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# INTERDISCIPLINARY STUDIES AND THE REAL WORLD: A Practical Rationale for and Guide to Postgraduation Evaluation and Assessment

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*Abstract:* This article is an outgrowth of the evaluation and assessment process in a large interdisciplinary studies (IDS) program at West Virginia University. We argue for the importance of collecting and assessing quantitative and qualitative data concerning learning outcomes, student satisfaction, career choice and development, and graduate education after students have graduated from an undergraduate IDS program. While there are difficulties inherent in developing an assessment instrument and gathering quality data, we contend that this process ultimately yields valuable insights that can improve student learning, teacher quality, and programmatic design. Moreover, a comprehensive postgraduate tool can provide evaluative data directly relevant to critics' demands for higher education to implement greater accountability measures and demonstrate programmatic achievement. To assist other IDS programs, this article includes a practical guide to navigating the difficulties in developing a postgraduation evaluation and assessment tool and carrying out a plan for collecting data on a large scale.

*Keywords:* interdisciplinary, assessment, evaluation, postgraduate, capstone, accreditation, multidisciplinary

For at least the past decade ferocious competition and widespread criticism of spiraling tuition costs have prodded American universities into con-

certed efforts to improve the academic experience of their undergraduate students. Areas of emphasis include improving student learning and student-community engagement, developing stronger critical thinking skills, enhancing the quality of instruction, and providing clear pathways to success in postgraduation life. To determine whether such efforts are proving successful, universities are mandating an increase in both the number and sophistication of evaluation and assessment measures. Meaningful evaluation and assessment require considerable contact with students at regular stages in their academic curriculum, so the burden of implementing new evaluation and assessment practices has fallen in great part on the programs and departments that comprise the academic backbone of the university system. This article will examine a specific response to the demand for increased programmatic accountability: the use of a postgraduation research instrument to facilitate evaluation and assessment of an interdisciplinary program.

Evaluation and assessment measures are continually evolving. In only a few decades, the standard for good academic practice has evolved from sporadic course-based assessments of student learning to advanced quantitative and qualitative metrics illuminating the academic experience of students at the course, programmatic, and institutional levels. For example, peer review among professors, the development of teaching resource centers, and the creation of “lead teacher” programs are providing new data on teacher quality (Field & Stowe, 2002). Moreover, expanded cross-disciplinary use of authentic assessment tools like rubrics and more systemic efforts to increase experiential learning opportunities such as field service placements, co-ops, and lab time have increased the data available on analytical and critical thinking skill development, research quality and accessibility, and student-community engagement (Field & Stowe, 2002).

While we applaud each of these new measures, we also argue that there is another valuable source of data currently underutilized by institutions and, more specifically, interdisciplinary studies programs: postgraduation assessment. Currently, most postgraduation research is driven by a desire to compile information quantifying the career and financial successes of university graduates and thus validate the value of a university degree. Although this evaluative information is important, particularly to interdisciplinary and liberal arts programs that lack clearly defined career paths, postgraduation assessment has potential that exceeds basic degree evaluation. When carried out correctly, comprehensive postgraduation assessment not only facilitates the evaluation of a program’s worth; it also becomes a means to advance

the entire academic assessment project, encouraging graduates to reflect on learning outcomes, teacher quality, student satisfaction, and graduate education choices, and then relate these considerations to their current lives, both inside and outside of the workplace.

In this article we present a practical rationale for and guide to conducting postgraduation evaluation and assessment in an interdisciplinary program. We initiate the discussion by presenting the central arguments for conducting programmatic evaluation and assessment, including meeting higher education accountability requirements and examining learning outcomes. Additionally, programmatic assessment is discussed for its applicability to all academic programs and then specifically related to the unique challenges facing interdisciplinary studies programs. We then articulate our rationale for conducting postgraduation evaluation and assessment as a means of collecting valuable data that buttress other forms of programmatic evaluation and assessment. The final section presents a practical guide to the practice of postgraduate evaluation and assessment in an interdisciplinary studies program by relating our experiences in carrying out the process and providing a demonstration of how we used our research tool to improve our program.

### Reasons for Programmatic Evaluation and Assessment

Before addressing postgraduation evaluation and assessment, we should clarify how programmatic assessment differs from other types of student-focused, evaluative research and why interdisciplinary studies programs should conduct programmatic evaluation and assessment. Such a discussion must begin with a clarification of the terms “assessment” and “evaluation.”

Assessment and evaluation represent two related, but ultimately distinct research agendas. Stowe and Eder (2002) have delineated the division:

In general, when data are collected to improve teaching and learning, the process is assessment . . . When data are collected to make judgments of worth or value, the process is evaluation. Judgments might involve qualification for tenure, continuation of a program, the level of funding, or continuation of accreditation. (p. 81)

When the terms are defined side-by-side, the distinction is clear: Assessment is process-based and evaluation is summative—though in practice the line between the two may blur. Evaluation demonstrates if a person, program, or institution is succeeding or failing, but cannot alone explain the cir-

cumstances leading to success or failure or, perhaps more importantly, measures for improvement. Only comprehensive assessment can fill this void.

Stowe and Eder (2002) acknowledge, however, that many in academia confuse the two concepts, and our experience at West Virginia University supports their claim. At West Virginia University, as at the vast majority of institutions for higher education, programmatic assessment is mandatory (Kuh & Ewell, 2010). Department administrators and faculty do not, however, uniformly share the institutional enthusiasm for assessment, and so the spectrum of assessment practice is wide. Some programs have embraced yearly assessment as a means to illuminate opaque concepts such as academic accomplishment related to learning outcomes. Other programs, perhaps resenting the mandate from above to implement sweeping measures, view assessment as a burdensome and unwelcome intrusion into their affairs by higher administration and decline to fully engage with its practice. Although they may claim to be practicing assessment, reluctant programs are most often simply evaluating, often using minimal demographic and retention/graduation statistics to argue to their stakeholders for the continued relevance of their programs (Miller, 2006; Basken, 2007).

We acknowledge that comprehensive assessment is certainly much more time-consuming and labor-intensive than collecting evaluative data, and that assessment research is oftentimes slighted by promotion and tenure committees, but it is also a mistake for academic programs to fail to embrace it fully. There are at least two clear reasons to adopt thorough assessment practices. First, the institutional mandates being handed down to programs actually stem from changes in higher education policy calling for educational accountability, and these policies continue to gather strength with each round of yearly tuition hikes (see for example, The National Governors Association 2010 report “Complete to Compete”) to the point where basic evaluative data are no longer sufficient to meet the demands of governing bodies. Secondly, a well-reasoned assessment plan with an emphasis on learning outcomes facilitates concrete improvements in both student learning and instructional quality.

### *Higher Education Accountability*

For at least the last few decades, federal and state initiatives have urged universities to accept accountability for their educational practices. This policy decision stems from a 1990 Department of Education mandate requiring higher education accrediting organizations to include documenta-

tion addressing student learning when reviewing institutions (Ewell, 2010). The focus on accountability has continued and intensified in recent years, through federal initiatives like the Spellings’ Commission on Higher Education, which called for universities to be more transparent in demonstrating their academic effectiveness (Ekman & Pelletier, 2008). Practically, these mandates have led nearly every academic program to justify its current configuration, if not its continued existence, on a regular basis.

While the necessity to “sing for one’s supper” should be a relatively egalitarian requirement across the university, the risks are often greater for newer programs or those viewed as non-traditional (Wilson, 2009). It is nearly impossible to imagine a university shuttering a dysfunctional English program, for instance, though a change of emphasis from post-colonial literature to technical and business writing might be recommended. Lacking the tradition, institutional advocacy, or tenured faculty of other, deeper-rooted programs, interdisciplinary studies programs may be at greater risk. Moreover, recent examples, such as that at SUNY Albany, demonstrate that even traditional major programs such as classics, French, and theater are in danger of extinction if they cannot demonstrate their continued relevance to students and the university’s mission (Hebel, 2010). Given the risks involved, adopting a comprehensive evaluation and assessment plan is the most effective means to validate an interdisciplinary studies program’s merit to the university and its partners in accreditation.

A common and accessible form of programmatic analysis is quantitative evaluation of basic student data—encompassing enrollment information, demographics and graduation/retention rates—gleaned from university databases. For example, the West Virginia Higher Education Policy Commission and the University Board of Governors mandate a program review every five years (West Virginia University Board of Governors, 2010). The instructions direct each university program to conduct a “self-study,” calling specifically for academic elements such as curriculum, course descriptions and yearly departmental assessment reports (discussed below). The majority of the requested information, however, is aligned along quantitative measures of program vitality, including detailed reports of five-year enrollment trends, physical space and funding information, and estimates of the program’s ability to attract students and maintain a “viable, cost-effective program” (West Virginia University Board of Governors, 2010). Unlike the data provided by more thorough-going assessment practices, evaluative data are relatively simple to request from the Registrar or Admissions Office and may not require regular faculty participation to compile. Such evaluative

data-mining may seem particularly attractive to interdisciplinary programs. The discipline-focused structure of universities and the difficulties inherent in explaining the interdisciplinary enterprise to the uninitiated can act to discourage sophisticated assessment formulations (Stowe & Elder, 2002; Klein, 2002). Thus, for reasons of convenience, relying on basic student data to evaluate programmatic performance may be a tempting expedient for interdisciplinary programs.

Relying on such a limited data set is perilous, however. In many cases, basic student data are either misleading or not sufficiently nuanced to demonstrate the true effectiveness of an interdisciplinary program. One way of mitigating this problem is to collect additional evaluative data—an opportunity we discuss below. To create a more complete picture of programmatic effectiveness, however, a comprehensive approach to assessment incorporating learning outcomes is necessary.

### *Learning Outcomes*

Learning outcomes represent the set of skills, knowledge, and/or behaviors that a student is expected to have gained after instruction.<sup>1</sup> Due to the accountability measures described above, many academic units have adopted clearly defined learning outcomes that seek to calibrate student academic progress at different stages in the curriculum. Regularly collected learning outcome data provide academic programs with a descriptive sense of how well they are achieving the core academic values of their program and prescriptive ideas for improving individual assignments, courses, programmatic mission, and teacher instruction.

The descriptive data that are attained through learning outcome assessment can be used to demonstrate a program's viability to accreditors through the process of yearly assessment reports. Regular assessment reports utilizing programmatic learning outcomes are a practical means to ensure that a program can clearly demonstrate its relevance to the university's educational mission. Consistently compiled reports can also profitably supplement basic student data by documenting the program's academic performance on a year-to-year basis. In doing so, assessment reports can provide a valuable counterpoint to raw evaluative data that are oftentimes outside of the program's control. For instance, a change in financial aid eligibility determination formulae may lead to a drop in non-traditional

<sup>1</sup> Instructional Assessment Resources (IAR). (2007). Glossary, <http://www.utexas.edu/academic/ctl/assessment/iar/glossary.php>

student enrollment, raising questions about a program's ongoing "viability" even though there was no decline in the program's academic merit. Learning outcome-based assessment can then be brought to bear, mitigating misjudgments based on such unavoidable variances in student enrollment data.

Moreover, it is important to note that accreditation bodies are greatly interested in learning outcome assessment. For example, The North Central Association of Colleges and Schools, one of six institutional accreditors in the United States, enumerates five broad criteria for accreditation. The first two criteria are institutional in focus, but the remaining three are entitled "Student Learning and Effective Teaching," "Acquisition, Discovery, and Application of Knowledge," and "Engagement and Service."<sup>2</sup> Providing accreditors with convincing evidence of accomplishment in these core criteria is difficult, if not impossible, without setting concrete learning outcome goals and improving the program in response to feedback.

Prescriptive insights gained through learning outcomes assessment can be focused toward specific programmatic improvements. There are a number of research studies that have been conducted that show the value of assessing learning outcomes as they relate to everything from capstone course development (see Brooks, Benton-Kupper, & Slayton, 2004) to learning environments (Wilson & Scalise, 2006). Unfortunately, assessing learning in an interdisciplinary studies program can be more problematic. As Boix Mansilla (2005), Newell (1994, 2001, 2006), and Repko (2007, 2008a, 2008b), among others, have convincingly shown, disciplinary grounding is vital to the success of interdisciplinary programs and the integrative thinking they promote. However, because most interdisciplinary programs rely on other academic units to provide disciplinary instruction, opportunities to convey and assess progress towards specifically interdisciplinary learning outcomes, like integrative thinking, may be limited. It is vital, then, to make good use of whatever interdisciplinary studies courses are incorporated into the curriculum by setting specifically interdisciplinary learning outcomes for students. Progress towards the desired outcomes can be then assessed by using comprehensive rubrics to evaluate assignments, encouraging students to complete surveys—at different stages of their studies if possible, and compiling feedback on instructor performance

<sup>2</sup> Higher Learning Commission (HLC). (2011). Institutional Accreditation: An Overview, <http://www.ncahlc.org/Information-for-Institutions/criteria-for-accreditation.html>

(Field & Stowe, 2002; Repko, 2008b). These data can then provide evidence for academic success as well as revealing a path for positive changes to the curriculum.

Still, given the difficulties created by intermittent academic interaction with students in many interdisciplinary programs, more creative means of data collection may be required. As we will see, postgraduation assessment can be a powerful tool to supplement more traditional, classroom-centered, assessment methods.

### *Postgraduation Evaluation and Assessment*

Postgraduation evaluation and assessment require the collection of data related to a graduated student's academic experience. Admittedly, this is not a new tradition in American higher education. As far back as the 1930s institutions of higher education, state agencies, and for-profit businesses like the College Board began collecting data on students after graduation, usually in the form of alumni surveys (Ewell, 2005). These surveys generally served as a method for institutions to evaluate overall alumni satisfaction with university services, while also keeping a watchful eye on potential fund-raising sources. Perhaps of greater importance at the programmatic level, these data allowed programs to evaluate the real-world value of the degrees they conferred on their graduates. Assessment, however, was not yet a priority. It is only within the last few decades, with the rise of interest in higher education accountability, that institutions have begun to query alumni about elements of their academic experience, such as learning outcomes, that are more comprehensively addressed by assessment than evaluation (Ewell, 2005).

Unfortunately, this type of postgraduation assessment has failed to penetrate widely below the institutional level, and the data gathered through institutional assessment rarely involve the kind of specificity that programs need to understand why a program or an element of a program is succeeding or failing and how it might be improved. By adopting postgraduate assessment, academic programs can use the experiences and perspectives of former students to improve the teaching and learning of current and future students and retool programmatic design. Moreover, proactively adopting such measures prepares the program for future institutional and governing body policy revisions, such as increased or more nuanced accountability demands, that are most likely inevitable (See for example, Mangan, 2011, and Patton, 2012).

We found that collecting data on student learning solely while students were in the program had left us with a partial view of our impact on their academic and professional development. By querying graduated students we were able to complete the picture. The perspective granted by real-world experience, when combined with the other evaluation and assessment measures we had implemented during their time at the university, provided us with multilayered insights into where the program was succeeding and where it needed to improve.

### *A Practical Guide to Postgraduation Evaluation and Assessment*

Any interdisciplinary program can successfully design and administer a postgraduation evaluation and assessment tool. The project involves some thoughtful consideration in the design phase, research to compile a subject pool, a straightforward collection of data, and an analysis stage that can range from the running of basic statistical tests to more intricate variance analysis depending on the complexity of the information desired. Using our experience at West Virginia University as an example, the guide that follows is intended to assist other interdisciplinary studies programs in navigating the difficulties in developing a postgraduation evaluation and assessment tool and carrying out a plan for collecting data on a large scale.

### *Know Your Mission*

Understanding your program's mission is the first phase of programmatic postgraduation evaluation and assessment. Our program was founded in 2006 and requires interdisciplinary students to complete the university's undergraduate general education requirements, three minors selected from over 100 available choices, and only two interdisciplinary courses, an introduction to interdisciplinarity and an integration-focused, writing-intensive capstone. The Dean's office set our programmatic mission as encouraging undergraduate retention and satisfying students' demands for flexibility by providing them with an avenue to formulate individualized plans of study. As of spring semester 2012, the program has grown to just over 600 undergraduate students. The large number of enrolled students, limited student-contact hours, and disciplinary variation were critical elements to consider when implementing our mission of retention and individualized studies.

In addition to addressing these pragmatic concerns, we felt it imperative

to integrate a strong academic understanding of interdisciplinarity into our curriculum. We reviewed much of the seminal work in IDS to develop our own understanding of interdisciplinarity, but found the concept of “deep learning” as presented by Stowe and Eder (2002) to be a particularly useful concept in developing this portion of our mission. The authors define “deep learning” as “the learning possessed by experts in a field, . . . usually acquired directly through instruction and indirectly through experience” (p. 82) and argue convincingly that interdisciplinary learning is inherently “deep learning.” Stowe and Eder state that to achieve “deep learning” in an academic environment at least four factors must be present:

1. Students must experience a pedagogy beyond “standard” passive lecture.
2. Students must face a significant problem for which their own discipline and its way of knowing is a necessary but not a sufficient contributor to the solution.
3. Students must see the need for acquiring relevant and important facts outside their own major disciplines and inserting them into new contexts.
4. Students must practice acquiring those facts and manipulating them in those contexts under faculty supervision.

(Stowe & Eder, 2002, p. 82)

We agreed, as faculty and as interdisciplinarians, that combining these ideals with our more pragmatic charges had the potential to foster the learning environment we hoped to create for our students. Our programmatic mission and the learning outcomes to follow were developed with this conception of interdisciplinary “deep learning” in mind.

### *Set Your Learning Outcome Goals*

Within the boundaries set by our mission, we could now develop the curriculum that best served our students. By referencing the IDS literature, we learned of the value and difficulty in integrating disciplinary foundations (see Boix Mansilla, 2005; Repko, 2007, 2008; and Newell, 1994, 2001, 2006). Our first experience with undergraduate IDS students immediately raised our awareness of the importance and challenge of overcoming a lack of name recognition for our program and demonstrating the employability of students with our degree. To surmount these ob-

stacles, we developed a set of programmatic learning outcome goals that continue to serve as our core principles for maintaining a strong undergraduate program:

#### **1. Knowledge**

- A. Broad-based knowledge of three discrete areas of study.
- B. Understanding of the synergistic advantage of interdisciplinary curriculum.

#### **2. Skills**

- A. Ability to think critically in each of three disciplines.
- B. Ability to partition and interpret information or events using the most appropriate discipline’s toolset or by combining disciplines’ toolsets.
- C. Ability to integrate knowledge and modes of thinking drawn from multiple disciplines.
- D. Ability to write a professional resume, conduct a job interview, and apply to graduate school.
- E. Ability to research and write a research paper.
- F. Ability to create and present a quality visual presentation.

#### **3. Attitudes**

- A. Positive attitude towards civic action and engagement.
- B. Familiarity with poverty in West Virginia/America.

#### **4. Integrative Learning**

- A. Ability to explain interdisciplinary studies and its advantages to others.
- B. Ability to synthesize and integrate academic knowledge to confront real-world problems.

### *Develop Your Postgraduation Evaluation and Assessment Tool*

Testing the imperatives of our programmatic mission and our desired learning outcomes constituted the foundation for our programmatic evaluation and assessment plan. This article is concerned primarily with postgraduation evaluation and assessment, but we would be remiss if we did not make it clear that we view postgraduation evaluation and assessment as only an important piece of a larger evaluation and assessment plan. In

addition to examining the evaluative data gathered at the institutional level, we actively carry out direct and indirect, quantitative and qualitative evaluation and assessment at the course and program level. For example, at the programmatic level, we have developed new-student and graduating-student surveys, which incorporate open-ended responses to provide data on what our students have learned relative to our programmatic learning outcome goals. At the course level, we engage in authentic assessment through the use of rubrics and peer review on individual assignments to determine whether students are developing the specific skills we had hoped for when we created the assignments.

It was while we were calibrating these programmatic evaluations and assessments that we realized we lacked our graduates' perspectives on our program. It was to correct this oversight that we first began developing a postgraduation evaluation and assessment tool. Ultimately, we chose to create a 50-question survey with 44 closed-ended questions or prompts and six open-ended questions. The six open-ended questions allowed the respondents to offer their perspective on the topics raised in the closed-ended prompts. The prompts were broken up into four distinct informational groupings: general, programmatic, capstone-specific, and specific skill development. These queries provided us with the baseline demographic information necessary for conducting more nuanced and sophisticated analysis of our learning outcome goals. The programmatic, capstone-specific, and specific skill development prompts also each addressed some aspect of our learning outcome goals. For example, in our capstone-specific section we asked the participants to respond to the following prompt:

*The research paper assignment in the Capstone course helped me to produce an interdisciplinary understanding of a complex problem or intellectual question.*

*Strongly Disagree    Disagree    Unsure    Agree    Strongly Agree*

The answers we received on this question allowed us to assess issues related to learning outcome goals 1A, 1B, 2A, 2B, 2C, 2D, and 4B. When we combined the responses with other prompts that also address these learning outcome goals, and then cross-referenced the data with more direct in-class assessment efforts such as assignment rubrics and peer reviews, we developed a much clearer picture of how well we had served our students.

### *Query Your Foundation*

After constructing our postgraduation evaluation and assessment tool, we moved on to the data collecting phase. This stage of the project can be difficult as the challenge of contacting potential respondents can form a considerable obstacle to implementing postgraduate assessment. We pursued two avenues with some success, and we plan to implement two additional options in the future that we hope will increase our respondent pool and our response yield.

We first requested a database of students who had graduated from the program in the past 18 months and their student email addresses. At West Virginia University, students retain access to their email for approximately one year after graduation and occasionally a little longer. At present, the University's technical staff has resisted calls to provide students with permanent access to their University email addresses. In universities where students retain their undergraduate emails permanently, the data collection phase would most likely be rendered considerably less difficult.

We supplemented the email addresses of recent graduates with a request to our University's alumni foundation. To our delight, the West Virginia University Foundation provided us with hundreds of email addresses. However, unless the students had responded to earlier requests from the Foundation, the contact information was often woefully outdated. Still, contacts retrieved from these two sources formed the bulk of our pool. Ultimately, we ended up with a respondent pool of just under 500 alumni, 102 of whom actually completed our survey.

A third option, which we have not yet pursued, is to mail requests for an email contact to the permanent mailing address on file with the Foundation. Previous experience with physical mailings suggests that this avenue will not be particularly cost-effective, requiring postage, or effective, as it demands active participation from the letter recipient, but it may be a useful way to supplement the first two avenues.

The final means by which we hope to increase our participant pool is to adapt social media to the problem. There are a number of ways to try to reach out to alumni through social media outlets. The two easiest, and most likely to be successful, are to create a Facebook profile and a Twitter feed that send out periodic messages to alumni. Through these sites we can ask for alumni email addresses or send a direct link to our survey instrument. Given the relative youth of our alumni base, this avenue is likely to be more successful than physical mailing, but it does still demand active participa-

tion from graduates. Of course, so does the act of answering a survey. It is our hope that if our alumni base is willing to communicate with us through Facebook and Twitter, they will be willing to engage us through our evaluation and assessment tool as well.

### *The Internet and Bribery*

Email addresses in hand, we sent each of our contacts a link to our survey along with a plea to help us improve our program and then repeated the process several times over a few months. We also sent each recipient a PDF copy of our alumni newsletter containing a similar plea. We supplemented our appeals to our graduates' good natures by entering survey participants in a small sweepstakes. The state of West Virginia fortunately allows state funds to be used for "promotional materials," and by filling out the survey each respondent was given a chance to win a \$50 gift card to the University bookstore. We provided three gift cards at a total cost of \$150.

### *Analyze Your Data*

After creating an evaluation and assessment tool, determining our respondent pool, and collecting as many responses as possible, it was time to analyze the data. There is a wide array of analysis measures available, and it was important to determine which measures made the most sense considering our mission and learning outcome goals. After exploring some of the available tools, we were able to discover what worked for our needs.

First, we let Survey Monkey do much of the work for us. This web-based software provides users with data on how participants responded to quantitative questions and can also create a wide variety of easy-to-read graphs and charts. These data can then be used to run basic descriptive statistics such as mean, median, and mode, providing the basic information necessary for yearly programmatic assessments reports and five-year accreditation reports. Survey Monkey is easy to use and reasonably priced at several different subscription levels.

The software also makes possible conducting more thorough analysis, assessing learning outcomes or curricular changes longitudinally, and determining the impact of multiple issues/criteria on learning outcomes. Survey Monkey facilitates the process by allowing the user to create cross-tabs where multiple questions are assessed in combination. To gain more insight, it was useful, but not necessary, to run software like Excel and SPSS. These programs allowed us to run analyses like T-Tests, which check for a statisti-

cally significant difference between two means. We found SPSS to be the more sophisticated of the two as it performs many different types of statistical analysis.

To provide a brief example, suppose we implemented an experiential service learning initiative at the start of 2011 to help students engage the world from multiple perspectives. We know what year students graduated by including the question "In what year did you graduate?" and we can test students' responses to the initiative by asking, "Did our program help you to develop the ability to engage the world from different points of view?" We can then evaluate graduated student responses to the latter question based on the year they completed the program. Survey Monkey provides the basic cross-tabbed statistics, which we can then download to a program like Excel or SPSS to run a T-Test to check for a statistically significant difference between the two years. By executing other analyses of this sort we can assess the value of curricular changes in some detail, fostering program accountability, and improving our ability to accomplish our programmatic mission.

Our last piece of advice addresses open-ended questions. To demonstrate accountability and pass accreditation, quantitative analysis speaks volumes. However, we discovered that some audiences also appreciate when our assessment reports are punctuated by "testimonials." During the presentation of data analysis, it can be beneficial to present relevant stories or direct quotes from your respondents to drive home your point. For some audiences it is easier to appreciate a program's value by hearing directly from the students.

The guide, to this point, has shown evaluation and assessment from their inception through analysis. Analysis, however, is nothing without application. The final section of this article demonstrates the applicability of post-graduation research to evaluating and assessing program mission and learning outcome goals through an example derived from our research tool.

## **A Practical Application of Our Postgraduation Evaluation and Assessment**

Upon retrieving our data, we were struck immediately by the relevance of some of our more basic queries to the University's programmatic review and evaluation process. To offer just one example, our postgraduate assessment tool concluded with the following prompt:



*Are you satisfied with your degree choice?*

Yes No

The preponderance of positive responses provides persuasive evidence for the success of the program, but this information would have been unavailable to us if we had not begun to collect postgraduate evaluative data. Until we queried the students after graduation, we had generally relied on anecdotal evidence to convey the real-world worth of our degree program. After administering the survey, we possessed statistical evidence that, even in a down economy, choosing an interdisciplinary curriculum was perceived as a perspicacious choice by the great majority of our graduates.

Such demonstrations of programmatic effectiveness are exceedingly valuable for successfully negotiating both external and internal programmatic reviews, but they do not tell the complete story. To take full advantage of the potential of postgraduate program assessment, it is necessary to do more than ask evaluative questions. To illustrate this point, it may be useful to provide a thorough example examining one aspect of our postgraduate survey through the lens of a single issue, in this case an undergraduate research paper.

One of our programmatic learning outcome goals expresses our desire for students to understand the synergistic advantage of an interdisciplinary curriculum. Although we provide a number of assignments with this learning goal in mind, the primary assignment in our Interdisciplinary Studies Capstone course is for students to write a research paper designed to foster disciplinary critical evaluation and interdisciplinary thinking.

Our classroom assessment of the assignment returned mixed results. Faculty rubrics revealed that many students had only limited success thinking in an integrative manner. Moreover, when we asked students what they felt about the research paper at the end of the course, the majority felt that the paper assignment was not one of the more useful aspects of the class, ranking it dead last in value out of the 10 course assignments. These results encouraged us to consider eliminating the research paper assignment. After some discussion, we decided to proceed with more analysis first, examining the question of integrative thinking in our postgraduate survey. Perhaps testing the value of the analytical essay for fostering integrative thinking in our postgraduate survey would expose new avenues for positive change.

We asked our alumni to respond to the following prompt:



*The MDS program helped me to integrate knowledge and modes of thinking drawn from multiple disciplines/minors.*

A total of 101 graduates answered the question, and Survey Monkey exported this chart on the preceding page.

Our graduates overwhelmingly agreed that they had learned how to integrate disciplinary knowledge, but where had they learned these skills? Our faculty’s attempts to teach integrated thinking largely occurred in the Interdisciplinary Studies Capstone course, so we refined the assessment with another prompt:

*The Capstone coursework helped me to synthesize knowledge from multiple disciplines/minors.*

(See Table 3 on the following pages.)

Although the majority of students continued to accept the premise, the numbers were less consistently positive than when they commented on their academic experience holistically. This seemed to suggest that our Capstone as a whole was not working as well as it could, but we still needed to know more about the research paper’s specific role in fostering integrative thinking:

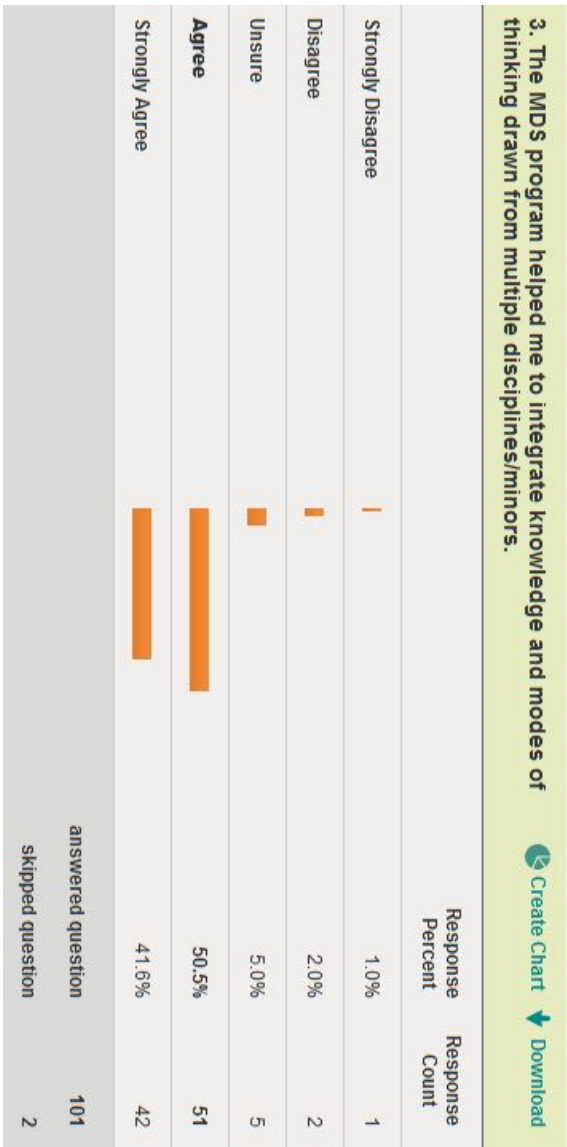
*The research paper assignment in the Capstone course helped me to produce an interdisciplinary understanding of a complex problem or intellectual question.*

(See Table 4 on the following pages.)

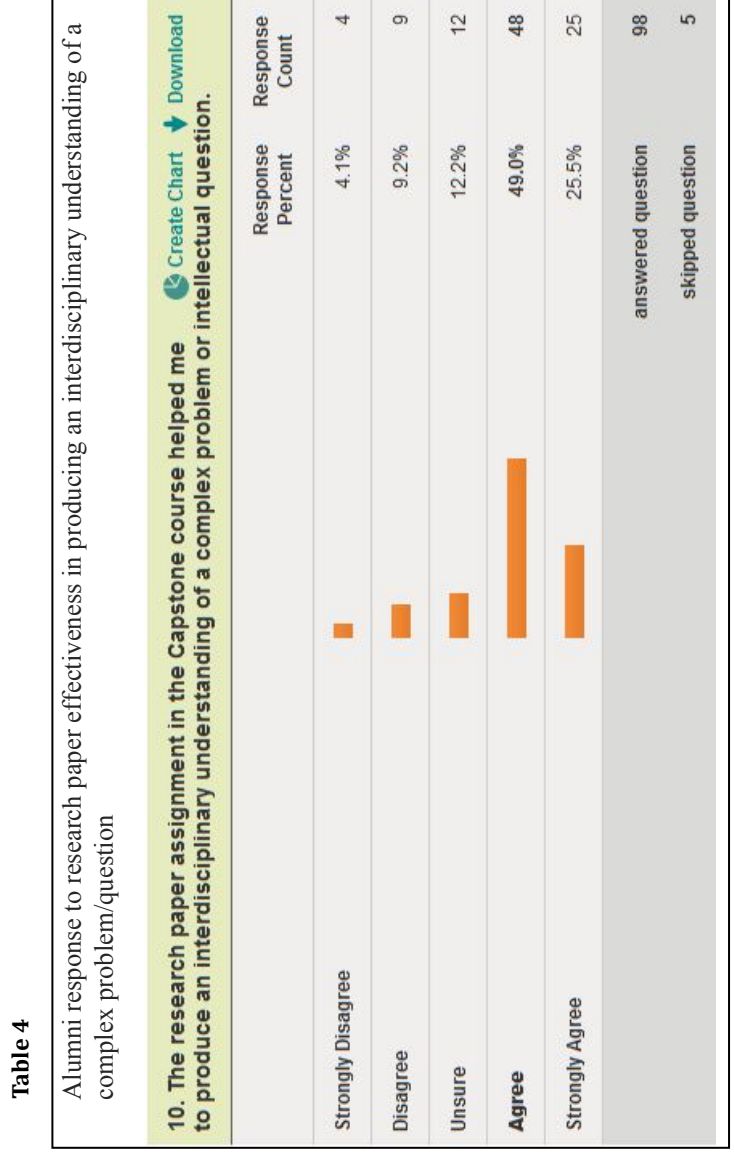
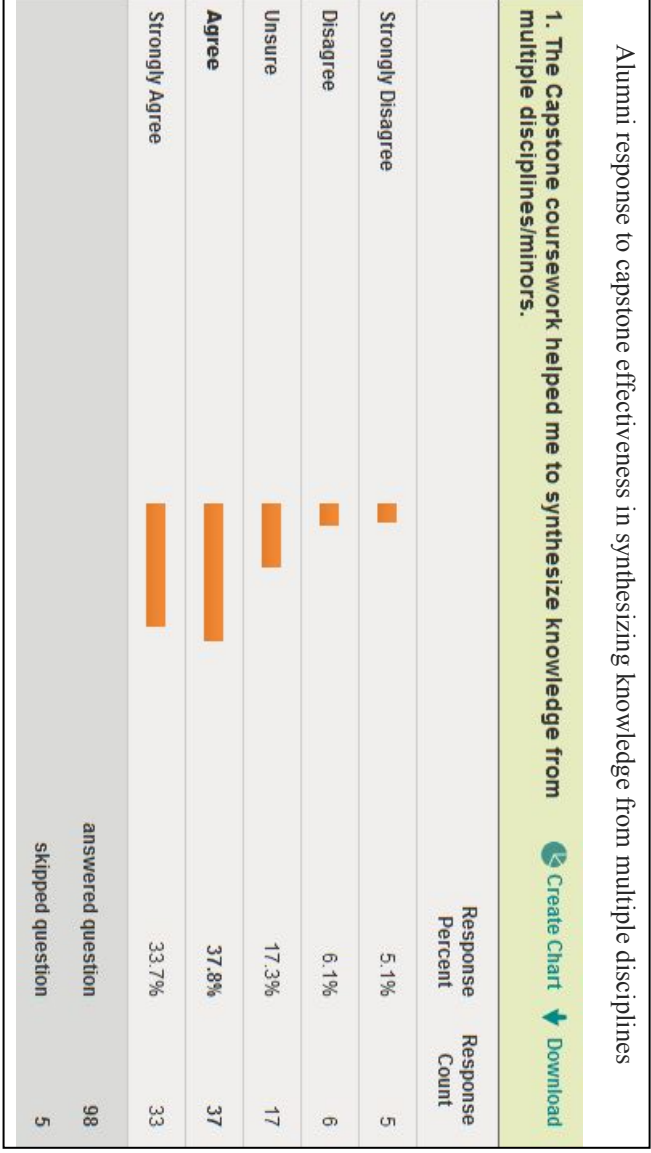
This finding surprised us. In retrospect, graduates felt that the paper assignment had done a better job preparing them for interdisciplinary work than either faculty rubrics or immediate post-course assessment would have suggested. In fact, students found the paper more useful than the class as a whole. Our survey had provided a new perspective with which to consider the Interdisciplinary Studies Capstone generally and the research paper specifically.

Postgraduate assessment thereby changed our course of action in the program. Rather than deciding that an interdisciplinary research project was too complicated for our undergraduate students, we decided to act on the opinion of our students who had seen the paper as much more useful in retrospect than at the conclusion of the course. We rewrote and extended the

**Table 2**  
Alumni response to programmatic effectiveness in integrating knowledge and modes of thinking from multiple disciplines



Note: This chart was generated by Survey Monkey (surveymonkey.com)



assignment, provided additional course time for planning the paper, limited the potential topics, and changed the focus from research to disciplinary analysis. We hope that future assessment will prove that these changes have provided measurable improvements towards achieving our learning goals in the Capstone and with the paper project. If so, we can highlight this effort in our yearly assessment report and our five-year review as an example of our program's accountability to student learning outcomes and of our willingness to modify our curriculum to better achieve our programmatic mission.

## Conclusion

We hope the process described in this paper will serve as a persuasive example for initiating regular programmatic postgraduation evaluation and assessment. Admittedly, beginning postgraduation evaluation and assessment can be an intimidating prospect in a down economy. When we began, it certainly seemed possible that our students would blame their academic experience for difficulties they might have experienced in the job market and that their responses to our queries could reflect negatively on our program or even jeopardize our future. Once we embarked on the process, however, we found that the experience was almost wholly positive. Negative feedback was largely focused on specific areas and was useful for programmatic improvement, while the majority of our respondents were enthusiastic about their experience in the program. We consider these results to be a powerful endorsement of the tenets of interdisciplinary studies and a convincing example of the applicability of IDS programs to success in the "real world."

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