

**Lessons Learned: One Criminal Justice Program's Steps  
(and Missteps) for Developing an Assessment Program**

Christine Tartaro\*  
Marissa P. Levy  
Criminal Justice Program  
The Richard Stockton College of NJ

**ABSTRACT**

The Richard Stockton College of New Jersey began encouraging all of its academic programs to assess student learning in 2001. The Criminal Justice Program was selected to be one of the first programs to develop an assessment plan. The purpose of this paper is to share our program's experiences with the hope that departments that are considering participating in assessment may adopt what worked for our program and avoid some of the difficulties that we have encountered.

---

\* To learn more about this study contact Christine Tartaro at [Christine.tartaro@stockton.edu](mailto:Christine.tartaro@stockton.edu).

### Lessons Learned: One Criminal Justice Program's Steps (and Missteps) for Developing an Assessment Program

Teachers have been under increasing pressure from their own school administrations, and even state and federal governments, to demonstrate that their classroom activities are linked to student achievement. The pressure has been greatest on primary and secondary school educators, with the No Child Left Behind Act's call for school accountability of student success. Higher education has not been immune to the pressure to become more active in setting performance indicators and assessing student learning. While the Chairman of the Federal Commission on the Future of Higher Education announced that the Commission will refrain from mandating standardized tests of college students, it is urging both colleges and higher education accrediting agencies to voluntarily adopt assessment activities (Field, 2007).

Assessment activities are important for all academic programs, but embarking on assessment projects is especially important for criminal justice programs. Criminal justice is a relatively new field in academia, and many of the early college criminal justice programs were vocational in nature (Newman, 1993). Criminal justice programs are continuing to work to change perceptions that the field is somehow less academic and scientific than its older social science counterparts, sociology and psychology. Proctor (2006) cited a number of changes in criminal justice education that have helped to improve the reputation of these programs. Funding for the development of college criminal justice departments largely came from the federal government's Law Enforcement Assistance Administration (LEAA). After seeing that many of the newly created college programs were gaining the reputation of being "cop shops", LEAA began to restrict funding to colleges committed to fostering academic criminal justice programs. The creation and growth of two national academic associations, The American Society of

Criminology (ASC) and The Academy of Criminal Justice Sciences (ACJS) was another important development. ACJS has taken an active role in shaping higher education in criminal justice by establishing a set of minimum standards for programs in 1998 (Proctor, 2006) and then by announcing a certification program for two-year, four-year and master's level criminal justice programs in 2005 (ACJS Certification Standards, n.d.). Programs can only be certified if faculty can demonstrate that they have been active in assessing student learning. The ACJS standards state that “The ACJS Executive Board will certify those programs that undergo ACJS Certification Review and that have demonstrated, through substantive, credible evidence, the program meets or exceeds all parts of every standard. *The emphasis is on evidence, not intention*” (ACJS Certification Standards, n.d., underline and italics in the original). Consequently, only programs that are able to demonstrate an active commitment to assessment will be eligible for certification.

### **Literature Review**

Moriarty (2006) conducted a national study of assessment in criminal justice programs. She asked criminal justice program chairpersons from a random sample of 369 two- and four-year colleges to respond to a web-based survey about their program's assessment activities. Before being selected for participation, programs were vetted to ensure that they offered degrees in criminal justice and that the program was not considered a “diploma mill”. One hundred, sixty-two faculty members, each representing one college, responded to the request yielding a 44% response rate. Slightly over half (53%) of the programs have implemented a set of learning objectives, and 52% have identified and implemented an assessment instrument. Those who reported their department's involvement in assessment activities indicated that this work began between 1980 and 2005, with most programs initiating this process during 2000 or later. This is

to be expected since assessment and the use of performance indicators in education became popular during the past decade.

Moriarty (2006) found that the most popular assessment measure among the respondents was the use of student grades in coursework, with 80% using grades for assessment purposes. The next most frequently used measure was student surveys, with 79% of responding departments administering instruments to students. Grades are certainly important and are the most traditional measure of student performance. They are not, however, always an ideal measure for assessment. Moriarty noted that grades “may be a good measure of familiarity with major theories and analytical approaches, but when grades are used as an assessment tool, we are often left to ponder just what the students did not understand. When a student receives a “B” in a theory class, exactly which theories or theorist or paradigms or schools of thought is the student having difficulty mastering” (2006, p. 424).

Weinstein (2006) further elaborated that a limitation to using grades to assess learning outcomes is that grades reflect a complete classroom evaluation. That means that grades reflect factors unrelated to student knowledge and skills, such as attendance and participation points. Grades are also impacted by grade inflation or deflation; extra credit assignments can change the grade of a student who otherwise would have received a lower grade. This point was also highlighted by Proctor (2006) who compared criminal justice and non-criminal justice students in two sections of Introduction to Statistics classes. He found that non-criminal justice majors had a higher median score on conceptual knowledge and homework than criminal justice majors. There was no significant difference in computational knowledge between criminal justice and non-criminal justice majors as measured by exam grades (Proctor, 2006). In Proctor’s sample, criminal justice students had higher GPAs than the non-criminal justice majors (3.03 vs. 2.81,

respectively) but Proctor argues that since GPA is tied primarily to one's major coursework, differences in academic rigor between programs may have dictated grade inflation or deflation. Thus, tying assessment to GPA or course grades alone is not an accurate measure of student learning.

Moriarty (2006) identified the ideal plan to assess student learning as containing the following components: development of a set of learning objectives, creation and implementation of assessment instruments, regular data collection and analysis, and the implementation of changes based on the results of the analysis. Without these characteristics, any assessment plan will be a short-lived venture void of value and lacking tangible results. In order to achieve an assessment plan which can be easily maintained and produce a bounty of information, a program must have faculty members who buy into the importance of assessment of student learning. Faculty, however, must also be supported by the administration in two key ways. First, administrators must agree to let faculty members own the results and, second, they must provide administrative/data entry support for the ventures. Without both faculty and administrative support, assessment activities may not be successful.

## **Background**

The purpose of this paper is to share the experiences of some of the Criminal Justice program faculty from The Richard Stockton College of New Jersey in creating an assessment program. The program has been working on building a plan for assessing undergraduate student learning since 2001. The program practices have resulted in varying levels of success. It is the hope of the authors that faculty from other programs might benefit from the lessons that we have learned.

While there were sporadic assessment initiatives underway at the college in 2001, there was little discussion between programs and little administrative support for programs interested in conducting assessment. In August 2001, the college began to encourage all programs to become involved in assessment. The first step in this process was the creation of an assessment committee consisting of a committee chair, a faculty representative from each school, and one administrator. The committee members were tasked with developing an assessment plan for the college. The committee agreed that the college would begin its assessment project by asking each committee member to work with his or her own undergraduate program to formulate a plan. One of the authors of this article was a member of that first assessment committee. The Criminal Justice Program was to be among the first programs expected to develop an assessment plan.

Before this work could begin, the committee asked the administration to put decisions about what to assess and how to assess it in the hands of the faculty. Also, the committee and the administration agreed that the faculty members would “own the results”, meaning that it would be up to the program faculty to decide how to modify teaching in response to the findings. Additionally, the administration assured the faculty that assessment data would not be used in personnel decisions or to compare individual faculty to each other.

### **Initial Attempts**

The Criminal Justice Program had to overcome some obstacles during the first year of its assessment efforts. First, some of the faculty members were skeptical about the way assessment data would be used by the administration. Despite assurances that the data would not be used in personnel decisions, there were professors who believed that the best way to ensure that no faculty members were negatively impacted would be to refrain from collecting any data at all.

Second, it was difficult to get every program member to participate due to a lack of interest or unwillingness to take on the extra work that would be involved in the initiative.

The program's first attempt at assessment involved the use of a standardized test in 2003. The program members decided that we should use a standardized test made by a nationally-recognized testing service to learn how our college seniors compared to others on a 150-item subject test. Ordinarily, faculty would simply incorporate such a test into the program's capstone course, but our program had not yet mandated a capstone course for our seniors. The result was that we had no class where we could reach all of our seniors at one time. Our solution to this problem was to offer seniors extra credit if they would come to school and sit for the test. The college cancels classes on advising day, so students would not have to miss any class time in order to take the test on that day. Students were offered five extra credit points in the criminal justice course of their choice, provided that they were enrolled in that course during the semester when the test was administered. Interested students were able to approach criminal justice faculty members to discuss how the extra credit points would be incorporated into their grades. The professors who offered the extra credit agreed to add the points to either the students' final exam scores or their term paper grades. We had 38 of the approximately 125 senior criminal justice students sign up to take the test, but we did not anticipate how they would approach this task. Students were told by the faculty that they would receive five extra credit points for taking the test, but we did not specify that they would have to do well on the test in order to earn the points. As a result, some of the students entered the classroom, filled out 75 bubbles on the standardized test form in about five minutes, and then went out to the hallway to socialize with their friends until part two of the test began. When these students came back for part two and were told that they would not be permitted to continue with the test and earn the extra credit, the

students became irate and argued that the faculty never specified that they must do well on the test to get the extra credit. After discussing the students' lack of effort on the exam, the faculty decided against submitting the tests for grading. We also agreed to abandon the idea of testing seniors until we created a capstone course and could make the test part of the students' course grade. One lesson that can be taken from our experience is that collection of data for direct measures of student learning with an instrument that is time consuming is unlikely to be successful unless students have an incentive to take the test seriously.

The assessment coordinator attempted to include all faculty in a program-wide assessment plan by asking everyone to identify specific learning objectives for the core courses that they taught. While some faculty members were enthusiastic and helpful with providing the coordinator with the requested information, others still had not provided the necessary materials after a year of requests. It became evident that, at least for a while, assessment activities in our program were going to have to be much smaller in scope and only include faculty who were willing to participate.

### **Successful Projects – APA Paper Formatting and Statistics Assessment**

#### *APA Assessment*

Faculty members in the Criminal Justice Program have often lamented that the students have difficulty understanding the American Psychological Association (APA) citation and paper formatting rules. The college's Psychology program had developed an APA assessment instrument to learn about their students' understanding of these rules. The authors of this paper revised the instrument to fit the needs of the Criminal Justice Program. The instrument includes twenty-one multiple choice questions that address three aspects of preparing criminal justice papers (See Appendix A). The first aspect is the proper construction of a reference page (four



questions). The second is how to format research papers in accordance with APA rules (eleven questions). Third, the survey includes six questions that measure students' knowledge of how to properly cite sources within the text of the paper.

We asked some faculty members to help us survey seniors in their classes to gauge their understanding of the APA rules in December 2003 and January 2004. The students were more amenable to participating in this type of assessment, since the instrument took 10 to 20 minutes to complete and students were given class time to take this test. The results were disappointing, with students scoring an average of 42% (mean of 8.82 of 21 questions answered correctly) on the assessment. The students were approaching the end of their college careers without having learned how to properly cite sources and format a paper. The authors brought these results back to the program and discussed ideas to address the problem. Since students learn about the process of doing research in the Research and Evaluation course, the program decided that students should also learn about APA rules in that class. Another important lesson that can be learned from our experience is that it is essential for faculty to take the assessment data and identify how to improve the results (teach students specifically about APA), who should be responsible for teaching the students (the faculty who teach the Research and Evaluation classes), and when and where students should learn this information (during the semester that students take Research and Evaluation).

The adjustments to the course content were made in September 2005. Students in each section of the Research and Evaluation course were given a pre-test during the first week of the semester and a post-test during the last week. The professors instructed students about APA rules during the first half of the semester, but students were graded on their performance and given feedback on a series of papers throughout the term. The initial results were encouraging,

with students showing statistically significant improvement on all aspects of APA formatting.

Unfortunately, there was one important drawback to our design. The pre- and post-tests that were used during the first two semesters were anonymous. This meant that there was no way to control for the fact that the weaker students took the pre-test and then withdrew from the class prior to taking the post-test. On average 27 percent of students withdraw from the Research and Evaluation course each semester. The result was that the post-test results were higher in part because most students who had trouble with the course material withdrew from the course, leaving only the higher-achieving students to take the post-test. This problem was corrected in September 2006 when students were asked to add their names to the pre- and post-tests.

**Table 1: Paired Samples t-test for research methods (APA) Assessment**

	<b>N</b>	<b>Mean</b>	<b>SD</b>
Beginning of semester	264	9.08	3.02
End of semester	264	12.66	3.10

( $t(263) = -19.06, p < .001$ ).

Two hundred, sixty-four students completed both the pre- and post-tests between September 2006 and May 2009. Student performance on the post-test (mean = 12.66) was higher than on the pre-test (mean = 9.08) and was statistically significant ( $t(263) = -19.06, p < .001$ ). Students showed improvement on all four of the reference page questions, six out of 11 formatting questions and four out of six citation questions. Student scores did not change on the questions pertaining to font, in-text citations, and when to use the percent and ampersand symbols. There was also no change in the citations questions regarding how to cite multiple sources in the text and how to properly use a direct quotation. Students seemed to be less clear

about formatting a title at the end of the semester than they did at the beginning, since this paired samples t-test reported a significant difference in the opposite direction than expected.

**Table 2: Paired Samples t-tests for research methods (APA) assessment questions**

	Mean Difference	SD	T
<b>Reference Page</b>			
Format journal article	-.42857	.66039	-11.944***
Author listed 3 times	-.06569	.55078	-1.974*
List alphabetical	-.05839	.44089	-2.192*
Indent/Justification	-.25547	.54845	-7.711***
<b>Format</b>			
Font	-.0195	.39672	-.457
In-text Citations	.0000	.56796	.000
Title	.05839	.44912	2.152*
Website citation	-.12857	.49864	-4.315***
Section in order	-.21053	.56372	-6.091***
Percent vs. %	-.03214	.35272	-1.525
Reference Page	-.57143	.53739	-17.793***
Numbers	-.18797	.53765	-5.702***
Chapter in edited volume	-.14643	.65308	-3.752***
Cite edited volume	-.11429	.52990	-3.609***
And vs. &	.00376	.61735	.099
<b>Citation</b>			
1 <sup>st</sup> reference in text	-.17293	.66174	-4.262***
When to cite	-.31022	.58876	-8.722***
Where in sentence	-.16071	.56087	-4.795***
Paraphrase	-.35000	.52089	-11.243***
Multiple sources	-.05357	.62847	-1.426
Direct quote	-.06767	.64070	-1.723

\*\*\* Significant at the 0.001 level

\*\* Significant at the 0.01 level

\* Significant at the 0.05 level

The non-significant finding for the questions on font and symbols were interesting since these tend to be very easy concepts for students to grasp. It is possible that since instructors perceive this to be an “easy” concept that not much classroom time is spent on these smaller errors. The questions regarding formatting of in-text citations, how to cite multiple sources and how to use direct quotations are definitely bigger issues from the faculty perspective. The faculty teaching the Research and Evaluation courses have met to discuss these areas of concern and will work to enhance student knowledge of these concepts in the upcoming semesters. We will also continue to focus on reference page citations since students did improve in these areas, but not as much as other areas of APA citation. This leads us to the next lesson that we learned through this process: conducting assessment is pointless unless faculty are going to use the data to identify what needs improvement and actually act on those improvements.

#### *Statistics Assessment*

The three faculty members who participated in the APA assessment project also teach the program’s statistics course. The faculty developed and piloted an assessment instrument in 2006 and began collecting pre-and post-test data in January 2007. The instrument consists of 25 items including questions about descriptive statistics (six questions); identification of variables, hypotheses and samples (seven questions); reporting data (four questions); causality, significance and SPSS (five questions); and statistical test selection (three questions). It is estimated that 17% of students withdraw from the statistics courses each semester. For this reason, we asked students to write their names on the pre- and post-tests so we were able to count only the tests of students who remained in the courses for the full semester. See Appendix B for the instrument.

**Table 3: Paired Samples t-test for Statistics Assessment**

	<b>N</b>	<b>Mean</b>	<b>SD</b>
Beginning of semester	299	9.75	3.01
End of semester	299	12.84	5.09

(t(298)= -9.837, p<.001).

Two hundred, ninety-nine students completed both the pre- and post-tests between January 2007 and December 2008. Student performance on the post-test (mean = 12.84) was higher than on the pre-test (mean = 9.75) and was statistically significant (t(298)= -9.837, p<.001). Students showed improvement on five of the six questions regarding descriptive statistics and six of the seven questions on identification of variables, hypotheses and samples. Student scores did not change on the questions pertaining to reporting data. There was also no change in students' understanding of the elements of causation. Students improved in their understanding of statistical significance, but the results indicate only some improvement in understanding of SPSS. Finally, students showed improvement on two of the three questions about statistical test selection.

**Table 4: Paired Samples t-tests for statistics assessment questions**

	<b>Mean Difference</b>	<b>SD</b>	<b>t</b>
<b>Identifying Descriptive Statistics</b>			
Level of Measurement (Q1)	-.274	.659	-7.19***
Measure of Central Tendency (Q2)	-.137	.628	-3.78***
Level of Measurement (Q3)	-.130	.433	-5.21***
Measure of Central Tendency (Q4)	-.167	.675	-4.29***
Measure of Dispersion (Q5)	-.017	.610	-0.47
Measure of Dispersion (Q25)	-.247	.634	-6.75***

Identification of Variables,  
 Hypotheses, Sample

Sample/Population (Q6)	-.070	.490	-2.48**
Sample Size (Q7)	-.114	.613	-3.21***
Dependent Variable (Q8)	-.204	.666	-5.29***
Independent Variable (Q9)	-.214	.666	-5.56***
Control Variable (Q10)	-.047	.659	-1.23
Null hypothesis (Q11)	-.398	.607	-11.35***
UCR/NCVS (Q24)	-.104	.596	-3.01**
<hr/>			
Summation / Reporting Data			
Identify Proportion (Q12)	-.040	.623	-1.12
Identify Percent (Q13)	-.010	.481	-.36
Identify Ratio (Q14)	.043	.657	1.15
Identify Rate (Q15)	-.027	.623	-.74
<hr/>			
Causality/Significance Levels/SPSS			
Non-spuriousness (Q16)	-.037	.412	-1.54
Time-Order (Q17)	-.017	.616	-0.47
Significance Level (Q18)	-.411	.614	-11.58***
Data/Variable View (Q22)	-.077	.698	-1.91
Coding Missing Data (Q23)	-.211	.484	-7.53***
<hr/>			
Test Selection			
Chi-square (Q19)	-.084	.582	-2.485*
t-test (Q20)	-.027	.675	-.685
ANOVA (Q21)	-.074	.636	-2.002*
<hr/>			
*** Significant at the 0.001 level			
** Significant at the 0.01 level			
* Significant at the 0.05 level			

The non-significant finding for the questions on reporting data was surprising, since these questions covered the relatively easy concepts of rate, ratio, and percentages. A possible explanation for this could be that students simply answered these questions correctly on both the pre- and post-test, resulting in no difference in scores. A closer look at the data indicates that

this is not the case and that students tended to answer these questions incorrectly on the pre- and post-tests. The mean differences, displayed in Table 4, show little change in student performance between the pre- and post-tests. The faculty who teach the statistics courses for the program are considering ways to make this information more clear to the students. The results of the analysis also informed the statistics instructors of the need to add more emphasis to the lessons covering the elements of causation and information regarding SPSS.

### **Next Steps**

The program has agreed that our students would benefit from a mandatory capstone experience, and the program began offering these courses last year. Faculty members are able to develop courses in accordance with their own areas of expertise. The capstone courses will cover a variety of areas in criminal justice such as corrections, environmental crime, victimology, forensic behavior analysis, crime prevention, and international law. They will, however, have a common element in that all students, regardless of the topic covered, will be required to demonstrate their writing and research and statistics abilities by doing a research project for the course. Additionally, they will have to demonstrate their communication skills by giving the class an oral presentation with Power Point slides. The requirement of a Power Point presentation will also allow faculty to assess students' understanding of the subject matter and ability to think critically and answer questions on the topic. Students will also demonstrate their oral command of the subject as opposed to simply written command.

The addition of the capstone experience will allow the program to do something that it attempted and failed six years ago – test our seniors. The program faculty members have formed committees to identify specific learning objectives for all of our core courses. The next step is for the faculty to write questions for a test that all seniors will have to take as part of their

capstone class. This test will count for 10 percent of the course grade. We feel that 10 percent is enough for the students to take the test seriously, but not enough for the students to fail the capstone if they have trouble recalling information from their earlier core classes.

### **Lessons Learned**

Our involvement in this assessment project leads us to a few recommendations for other colleges as they embark on this process. First, make sure that the administration agrees that assessment data will not be used to negatively impact any individual faculty member's career. Assessment of student learning should be used to inform faculty about what does or does not work and help them improve teaching. If faculty are suspicious of what the administration might do with this information, they will be reluctant to collect any data, or they might restrict their data collection to aspects of learning that need no improvement and will serve only to make the faculty look good. If data collection will occur over several sections of the same course and include multiple faculty members, one way to ensure that faculty are not negatively impacted by the data is to refrain from including a "faculty member" variable. The data that we collected for the assessment of APA knowledge in Research and Evaluation and the assessment in Statistics do not include information about which faculty member taught each course. All of the surveys collected from each semester are pooled together, so it is not possible to tell who was teaching each class.

Second, any assessment that is going to involve a significant amount of time for students to complete needs to include incentives for good performance. The short quizzes that we use to assess student knowledge of APA and statistics only take ten to fifteen minutes to complete, and students have been willing to sit for a few minutes at the end of class to take these. The attempt to administer a much longer test to our seniors in 2003 did not work because the students lacked



incentive to take the time to do well. While some students did sit for the full time and tried to do their best, others filled out the answer sheet without even looking at any of the questions. Results from a test that will take significant time and effort from students will be more valid indicators of student knowledge if students have a vested interest in the results. The incentive for students may come in the form of either a test grade or as extra credit, but offers of extra credit should be tied to good performance to ensure that students will provide their best effort. Of course, one potential drawback to this extra credit proposal is that it might generate selection bias, with only the brightest and most motivated students willing to attempt the test while those who are not confident about their ability to do well opting not to waste the time. A solution to this could be a tiered extra credit system with students getting a small amount of extra credit just for trying and then additional points based on performance.

Third, assessment can definitely result in improvements to the curriculum and student performance if the faculty respond to the results by making appropriate changes. The faculty members who teach the Statistics and Research and Evaluation courses are in the process of responding to the assessment results. The authors are optimistic that the program faculty who teach the capstone courses will work together to respond to the assessment data. The capstone courses will be assessed by an instrument developed by the entire Criminal Justice faculty; therefore, we suspect that faculty buy-in will much higher with this form of assessment.

### **Conceptualization of Assessment**

Assessment must remain an ongoing process for each criminal justice program. Fouseff-Baker and Holm (2004) discussed a feedback loop for assessment, where faculty move from the planning stage to teaching, to assessing, to analyzing the data, to responding to the results, to adaptation and then back to the planning stage. This is useful in that it illustrates how the process

never ends. Moriarty (2006) emphasized the never-ending characteristic of assessment work by stating “If we believe that assessment is an ongoing process that incorporates reflection and revision, then we need to make sure that we are not just checking the assessment box as done, and moving forward without really addressing whatever is problematic in terms of student learning” (p. 424).

Wehlburg (2007) argued that perhaps academics should alter their view of assessment, moving from a feedback loop to an assessment spiral. The goals of assessment are to learn about the impact of our teaching on students and to continuously improve. The conceptualization of an assessment spiral instead of loop allows the continuation of identifying goals and outcomes and measurement of those outcomes, but there is an assumption that once the outcomes are measured, the ensuing adaptations will result in improvements and, hence, a move to the next level of the spiral. The fact that the spiral never closes also symbolizes the fact that assessment never ends. The spiral can also increase its width as it moves to new levels. This is particularly relevant to the assessment efforts discussed in this paper. Our program started small with just the assessment of student learning of the APA citation and formatting rules. Then, we expanded to assessing students’ understanding of statistics. Now, the program is moving towards a more comprehensive assessment plan that involves assessing student knowledge of the program’s core areas through the capstone experience. With this comprehensive assessment we believe a true picture of student learning will be revealed and the assessment spiral will continue.

## References

- ACJS Certification Standards (n.d.) Available at: [http://www.acjs.org/pubs/167\\_667\\_3517.cfm](http://www.acjs.org/pubs/167_667_3517.cfm).  
Retrieved on December 19, 2009.
- Field, K. (2007). Panel to give colleges 'gentle shove' toward testing. *Chronicle of Higher Education*, 52(31), A33-A35.
- Fouseff-Baker, F. & Holm, A. (2004). Engaging faculty and students in classroom assessment of learning. *New Directions for Community Colleges*, 126, 29-42.
- Moriarty, L. J. (2006). Investing in quality: the current state of assessment in criminal justice programs. *Justice Quarterly*, 23(4), 409-427.
- Newman, Donald J. (1993). "The American Bar Foundation Survey and the Development of Criminal Justice Higher Education." In Ohlin, Lloyd E., and Remington, Frank J. (eds). *Discretion in Criminal Justice*. Pp. 279-350.
- Proctor, J. L. (2006). Academic achievement and statistical knowledge: a comparison of criminal justice and noncriminal justice majors. *Journal of Criminal Justice Education*, 17(1), 143-161.
- Wehlburg, C. M. (2007). Closing the feedback loop is not enough: the assessment spiral. *Assessment Update: Progress, Trends and Practices in Higher Education*, 19(2), 1-2, 15.
- Weinstein, D. (2006). Outcomes assessment is here to stay, get faculty buy in. *Academic Leader*, 22(1), 1-2.

### Appendix A: Assessment Instrument for APA Style

This test is for research purposes only and will not affect your grade at all. Your name is being used for tracking purposes so we know who took the test and who didn't.

Name: \_\_\_\_\_

1. CRIM major?  Yes  No

2. Gender:  Male  Female

3. Transfer student:  Yes  No

a. If yes, how many credits transferred into Stockton? \_\_\_\_\_

b. What was your GPA at the other institution? \_\_\_\_\_

4. Number of credits taken at Stockton so far (not including this semester) \_\_\_\_\_

5. GPA at Stockton: \_\_\_\_\_

6. Type of student:  Full-time  Part-time

7. Have you taken research methods (CRIM2140) yet?

I am currently taking the course.

I've completed it with a C or better (the grade has already been posted).

I haven't taken it yet.

8. What is your career goal:

Law enforcement

Lawyer/judge

Other court administration

Probation/parole

Institutional corrections (prison/jail)

Forensic science-related job

Forensic-psychology-related job

Teaching

Other \_\_\_\_\_

9. When are you taking this survey?

At the beginning of the semester/summer session.

At the end of the semester/summer session.

APA Assessment questions:

1. Which of the following article references is formatted correctly?
  - a. Jones, Abner; Willis, Carol; & Huffman, Seymore (1998). Children's temperament and style in first grade. *Journal of Children's Development*, 23, 44-48.
  - b. Jones, A., Willis, C., & Huffman, S. (1998). Children's temperament and style in first grade. *Journal of Children's Development*, 23, 44-48.
  - c. Jones, A., Willis, C., & Huffman, S. (1998). "Children's Temperament and Style in First Grade." *Journal of Children's Development*, 23, 44-48.
  - d. Jones, Abner; Willis, Carol; & Huffman, Seymore (1998). Children's Temperament and Style in First Grade. *Journal of Children's Development*, 23, 44-48.
2. Which of the following is acceptable according to APA style?
  - a. Single spacing for the body
  - b. bullets
  - c. 12 point font
  - d. colored paper
3. Which of the following is true about references?
  - a. Only works used in the paper should be cited.
  - b. All related works should be cited.
  - c. Only books and articles in APA journals should be cited.
4. Which of the following is the best way to cite the reference *for the first time* in the text or an article?
  - a. Some investigators have found that rats have delayed response times when stressed by the threat of shock (Lewis, Turner, and Saranson, 2001).
  - b. Some investigators (Lewis, Turner, and Saranson, 2001) have found that rats have delayed response times when stressed by the threat of shock.
  - c. Some investigators have found that rats have delayed response times when stressed by the threat of shock (Lewis et al., 2001).
  - d. Some investigators have found that rats have delayed response times when stressed by the threat of shock (Lewis, Turner, & Saranson, 2001).
5. Which is the best way to cite the source in the text of a paper?
  - a. Miner, Solomon, and Randolph, 1997, showed high school graduates to be more conservative than their counterparts with baccalaureate degrees.
  - b. Miner, Solomon, & Randolph showed high school graduates to be more conservative than their counterparts with baccalaureate degrees (1997).
  - c. Miner, Solomon, and Randolph (1997) showed high school graduates to be more conservative than their counterparts with baccalaureate degrees.
  - d. None of the above.
6. When citing more than one source with the same author's name in a reference section (e.g., Jones has 3 separate article cited), organize the citations by the
  - a. first word of the article title.
  - b. year of publication with the most recent one first.
  - c. year of publication with the earliest one first.
  - d. order they appeared in the text.
7. Where should a citation be placed in the text?
  - a. As close to the material cited as possible.
  - b. At the end of the paragraph in which the citation occurs.
  - c. At the end of the page as a footnote.
  - d. The citation should only occur the first time the source is used.
8. Where should the title of a paper appear?

- a. On the title page only.
  - b. On each page as the page header.
  - c. On the title page and the first page of text.
  - d. On the title page and on each page as the header.
9. Which of the following formats is correct when citing the World Wide Web?
- a. Lemon, D. (2002). Extroversion and decision making under uncertainty. PsychCite. Retrieved March 14, 2003 from the World Wide Web:  
<http://www.geocities.com/~piscaroti/psychcite/lemon.html>
  - b. PsychCite (2002). Extroversion and decision making under uncertainty. Website.
  - c. <<http://www.geocities.com/~piscaroti/psychcite/lemon.html>> Extroversion and decision making under uncertainty.
  - d. EBSCO Host: <http://www.geocities.com/~piscaroti/psychcite/lemon.html>
10. Which is the correct order for sections of an experiment?
- a. Introduction, Method, Results, Discussion, Abstract
  - b. Abstract, Introduction, Results, Method, Discussion
  - c. Abstract, Introduction, Discussion, Results, Method
  - d. Abstract, Introduction, Method, Results, Discussion
11. Which is the correct way to cite paraphrased material?
- a. Peer pressure becomes a greater factor than parental influence for early teens (Van Wyck, p. 24).
  - b. Peer pressure becomes a greater factor than parental influence for early teens (Van Wyck, 1995).
  - c. Peer pressure becomes a greater factor than parental influence for early teens (Van Wyck, 1995, p. 24).
  - d. No citation is necessary.
12. Which sentence is best?
- a. The group improved its score by 24%.
  - b. The group improved their score by 24 percent.
  - c. The group improved its score by 24 percent.
  - d. The group improved their score by 24%.
13. Which is the correct way to cite multiple sources in the text of a paper?
- a. The last decade of literature has shown that generally foster homes provide inferior environments compared to residential placements (Langley & Swift, Sanger & Tilton, Wunderburg, Lawrence, & Gale, 2000, 1999, 1998).
  - b. The last decade of literature has shown that generally foster homes provide inferior environments compared to residential placements (Langley & Swift, 2000; Sanger & Tilton, 1999; Wunderburg, Lawrence, & Gale, 1998).
  - c. The last decade of literature has shown that generally foster homes provide inferior environments compared to residential placements (Langley & Swift, 2000) (Sanger & Tilton, 1999) (Wunderburg, Lawrence, & Gale, 1998).
  - d. The last decade of literature has shown that generally foster homes provide inferior environments compared to residential placements (Langley and Swift, 2000, Sanger and Tilton, 1999, Wunderburg, Lawrence, and Gale, 1998).
14. The reference list should be organized
- a. by publication date.
  - b. according to the order they appear in the text.
  - c. alphabetically by author's last name.
  - d. in order of importance.
15. The section that lists sources used is titled:
- a. References
  - b. Bibliography

- c. Works Cited
  - d. None of the above
16. Which sentence has the correct format for writing numbers?
- a. Three raters were under the age of twenty-seven.
  - b. 3 raters were under the age of 27.
  - c. 3 raters were under the age of twenty-seven.
  - d. Three raters were under the age of 27.
17. What is the appropriate way of citing a chapter from an edited book?
- a. Reser, J.P. (1992). The design of safe and humane police cells: A discussion of some issues relating to Aboriginal people in police custody. In D. Biles and D. McDonald (Eds.). Deaths in custody, Australia 1980- 1989. (pp. 147-190). Canberra, AUS: Institute of Criminology.
  - b. In D. Biles and D. McDonald (Eds.). Deaths in custody, Australia 1980- 1989. (pp. 147-190).  
  
Reser, J.P. (1992). The design of safe and humane police cells: A discussion of some issues relating to Aboriginal people in police custody.
  - c. Deaths in custody, Australia 1980- 1989. Reser, J.P. (1992). The design of safe and humane police cells: A discussion of some issues relating to Aboriginal people in police custody. Book edited by D. Biles and D. McDonald. (pp. 147-190).
18. Which of the following is the correct format for citing an edited book?
- a. Troubador, R. & Mendez, C. (Eds.). (1996). *Consequences of trauma*. New York: Harper.
  - b. Troubador, R. & Mendez, C. (1996). *Consequences of trauma* (Edited Book). New York: Harper.
  - c. Troubador, R. & Mendez, C. (Eds., 1996). *Consequences of trauma*. New York: Harper.
  - d. Troubador, R. & Mendez, C. (Editors). (1996). *Consequences of trauma*. New York: Harper.
19. All sources listed on the page that lists the sources used should
- a. have the first line indented.
  - b. be justified left.
  - c. use the hanging indent (the first line is normal, but the rest of the lines are indented).
  - d. be single-spaced and have the first line indented.
20. Which of the following is the correct format for a direct quote:
- a. He believes qualitative research is an “anathema to rigorous scientific inquiry (Jenkins, 1999, 13)”.
  - b. He believes qualitative research is an “anathema to rigorous scientific inquiry.” (Jenkins, 99, p. 13)
  - c. He believes qualitative research is an “anathema to rigorous scientific inquiry. (Jenkins, p. 13)”
  - d. He believes qualitative research is an “anathema to rigorous scientific inquiry” (Jenkins, 1999, p. 13).
21. When should an ampersand (&) be used?
- a. When writing out “and” will not fit.
  - b. At any time, it is interchangeable with “and”.
  - c. To list more than one author in the text.
  - d. To list more than one author either when set off by parentheses or in the reference list.

**Appendix B: Assessment Instrument for Statistics**

Name: \_\_\_\_\_

1. CRIM major?  Yes  No
2. Gender:  Male  Female
3. Transfer student:  Yes  No
  - a. If yes, how many credits transferred into Stockton? \_\_\_\_\_
  - b. What was your GPA at the other institution? \_\_\_\_\_
4. Number of credits taken at Stockton so far (not including this semester) \_\_\_\_\_
5. GPA at Stockton: \_\_\_\_\_
6. Type of student:  Full-time  Part-time
7. Have you taken statistics (CRIM2145 - Stats for Criminal Justice, CSIS1206 - Stats I, PSYC2241 - Statistical Methods, ECON2210 - Introductory Statistics, AP Statistics or Statistics at a CC) yet?  
 I am currently taking the course.  
 I've completed it with a C or better (the grade has already been posted).  
 I haven't taken it yet.
8. Have you taken research methods (CRIM2140 or CRIM2141) yet?  
 I am currently taking the course.  
 I've completed it with a C or better (the grade has already been posted).  
 I haven't taken it yet.
9. What is your career goal:  
 Law enforcement  
  
 Lawyer/judge  
  
 Other court administration  
  
 Probation/parole  
  
 Institutional corrections (prison/jail)  
  
 Forensic science-related job  
  
 Forensic-psychology-related job  
  
 Teaching  
  
 Other \_\_\_\_\_
10. When are you taking this survey?  At the beginning  At the end of the semester/summer.



Statistical Assessment questions:

11. A variable, such as gender, measured as male and female, is \_\_\_\_\_
  - a. Nominal
  - b. Ordinal
  - c. Interval
  - d. Ratio
12. The appropriate measure of central tendency for gender is \_\_\_\_\_.
  - a. Mode
  - b. Median
  - c. Mean
13. When age is measured in years, the level of measurement is \_\_\_\_\_.
  - a. Nominal
  - b. Ordinal
  - c. Interval
  - d. Ratio
14. The appropriate measure of central tendency for age measured in years is \_\_\_\_\_.
  - a. Mode
  - b. Median
  - c. Mean
15. If a probation officer has clients who are 18, 21, 21, 22, and 40 years old, and the officer says that the ages of his clients vary by 22 years, which measure of variability or dispersion is the officer giving you?
  - a. mean
  - b. range
  - c. standard deviation
  - d. variance
16. The \_\_\_\_\_ refers to those who are selected from the \_\_\_\_\_ in the research study.
  - a. inferential, statistics
  - b. statistics, inferential
  - c. sample, population
  - d. population, sample
17. Luke is planning to survey 20 students in each season, spring, summer, fall and winter.
  - a. The total sample size is 80.
  - b. The total population is 80.
  - c. The total selection size is 80.
  - d. The total collection size is 80.
18. Jack wants to create a hypothesis using gender to predict salary but he thinks that education level may also play a role in the relationship. Salary is the
  - a. Independent variable.
  - b. Control variable.
  - c. Dependent variable.

19. In Jack's hypothesis, gender is the
- Independent variable.
  - Control variable.
  - Dependent variable.
20. In Jack's hypothesis education level is the
- Independent variable.
  - Control variable.
  - Dependent variable.
21. When you run statistics in SPSS you are testing the
- Null hypothesis.
  - Secondary hypothesis.
  - Research hypothesis.
  - Exploratory hypothesis.
22. \_\_\_\_\_ is based on a scale of 0-1.
- Percent
  - Proportion
  - Rate
  - Ratio
23. \_\_\_\_\_ is based on a scale of 0-100.
- Percent
  - Proportion
  - Rate
  - Ratio
24. \_\_\_\_\_ compares the number of cases in one category to the number of cases in another category.
- Percent
  - Proportion
  - Rate
  - Ratio
25. When you are comparing cities of different sizes \_\_\_\_\_ is used to standardize the crime statistics.
- Percent
  - Proportion
  - Rate
  - Ratio
26. The following criterion for causality indicates that there needs to be direct relationship between the independent and dependent variable.
- Correlation
  - Time-order
  - Non-spuriousness
  - Seasonality

27. The following criterion for causality indicates that the independent variable must come before the dependent variable.

- a. Correlation
- b. Time-order
- c. Non-spuriousness
- d. Seasonality

28. What is the significance level that social scientists use most often? (This is also the minimum level of significance in our field.)

- a. .001
- b. .010
- c. .050
- d. .100

29. If Linda wanted to find a relationship between two categorical variables she would use

- a. Regression.
- b. t-test.
- c. Chi-square.
- d. Analysis of Variance.

30. Sue wants to compare the amount of money that Republicans and Democrats make. She would use

- a. Regression.
- b. t-test.
- c. Chi-square.
- d. Analysis of Variance.

31. Sue decides she needs to add a comparison of Republican, Democrats and Independents when comparing their salaries. She would use

- a. Regression.
- b. t-test.
- c. Chi-square.
- d. Analysis of Variance.

32. In SPSS, one enters data into

- a. Entry view.
- b. Data view.
- c. Variable view.
- d. Mobile view.

33. In SPSS, missing cases are usually coded as

- a. 0
- b. 1
- c. 9
- d. 99

34. \_\_\_\_\_ is collected by the police department while \_\_\_\_\_ collects data from victims that may not have reported their victimization to the police.

- a. NIBRS, UCR
- b. NCVS, UCR
- c. UCR, NIBRS
- d. UCR, NCVS

35. One standard deviation about the mean includes roughly \_\_\_\_\_ of the sample.

- a. 50%
- b. 68%
- c. 95%
- d. 99%

---

Christine Tartaro is an associate professor of criminal justice at the Richard Stockton College of New Jersey. She has a Ph.D. in Criminal Justice from Rutgers University. She has worked as a researcher for the Police Foundation, the New Jersey Juvenile Justice Commission, and the New Jersey Department of Corrections. Her research interests include prisons and jails, suicide in correctional facilities, violence in prisons and jails, and crime prevention.

Marissa P. Levy is an associate professor of criminal justice at the Richard Stockton College of New Jersey. She has a Ph.D. in Criminal Justice from Rutgers University. She has worked as a research associate at the Crime Prevention Analysis Lab at California State University – San Bernardino. Her research interests include ecological criminology, crime prevention, crime mapping, and research methods.