Criminal Justice Program Department of Behavioral Sciences Annual Assessment Report, 2021-22

1. Narrative:

Please summarize your department or program's assessment activities during the past academic year.

Our previous assessment activities had relied on the analysis of only senior-level work by our students. However, we decided this past year to try to begin to answer the question: Does our program, and college in general, have an actual effect on students' cognitive abilities beyond the effects of mere maturation? As this is an extremely difficult question to answer, given the practical impossibility of performing a randomized control trial with a CJ education as the treatment, we dedicated this past year's assessment activities to the development of a pilot program. As our initial effort during AY 2021-22, our department initiated an assessment protocol with the goal of determining whether the academic work turned in by our students demonstrates more advanced cognitive abilities and practices, in concert with our program's learning goals, in later college classes than in earlier classes. Because this is a pilot program, we are using our analysis of the first round of assessments to refine and improve our overall protocol.

Our concern was that our traditional method of assessment did not allow us to examine whether, first, our seniors were closer to achieving our learning objectives than our frosh; and, second, any students' achievements in the senior year were actually related to what we have attempted to teach them. The first possibility, of course, was that our seniors' work was no closer to the objectives than the work of the frosh.

Our original design for our assessment was to determine, using a blind protocol, whether differences between first- and senior-year papers in the extent to which they reflected the accomplishment of various learning objectives were apparent to the raters. We scored the papers using a questionnaire combined with analytical tools provided in Microsoft Word. In this pilot project, we did not use a sample of papers that would allow us to assess quantitative analysis. The method worked best for the assessment of critical thinking and effective writing. Unfortunately, this method did not work as planned, as the raters began to discern obvious differences between the two sets of papers. However, we were able to quantify differences, especially in critical thinking and effective writing, between the papers. We are continuing to refine our assessment of these outcomes.

We found, in our pilot evaluation reported here, evidence that our seniors' work outscores our first-year students' work on several measures related to our program's learning objectives. Our assessment instrument is a work in progress. In our initial sample of 26, significant differences emerged between first- and last-year papers on four of our ten measures, with one other approaching significance. We conducted both quantitative and qualitative analyses, including an overall qualitative assessment of the breadth of the papers' sources. These findings will be elaborated below.

Although we found differences, we cannot interpret them with confidence at this time. Much, if not most, of the differences could be due to maturation and/or attrition. Regarding maturation: There is no way to tell from our design whether people generally produce more sophisticated work in their early 20's than in their late teens, just out of high school. And regarding attrition: Fitchburg State's attrition rates are fairly high, with about 27% of first-year students failing to return for their second year and only about 58% graduating within six years (see https://www.fitchburgstate.edu/sites/default/files/documents/2022-03/CDS 2021-2022 Final.pdf.) It could very well be that systematic differences between students who return and those who do not are responsible for a large portion of the apparent improvement between frosh and seniors.

Below we have included a table indicating the variables we measured and the differences we found between the two sets of papers, from a sample of 13 from each group. The first six variables came from Microsoft Word readability statistics, available in the app. The last four were scored by the raters. All are in the same direction: the first three were scored 0 (absent), 1 (some), 2 (present); while the last was scored from 1 (never) to 5 (always).

Table 1: T-Test Comparing First-Year to Senior Papers

<u>Item</u>	First-Year Mean	Senior Mean	p (one-tailed)
Total Errors	57.8	66.5	.249
Number of Words	1748.0	2201.1	.013 *
Words per Sentence	20.5	24.6	.067 #
Sentences per Paragraph	8.9	10.7	.129
Flesch-Kincaid Grade Level	10.3	13.1	.003 **
Percentage Passive Sentences	15.8	26.1	.026 *
Thesis Provided (0-2)	1.5	1.5	.500
CJ Info and Context Provided (0-2)	1.2	1.5	.060 #
Moral/Ethical Integration (0-2)	0.8	1.3	.044 *
Topic Sentences (1-5)	3.7	4.0	.203
* Significant at p < .05 ** Significant	cant at <i>p</i> < .01	# Trend (.10 > p > .05)	

2. Annual Analysis of Data

What is/are the most important thing(s) you learned from assessment in the past academic year, and how does knowing this benefit your program?

Through our pilot assessment program, we learned more about the work submitted by our frosh. Because of this, we will be examining first-year work going forward, so that we can target, at the program level, the needs we discover.

Please specify the following using the table that follows:

Outcomes:

What are the formal learning outcomes that your program has assessed, for which you have looked at data (*including data collected in prior years*), and for which you have made or proposed program changes in the past academic year? Please include the full outcome statement your program uses.

Data:

Other than GPA, what data/evidence was used to determine that graduates have achieved the stated outcomes for the degree? This can include data collected in prior years and analyzed this year (e.g., capstone course, portfolio review, licensure examination). Highlight key data in the table below. Rubrics and full data tables can be attached.

Changes:

What changes have been made or proposed as a result of using the data/evidence? Please specify clearly which changes have been proposed based on this year's data and which have been enacted this year based on either this year's or prior year's data. This can include changes to your program or changes to your assessment system.

Using Data to Improve Student Learning Outcomes This Year.

Outcomes	Data Data Data	Changes
Criminal justice knowledge	A comparison of papers written by frosh and seniors. From our qualitative analysis of the papers, not reflected by specific variables, seniors drew on a wider variety of appropriate resources than frosh in support of their arguments. We infer that they had a more expansive understanding of the CJ system than frosh.	We will continue to expose our less- advanced students to the real world of CJ. We are working to improve the assessment of our students' overall understanding of the CJ system beyond looking at their grades in individual courses.
Understanding of crime and crime causation	None.	Because our frosh do not take courses in crime causation but are introduced to the CJ system early in their careers, the papers chosen for this pilot project were more closely associated with criminal justice than criminology, and we were unable to assess them for this outcome element. We will resume assessment of this outcome following the current academic year.
Critical thinking	A comparison of papers written by frosh and seniors. There were no significant differences between the two groups in their use of theses and topic sentences. There was a trend ($p = .06$) favoring the seniors in their use of appropriate information to support their arguments. Frosh were more likely to express opinions without recognizing the kinds of evidence that would support their stance, and without paying due attention to alternate points of view.	We will continue to emphasize argument literacy and critical thinking in our classes, and will pay particular attention to the kinds and quantities of evidence that students bring to bear on their arguments. They did not improve in the two organizational areas we measured (thesis and topic sentences). We intend to address this issue in our classes.
Effective writing	A comparison of papers written by frosh and seniors. Seniors' papers were significantly more sophisticated, as measured by Flesch-Kincaid Grade Level, than those written by frosh. Seniors were also more likely to use passive sentences. Both groups of students made similar numbers of errors.	From first to last year, student papers have, appropriately, increased in complexity, as well as in passivity. This has made their papers look more like "college papers".

Moral and ethical reasoning	A comparison of papers written by frosh and seniors. Seniors were significantly more likely to effectively integrate moral and ethical reasoning into their overall arguments. Means were not as high as for the variable measuring the inclusion of appropriate CJ information.	Will continue to monitor, and aim for improvements in overall means.
Quantitative analysis	None	While we have added an alternative quantitative course, CJ/GEOG 3004, to CJ 3140, not enough students have taken it to render any evaluations of this outcome meaningful. We will resume assessment of this outcome following the current academic year.

3. Future Assessment Plans:

What are your top assessment priorities for next year and what will assure that next year's assessment priorities are accomplished?

Research that could explore alternative causal explanations for first-year – senior differences would require a comparison group of students similar to ours who did not attend college. The purest form of this design would involve random assignment to treatment (college) and control groups, but that is impossible. To ensure similarity between the groups, both groups would have to be assessed at what would be the beginning and end of their college careers. This would be a substantial project, unlikely to be undertaken as pure service by hard-working faculty members, that would produce results only after four to six years.

Because of the challenges that a true "treatment effect" study would present and the limitations of the resources available to address them, our program has concluded that our primary goal, going forward, for our assessment is to perform a gatekeeping and diagnostic function. We will examine whether the students we present to the world with the imprimatur of a Fitchburg State criminal justice degree are, in fact, at least reasonably close to fulfilling our program's goals, and we will use assessments of both first- and last-year work to uncover areas of concern.

Because we will no longer be piloting a new assessment protocol, we will be able to make sure, as we discuss below, that we are assessing each of our learning outcomes, as we were able to do using our older protocol. We will enhance our

assessment through the quantitative analysis we piloted for certain learning outcomes, and will be continuing to assess early-college papers, as we did in the pilot.

Please specify the following using the table that follows the outcomes to be assessed, data to be collected and who will collect and interpret the evidence? What is the process? (e.g. annually by the curriculum committee, at a program retreat, etc.)

Plans for Collecting Data on Student Learning Outcomes Next Year

Outcomes	Data to be collected	Collection and interpretation
Criminal justice knowledge	Student work from first- and last-year courses. Possible additional instrument under discussion.	Anonymized student papers will be assessed by professors who did not teach the classes they came from, in the summer following the spring semester. We learned that the statistical, questionnaire-based method we piloted was not ideal for this outcome.
Understanding of crime and crime causation	Student work from first- and last-year courses. Possible additional instrument under discussion.	Anonymized student papers will be assessed by professors who did not teach the classes they came from. We learned that the statistical, questionnaire-based method we piloted was not ideal for this outcome.
Critical thinking	Student work from first- and last-year courses.	Anonymized student papers will be assessed by professors who did not teach the classes they came from. A sample of papers will be examined more closely using the kind of statistical analysis piloted this year.
Effective writing	Student work from first- and last-year courses.	Anonymized student papers will be assessed by professors who did not teach the classes they came from. A sample of papers will be examined more closely using the kind of statistical analysis piloted this year.
Moral and ethical reasoning	Student work from first- and last-year courses.	Anonymized student papers will be assessed by professors who did not teach the classes they came from.
Quantitative analysis	Student work from our quantitative courses. These are typically upper-level courses, so no first-year data will be collected.	Anonymized student papers will be assessed by professors who did not teach the classes they came from.