this process? So, is it kind of saying 'Does one just get you a better-designed program and that's what you're interested in?' or is it sort of 'What do students gain from such activities?' and 'How do they experience?'

A related concern was raised around the difference between faculty consulting with students and partnering with them.

A consultation model is fairly easy because we don't have to deal with issues of equality in relation to partnerships, at least not to the same degree.

Another respondent had specific concerns about partnership efforts in assessment work.

You could, of course, have a model which is about involving students in the assessment process in terms of understanding criteria, and understanding how judgments are made... "that one, I guess, is increasingly being called, 'student voice,' maybe.

Moving forward, we should be intentional in owning the meaning of student partnership in program-level assessment work as more than using student feedback or opinions to inform what we already do. In essence, this is already what assessment work does and we can do better. The final participant quote above is indicative of the issues of not owning our vocabulary. The term 'student voice' has a multitude of meanings across people, fields, and countries. To some it is the process of gathering student input on our processes (i.e. what one participant called consultation). To some it is making sure that students are knowledgeable about our practices (i.e. what the final participant referenced). To others, it aligns more with what we are now calling student partnership. A component of a definition of student voice offered by Seale (2010) stated, "...treating students as equal partners in the evaluation of teaching and learning..." By owning and defining our terminology (which requires that we act on other suggestions in this work such as building theory and networks of practice), there is less of a risk that we suffer the same confusion as troubles 'student voice' work.

Other factors in higher education impact student-faculty partnership efforts.

To build a system of student-faculty partnerships in program-level student outcomes assessment, we need to consider what higher education policies and practices might

hinder our success. The first theme common to respondents was a common belief that changes in the culture of higher education can have large impacts on partnership efforts. Respondents referenced a belief that various expectations of quality (e.g., those from accreditors) have changed over time to expect at least some student input in quality assurance work.

There's been far more of a quality culture in which is expected that you will work with students and that you will listen to the student voice and that there will be student engagement. That didn't exist when I was younger.

Respondents generally thought this was a good shift, but warned that we

should be wary about being forced to do partnership in ways that we don't necessarily know work well.

Respondents also shared that they believed that partnership work is becoming more prevalent because

there is a greater focus on students than there was maybe twenty-five years ago on their personal experience.

Considering a student's personal experience naturally leads to some forms of partnership because students are the only ones who can share their own experience of higher education. Respondents, in addition to thoughts about politics in general (expanded below) made a number of specific references to the Reports of the National Committee of Inquiry into Higher education (Dearing, 1997), informally known as 'the Dearing Report, after the principal author of the report, Sir Ronald Dearing. The Dearing Report was composed of 93 recommendations on higher education funding, expansion, and the standard for academics in the U.K.. While not all of these recommendations were enacted, two of those that were enacted radically altered higher education in the U.K..

First, teachers in higher education are now highly encouraged, and sometimes required by individual institutions, to have some explicit instruction in teaching and learning outside of just earning a Ph.D. Respondents referenced the perceived impact of increasing educational development efforts with faculty over time.

Engaging staff and talking about how to improve learning and teaching, you can't ignore the students when you are talking about that, that rise in the discussion of improving learning and teaching has led inevitably to much greater partnership with students.

Second, student tuition was introduced for the first time. It is to respondents' views of the impact of tuition and fees that I turn next. Moving forward, we need to consider the culture of the higher education system in which we work. During these times when our accreditation agencies are calling for the inclusion of student perspectives into our work, we may be in a good position to push them a bit further into asking for student partnership on our own terms. Given current trends, if we do not help set the standards for good partnership work, we run the risk of having them set and forced upon us. Greater intentional thought about good instruction may lead to more student partnership. Greater educational development work leads to greater thought about good instruction. Thus we should endeavor to include educational developers in our partnership efforts.

Respondents had strong opinions about the impact of tuition and fees on partnership efforts. While all respondents had thoughts about these impacts, responses from participants in the U.K. were particularly strong, likely due to the relative novelty of implementation and the continuing trend of tuition increases in recent times. Respondents often referenced the idea that charging students positions them as consumers of a product:

One of the arguments here is, now we have fees, students are positioned as consumers.

Tuition fees are still relatively new. And it has changed how institutions go about doing things and it has changed student expectations, I think, because it positions them as consumers.

...and then the sort of consumer model of the students that became very strong.

Some respondents pointed out that the relationship between students-as-consumers and tuition fees may not be as obvious:

I would argue that students were positioned as consumers first, that's what allowed us to charge the fee, that's what allows charging tuition fees to be acceptable.

But I think that [students-as-consumers] started well before the fees imperative really kicked in.

Respondents noted that they see the student-as-consumer model as antithetical to a student-as-partner model:

In a consumer model, the burden for learning falls on the teacher... students or somebody is paying for them to be here so they should expect something from us.

...questions about students paying to work on the thing they paid to receive for might hinder partnership, or, we might see it as students paying for the opportunity to engage in partnership.

Despite their reservations about tuition, respondents were very practical discussing what to do,

I suppose in an ideal world I'd advocate that education should be free but we are not going to see it anytime soon and we have to work within the systems that we work, I think.

Moving forward, student-faculty partnerships in program-level assessment work will need to operate within the systems of student tuition and fees that are currently in place. As we develop a stronger theory and framework for partnership work, we may wish to reframe the conversation in our field. Instead of how partnership can work within a student-as-consumer model, perhaps a student-faculty partnership model can change the perception of how students engage with institutions. Student-partners in this work would have much to do and much to contribute. Thus, student contributions to partnership efforts should result in appropriate compensation (be that course credit, money, or something else), but, approached carefully, there is merit in the idea that students have paid tuition for the opportunity to engage as a partner in the teaching, learning, and assessment process at both the classroom and program level.

Respondents suggested that student-faculty partnership efforts might be less challenging in some institutional contexts than in others. Participants felt that institutions that focus primarily on teaching and learning, rather than on research, were more conducive to student-faculty partnership efforts:

There is a sense that in some of these institutions [research-intensive], that if you say you are interested in teaching that would be career suicide, there's a real problem with that.

...in universities that are heavily focused on research... the student experience is secondary to that [research].

One respondent pointed out that the dichotomy was not absolute.

Some of those universities actually offer a very poor student experience. There are honorable exceptions—*redacted* University is a high-performing research university that also takes teaching very seriously--but I could name four or five others that do a good job.

Respondents also shared that smaller institutions (or classes in the case of the classroom level) were set up better to facilitate partnership efforts.

It's a small place. Take the student union, they walk over here, we walk over there and there's a lot of liaison between us. That can't happen on a massive campus.

One respondent believed that

there's always been a desire to listen with students and develop things with students... but that desire is manifested more often in smaller, teaching-focused places.

Moving forward, student-faculty partnership efforts in program-level assessment will need to consider the focus and size of the institution and programs involved. For prototype efforts, it is perhaps best to begin with a smaller, teaching and learning focused institution with a strong educational development focus. Once success is achieved in these ideal conditions, the framework can be adjusted to best suit the needs of larger, research-focus institutions.

Respondents believed that the political side of higher education can have an impact on student-faculty partnership efforts. Respondents in the U.K. believed that the current political climate around higher education has at times moved to support partnership efforts.

It was really in the last years that student engagement came higher up on the political landscape, but it also became more important that students were active partners in the process

Respondents also noted that the climate has at times, moved away from one conducive to partnership.

The UK is also becoming a place that's positioned itself as being less welcoming of other people which from an Higher Education and partnership perspective is bad.

One respondent made an interesting connection between students who are active in their institutions and politicians.

If you look at some of our national politicians, quite a lot of them started in politics by being student reps, being involved in the National Union of Students and so on.

Conversely, participants in the U.S. generally did not believe that the current political climate supported partnership efforts at all.

Given what's going on [in the U.S.] and the sort of level of distrust and lack of civility that seems to be sort of prevailing, that's a whole other level of threat that institutions sometimes feel, and certainly individuals feel, where the rhetoric of the nation right now is antithetical to partnership.

Participants also noted that when politicians pay attention to higher education, those in higher education tend to start paying attention too.

If the politicians pick up an issue in higher education, quite often, the people in higher education start worrying about what might be forced upon them.

Moving forward in partnership in program-level assessment, we must consider the political climate in which we attempt such efforts. If the climate is not conducive, we may have a more difficult time convincing our stakeholders (e.g., students, faculty, administration, legislators, etc.) of the value of such work. We would benefit from identifying stakeholders early in the process and, considering the political climate at the time, work to identify what types of evidence would be best for convincing each stakeholder of the value inherent in partnership work.

Participants identified benefits and challenges to the work of higher education organizations in promoting student-faculty partnership efforts. Participants noted that well-connected organizations can provide a framework for conducting partnership efforts.

[An organization developed] a framework for doing this [classroom partnership] and that encouraged some work.

Yet, participants were wary of the disconnect between the 'ground-level' work with students and those that make policies at the upper levels of large organizations:

[It looks] so well structurally speaking, it should look quite good but then it goes on to the [actual] quality of that partnership.

There's not always been a mix of the kind of practicalities and challenges on the ground with some of the rhetoric up above.

There can be a shift in a few people who talk about things on quite a broad, almost theoretical level, which can be quite different than some people who kind of get down and do the nuts and bolts of it.

Moving forward in student-faculty partnership, before trying to spread such work to a large number of institutions through high-profile organizations, we may wish to develop strong but practical theories, guidelines, and practices that are adaptable to context. In doing so, we may reduce the chance that the ideas of partnership get lost in discussions that take place in the world of ideal, best-practices.

Respondents have a general interest in program-level thinking and assessment. To build a system of student-faculty partnerships in program-level student outcomes assessment, we would benefit if those interested in partnership work to also develop an interest in program-level assessment. Such interest would allow program-level assessment practitioners to benefit from the experience of those already engaged in such work. While no questions were explicitly asked about respondent interest in

program-level assessment work, such interest manifested itself through the discussions.

Respondents pointed out a divide between faculty thinking at the course level and those who want to think at the program level:

There is interest in it [program assessment] but we are struggling how to make that work in an atomized system.

Yeah, I've been mostly operating at the level of the course rather than the program although that's partly because of the way we think in the institution.

They're kind of so fixated on the modules [courses], and the ownership of a module is much stronger than the ownership of a program.

One participant noted that partnership efforts might be a way to get faculty to think at a program level.

[We have] new teaching staff who don't know the other modules [courses] students are taking at the same time. They don't know the modules students take before or after the one they teach. So, how do you actually use--and this is where I kind of try and operate strategically--use that student perspective to change how staff view their teaching?

In discussions about program-level assessment, respondents in the U.K. consistently referenced the idea of constructive alignment.

What you're making me reflect on immediately is that we have a very loose connection between our course learning outcomes, as we call them, and our program learning outcomes, they are supposed to be mapped but I don't think anyone's checking. U.K. universities are a bit hung up on in program design, something called constructive alignment... And the assumption is by achieving the course objectives, because it was designed so beautifully, you will have achieved the program objectives.

Constructive alignment, introduced by Biggs and Tang (2013), emphasizes many components but chiefly that learning is actively constructed and that assessment tasks "should be aligned to what is intended to be learned" (p.97). Thus, the idea of

constructive alignment shares much with ideas such as backward design and good assessment practices (e.g., the assessment cycle). In the U.K., the idea of constructive alignment is extended to the program-level in that, if the classroom objectives are constructively aligned with the program objectives, then assessment of classroom objectives also serves as assessment of program objectives. Respondents suggested that many people in higher education are beginning to question the soundness of the constructive alignment argument.

With this constructive alignment argument though, we are missing that high-level, that look at what's really going on within the programs, whether that learning is taking place.

Moving forward with partnership in program-level outcomes assessment, we may be able to leverage this work to address the level-challenge problem. As noted earlier, the level challenge is the problem inherent in the fact that teachers are responsible for only their own course in a program, yet, many important skills and knowledge sets require more than one course and thought at the program level. If student-faculty partnership can highlight the importance of program-level thinking directly from the student perspective, faculty may seek out program-level practices and assessment methods. The potential for this work is particularly high in the U.K..

While most respondents had not been directly exposed to program-level assessment work, respondents shared a general interest in program-level assessment work. Respondents frequently showed interest in exploring program-level assessment and asked for examples of such work:

It's really well thought through [program assessment], I'll be taking a more in-depth look at that, that's really interesting.

Can you give me an example of where program level assessment is working well in a particular program

After discussing program-level assessment with the interviewer, many participants generated compelling reasons for increasing program-assessment work:

I find it frightening that we don't do it [program-level assessment].

Because it is ultimately about how do students learn to operate within a discipline at the levels wherever they should do for whatever level the course is. So after a four-year degree program, say in psychology, you've got the specifics of what psychology graduates should be able to do at that stage. Well, isn't it everybody's responsibility, and it's about psychology, the discipline, to help enable students get there and to think across the whole program? There are some strong moral drivers if they are presented in the right way which, a caricature version might be that you don't care about your discipline if you don't care about the program or what it does. Essentially, what I'm saying is I'm going to steal some of your ideas and apply them.

Moving forward in partnership work in program-level outcomes assessment, these strong initial reactions are positive signs for the potential of our work to shift educational thought to the program level. Empirical research into the ability of student-faculty partnership to influence faculty to think at a program level would be helpful as work in this area continues to develop.

Respondents in the U.K. universally noted that program-level assessment efforts are rare:

I was about to say, I think it's a gap and something we don't have is my sense, or just maybe the edges of it.

I think there is too little of that happening here.

In the [United] states it sounds like a system about what the program does while in the UK its more about what each module that contributes to the program does.

Though rare, respondents did consistently mention two such program-level initiatives in the U.K.; the Program Assessment Strategies (PASS) project and the Transforming the Experience of Students through Assessment project. The PASS project, directed by Peter Hartley at the University of Bradford in the U.K., "sought to redress the current imbalance where assessment issues are primarily investigated and discussed at module/unit level by providing evidence-based guidance and exemplars/examples to help programme leaders develop and implement effective programme focused assessment strategies" (Hartley, 2013). The program was funded by the Higher Education Agency, a U.K. HE funding organization, and ran from 2009 until 2013. The PASS project achieved:

- the collection of a variety of program-level assessment case studies (http://www.pass.brad.ac.uk/case-studies.php)
- the creation of a program-assessment workshop
 (http://www.pass.brad.ac.uk/workshop.php)
- criteria for evaluating the impact of program assessment (http://www.pass.brad.ac.uk/wp3issues.pdf)

The TESTA project, ran during the same time as the PASS project (2009-2012) with no collaboration between the two programs. TESTA was a collaboration between four universities to "improve the quality of student learning through addressing programme-level assessment" (Jessop, 2012). One of the most often discussed facets of the TESTA program is the mapping of the various existing module-based assessments from the perspective of a student's experience. This mapping procedure lays out what assessments students take and when they take them. This map serves as a baseline for designing

program-level assessment. The TESTA website provides a collection of case studies, workshops, and resources developed in the program (https://www.testa.ac.uk/).

While the definition of programme assessment in these two examples differs slightly from the typical U.S. definition of program assessment (programme assessment is about assigning grades to programme level work), the concept is still largely the same. That all respondents in the UK were able to reference these works, six years after they were completed, speaks to the impact of program-level initiatives and some desire to work at that level. Moving forward with partnership efforts in program-level assessment, it may be beneficial to work with collaboratively with our colleagues in the UK. The ideas and practices of student-faculty partnership are more common in the U.K. while the ideas and practices of program-level assessment are more common in the U.S. Thus, we each have much to gain from each other.

Broad differences between higher education systems in the U.S. and U.K.. To build a system of student-faculty partnerships in program-level student outcomes assessment, we would benefit from a cross-national partnership in developing such work. Many of the leading experts in partnership work are in the U.K.. Through the course of these conversations, many differences in higher education systems were discussed. For all respondents in the U.K. and some respondents in the U.S. with knowledge of the U.K. system, part of the discussions always veered into an attempt to define common vocabulary. Often, the respondent and interviewer would have been discussing an issue for several minutes when we realized that we were actually discussing different issues. This was the case in an early interview discussing what turned out to be an important issue, course versus program.

Oh, well I suppose we should have that discussion again, we use 'course' too, but in the UK, course is quite often meaning the program.

The vocabulary issues rarely required either the interviewer or the respondent to learn a new word; rather, each often had to hold two meanings for the same word during discussions (e.g., professor, staff, faculty, assessment).

Hardly ever professors because of course, I guess, in your context I'm a professor but in the UK context I definitely am not, because professor is only the top tier of academics.

Staff of course means everybody so it doesn't just mean academics, so, my University would talk about this where we had staff and we had teaching staff.

Lecturers is probably what is generally used.

So where you have three colleges we had faculties. In my old university I was in the faculty of social sciences, so it refers to administrative structures quite literally, structures.

Assessment work, which I am now in the understanding that that's called 'grading' in the U.S.

Respondents noted that the vocabulary issue is not localized to higher education,

I really learned this when – for five years, I ran these summer seminars in Cambridge and my daughter went over with me and went to school, because their school year is so much longer and when she started keeping the – she was little. Six, seven, eight, like that – and she kept this sort of running list of words in American English and words in British English, and there were really problematic ones that you needed to be aware of, like 'pants', right? For that age, you don't say 'pants'. In Britain, that means underwear, right?

See Appendix C for a table from Curtis, Anderson, and Brown (2018) containing examples of higher education vocabulary translations. Moving forward in developing student-faculty partnerships in program-level assessment, especially in collaboration with

our colleagues in the U.K., we will need to cognizant of these vocabulary issues. Simply within the term program-level assessment, there are two terms (program and assessment) that can have disparate meanings in the two countries. When working in collaboration or writing for audiences in more than one country, we should attempt to use common words where possible, provide disclaimers for readers that we are using vocabulary common in one country's system, and/or provide a translation of commonly misunderstood vocabulary. Addressed early, the vocabulary issue will be less likely to derail the meaningful work possible through collaboration.

Respondents in the U.K. frequently referenced the National Student Survey. The National Student Survey (NSS), is a nationwide survey completed by final-year undergraduates in the U.K. (Ipsos MORI & HEFCE, 2018). The NSS is comprised of 27 Likert-type questions (definitely agree to definitely disagree) on the experience of students in eight subareas (i.e., teaching, learning, assessment, organization, resources, community, voice) and overall. The results of the NSS are provided publicly to all stakeholders (e.g., prospective students, institutions, faculty, etc.). Prospective students use the results to make enrollment decisions. Institutions can use the results to target interventions to specific areas of perceived need. The NSS results are also considered in making governmental funding decisions for universities. Respondents had strong opinions about the survey:

We are judged on the national student survey, so universities and the staffing are very acutely aware that if you don't listen to the students, you are going to be in deep trouble.

Our National Student Survey was throwing up as many problems as it threw out interesting things to help because it's very much about satisfaction. it's not about learning. Respondents pointed out specific issues with the NSS from their perspective:

We are very skewed [what impacts policy] in the UK by the National Student Survey, and in order for the numbers of responses to count we have to reach a certain threshold.

Straight down the middle [of the response scale] doesn't work for us on the NSS because anything other than 4 or 5 doesn't count as overall satisfaction.

It's at a particular point in time for students busy preparing for the final exams. You only get so much information there. If it was a bit later, you wouldn't get as much of a response rate but it might be more valuable.

Moving forward in developing student-faculty partnerships in program-level assessment, we need to be aware of such large-scale existing feedback and evaluation measures. In collaborating with our colleagues in the U.K., we will need to be aware of the potential impact of any initiatives on initiatives like the NSS. Conversely, when such measures inform policy and funding in such a high-stakes manner, it can have an undesired effect of stifling innovation and good practice as noted by one participant,

And I certainly do hear people saying 'We can't afford to fail students, because if we give them bad marks, particularly in the pre-final marks, if we give them bad marks they're going to give us negative feedback and we can't afford to do that because so much hangs on NSS.

Respondents, though they recognized many differences between U.S. and U.K. higher education, believed that the differences within each system were greater than the differences between them:

I think we should try not to get caught up in the language so much. Actually the aims of what we are trying to do is similar.

If you look at here and [another local university], it's chalk and cheese.

There's other things where it does seem to be a Scottish thing. I'm from England and I kind of think some of it is 'hey we are different because we are Scotland'.

The theme of greater variance within groups than between them is a common one in statistical analyses. Cheng and Marsh (2010) provide a relevant example by analyzing National Student Survey responses for institutions across the U.K.. The analyses suggested that institution-level NSS scores could only account for a small amount of variance in student scores and that the variability of students within institutions was greater than the variability between them. Moving forward with collaborations between the U.K. and U.S. on student-faculty partnership in program-level assessment, we should acknowledge key differences in our higher education systems. Once differences are acknowledged however, we should remember that our goals are the same and that differences between our practices are not as large as the differences between institutions. In doing so, we can create strong frameworks that can be adapted to the unique situations at our varying institutions.

Summary of Discussion. The themes that emerged out of interviews with experts in student-faculty partnerships provide a wealth of information with which to begin conceptualizing partnership work in program-level student learning outcomes assessment. In addition to providing deep information about each of the intended research questions, the themes also address issues not explicitly considered during the planning stage of this study. Next, I will use this information gathered and analyzed through this grounded-theory methodology to inform a framework that will guide future efforts to engage in student-faculty partnership in program-level student learning outcomes assessment.

The framework for developing student-faculty partnership in program-level student learning outcomes assessment

Combining research with expert responses from this study informs a framework for developing student-faculty partnership in program-level student learning outcomes assessment. The goal of the framework is to provide a structure for developing prototype student-faculty partnership efforts in program-level student learning outcomes assessment. However, in addition to engaging in the prototyping process, there are critical steps both before and after such work. Thus, the framework is centered around prototype efforts and is divided into three parts: Pre-prototyping, prototyping, and post-prototyping. See Figure 16 for a visual representation of this model.

Pre-Prototyping. Prior to engaging in student-faculty partnership prototype projects, there are several critical steps to consider. These steps include defining partnership at the program level, considering other factors in higher education, considering the challenges at the program level, and working to address the challenges inherent in collaboration with other professionals.

Defining student-faculty partnership in program-level student learning outcomes assessment. In order to move partnership forward, our field needs to adopt a common definition of partnership, avoid conflating partnership with representation, and avoid student-input models. In adopting a common definition of student-faculty partnership, program-level assessment professionals (and their partners) can take ownership of what partnership means to us.

One way to begin this discussion is to adapt the definition provided by Cook-Sather, Bovill, and Felton (2014) to fit to the program level. An adapted definition might

be: A collaborative, reciprocal process through which all participants (e.g., students, faculty, assessment practitioners, educational developers) have the opportunity to contribute equally, although not necessarily in the same ways, to program-level assessment practices including, but not limited to, developing and interpreting objectives, developing and mapping program-theory, developing/administering assessment protocols, analysis of assessment information, making interpretations, sharing results, and most importantly, working to improve the educational experiences designed to help students learn. This definition could be improved; although, it clearly provides guidance for partnership in program-level assessment work. Moving forward, student-faculty partnership work could help refine this definition further.

In developing future projects, we need to avoid conflating partnership effort with representation efforts. As detailed in previous sections, having a single student represent all other students is not only unfair, it is not possible. Consider your work with your own colleagues. Could you always represent their opinions on educational matters with your own? Moving forward, we should consider that student representation is a necessary but not sufficient component for true partnership work to occur.

We should also be wary of student-input models. Such models, where faculty collect student feedback and evaluation of educational experiences (through quantitative or qualitative methods), analyze and interpret the information through their own lens, and report it back to others is often termed 'student voice' work. While including the 'student voice' in our decision-making processes is better than not doing so, partnering with students to be able to provide their own perspective from their lens is a more powerful way of doing so.

Once again, student representation and student input models are not inherently bad ideas. In fact, in many cases, these models may represent the best way of engaging students. However, the key point highlighted during conversations with participants in this study is that we must be careful not to call all things partnership. True partnership efforts will likely lead to different outcomes than other models of engaging students.

Considering the challenges of partnership work in program-level assessment. For partnership efforts to be successful, we need to anticipate the challenges we may face in such work. Many of the challenges observed at other levels and in other areas are likely in our work. On the whole, the current system of program-level assessment in the U.S. does not incorporate (or mention) students other than as sources of information. There are signs that this state of affairs is changing. For example, the recent emergence of the Excellence in Assessment designation recognizes higher education institutions for exemplary program-level assessment practices (Lumina, Teagle Foundation, & College of Education at the University of Illinois, 2018). The rubric that raters use to evaluate higher education programs makes several references to including students in the process. For example, one element states, "Groups and individuals engaging regularly include representatives from...g) students..." This is certainly better than much of our current practice; however, nowhere in the EIA rubric does it mention partnership with students nor does it require that students be involved. In the current example, institutions can get the highest rating possible by including other groups (eg., representatives from the president's cabinet, adjunct faculty, etc.) but excluding students. The language in the EIA rubric is vague, yet, it opens the door to the possibility of shaping future versions of this rubric and other similar guidance documents. In doing so, we may see partnership

become engrained as a best practice in program-level student learning outcomes assessment.

It may be challenging to convince stakeholders that student-faculty partnerships are necessary in assessment work. This will be especially challenging if stakeholders do not perceive any issues in the current assessment system. Yet, making the argument for partnership in assessment work is not challenging and, presented correctly, is convincing and compelling. We should not fall prey to the belief that the most logical and evidence-based argument will convince all stakeholders. Instead, we should intentionally build both a logical and evidence-based argument while at the same time building an emotional one. We should be especially mindful that convincing students of the value inherent in partnership work might be more difficult in program-assessment as they may not perceive the importance or relevance of such work.

Student-faculty partnership work is also challenging in that it requires additional time, funding, and resources. Moving this work forward, we will need to identify what resources are necessary, where we can obtain such resources, and how to maintain and expand those resources. Working in assessment partnerships is likely to require more time than our current system of faculty-driven work. Yet, given that our current system provides incomplete and possibly inaccurate information, this may be a palatable compromise. Working with students as partners will require us to provide some form of compensation for the student's work. Whether this is monetary, course credit, or another form of compensation, it likely requires additional funding. If possible, providing useful course-credit for student work may be less resource intensive than other methods.

In creating student-faculty partnerships in program-level assessment, we likely exacerbate the power, knowledge, and experience differential noted in other partnership efforts. Unlike classroom-level teaching, learning, and assessment, program-level assessment is an area most students (and faculty) have little to no experience. While program-level learning would improve if all stakeholders did have more experience in this area, it is simply not the case. Consequently, not only do students have less experience and knowledge regarding the content area and pedagogy compared to faculty, they (and many faculty) also have less experience and knowledge regarding program-level assessment compared to assessment practitioners. Thus, we must find ways of reducing the knowledge and experience differential between all partners, but especially students. One way of doing so would be to provide a scaffolded introduction to the basic tenants of program-assessment and educational development. In doing so, students would build enough knowledge and experience to be able to apply their experience and perspective as a student to the assessment process.

Student-faculty partnerships in program-level assessment will require faculty who are willing to open themselves (and possibly their department) to critique and evaluation by students. This requires individuals who are willing to take a perceived risk. Thus, it may be best to seek out faculty partners who would be more comfortable doing so. Such faculty are likely to be tenured, focused on good teaching and learning practices, and familiar with program-level assessment practices.

Considering other higher education factors. For partnership efforts to be successful, it is imperative that we do not consider them in a vacuum. Other factors in higher education will undoubtedly affect how we engage in these efforts. Experts in this

study were clear in their belief that the culture of higher education will dictate how partnership efforts are received. Among many aspects of our current higher education culture, there are three particularly salient ones. First, there is a continued movement toward increased educational development practices and a focus on better teaching and learning. We can capitalize on this movement as partnership seeks the same outcome. For this and other reasons, we should seek to include educational development experts as partners in our efforts. Second, many stakeholders in higher education (student, parents, legislators, faculty, etc.) are asking for better evidence of learning as a result of time spent at an institution. Student-faculty partnerships in program-level assessment give us the ability to provide this evidence to a degree not before possible. Furthermore, partnerships in program-level assessment are likely to lead to other program-level partnership opportunities such as those possible in learning improvement efforts. Finally, if we do not engage in partnership efforts voluntarily to produce better evidence of learning, we run the risk of others mandating what we do. Likely, this would not be partnership work (it may be something less palatable and less effective); however, even if it were, we would not retain ownership of the process. If student-faculty partnerships, implemented well, are an effective way of improving teaching, learning, and assessment, then we should work to maintain our influence over this area.

Considering differences between the U.S. and U.K. higher education systems.

Many experts in student-faculty partnership and successful examples of such work reside outside of the U.S.. Thus, in order to collaborate with our colleagues, we must consider the differences in our systems of higher education. For the purposes of work in program-level assessment, we may wish to concentrate specifically on collaborations with

colleagues in the U.K.. One of the biggest challenges to working with those in the U.K. is the difference in higher education vocabulary. While some work has been done to identify 'translation' issues across the two systems (see Curtis, Anderson, & Brown, 2018; Appendix C), more work is still necessary. While each system has unique vocabulary, the larger issue is that there is shared vocabulary with different meanings. Particularly salient double (or triple) meaning words for the current work include: 'program', 'assessment', 'partnership', 'course', and 'faculty'. While developing a completely common language across systems may be infeasible, future research might provide a good translation of such terms.

The higher education system in the U.K. has an established national survey that serves as an evaluation of student experiences within a program: the National Student Survey (NSS). The results of this survey are used for many purposes and new and existing initiatives are often judged against their potential impact on scores for this survey. The relevance to partnership work in program-level assessment is two-fold. First, we must consider that HE institutions in the UK will consider whether or not such partnerships are likely to affect NSS scores. This could work for or against partnership efforts at the program level. If we can convince stakeholders that NSS scores will benefit from (or not be affected by) these efforts, we are likely to get support. If HE institutions perceive that our efforts would negatively affect NSS scores, they are likely to block any efforts to engage in this work. Second, the NSS, as pointed out by numerous respondents in this study, is not a measure of student learning and is not a true attempt at student partnership. While in the same vein as partnership efforts, the NSS aligns more closely

with student voice/input models. Thus, U.K. practitioners might be able to implement true student-partnership work to explore and enhance the value of the NSS in the U.K..

As is often the case when examining differences between two groups, the variability in practice within the U.S. and U.K. may be greater than the variability between the two countries. Moving forward in student-faculty partnership efforts in program-level assessment, we should remain cognizant of this. Any attempt to develop a regimented system of partnership will likely remain localized to the institution for which it was developed. Thus, our efforts should focus more on developing frameworks of partnership efforts that can be adapted to the needs of different types of institutions.

Protoyping. Once the issues in the pre-prototyping stage are addressed, prototype projects should be carefully developed and evaluated. In order to move program-level assessment partnership forward, we need to consider who are the people working in partnership, what are the expected benefits and outcomes of partnership, how to leverage a model of improvement to showcase partnership, how to leverage partnership to build program-level interest, and how to build on seed ideas from examples in the classroom-level, program-level, and those suggested by experts in this study.

Who are the partners in this work? For partnership efforts in program-level assessment to be successful, we need to ensure that the most relevant stakeholders comprise the partnerships. While all stakeholders in higher education (e.g., legislators, researchers, community members) could provide a different and useful perspective and experiences to a partnership, work in program-level assessment should focus primarily on partners within the institution. Primary partners in these efforts should include students, faculty-members, assessment experts, educational development experts, and at least to

some extent, administrators. Without these perspectives in partnership, a key set of experiences and perspectives is likely missing from the assessment process. Students are the only ones who experience assessment efforts from the learner perspective. Faculty members are the only ones who experience assessment efforts from the teacher perspective. Assessment experts provide a unique view of the assessment process from the perspective of someone who knows the process of assessment. Educational developers provide a unique view of the assessment process as informing the potential for educational interventions to improve learning. The view of administrators varies widely depending on the level and role of that administrator. In many cases, administrators (e.g., heads of departments, deans of schools) have a high-level perspective of the program that other stakeholders may not have. At the least, administrators are the ones who are the decision-makers for program-level changes. Without including these individuals, student-faculty partnership work in program-level matters will not succeed.

What are the expected benefits and outcomes? Given that this work is focused on assessment practice, we would be remiss if we did not apply assessment and evaluation to our efforts. We will need to provide evidence of which partnership efforts are successful and which are not. In order to provide such evidence, we need to define what success looks like. Initially, we can draw from the identified global benefits to partnership efforts. Potential specific, observable, and measurable outcomes include:

- 1. Better teaching, learning, and assessment
 - a. Learning outcomes measure results before and after partnership efforts
 - b. The quality of validity evidence for the interpretations of assessment results
 - c. Implementation fidelity information on program-level educational experiences

d. Qualitative information such as reported changes as a result of the information produced in partnership with students, focus groups on the impact of such work on various stakeholders

2. Better and/or novel information

- a. Qualitative written record of new information gained by all stakeholders
 (students, faculty, etc.) as a result of partnership efforts
- b. Independent ratings of the quality of assessment information
- c. Examination of student-faculty partnership as a threshold concept
- d. Do stakeholders resist a return to non-partnership based assessment practices after engaging in them (as commonly occurs for threshold concepts)?
- e. Do partnership efforts qualitatively change the way stakeholders engage in assessment even after partnerships have ended?
- Examination of the outcomes related directly to students (based on the research cited in the literature review of this document)
 - a. Knowledge and Skills
 - b. Sense of Belonging and Engagement
 - c. Metacognition
 - d. Locus of Control
 - e. Self-efficacy
 - f. Goal Orientation
 - g. Attitudes toward assessment
- 4. Examination of the benefits to different perspectives

- a. Qualitative record of examples of different perspectives from different stakeholders in the partnership process. Especially those that resulted in a combined perspective that was more useful.
- b. Do the new perspectives change the interpretations of the results?

 The outcomes presented here are suggestions with which to begin the process of evidence collection. Modified benefits and outcomes will be discovered through future efforts in partnership with students.

Use the improvement model to highlight partnership and make improvement more likely. The model of improvement presented by Fulcher et al. (2014) can be advanced by incorporating student-faculty partnership. Returning to the metaphor of weighing and feeding pigs, In the initial and final steps of 'weighing', if the scale used is not actually measuring pig weight, but pig weight and something else (e.g., height, body mass, color) or only measures part of the pig's weight, then it doesn't really matter if the 'weight' changes because we were never actually measuring weight anyway. In the middle step of 'feeding', the model currently seeks faculty input in the current educational programing and educational developer input in developing new educational programing. The problem here is that students are the only ones who are experiencing the current educational program and the only ones who will experience any changes to it. Without input from students, our thoughts about the intended educational experiences whether before or after making changes, will not accurately relate to the experiences that the students experience. Student-faculty partnership in these processes addresses both issues. Students have the only perspective and experience that can identify whether our assessment processes are capturing irrelevant information or are not capturing the true

picture of what is happening. They are also the only ones that can provide a first-hand perspective on experiencing educational programming. These are compelling reasons to consider student-faculty partnership in assessment and improvement efforts at the program level.

In addition, since student-faculty partnerships are hypothesized to improve our assessment and improvement efforts, it makes sense to apply the improvement model to partnerships themselves. Such work would situate partnerships as the educational intervention at the program level. In this way, the improvement model could provide evidence of the utility of partnership efforts.

Use partnership efforts to increase interest in program-level work. Participants in the current study were experts in student-faculty partnership; however, they were not experts in program-level assessment. Even so, discussions about student-faculty partnership in program-level assessment spurred interesting and deep conversations about the benefits of thinking and assessing at the program level rather than the classroom level. Moving forward, if this interest is common to many faculty members after considering student-faculty partnerships, we may be able to leverage such interest in partnership to spur interest more widely in assessment. Student-faculty partnerships in program-level assessment may have the potential to address the level problem in the field of program-level assessment. In addition, in higher education systems outside of the U.S., student-faculty partnership work may be a catalyst for increasing instances of program-level assessment work.

Build an initial structure based on the organization of student-as-consultant programs, recruit well, and find easy successes. Respondents in the current study

referenced a variety of student-as-consultant programs that focused on developing classroom-level partnerships focused on teaching and learning. We may be able to adapt the structure and organization of these programs to program-level partnership efforts. One potential structure might be that of a course designed to develop student-faculty partnership in program-level student learning outcomes assessment. This course could provide the scaffolding necessary to develop students' knowledge about assessment and learning so that they might apply their experiences as a student to such work. This process would also work to lessen equity issues between students and faculty. These students could then work in prototype partnerships with faculty, assessment experts, and educational developers. These students would also be in prime positions to assist in developing additional student-faculty partnership ideas.

Recruiting students into partnership efforts structured within such a course should be based on general interest levels rather than any prior experience or skill sets.

Recruiting faculty should be based on general interest, experience with assessment, and comfort with the idea of partnership. Once the initial group of students and faculty is recruited, a system of 'chain-recruiting' may be useful to sustain an adequate number of student and faculty partners.

Initial attempts at executing student-faculty partnership efforts should focus on topics and programs that most likely to result in success. If the faculty members in program X, for example, are resistant to the idea of partnering with students, then we should choose to work with program Y first. The type of partnership may also affect the likelihood of success. For example, an effort to recreate the entire educational program

would be a poor choice for a first partnership project. Once smaller and more manageable projects show success, larger and more complicated efforts can start to occur.

Seed ideas with which we can begin our efforts. To advance student-faculty partnership in program-level assessment work, we will need to have some proof-of-concept, prototype work to build upon. Thus, we should initially draw from classroom-level partnership efforts, program-level partnership efforts, and ideas generated during the current study. Seed ideas for work in student-faculty partnership in program level assessment include:

- Developing and evaluating a program-level portfolio assessment in partnership.
 This work would include both self and peer assessment.
- Developing and evaluating program-level assessment questions in partnership.
- Developing and evaluating novel program-level assessment methods. Allowing partnership efforts to help think 'outside-the-box.'
- Collecting and interpreting qualitative information in partnership through studentled focus groups.
- Providing formative feedback on the learning experiences designed to enhance program-level learning.
- Working in partnership to define motivations for and reflections on program-level learning.
- Working in partnership to co-create program-level educational experiences.
- 'Translating' program-level student learning outcomes for each cohort of students in ways that are meaningful to them.

- Working in partnership to interpret program-level assessment information and to compose reports
- Working in partnership to share and present program-level assessment information.
- Working in partnership to use program-level assessment information to inform improvement efforts to educational programming.

Use initial framework to generate future ideas for representative partnership efforts in program-level assessment. While the seed ideas presented above may produce good outcomes, these ideas are primarily from the perspective of faculty members familiar with student-faculty partnership work. These ideas were not generated in partnership with other stakeholders, and thus, additional and perhaps more powerful ideas are yet to be identified. Students who partner with faculty on the initial partnership projects may be best suited for partnering with other stakeholders to generate additional partnership ideas. This potential should be explored further once a structure for initial work has been established. Additionally, although initial efforts will likely focus on only one or two programs, subsequent efforts should explore the effect of cross-disciplinary partnership.

Post-Prototyping. Once prototype projects have been established, evaluated, and can demonstrate success, the results can be applied in several ways. In order to move partnership forward, we will need to build a network of research and practice in our field, consider if the developmental pattern of partnership experts might hold at the program level, and apply information gained from partnership efforts to the validity argument of the interpretations for our assessment information.

Build network of theory and practice. In order to facilitate the distribution and spread of student-faculty partnership work in program-level assessment, we should begin to build a community of shared practice across institutions and practitioners. If prototype efforts are successful in achieving desired outcomes, research should be conducted to explore why the efforts were successful. In this way, we can advance the scholarship support student-faculty partnership efforts. As Curtis, Anderson, and Brown (manuscript pg. 31) note,

"Because faculty and student partnerships can take many different forms at many different points along the assessment cycle, it will be important that early implementers are able to assess and communicate effectively to stakeholders which of the student-faculty partnerships produce intended outcomes and which ones do not. Only through the rigorous assessment and evaluation of our initiatives will we be able to understand where we should place resources and energy and where we should not."

Consider benefits of developmental pattern of partnership leaders. Experts in student-faculty partnership at the classroom level of higher education tend to also be in positions of leadership both at their own institution and in higher education focused organizations. If this pattern holds true, and we can develop experts in student-faculty partnerships in program-level assessment, then these future leaders can advocate for expanding this work, direct funding to such efforts, and encourage others to become involved. This pattern also has the potential to reduce the practice of partnership. If all eventual experts in partnership leave their current roles to move into leadership positions, we may face a lack of people prepared to engage in such work. We may be able to

mitigate this issue by exposing our students to partnership opportunities and encouraging them to continue the same practices in their future work.

Apply the information gained from partnership to the validity argument made for the interpretation of program-level assessments. As stated in the introduction, in every step of the [current] process of program assessment, faculty and/or staff are asked to make implicit assumptions about the experience of students. To the extent that these assumptions do not reflect actual student experiences, the validity of any information produced from the program assessment process is compromised.

Student-faculty partnership in program-level assessment provides a direct and elegant solution to these threats to validity. By engaging our students as partners in the process we make it much more likely that our information is free from misinterpretations both from irrelevant information and from underrepresenting our constructs of interest. Once we are able to incorporate student-faculty partnership into program-level assessment efforts, we should incorporate this additional evidence for validity into our argument for appropriately interpreting our assessments.

Limitations

I believe there are several limitations to the inferences made in this study. First, the participants, while unquestionably experts in student-faculty partnership, were largely unfamiliar with program-level assessment. This limits the confidence with which I can apply inferences made from this study specifically to program-level assessment work. Second, all of the participants in this study were current or former faculty members. Given the novelty of the subject area, this study focused on developing the preliminary framework of partnership in program-level assessment. Although a single undergraduate

student was a partner in related work completed alongside this dissertation, no students served as partners on this research. Future research should consider how to partner with students to enhance the comprehensiveness of the information contained herein.

Third, the formats and breadth of qualitative data produced by these interviews likely reduced the depth of analysis possible. Most qualitative data was in the form of word-for-word transcripts of multiple-hour discussions between student-faculty partnership experts and myself. These interviews provided a wealth of information and required a vast amount of time to code, recode, and interpret. Some data however, was in the form of field notes from conversations between experts and myself prior to the formal study. These notes, while still informative, were not as rich in information as were the transcripts. Fourth, while I made attempts to balance participants across countries, the resulting information was ultimately balanced more heavily toward U.K. based experts. This state of affairs is largely because it is the U.S.-based experts for which field notes were used as the source of data.

Finally, the original intent of this dissertation was to develop an empirical theory of student-faculty partnership in program-level assessment. In other words, I aimed to explore 'why' I believed these practices would work better than our current ones. Yet, as is often the case in qualitative research (Charmaz, 2006), the final scope of the impact of this study is slightly different than I intended. When I first set out to examine this area, I was aware that partnerships in program-level assessment must be rare. However, I was not prepared for the true scarcity of such efforts. I was also unprepared for the U.K. system of heavily modularized assessment practice. While there are many potential benefits to assessment practices in the U.K. (e.g., external evaluation), these practices did

not align with my own training and experiences in program-level assessment. These two unexpected developments, in combination with some smaller misconceptions, led ultimately to a synthesis of the collected information to inform a framework to accomplish my original goal. Future work should seek to apply this framework in ways that make it possible to generate and test empirical theories of 'why' partnership should work.

Importance to the discipline of program-level student learning outcomes assessment.

The importance of the current work to the discipline of program-level assessment and measurement specific to student learning outcomes can be exhibited in three ways: the validity argument for program-level assessment; integrating assessment; improvement, and partnership efforts; and by showcasing plans for future efforts based on the results of the current work.

The validity argument. The practice of program-level student learning outcomes assessment rests on our ability to make a coherent and convincing argument for the validity of our interpretations. A well-constructed measurement instrument is useless if we cannot: a) make meaningful interpretations from its results and, b) convince others that our interpretations are meaningful and trustworthy. If student-faculty partnership becomes engrained in our assessment processes (outcomes through improvement) we can be more confident in the interpretations we make from those processes. What is more, our interpretations will likely carry significantly more weight as they represent not just our opinions on the state of learning, but also, those of our student-partners who are experiencing the educational interventions. It is easier to argue that assessment is

capturing an accurate picture of learning when the students who are supposed to be (or not be) learning are involved in and contributing to the process.

Integrating program assessment, improvement, and partnership efforts.

Program-level assessment practitioners and researchers are already moving toward a process of learning-systems improvement instead of the traditional status-quo-encouraging of a cycle of assessment (Fulcher et al., 2017). It is hard to argue that this new model of improvement (see Figure 17; James Madison University, 2018), if adopted, is not likely to result in more improvement efforts. Yet, without student-faculty partnership in these stages, the process still risks failure where it need not risk it. Briefly applying the information in this study to the stages demonstrates how student-faculty partnership could augment improvement efforts:

- Review program curriculum. The program curriculum, from the viewpoint of anyone but the students themselves, is always a version of the planned curriculum. Students are the only ones who experience the actual curriculum from the viewpoint of a learner.
- 2) Evaluate Readiness. Even if faculty and administration are ready for a change in the curriculum, students may not be. Students may not understand why things are being changed or may feel that unnecessary restraints are being forced on their learning. In such a case, student learning will be negatively impacted even if students conform to the proposed changes. Learning is constructive. It requires more than faculty members doing something to passive students.

- 3) Identify Core Student Learning Outcome. Do students know and understand program outcomes? Do they know why each is important? Do they agree that the one you have chosen is worth the effort that will be expended on it? Are there other outcomes that might be more important to students?
- 4) Unpack SLO and map to curriculum. Students will be able to provide their own experience of the objectives and again, are the only ones that can comment on the actual effect of curricula from the perspective of those who engaged as learners.
- 5) Create Assessment Plans and Baseline Data. Students, having the perspective of being in the learning process as a student, often have insights about assessment methods and procedures in the classroom. There is no reason to expect that they would not also have insights about assessment at this level. At the very least, placed against the potential benefits, there is no compelling argument against giving them the opportunity to do so. Depending on the type of assessment data, faculty may not be in the optimal position to collect accurate data. In many cases, students will not give unguarded and completely accurate responses to those perceived as 'above them.' Students as partners may help mitigate this issue.
- 6) Redesign Educational Experiences. Knowledge is constructed not transmitted.

 Thus, while we can design educational experiences based on best-practice recommendations and our best intentions, ultimately, we will need to partner with students to find out if those experiences were effective at helping them construct their knowledge. If we partner with students from the beginning of

the process instead of at the end, we have a better chance of achieving improvement.

7) Reassess. For the same reasons as the baseline assessment, we desire studentpartnership in the reassessment stage.

Plans for future work. Perhaps the biggest contribution of this work to the field is the ability to plan future work. Now that a framework for integrating student-faculty partnership into program-level assessment has been proposed, we can move forward with partnership efforts. It would be disingenuous of me to spend more than 100 pages noting the need for student-faculty partnership only to conclude with concrete ideas for such work generated by discussions between non-students. Yet, the participants in this study are not the general public. These participants are highly skilled and highly knowledgeable concerning student-faculty partnership work. Thus, based on my work with these participants, I make the following loose suggestions about how student-faculty partnerships in program-level student learning outcomes assessment might begin.

Outcomes. The program-level outcomes are meant to be the knowledge, skills, or attitudes that represent the most critical aspects of what students achieve as a result of completing a program. Yet, students often don't even know that there are program-level outcomes. Moving forward, we might work in partnership with students to translate our current program objectives from being meaningful and useful to us (i.e., faculty and staff) to be useful to our students. In this way, the objectives can be used to further the pursuit of good learning.

Creating educational experiences linked to objectives. We should only expect students to achieve the learning objectives if those students have engaged in learning

experiences that help them construct the requisite knowledge, skills, and attitudes. The connection between the objectives and experiences is made concrete through the process of establishing a coherent program theory for such experiences. Moving forward, we might work in partnership with students to make the program theory explicit to all and to evaluate the extent to which it aligns with the implemented experiences.

Measurement of student learning. It is difficult to know how to change educational programming without first knowing how the current programming is faring. Too often, our assessment instruments are designed to align with our faculty-staff view of the educational experiences. This may often result in a misalignment of our measurement with our intended outcomes. Moving forward, we might work in partnership to ensure we are designing assessment instruments that align with the educational experiences of students.

Data analysis. Much of our current practice of analyzing program-level student learning outcomes assessment data focuses on 'what' is happening to student learning. This is necessary and often useful information; however, it is less helpful than it might be when one is considering 'why' something is happening. For example, our current assessment methods rarely help us understand why students did not improve their critical thinking skills over two years of educational programming. Moving forward, we might work in partnership with students to analyze and interpret our data. Students are the only ones who can truly infuse the 'why' into our results because they are the only ones who experience our educational interventions.

Sharing interpretations. The purpose of sharing our data, analyses, and interpretations is often to get critical information into the hands of those who might use it

to inform logical change. Yet, there are too many examples of program-level assessment work amounting to a written report that is not used to inform program decisions. Moving forward, we might work in partnership with students to present our joint interpretations to stakeholders. Students objectively have the most to gain, or to lose, from changes to an educational program. Students are the ones that must experience that changed programming and the potential gain or loss of knowledge, skills, or attitudes associated with such a change. Most stakeholders (e.g., faculty, staff, administrators) realize and accept this state of affairs. Thus, moving forward, we might work in partnership with student to present our interpretations to key stakeholders. Critical interpretations may have more of an impact presented from a student perspective than a faculty or staff perspective.

Using interpretations for improvement. Once a program has decided to change its educational experiences in an attempt to improve learning, that program will need help designing such changes. If student-faculty partnership has been infused in all other levels of the assessment cycle, it may not be a grand leap for those involved to realize that students could be key partners in the design of the new programming. Such partnership in the creation of educational programming might help better design the program to align with the needs of students and fight against the temptation to make critical assumptions about student experiences.

None of the suggestions made in this section are meant to prescribe studentfaculty partnership practices in program-level student learning outcomes assessment. Rather, they are simply examples we may wish to explore during our prototyping effort. The best ideas for student-faculty partnerships and the true value of those partnerships will only be discovered once we engage in this work.

Conclusion

"The idea of learning without some form of assessment of what has been learned is inconceivable" (Brown & Knight, 1994; pg. 9). Sally Brown and Peter Knight shared this insight over twenty years ago. It is past time that we applied our knowledge of learning to fully appreciate this statement. Learning is not one sided; faculty-members do not, and cannot, simply pour knowledge into student's heads. The idea of understanding the whole learning process without considering both the student and faculty perspective makes no sense. Assessment is an integral and integrated part of teaching and learning. Thus, it should be inconceivable to consider the assessment of learning without student-faculty partnership.

Although more research is needed to fully explore student-faculty partnerships in program-level assessment, this initial work should serve as a framework and springboard for that research. The world of higher education is changing, and has been changing for some time now, to one of learner-centered practice. Optimizing student learning is the primary purpose of higher education. Utilizing student-faculty partnerships in our work can help us achieve that purpose.

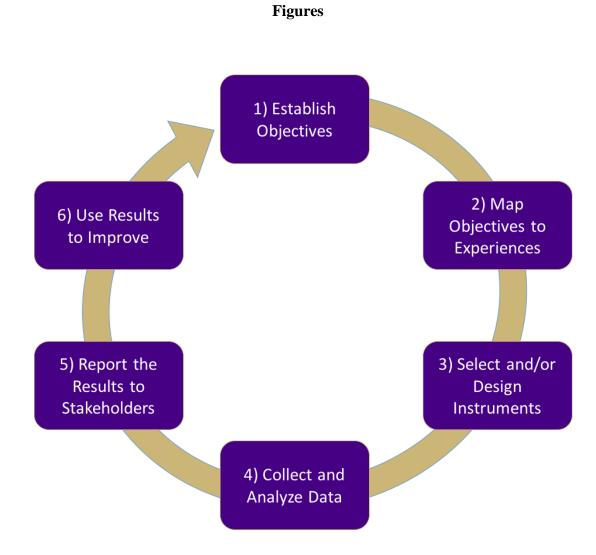


Figure 1. Example of an assessment cycle.

Objective: Graduating students will demonstrate scientific reasoning and problem solving by interpreting, designing, and conducting psychological research at the level of an entry level graduate student in psychology

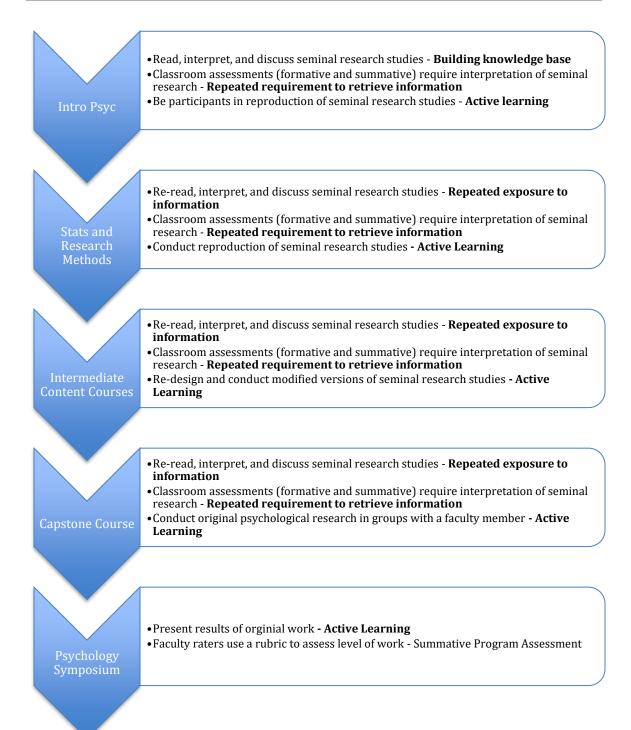


Figure 2. Program Theory Example.

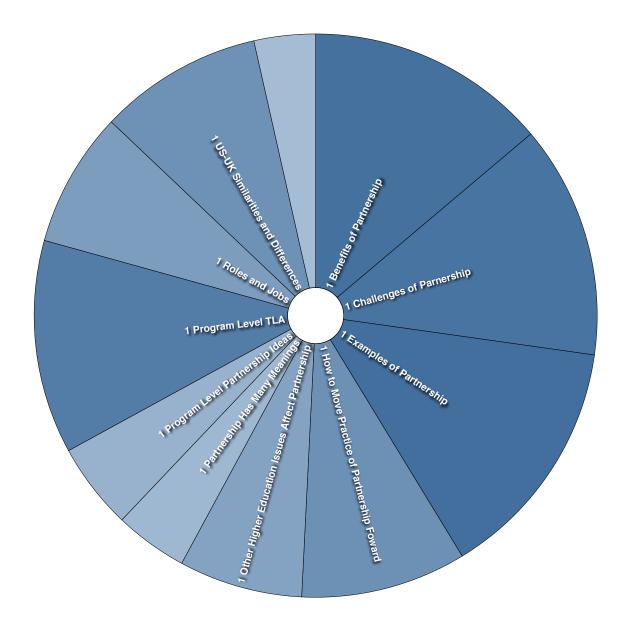


Figure 3. Visualization of overall coding.

Note: the size and shade of the boxes represent relative coverage of each theme to compared to all qualitative content.

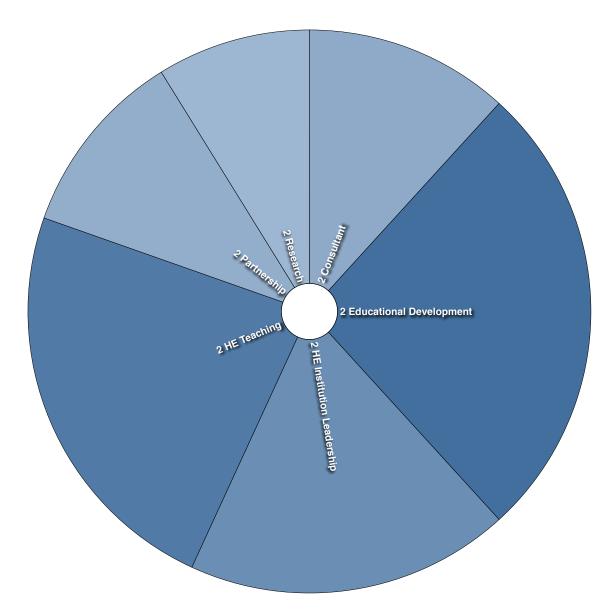


Figure 4. Visualization of 'roles and jobs' theme
Note: the size and shade of the boxes represent relative coverage of each subtheme within this theme.

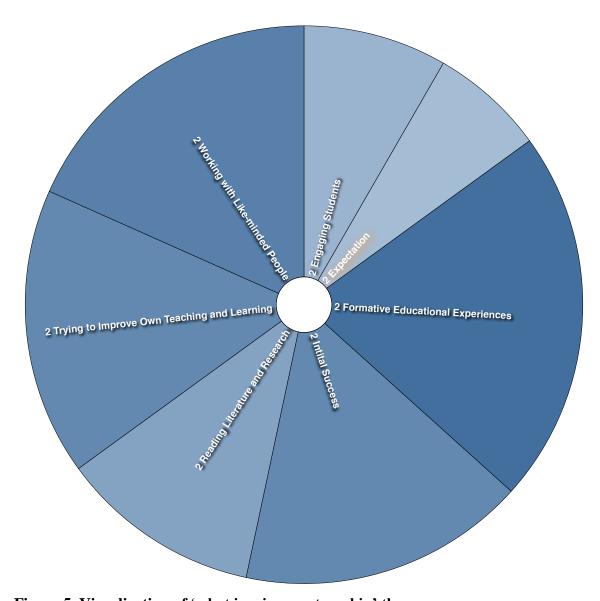


Figure 5. Visualization of 'what inspires partnership' theme

Note: the size and shade of the boxes represent relative coverage of each subtheme within this theme.

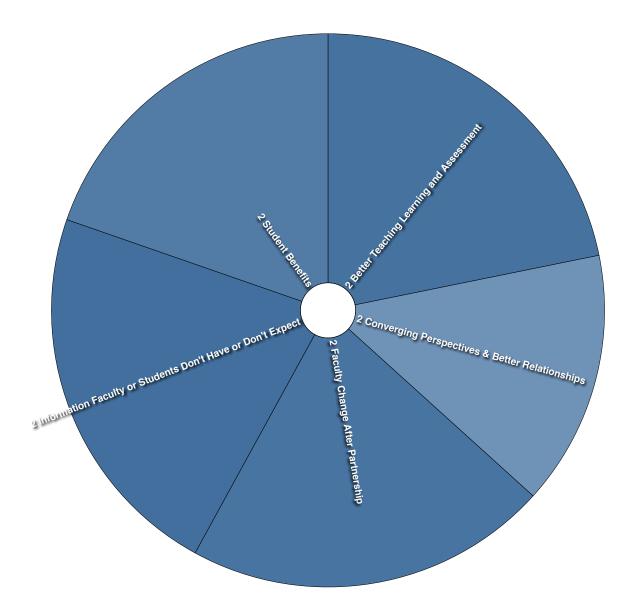


Figure 6. Visualization of 'benefits of partnership' theme

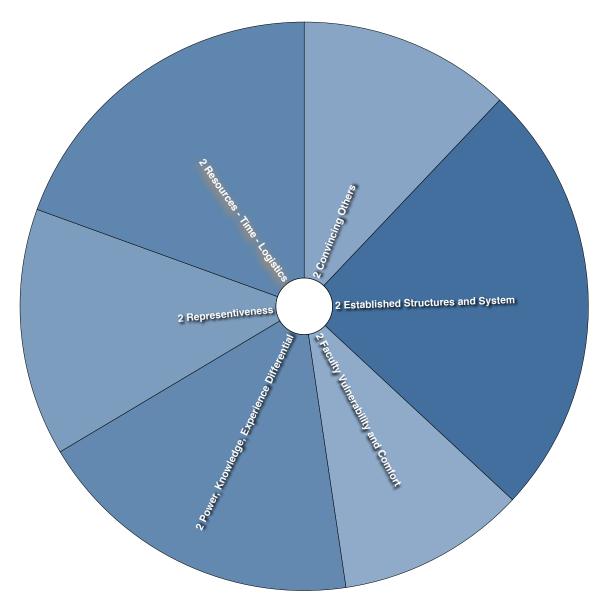


Figure 7. Visualization of 'challenges of partnership' theme

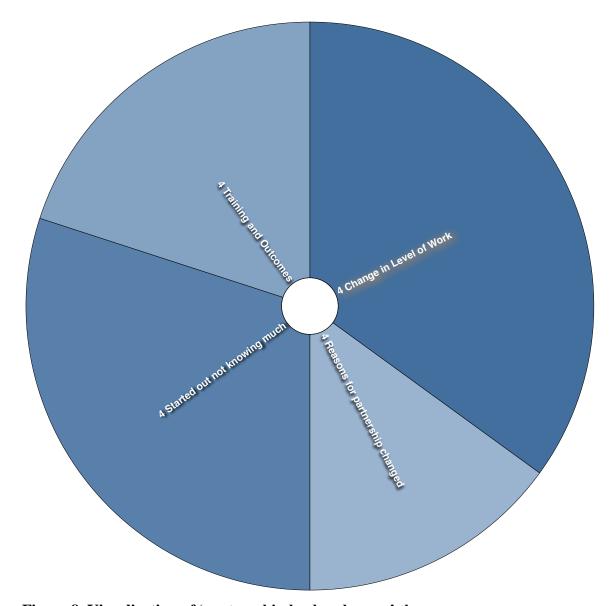


Figure 8. Visualization of 'partnership leader changes' theme

Note: the size and shade of the boxes represent relative coverage of each subtheme within this theme.

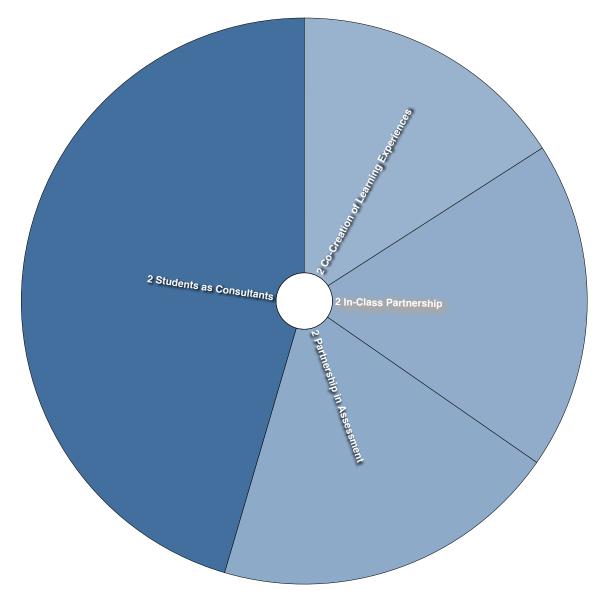


Figure 9. Visualization of 'examples of partnership' theme

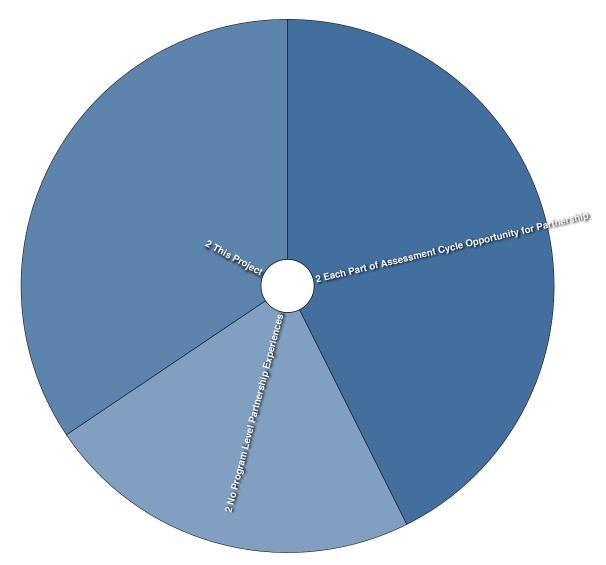


Figure 10. Visualization of 'program-level ideas' theme

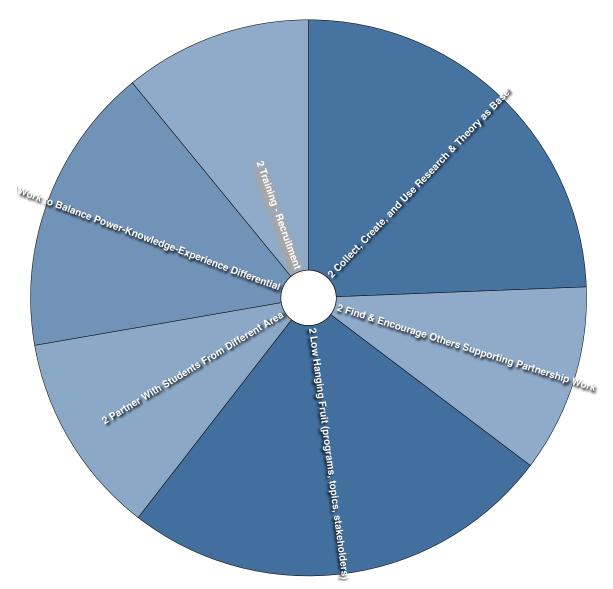


Figure 11. Visualization of 'moving partnership forward' theme Note: the size and shade of the boxes represent relative coverage of each subtheme within this theme.

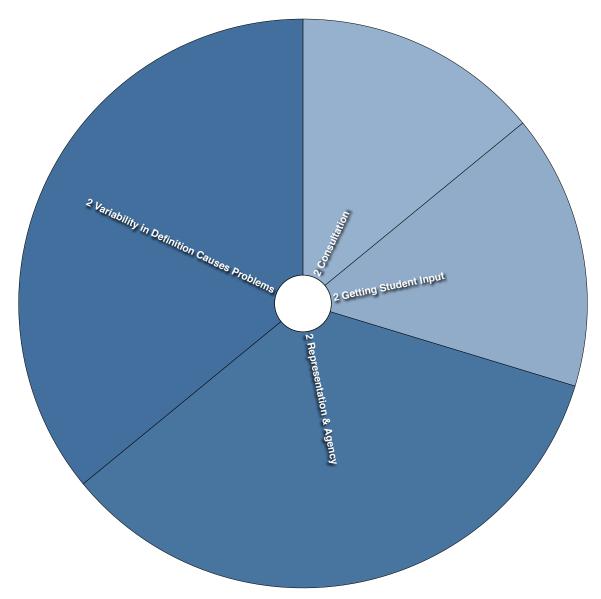


Figure 12. Visualization of 'partnership has many meanings' theme
Note: the size and shade of the boxes represent relative coverage of each subtheme within this theme.

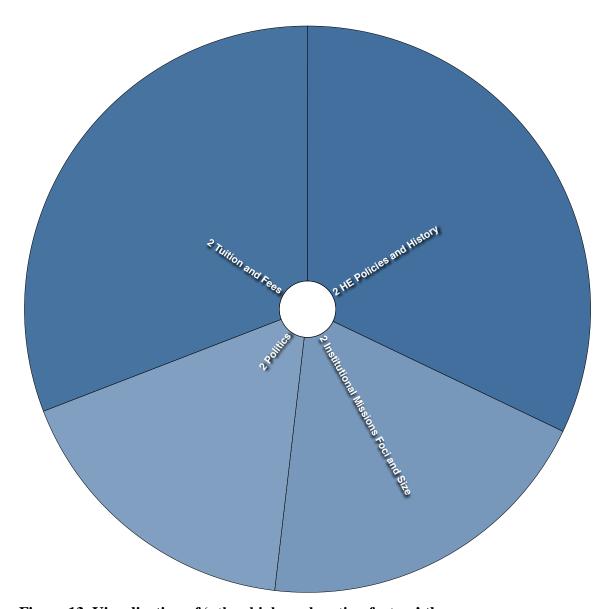


Figure 13. Visualization of 'other higher education factors' theme

Note: the size and shade of the boxes represent relative coverage of each subtheme within this theme.

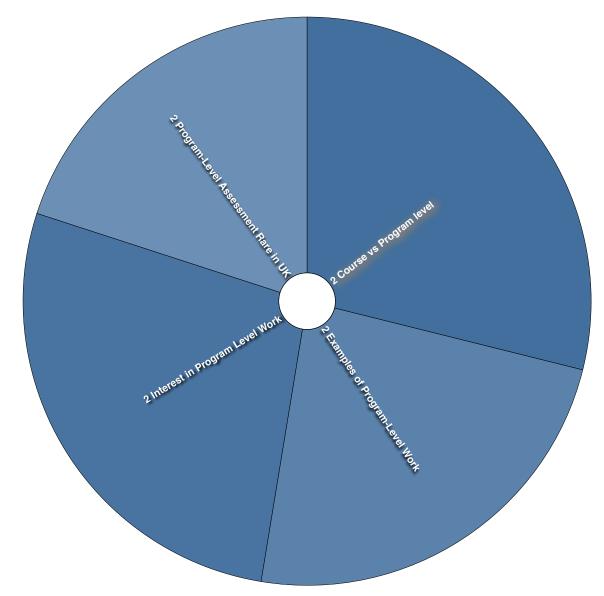
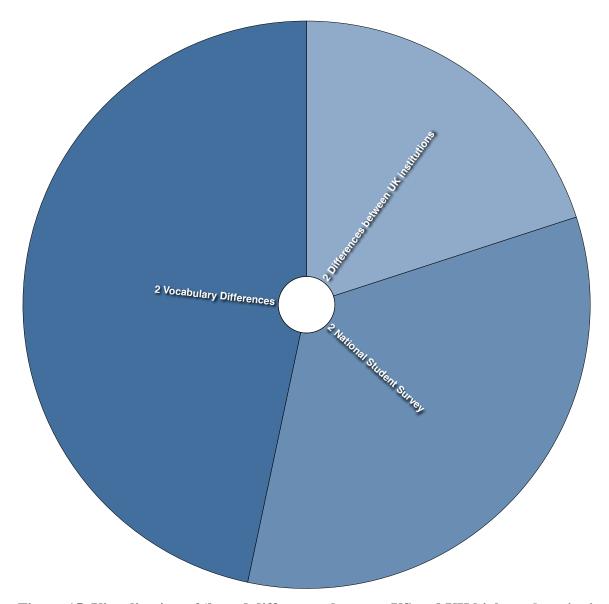


Figure 14. Visualization of 'respondents have a general interest in program-level assessment' theme



Pre-Protoyping Prototyping **Define Partnership** Consider HE factors Post-Prototyping **Consider Challenges** Define stakeholders **Consider Collaboration Issues** Define intended benefits (outcomes) Use and improve Fulcher, et al. model of Build network of theory and practice -Work to spread partnership practices to improvement more insitutions and practitioners Build on program-level interest to encourage program theory work Examine if developmental pattern of partnerhsip work occurs at program level Build initial framework, recruit, find easy Apply information to generate stronger successes validity evidence for the effectiveness of Build on seed-ideas from classroom level higher education partnerships and expert suggestions Generate additional ideas in partnership with students

Figure 16. A framework for moving student-faculty partnership in program-level assessment forward.



Figure 17. Learning Improvement Stages (James Madison University, 2018)

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Appendices Appendix A. Semi-structured Interview Questions

Semi-Structured Interview Script

- A) Brief introduction and purpose of interviews
 - a. Summary of Program Assessment Work at JMU
 - b. Faculty-engagement has been successful in improving assessment process
 - c. Could student-engagement help with improving the learning process?
 - d. We are interviewing experts in partnering with students generally to explore the possibilities of partnering with students at the program-level. We are hoping to draw on partnerships with students in other realms such as at the classroom level.
- B) Permission to Record and Consent Form
- C) Warm-up
 - 1) Where do you work and what is your job title?
 - 2) What are your responsibilities as _____?
 - 3) How did you become interested in partnering with students?
- D) Student Partners Questions
 - 4) What work have you done to partner with students?
 - 5) How has your work partnering with students changed over time?
 - 6) What are the benefits of partnering with students? (Students, faculty, institutions, public)
 - 7) What are the challenges in partnering with students?
- E) Student Partners in Program Assessment

To address any questions about why program-level assessment is different than classroom level: "Program theory posits how and why a program is supposed to work. It suggests that an entire program of study develops different knowledge, skills, and attitudes than does any single class within the program."

- 8) Have you done any work partnering with students at a program-level?
- 9) Do you know anyone else who has done work partnering with students at the program-level?
- 10) How (or how else) might we partner with students to improve program assessment and student learning? (Are there opportunities to scale up classroom level ideas?)
- F) Conclusion
 - 11) Is there anything else that you would like to talk about around students as partners?

Appendix B. Informed Consent Form for Semi-Structured Interviews

Consent to Participate in Research

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by *Nicholas Curtis and Robin Anderson* from James Madison University. The purpose of this study is to *explore student partnership opportunities at the program-level*. This study will contribute to the researcher's completion of his (Curtis) Ph.D. dissertation.

Research Procedures

Should you decide to participate in this research study, you will be asked to sign this consent form once all your questions have been answered to your satisfaction. This study consists of an interview that will be administered to individual participants in-person or via video call. You will be asked to provide answers to a series of questions related to student partnership. We would like to record the interview so that we may review the conversation at a later time. We would like to use quotes from the interviews in our analysis and reporting. We will not connect your quotes with your name.

Time Required

Participation in this study will require one hour of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

Potential benefits from participation in this study include connecting with other likeminded faculty and researchers interested in student partnership. This research will expand understanding of student engagement in assessment with the aim to enhance the use of assessment research for student learning improvement.

Confidentiality

The results of this research will be presented at conferences and in research journals, in addition to the researcher's dissertation. The results of this project will be coded in such a way that the respondent's identity will not be attached to the final form of this study. The researcher retains the right to use and publish non-identifiable data. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers *including audio recordings* will be destroyed. *If you would like to waive confidentiality of your participation (not of your individual responses) in order to be connected to other individuals partnering with students, you will have the opportunity to do so below.*

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Nicholas A. Curtis Department of Graduate Psychology James Madison University curtisna@jmu.edu Dr. Robin D. Anderson Department of Graduate Psychology James Madison University ander2rd@jmu.edu

Questions about Your Rights as a Research Subject

Dr. David Cockley Chair, Institutional Review Board James Madison University (540) 568-2834 cocklede@jmu.edu

Giving of Consent

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

give consent to be <i>audio</i> taped during my in waive the condition of confidentiality of my (Initials)	
Name of Participant (Printed)	
Name of Participant (Signed)	Date
Name of Researcher (Signed)	Date

Appendix C. U.S. to U.K. Vocabulary from Curtis, Anderson, & Brown (2018)

U.S. Term	Definition	U.K. Term
Program	"any combination of courses and/or requirements leading to a degree or certificate, or to a major, co-major, minor or academic track and/or concentration" (Temple, 2017)	Module, Course, Programme, Degree (Module is the smallest of these units and Degree is the largest)
Faculty (member)	Staff within a university responsible for teaching and facilitating educational experiences	Teaching Staff, Lecturers, Academics The term 'Faculty' in the UK is commonly used to mean an administrative grouping of academic and other employees, typically grouped by disciplinary subject
Course	Unit of educational experience that typically lasts one entire academic term (e.g., a semester)	'Module' is the term that most closely approximates this, but modules can be 'short and fat' and can last only a few weeks or 'long and thin' and extend over a whole academic year
Professor	A university or college teacher	In the UK, Professor is the title to a person who has been promoted on the basis of esteem and experience to a very senior role in a university
Administrator	Someone charged with university or college leadership	Senior Manager In UK, the term 'administrator' applies to a wide range of secretarial and administrative tasks
Class	A single meeting within a course (e.g., a 50-minute meeting of Chemistry 101)	Lecture, Seminar, Tutorial, Workshop session, Practical
Program Objective/Outcome	The knowledge, skills, or attitudes desired at the conclusion of a program of study (objective) or assessed at the conclusion of a program of study (outcome).	Course Objective/Outcome, Degree Programme Objective/Outcome

Appendix D. Example of future work at JMU

Participants in future work at James Madison University (JMU) will be students and faculty working together on a prototype project planned for implementation in the fall 2018 semester. This prototype project will focus on the use of student learning outcomes assessment to inform logical changes at both the program and institutional level. A new course will focus on building student-faculty partnerships at the program and institutional level. Within the course, a team of students will partner with faculty at JMU to explore ways to partner in the program assessment and improvement process. A separate team of students will partner with faculty from the Madison Collaborative, an institution-wide educational program at the university. The student learning objectives and educational experiences for the course (draft syllabus – Appendix E), are designed to work with students to develop their knowledge, skills, and attitudes toward student learning outcomes assessment, pedagogy and curriculum development, and student-faculty partnership.

Program- and institutional-level improvement efforts often take years to implement, assess, and demonstrate effectiveness. Given the structure of the program and institutional level student learning outcomes improvement projects, it is unlikely that I will be able to capture the impact of the projects on student learning outcomes directly during a single academic semester. Consequently, I will focus initially on the benefits to students and faculty who are directly involved in the projects. Students will complete pretest and posttest measures of various research-based, hypothesized outcomes. The outcomes are chosen to align with the evidenced benefits of student-faculty partnership outlined in this study to see if such benefits occur when engaged in program or

institutional level partnerships. These outcomes, and their proposed assessments, are presented in Table 2.

Table 2. Proposed student outcomes and measures

Outcome	Measure
	Metacognitive Awareness Inventory
Metacognition	(Schraw & Dennison, 1994)
	Academic Locus of Control Scale
Academic Locus of Control	(Curtis & Trice, 2012)
	General Self-Efficacy Scale
Self-Efficacy	(Chen, Gully, & Eden, 2001)
	Modified Academic Achievement Goal Questionnaire
Goal Orientation	(Elliot & McGregor, 2001; Finney, Pieper, & Barron, 2004)
	Students attitudes toward institutional accountability testing
Attitudes towards assessment	scale
	(Zilberberg, Anderson, Finney, & Marsh, 2013)

The Metacognitive Awareness Inventory (MAI; Schraw & Dennison, 1994; appendix F) is a 52-item, true/false scale designed to assess adults' metacognitive awareness. The scale is divided into two subscales: knowledge and regulation. This two-factor structure was supported by a series of factor analyses. Each factor was found to be highly reliable (α = .91 for each). The initial study found that high scores on the MAI were related to self-reported monitoring ability and reading comprehension. The MAI has also been used as a related construct measure in studies of self-efficacy (Barry & Finney, 2009) and student test-taking effort (Swerdzewski, Harmes, & Finney, 2009). There is evidence that classroom-level student-faculty partnership efforts facilitate improved meta-cognitive skills for students and faculty. An increase in MAI scores over the course of the semester would provide initial evidence that the combination of training

experiences and program-level partnership efforts at JMU also facilitate improved metacognition.

The revised Academic Locus of Control Scale (ALC-R; appendix G) is a 21-item true-false measure designed to assess student views of control over academic outcomes. The ALC scale was originally developed by Trice (1985) and was more recently revised by Curtis & Trice (2012). Higher scores on the ALC-R indicate more external locus of control regarding academic work. The scale is divided into four subscales: hopelessness $(\omega = .83)$, distractibility $(\omega = .80)$, poor student attitudes $(\omega = .70)$, and impaired planning abilities ($\omega = .79$). MacDonald's omega reliability estimates for each subscale suggest adequate reliability. The initial study of the revised instrument found that higher scores on the ALC (more external LOC) were statistically significantly related to lower GPA, more frequent class absences, higher academic entitlement, higher procrastination, and greater indications of depression and anxiety symptoms. The ALC-R has been used in studies of engagement (Duve, 2015), self-concept and motivation (Ahman-Mahmud, 2016), and academic entitlement (Mateescu, 2015). Academic locus of control is similar to a students' sense of agency over their academics. A decrease in ALC-R scores over the course of the semester would provide evidence that students in the course developed a greater sense of agency in the learning process.

The New General Self-Efficacy scale (NGSE; Chen, Gully, & Eden, 2001; appendix H) is an eight-item, 5-point Likert-type scale (strongly disagree to strongly agree) designed to measure general self-efficacy. The NGSE is a revision of the General Self-Efficacy scale developed by Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, & Rogers (1982). The NGSE is described as unidimensional and principal components

analyses are reported to support this claim. The authors used CFA methods to demonstrate that the NGSE scores are distinct from, and highly correlated with, measures of self-esteem. The NGSE was significantly related to measures of future task-specific self-efficacy. The NGSE has been used in studies of self-esteem and locus of control (Judge, Erez, Bono, & Thoresen, 2002), resistance to change (Oreg, 2003), and goal orientation (Payne & Youngcourt, 2007). There is evidence that classroom-level student-faculty partnership efforts facilitate improved self-efficacy. An increase in NGSE scores over the course of the semester would provide evidence that students in the course gained efficacy in their ability to work in partnership with faculty.

The modified Academic Goal Questionnaire (AGQ; Finney, Pieper, & Barron, 2004; Appendix I) is a 12-item, 7-point Likert-type scale (1: not at all true of me, to 7: very true of me) designed to measure achievement goal orientation for general academic achievement during a specific semester. The scale is a modification of the Elliot and McGregor (2001) AGQ scale. Confirmatory factor analyses supported a four-factor structure: Performance approach, Performance-avoidance, Mastery-avoidance, and Mastery-approach. Internal consistency estimates for all subscales was acceptable (α =.68 - .88). Additionally, higher scores on the mastery-approach subscale were significantly and positively related to semester GPA scores controlling for SAT scores. Higher scores on the performance-avoidance subscale were significantly and negatively related to semester GPA scores controlling for SAT scores. The AGQ scale has been used in studies of metacognition and self-regulated learning (Vrugt & Oort, 2008) and study strategies and exam performance (Elliot, McGregor, & Gable, 1999). Researchers and practitioners in student-faculty partnership work believe that such work encourages

students to do more than what is required in pursing their own learning. Increasing AGQ scores over the course of the semester would provide evidence that students' desire to master learning content (i.e. do more than the minimum) had increased.

The Students Attitudes toward Institutional Accountability Testing in Higher Education scale (SAIAT-HE; Zilberberg, Anderson, Finney, & Marsh, 2013; Appendix J) is a 22-item, Likert-type response scale (1: strongly disagree to 7: strongly agree) designed to assess students' attitudes toward institutional accountability test in higher education. A six-factor structure is evidenced by confirmatory factor analysis models: Validity ($\alpha = .75$), Purpose ($\alpha = .77$), Disillusionment ($\alpha = .78$), Parents ($\alpha = .56$), Professors ($\alpha = .44$), and Students ($\alpha = .50$). Even through the final three subscales did not engender adequate reliability estimates in the original sample, those items within the subscales are highly relevant to the current work. Thus, all items will be administered in this study. The SAIAT-HE scale has been used in studies of student motivation (Zilberberg, Finney, Marsh, & Anderson, 2014), development of negative attitudes towards assessment (Zilberberg, Anderson, Swerdzewski, Finney, & Marsh, 2012), and to help assess the impact of changes designed to help first-generation, low-income students (Tompkins, 2017). One consequence of faculty-driven assessment work (and other factors) has been that students may perceive assessment as negative. Partnership work may be able to change this perception. Increasing SAIAT-HE scores over the course of the semester would provide evidence of such a change.

In addition to quantitative data collection during the course, qualitative data will be collected. First, student reflections will be collected weekly. These reflections will capture students' thoughts about class content and student-faculty partnerships. Second,

faculty feedback will be collected at the end of the course by in-person interviews. Finally, the students in the course will conduct focus groups with a combined group of students and faculty designed to explore future student-faculty partnership possibilities with program and institutional level outcomes assessment. Students in the course will experience extensive training in facilitating focus groups as a component of the curriculum prior to conducting these groups. Engaging in focus group work is an initial attempt at increasing representativeness in our partnership efforts.

Appendix E. Draft of Student Partner Class Syllabus

Madison Assessment Scholars

Course Information

Madison Assessment Scholars 3 credit hours Fall Semester, 2018 Monday and Wednesday (2:30 PM – 3:45 PM)

Overview and Objectives of the Course

Course Description

Students are the only ones who experience classes and programs from the learner's perspective. Similarly, faculty are the only ones who experience classes and programs from the instructor's perspective. While both student and faculty views are important, they do not always align. Moreover, the two views are rarely included in the same conversation. Without such conversation, we fail to include the voices of those most invested in higher education. As a result, we set inappropriate goals, ignore critical information, misinterpret assessment findings, and overlook opportunities for meaningful change. Student-faculty partnerships position students to engage with faculty and staff partners in the "collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision making, implementation, investigation, or analysis" (Cook-Sather, Bovill, & Felten, 2014, pp. 6-7).

There have been explicit efforts to establish student-faculty partnerships throughout higher education, almost exclusively at the classroom level (e.g., curriculum design, learning interventions, and classroom assessment). However, there have been no explicit efforts to establish student-faculty partnerships in the assessment process at the program level. The purpose of this course is to explore student-faculty partnerships at the program level to facilitate improvement in student learning.

Course Objectives

As a result of completing the course, students will be able to:

- Partner with faculty to interpret program-level assessment and to design evidence-based program-level changes.
- Successfully communicate the importance of developing meaningful student-faculty partnerships at the program and institutional level.
- 3. Describe the practical considerations involved in both program and institutional assessment processes.
- Successfully communicate the importance of program level assessment to a diverse audience including students, faculty, and outside stakeholders.
- 5. Conduct effective student-led focus groups.
- Design and deliver professional-quality presentations to a diverse audience including students, faculty, and outside stakeholders.
- Read, digest, and apply primary psychology literature to the teaching, learning, and faculty-partnership processes

Course Content

Tentative Topic Order

Week	Topic
Week 1: Aug 28th	Introduction to Assessment and Student Partnership
Aug 30 th	Introductions to Program Structure – Guest Presenters
Week 2: Sept 4 th	Practical Considerations of Program Assessment/Meta-Assessment
Sept 6 th	Discussion/Adjudication of APTs/Feedback Report
Week 3: Sept 11 th	Learning Improvement, Program Theory, Curriculum, and Pedagogy
Sept 13 th	Practical Considerations of Institutional Assessment
Week 4: Sept 18 th	Small group discussions about APT/Madison Collaborative
Sept 20 th	Consultation and Communication Skills
Week 5: Sept 25 th	Presentation of Learning Improvement and Student Partnership Ideas, Presentation Skills
Sept 27 th	Mock Program Meetings
Week 6: Oct 2 nd	Debrief and Prepare for Program Meetings
Oct 4 th	Meetings with Program Faculty/Staff
Week 7: Oct 9 th	Debriefing and Plan Program Work, Creating a Professional Presentation
Oct 11 th	Working with Program Faculty/Staff
Week 8: Oct 16 th	Conducting Focus Groups
Oct 18 th	Working with Program Faculty/Staff
Week 9: Oct 23 rd	Focus Group on Student Partners: A-Day
Oct 25 th	Working with Program Faculty/Staff
Week 10: Oct 30 th	Present to Class, Finalize Presentations
Nov 1st	Working with Program Faculty/Staff
Week 11: Nov 6 th	Focus Group on Student Partners: Objectives, Mapping, and Instrument Design
Nov 8 th	Working with Program Faculty/Staff
Week 12: Nov 13 th	Focus Group on Student Partners: Data Analysis and Interpretation, Reporting, Improvement
Nov 15 th	Virginia Assessment Group Conference Presentation
Week 13: Nov 20th and 22nd	Thanksgiving Break
Week 14: Nov 27 th	Guest Lecture:
Nov 29 th	Working with Program Faculty/Staff
Week 15: Dec 4 th	Guest Lecture:
Dec 6 th	Working with Program Faculty/Staff – transition plan
Finals Week: Dec 13 th	Final Exam Experience/Student Partner Presentation

Appendix F. Metacognitive Awareness Inventory

All items are T/F

- 1. I ask myself periodically if I am meeting my goals.
- 2. I consider several alternatives to a problem before I answer.
- 3. I try to use strategies that have worked in the past.
- 4. I pace myself while learning in order to have enough time.
- 5. I understand my intellectual strengths and weaknesses.
- 6. I think about what I really need to learn before I begin a task
- 7. I know how well I did once I finish a test.
- 8. I set specific goals before I begin a task.
- 9. I slow down when I encounter important information.
- 10. I know what kind of information is most important to learn.
- 11. I ask myself if I have considered all options when solving a problem.
- 12. I am good at organizing information.
- 13. I consciously focus my attention on important information.
- 14. I have a specific purpose for each strategy I use.
- 15. I learn best when I know something about the topic.
- 16. I know what the teacher expects me to learn.
- 17. I am good at remembering information.
- 18. I use different learning strategies depending on the situation.
- 19. I ask myself if there was an easier way to do things after I finish a task.
- 20. I have control over how well I learn.
- 21. I periodically review to help me understand important relationships.
- 22. I ask myself questions about the material before I begin.
- 23. I think of several ways to solve a problem and choose the best one.
- 24. I summarize what I've learned after I finish.
- 25. I ask others for help when I don't understand something.
- 26. I can motivate myself to learn when I need to
- 27. I am aware of what strategies I use when I study.
- 28. I find myself analyzing the usefulness of strategies while I study.
- 29. I use my intellectual strengths to compensate for my weaknesses.
- 30. I focus on the meaning and significance of new information.
- 31. I create my own examples to make information more meaningful.
- 32. I am a good judge of how well I understand something.
- 33. I find myself using helpful learning strategies automatically.
- 34. I find myself pausing regularly to check my comprehension.
- 35. I know when each strategy I use will be most effective.
- 36. I ask myself how well I accomplish my goals once I'm finished.
- 37. I draw pictures or diagrams to help me understand while learning.
- 38. I ask myself if I have considered all options after I solve a problem.
- 39. I try to translate new information into my own words.
- 40. I change strategies when I fail to understand.
- 41. I use the organizational structure of the text to help me learn.
- 42. I read instructions carefully before I begin a task.

- 43. I ask myself if what I'm reading is related to what I already know.
- 44. I reevaluate my assumptions when I get confused.
- 45. I organize my time to best accomplish my goals.
- 46. I learn more when I am interested in the topic.
- 47. I try to break studying down into smaller steps.
- 48. I focus on overall meaning rather than specifics.
- 49. I ask myself questions about how well I am doing while I am learning something new.
- 50. I ask myself if I learned as much as I could have once I finish a task.
- 51. I stop and go back over new information that is not clear.
- 52. I stop and reread when I get confused.

Appendix G. Academic Locus of Control Scale

All items are T/F

- 2. I came to college because it was expected of me.
- *3. I have largely determined my own career goals.
- 4. Some people have a knack for writing, while others will never write so well no matter how hard they try.
- 7. There are some subjects in which I could never do well.
- 9. I sometimes feel that there is nothing I can do to improve my situation.
- *10. I never feel really hopeless there is always something I can do to improve my situation.
- *11. I would never allow social activities to affect my studies.
- *13. Studying every day is important.
- 14. For some courses it is not important to go to class.
- *15. I consider myself highly motivated to achieve success in life.
- *16. I am a good writer.
- *17. Doing work on time is always important to me.
- 20. I am easily distracted.
- 21. I can be easily talked out of studying.
- 22. I get depressed sometimes and then there is no way I can accomplish what I know I should be doing.
- 23. Things will probably go wrong for me some time in the near future.
- 24. I keep changing my mind about my career goals.
- *25. I feel I will someday make a real contribution to the world if I work hard at it.
- 26. There has been at least one instance in school where social activity impaired my academic performance.
- 27. I would like to graduate from college, but there are more important things in my life.
- *28. I plan well and I stick to my plans.

*reverse scored

note: item numbers missing due to a revision of the scale that removed missing items

Appendix H. General Self-Efficacy Scale

5-point Likert-type scale (strongly disagree to strongly agree)

- 1. I will be able to achieve most of the goals that I have set for myself.
- 2. When facing difficult tasks, I am certain that I will accomplish them.
- 3. In general, I think that I can obtain outcomes that are important to me.
- 4. I believe I can succeed at most any endeavor to which I set my mind.
- 5. I will be able to successfully overcome many challenges.
- 6. I am confident that I can perform effectively on many different tasks.
- 7. Compared to other people, I can do most tasks very well.
- 8. Even when things are tough, I can perform quite well.

Appendix I. Academic Achievement Goal Questionnaire

7-point Likert-type scale (1: not at all true of me to 7: very true of me)

- 1. My goal in this class is to get a better grade than most of the other students.
- 2. It is important for me to do well compared to others in this class.
- 3. It is important for me to do better than other students.
- 4. I just want to avoid doing poorly in this class.
- 5. My fear of performing poorly in this class is often what motivates me.
- 6. My goal in this class is to avoid performing poorly.
- 7. Sometimes I am afraid that I may not understand the content of this class as thoroughly as I'd like.
- 8. I worry that I may not learn all that I possibly could in this class.
- 9. I am often concerned that I may not learn all that there is to learn in this class.
- 10. I desire to completely master the material presented in this class.
- 11. I want to learn as much as possible from this class.
- 12. It is important for me to understand the content of this course as thoroughly as possible.

Appendix J. Students attitudes toward institutional accountability testing scale

Likert-type response scale (1: strongly disagree to 7: strongly agree)

Validity

- 1. Assessment tests are unfair to some students (R).
- 2. Assessment test results are not accurate (R) [SEP]
- 3. Assessment test results accurately reflect basic skills and knowledge of a subject.
- 4. Assessment tests are not valid (R). [SEP]
- 5. Assessment test scores don't reflect my true ability (R).

Purpose

- 6. I don't understand how assessment tests are related to my education (R).
- 7. I don't understand the need for assessment tests (R).
- 8. Someone (professor, academic advisor, Resident Advisor) explained to me why I take assessment tests.
- 9. I understand the purpose of assessment tests [SEP]

Disillusionment [SEP]

- 10. The more assessment tests I complete, the more I dislike assessment tests.
- 11. There is too much assessment testing [SEP]
- 12. Assessment tests are a waste of my time. [1]

Parents

- 13. My parents would be disappointed if I performed poorly on the assessment tests (R). [SEP]
- 14. My parents don't value the assessment tests I complete at the University (R). [1]
- 15. My parents would be proud of me if I performed well on the assessment tests. [L]
- 16. My parents are unaware of the assessment tests I complete at the University (R).

Professors

- 17. My professor(s), an academic advisor, or resident advisor encouraged me to prepare for the assessment tests.
- 18. My professors don't value the assessment tests I complete at the University (R).
- 19. If I performed poorly on the assessment tests, my professors would be disappointed.

Students

- 20. Fellow students urged me to try my best on the assessment tests. [[1]]
- 21. Fellow students discouraged me from taking the assessment tests seriously (R).
- 22. Fellow students speak negatively about the assessment tests at the University (R).