Faculty Beliefs and Attitudes Toward Assessment

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Faculty Beliefs and Attitudes Toward Assessment

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Faculty Senate Assessment Committee

With my thanks to Ed Morgan for conversations that influenced the survey!

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Overview

We conducted a survey of the faculty (*n*=79 respondents), consistent with the charge to the committee. Merrimack does not have an assessment coordinator, and information on assessment is only gathered by departmental annual reviews.

Goals:

- How much, and what kind of experience do our faculty colleagues have with assessment work?

- What are their beliefs, attitudes, knowledge, and interests in assessment?

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Underlying Goals

A culture of assessment:

By finding out the beliefs, attitudes, knowledge, and interests of faculty, we might be able to **target support** for that activity in a way that might be better received, and of more use to faculty

Scholarship:

The research reported here is publishable, especially if we can get some more data…

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Measures, Rationale, and Outline

Psycho-Anthropological approach: How do faculty feel about assessment, what are their values, goals, and interests in assessment; and what experience do they have with it?

Values, feelings, and goals will influence faculty willingness to engage in assessment work, probably more than rewards or administrative priorities.

1. Assessment Self Efficacy (new measure)
2. Assessment Experience (multiple aspects)
3. Perceived Value of Assessment (from Culver & Phipps, 2018)
4. Desired Support
5. Motivation to Engage in Assessment

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Adapted from Culver, S., & Phipps, G. (2018) According to faculty, the most important reasons for doing assessment at an HBCU. *Journal of Assessment and Institutional Effectiveness, 8*, 1-21.

1. Assessment Self Efficacy

Self-efficacy refers to **an individual's belief in his or her capacity** to execute behaviors necessary to produce specific performance attainments (Bandura, 1977, 1986, 1997). Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment. These **cognitive self-evaluations** influence all manner of human experience, including the goals for which people strive, the amount of energy expended toward goal achievement, and likelihood of attaining particular levels of behavioral performance. Unlike traditional psychological constructs, self-efficacy beliefs are hypothesized to vary depending on the **domain of functioning** and circumstances surrounding the occurrence of behavior.

Blah, blah, blah...

https://www.apa.org/pi/aids/resources/education/self-efficacy

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Assessment Self Efficacy

tl;dr

Your beliefs about your ability to do something will strongly influence whether you will engage in that activity.

A commonplace belief in the assessment field: Faculty lack the confidence to engage in assessment.

What is our evidence for that?

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Assessment Self Efficacy

I developed an Assessment Self Efficacy Measure and we included it in our survey

Assessment Self-Efficacy Questionnaire

Please rate each item below for how much confidence you have that you can do the activity that is described, using the following scale that runs from *0* to *100*.

0	10	20	30	40	50	60	70	80	90	100
None at all					A moderate level				A very high level	

1. I can identify the learning objectives for my courses. That is, I know what I want my students to gain from my courses.
2. I can write measurable learning objectives for my courses.
3. I can develop an assignment (activity, project, exam, etc.) that will provide clear evidence of student achievement of my learning objectives.
4. I can gather evidence of student achievement of my learning objectives.
5. I can interpret evidence of student achievement of my learning objectives.
6. I can modify aspects of my courses in response to evidence of student achievement of learning objectives.
7. I can connect my course-level learning objectives to program-level (major) learning objectives.
8. I can make recommendations for curricular change in response to evidence of student achievement of learning objectives.

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Assessment Self Efficacy

Measuring Self-Efficacy

Statements describing activities in the domain of interest, and ask people to rate their confidence on a 100-point scale.

Assessment Self-Efficacy Questionnaire

Please rate each item below for how much confidence you have that you can do the activity that is described, using the following scale that runs from **0** to **100**.

0	10	20	30	40	50	60	70	80	90	100

None at all   A moderate level   A very high level

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Assessment Self Efficacy, Results, part 1

A total of 72 faculty completed the measure.

Cronbach's alpha: .88 (a strongly reliable measure)

Item analyses:
Cronbach's alpha after leaving out one item at a time ranged from .86 to .89

Principal Components Analysis supported two factors:

- Items 1-6 measure the perceived ability to work on one's own courses
- Items 7 & 8 measure the perceived ability to apply results to curricular change

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Assessment Self Efficacy, Results, part 1

Item means and standard deviations

		mean	SD	range
1.	Identify course learning objectives	92.8	9.6	58-100
2.	Write measurable objectives	86.9	13.3	47-100
3.	Develop assignment to measure	89.5	11.2	58-100
4.	Gather evidence of achievement	88.9	14.7	20-100
5.	Interpret evidence of achievement	86.7	12.9	50-100
6.	Modify my course in response	87.3	13.2	50-100
7.	Connect course to program objectives	83.7	20.1	1-100
8.	Recommend curricular change	82.1	19.8	3-100

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Participation Break!

If you're working on developing assessment with your faculty, what might you do with information like this?

		mean	SD	range
1.	Identify course learning objectives	92.8	9.6	58-100
2.	Write measurable objectives	86.9	13.3	47-100
3.	Develop assignment to measure	89.5	11.2	58-100
4.	Gather evidence of achievement	88.9	14.7	20-100
5.	Interpret evidence of achievement	86.7	12.9	50-100
6.	Modify my course in response	87.3	13.2	50-100
7.	Connect course to program objectives	83.7	20.1	1-100
8.	Recommend curricular change	82.1	19.8	3-100

Participation Break!

What items should we add or modify?

1. Identify course learning objectives
2. Write measurable objectives
3. Develop assignment to measure
4. Gather evidence of achievement
5. Interpret evidence of achievement
6. Modify my course in response

7. Connect course to program objectives
8. Recommend curricular change

Full questions on the next page…

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Factor 1: Ability to work on one's own courses

1. I can identify the learning objectives for my courses. That is, I know what I want my students to gain from my courses.

2. I can write measurable learning objectives for my courses.

3. I can develop an assignment (activity, project, exam, etc.) that will provide clear evidence of student achievement of my learning objectives.

4. I can gather evidence of student achievement of my learning objectives.

5. I can interpret evidence of student achievement of my learning objectives.

6. I can modify aspects of my courses in response to evidence of student achievement of learning objectives.

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Factor 2: Applying results to curricular change

Okay, we really need more items here...

7. I can connect my course-level learning objectives to program-level (major) learning objectives.

8. I can make recommendations for curricular change in response to evidence of student achievement of learning objectives.

2. Assessment Experience

The next part of the survey had a lot of questions about experience with assessment

1. Questions about departmental activity, approaches, and features
2. Questions about methods for assessing courses and the program
3. Questions about closing the loop

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Assessment Experience

1. Activity/ Approaches/Features

- Does your department have a **curriculum map**? (that is, a matrix showing which program outcomes are taught in each course)
- Does your department meet to discuss **student learning in a general way**?
- Does your department discuss, as a method of considering the curriculum, **groups of students**, or even individual students who are not achieving well enough? Or who are achieving really well?
- Does your department meet to **discuss student work** from courses?
- Does your department use a **standard rubric** to evaluate student learning?
- Does your department have a **standard assessment tool** for seniors to complete? (E.g., student reports of learning, a student survey, a standardized exam)
- Does your department have a **capstone course** that produces student work for evaluation of learning outcomes?
- Has your department identified a **common student project** to use for assessment of learning across courses or sections tied to program learning outcomes?
- Does your department use **student portfolios** for assessment purposes?
- **Other** (please specify)

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Assessment Experience

2. Methods: For each item, respondents indicated if they used it in their course, and separately if it was used in their department (two versions of each item).

Assessment of artifacts of student work (such as essays, projects, etc.) using rubrics
Results of standardized tests
Concept inventory or other measure of comprehensive knowledge
Pre and post testing of student work (on essays, tests, projects, etc.) over a course
Pre and post testing of student work over the duration of a major or minor
Students' self-reporting of their own learning on end of course evaluations
Students' self-reporting of their own learning on a qualitative self-assessment

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Assessment Experience

3. Closing the Loop

We modified the sequence of courses in the program
We modified the content of a course or courses
We changed the nature of assignments in a course or courses
We added a course or courses to the curriculum
We removed a course or courses from the curriculum
We haven't made changes but we are considering doing so
Other (please specify)

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Assessment Experience

One interesting finding is that, in annual reports, **all** departments report having a curriculum map.

49% of respondents indicated that their department had a curriculum map.

An anonymous survey might provide an additional source of institutional data

Assessment Experience, Results part 1

Scoring: Totaled up all the activities/approaches/features, methods, and loop closing activities used as a **proxy measure of experience** for each faculty member.

Respondents indicated that they used 41% the activities/approaches/features

For individual courses, 43% of the various assessment methods were used, but at the department level it was 17%

For loop closing, the mean was 28% of the activities

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3. Perceived Value of Assessment

A 15-item measure adapted from Culver & Phipps (2018) in which respondents indicate agreement with reasons for doing assessment

Improve student learning		Help faculty see how courses link together
Document student achievements		Demonstrate faculty achievement
Strengthen courses, curricula, and/or programs		Demonstrate the quality of Merrimack College
Gather information for planning		Collect information to attract potential students
Gather information to use limited resources more wisely		External accountability of the institution (NECHE)
Strengthen decision making processes		Disciplinary specialized accreditation
Create a track record of program growth and development		Internal accountability within the College
Encourage faculty conversation and dialogue		

MERRIMACK COLLEGE Adapted from Culver, S., & Phipps, G. (2018) According to Faculty, the Most Important Reasons for Doing Assessment at an HBCU. *Journal of Assessment and Institutional Effectiveness, 8*, 1-21.

The Value of Assessment

For each of the following, please indicate how strongly you agree or disagree with the idea that it is an important reason to engage in assessment activities. That is, checking off "agree" means that you agree that the item represents an important reason to do assessment; checking off "disagree" means that you do not agree that it represents an important reason to do assessment.

		disagree	tend to disagree	tend to agree	agree
1	Improve student learning...	___	___	___	___
2	Document student achievements..				
3	Strengthen courses, curricula, and/or programs...........................				
4	Gather information for planning...	___	___	___	___
5	Gather information to use limited resources more wisely...........	___	___	___	___
6	Strengthen decision making processes				

Scored as
    -2   **-1**   **+1**   **+2**

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Perceived Value of Assessment, results

Scoring these items from +2 (agree) to -2 (disagree), the average scores vary across items.

These items, that lean more toward "agree," might be successful messages to faculty (at Merrimack, at least) to encourage them to engage with assessment.

1.8	Improve student learning
1.7	Strengthen courses, curricula, and/or programs
1.6	Gather information for planning
1.4	Document student achievements
1.4	Encourage faculty conversation and dialogue

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Perceived Value of Assessment, results

Scoring these items from +2 (agree) to -2 (disagree), the average scores vary across items.

These also might be successful but perhaps less so...

1.2	Help faculty see how courses link together
1.2	Create a track record of program growth and development
1.2	Strengthen decision making processes
1.1	External accountability of the institution (NECHE)
0.8	Gather information to use limited resources more wisely
0.8	Disciplinary specialized accreditation

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Perceived Value of Assessment, results

Scoring these items from +2 (agree) to -2 (disagree), the average scores vary across items.

These probably might not be useful messages to get faculty to engage.

0.7	Demonstrate the quality of Merrimack College
0.7	Internal accountability within the College
0.6	Collect information to attract potential students
0.4	Demonstrate faculty achievement

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4. Support – Given all that, what would help?

We identified 6 possible ways to support departments and individuals, and this table shows the percentage of respondents endorsing each.

48%	Providing workshops at the foundational level
64%	Providing targeted workshops on particular issues
14%	Identifying external consultants
38%	Links to instructional materials
56%	Examples of rubrics
42%	Training in implementing any of the aforementioned assessment practices
13%	Other (please specify)

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5. Faculty Motivation for Assessment

Four questions addressed faculty motivation for engaging in assessment activities:

In all honesty on an anonymous survey, how motivated are you to <u>learn more about</u> the assessment of student learning outcomes?	
How motivated are you to <u>actively engage in the assessment</u> of student learning outcomes…	
… in your courses?	
… in your major program?	
… in general education?	
1 (not at all) to 5 (extremely)	

Mean: 3.64

Mean: 4.37
         4.14
         3.08

Why might these means be dropping across these categories?

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Assessment Self-Efficacy, Results part 2

Let's return now to Assessment Self-Efficacy

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Assessment Self-Efficacy, Results part 2

Self-Efficacy matters. Three predictions about self-efficacy *in any domain*

1. It should increase with experience in the domain

2. It should predict motivation to engage in the domain

3. (via cognitive dissonance at least) It should predict how valuable a person thinks that activity is

Does that happen with Assessment Self-Efficacy?

Assessment Self Efficacy, Results part 2

Question 1: Does Assessment Self-Efficacy increase with experience in the domain?

Yes

Years of being a higher education instructor? Not at all
$r = .001$

Experience doing assessment? Definitely!

Total number of experience categories:	$r = .44, p < .01$
Experience with features/processes:	$r = .34, p < .01$
Methods used individually:	$r = .46, p < .01$
Methods used in department:	$r = .35, p < .01$
Loop closing experiences:	$r = .22, ns$

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Assessment Self Efficacy, Results part 2

Question 2: Does Assessment Self Efficacy predict interest in engaging with assessment work?

Well, Yes

Mostly, but it depends:

How motivated are you to learn more about assessment of student learning outcomes?   r = .23, ns

How motivated are you to actively engage in assessment of SLO's...
          ... in your courses?   r = .39, p < .01
          ... in your major program?   r = .19, ns
          ... in general education?   r = .32, p < .01

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Assessment Self Efficacy, Results part 2

Question 3: Does Assessment Self Efficacy predict how valuable people think assessment is?

No

The mean rating of value across the 15 items on the Perceived Value of Assessment was 1.08, which translates to an overall "tend to agree"

Does higher Assessment Self-Efficacy predict greater value ratings? **No**
$r = .25$, ns

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Conclusions, Discussion, Ideas?

The pattern of results with the Self Efficacy measure suggests that we have an instrument for:

1. Measuring how strongly faculty self-confidence is a factor in getting them to engage in assessment work
2. Determining how to target resources – departments with lower self efficacy scores, and by looking at scores on individual items on the measure, we might focus on, say "using evidence to make curricular change"

The other items on the survey also provide useful information for working with faculty.

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Conclusions, Discussion, Ideas?

The Assessment Committee is planning to use these data to advocate for specific, targeted workshops and other resources. We're currently brainstorming ideas for next steps, and the administration is interested in the results.

How might you use similar results?

… because **we are looking for people to collaborate with at other institutions** to further validate the measure of self-efficacy. Measuring the validity, reliability, and potential factor structure of the measure would be better with more than the current 72 participants.
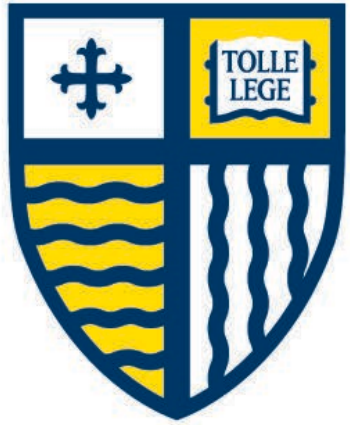
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If you're interested in potentially collaborating on this project, this QR code will initiate an email to me (shawr@merrimack.edu)

Thank you for participating today!