

UW Colleges Assessment Planning and Reporting Form
2005-2006

Email your reports to SAC@uwc.edu

Department	Psychology and Education
Assessment Coordinator(s)	Dennis D. Carpenter, Al Bugaj Report prepared by Dennis D. Carpenter

NOTE: Please attach relevant supporting information used to complete the Report Summary Sheet.

PART 1: Assessment of General Education Outcomes

Section 1: Identify the Proficiencies and Performance Indicators Assessed

- ❖ at the **Planning** stage, mark the performance indicators to be assessed in the left hand column below
- ❖ at the **Reporting** stage, report the numbers of students who did not meet, met, or exceeded expectations

	Proficiency	Performance Indicators	Courses Fall Semester	Courses Spring Semester
X	A. Analytical Skills	1. Interpret and synthesize information and ideas.	EDU201	EDU330 or EDU201
X		4. Select and apply scientific and other appropriate methodologies.	PSY201 or PSY202	PSY250 or PSY360 or PSY201/202

Section 2: Explain how, in general, the institutional rubric was applied to assessment activities. Please attach examples of assessment activities (i.e. modified rubric, assignment, questions) and measurements used to place individuals into the three categories (exceeds, meets, fails to meet). **When completing this section, it may be best to explain the results by course (or course cluster if there were similar tools or results) rather than by instructor.**

Data above	Proficiency	Exceeds	Meets	Fails to meet	in table
	A1-EDU	165 (67.62%)	51 (20.90%)	28 (11.48%)	
	A4-PSY	696 (43.53%)	488 (30.52%)	415 (25.95%)	

contains number of students assessed in EDU and PSY.
Numbers in parentheses indicates percentages of students in each category.

Proficiency A.1: The supplied rubric was used as a guideline for creation of an education specific rubric, which in turn was the foundation for the construction of the 15

item multiple choice assessment instrument. A scoring system was utilized to relate scores on the instrument to one of the three categories (meets, exceeds, and does not meet expectations). Exceeds is defined as 80% or more correct, meets is defined as 60% or more, and does not meet is defined as less than 60%. See **Appendix 1** for the rubric and **Appendix 2** for the instrument.

Proficiency A.4: The supplied rubric was used as a guideline for creation of a psychology specific rubric, which in turn was the foundation for the construction of the 15 item multiple choice assessment instrument. A scoring system was utilized to relate scores on the instrument to one of the three categories (meets, exceeds, and does not meet expectations). Exceeds is defined as 80% or more correct, meets is defined as 60% or more, and does not meet is defined as less than 60%. See **Appendix 3** for the rubric and **Appendix 4** for the instrument.

Section 3: Use of results.

1. **Use by instructors** - Summarize the ways individual instructors plan to use assessment results to improve the instructional process.

A survey was conducted of department members which included questions about instructional changes or innovations that have been made or will be made as a result of the department's focus on assessment. A culture of assessment is strengthening within the psychology department and members' responses indicate that they have taken assessment seriously and have used the results or the process to reinforce or make changes in present instructional practice. These survey results as well as discussions with department members suggest that instructors get the most value out of evaluating how their students perform at the stage of scoring the assessment instrument and organizing the data for submission to the Office of Academic Affairs. Psychologists, in particular, are influenced by their training in methodologies and measurement, and as a group seem particularly reflective in their approach to testing and grading. They continually evaluate student performance and consider ways to enhance student learning. The assessment process seems to have given more focus to this process, in the areas assessed. Here is a sampling of the comments made by various instructors:

"The assessment process reinforced my belief that research methodology is an essential part of my classes. I have included more in-class exercises and homework."

"I have looked for extra materials that are fun or interesting, such as cartoons or jokes showing some aspect of research methods, or any study in the news that could be used as an example."

"I plan to make significant course updates for next fall. I will likely adapt my coverage of methodology based on the specific areas that students find more difficult. I'll do this by identifying those questions on the assessment instrument with high failure rates."

"I spent more time talking about independent and dependent variables, rather than relying on them getting it from the book. I am more aware of the fact that students sometimes don't understand something that I think is pretty simple and straightforward."

"Last year's assessment revealed that students had difficulty understanding the difference between independent and dependent variables. I tried to focus more on this difference and to generate more examples of correlational and experimental studies."

"I am now more aware of the importance of stressing research methods, especially the difference between correlational and experimental research."

"I probably focus more formally on research methods than I otherwise would because the text is rather weak in this area."

"I try to integrate research methods more fully into the rest of the course content."

One professor reported an informal quasi-experimental type study in which he provided lecture only in one section. In the other section, he included a small group activity in which groups of students were provided with different hypotheses. Each group had to develop an experimental design that would test their hypothesis and present that design to the others in the class. The rest of the class critiqued the design to make sure it had the basic elements of an experiment, such as random assignment. The lecture only section had 68% of students meeting or exceeding expectations, while the lecture plus group activity section had 77% of students meeting or exceeding expectations. This same professor "closed the loop" in another interesting way, described in Appendix 5.

Education assessment focused on Wisconsin's 10 standards for teacher education and licensure. The assessment committee made the decision to focus on these 10 standards because of their core status in teacher education today. This assessment activity resulted in immediate instructional changes to weave this focus into the courses assessed. This was necessary because most instructors had not previously focused so clearly on the 10 standards. The following comments are representative of the types of course changes made and/or planned.

"For this past semester, I had to adapt my class sessions to include the DPI standards. I don't feel as if I spent very much time on them because of the time constraints on teaching all the other topics from the syllabus. For next semester I plan to merge the standards within the other topics in order to relate the standards to the various facets of education and to make the topics themselves more cohesive. Unfortunately, I haven't figured out how I will be doing that yet!"

"I organized the course around the 10 standards, selecting excerpts from text as readings for each standard. I used separate handouts from DPI on 10 standards."

"The students were referred to the class textbook which prints on its inside cover the 10 principles from the Interstate New Teacher Assessment and Support Consortium (INTASC) Standards for Beginning Teacher Licensing and

Development. These ten principles have almost the exact wording of our State's ten standards. It also refers the student to examples of the principles/standards within the chapters."

"I added assignments and homework regarding the 10 standards."

"I spent most of one lecture period covering the 10 standards."

"I noticed as a result of my data this semester that students are confusing question 1 with regard to whether it deals with Standard 6 (verbal and nonverbal communication techniques) or Standard 4 (variety of instructional strategies). Part of the problem appears to be how these two questions are worded and I recommend that the assessment committee re-evaluate these questions. However, in working with these standards in the course, I find that they are easily confused. I think that students key into 'techniques' and 'instructional media and technology' in question #1 and don't think through the 'active inquiry, collaboration, and supportive interaction' portion of the standard. I will be much more deliberate in my coverage of the standards to help students understand better the differences between standards 4 and 6."

"I spent time in class reviewing the DPI standards with students, and referred to them on occasion during the course of the semester."

"I really didn't make any instructional changes in my methods of teaching since I use group work quite often. I do think that the groups helped the students analyze each standard by dissecting the terminology and relating it to practical situations."

"I had the students work in small groups during the class prior to the final assessment. They completed a worksheet and answered questions about the DPI standards. I emphasized the importance of them learning the standards throughout the semester. I also emphasized how critical the standards are in receiving and maintaining teacher certification."

2. **Use by department** - What changes will you and/or the department assessment committee recommend to your department. Include changes to:
 - a. assessment process
 - i. Continue with the overall process of utilizing a 15 or 20 item instrument with instructor self-scoring entering of data into excel document which automatically scores data and transforms it to exceeds, meets, or fails to meet expectation.
 - ii. Continue with standardization principles previously adopted by the department.
 1. The assessment instrument should be included as part of the unit exam in which the relevant material is normally covered in the course.
 2. A point value should be assigned to these questions to ensure that students give them their appropriate attention.
 3. A questionnaire should be completed regarding coverage of this material in class and any teaching innovations that evolve out of the assessment process.

- iii. Continue to collect survey data from department members regarding how they are “closing the loop” in the assessment process.
 - b. proficiencies selected
 - i. The Office of Academic Affairs has recommended that the psychology department focus on assessing Quantitative Skills for the 2006-2007 academic year. This will be extension of the department’s previous assessment focus on selecting appropriate scientific methodologies. The psychology department has focused much of its assessment efforts, at both the department and institutional levels, on research methodologies, since this is so central to the discipline of psychology and it is a core subject area that is generally covered in all courses taught.
 - c. performance indicators used to measure proficiency
 - i. Al Bugaj has developed an instrument to measure performance indicators 1: Solve quantitative and mathematical equations and 3: Use statistics appropriately and accurately.
 - d. assessment activities
 - i. Continue assessment activities as outlined in previous comments about assessment process.
 - e. evaluative rubrics
 - i. Continue to evaluate performance based on the following criteria:
 - 1. 80% or more correct = exceeds expectations
 - 2. 60% or more correct = meets expectations
 - 3. less than 60% correct = fails to meet expectations
 - f. student performance in a specific course (if there is something that stands out with department discussion).
 - i. Nothing stands out to make recommendations regarding student performance in a specific course.
3. **Course of action** - After discussion of the results by the department, what course of action will the department take to improve student performance with respect to the assessed proficiency?
- a. The department will continue to encourage the reflective practice on the part of individual instructors to focus more intently and effectively on the proficiency assessed, and to evaluate one’s own effectiveness based on own student-generated data.
 - b. In the past, department members have requested and this assessment coordinator has tried to work out a system of getting department wide data back to instructors in a timely manner as a tool for comparing the performance of one’s own students to department averages. This was discussed at the January 2006 DAC/SAC meeting and the concerns expressed had to do with the possibility of instructor identify being revealed for those courses where 3 or less instructors are assessing. My recollection was that the Office of Academic Affairs was going to provide such data, but that plan apparently did not work out. I encourage the SAC

- to further consider this issue of getting reports back to department members in a timely manner to facilitate closing the loop.
- c. This assessment coordinator has prepared a brief data analysis evaluating the reliability of the instruments and developing departmental data that can be used by individual department members to look back over their own 2005/2006 data and evaluate the performance of their own students based on assessment information. See Appendix 6.
 - d. The psychology department is somewhat unique in that we have a high enrolled course such as Introductory Psychology that most instructors teach to focus our assessment efforts on. In addition, the department has re-invigorated a dialogue about approaches to teaching this course. At the Spring 2006 department meeting, discussion was held regarding grading patterns across instructors within the department. The department will continue such discussions.
 - e. Some department members have expressed interest in sharing teaching techniques with each other and that process will continue. A "best practices" packet has been compiled for research methods, based on submissions by department members. This packet will be provided to department members prior to start of the 2006/2007 academic year. See Appendix 7.

PART 2: Assessment of Department-Specific Outcomes

Section 1: Identify department-specific learning objectives.

Outcomes/Performance Indicators	Courses Fall Semester	Courses Spring Semester
1. After taking any course in the Psychology Department, a student will be able to demonstrate an understanding of psychological research methods, which includes an understanding of (a) key aspects of the experimental method and (b) the concept of correlation.	PSY201 or PSY202	PSY360 or PSY250 or PSY201/202
2. After taking any course in the Education Department, a student will be able An understanding of Wisconsin's 10 standards for teacher education and certification, which includes the ability to: identify the definition of each of the 10 standards; and identify which standard is best represented by an example of a educational situation.	EDU201	EDU330 or EDU201
3. After taking any course in the Psychology Department, a student will be able to demonstrate an understanding of learning theories, which includes understanding and identifying: (a) key concepts in classical conditioning; (b) key concepts in operant conditioning, and (c) different forms of learning.	Not Assessed	Not Assessed

Section 2: Insert the rubrics used here and explain how the rubric or standards were used to assess each outcome or performance indicator. Please attach examples of assessment activities (i.e. modified rubric, assignment, questions) and measurements used to place individuals into the three categories (exceeds, meets, fails to meet). **When completing this section, it may be best to explain the results by course (or course clusters if there were similar tools or results) rather than by instructor.**

For outcome #1, refer to appendices 3 and 4.

For outcome #2, refer to appendices 1 and 2.

Departmental Outcome/ Performance	# Exceed	# Meet	# Do Not Meet

Indicator			
EDU-Standards	165 (67.62%)	51 (20.90%)	28 (11.48%)
PSY-Methods	696 (43.53%)	488 (30.52%)	415 (25.95%)

Data in above table contains number of students assessed in EDU and PSY.
Numbers in parentheses indicates percentages of students in each category.

Section 3: Use of results.

4. **Use by instructors** - Summarize the ways individual instructors plan to use assessment results to improve the instructional process.

A survey was conducted of department members which included questions about instructional changes or innovations that have been made as a result of the department's focus on assessment. A culture of assessment is growing within the psychology department and members' responses indicate that they have taken assessment seriously and have used the results or the process to reinforce present instructional practices or to make changes. These survey results as well as discussions with department members suggest that instructors get the most value out of evaluating how their students perform at the stage of scoring the assessment instrument and organizing the data for submission to the Office of Academic Affairs. Psychologists, in particular, are influenced by their training in methodologies and measurement, and as a group seem particularly reflective in their approach to testing and grading. As with most instructors, they continually evaluate student performance and consider ways to enhance student learning. The assessment process seems to have given more focus to this process, in the areas assessed. Here is a sampling of the comments made by various instructors:

"The assessment process reinforced my belief that research methodology is an essential part of my classes. I have included more in-class exercises and homework."

"I have looked for extra materials that are fun or interesting, such as cartoons or jokes showing some aspect of research methods, or any study in the news that could be used as an example."

"I plan to make significant course updates for next fall. I will likely adapt my coverage of methodology based on the specific areas that students find more difficult. I'll do this by identifying those questions on the assessment instrument with high failure rates."

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For the education assessment focus on Wisconsin's 10 standards for teacher education and licensure, this assessment activity resulted in immediate instructional changes to weave this focus into the courses assessed. This was necessary because most instructors had not previously focused so clearly on the 10 standards. The assessment committee made the decision to focus on the 10 standards because of their core status in teacher education today. The following comments are representative of the types of course changes made.

"For this past semester I had to adapt my class sessions to include the DPI standards. I don't feel as if I spent very much time on them because of the time constraints on teaching all the other topics from the syllabus. For next semester I plan to merge the standards within the other topics in order to relate the standards to the various facets of education and to make the topics themselves more cohesive. Unfortunately, I haven't figured out how I will be doing that yet!"

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Part of the problem appears to be how these two questions are worded and I recommend that the assessment committee re-evaluate these questions. However, in working with these standards in the course, I find that they are easily confused. I think that students key into 'techniques' and 'instructional media and technology' in question #1 and don't think through the 'active inquiry, collaboration, and supportive interaction' portion of the standard. I will be much more deliberate in my coverage of the standards that I help students understand better the differences between standards 4 and 6."

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5. **Use by department** - What changes will you and/or the department assessment committee recommend to your department. Include changes to:
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 3. A questionnaire should be completed regarding coverage of this material in class and any teaching innovations that evolve out of the assessment process.
 - iii. Continue to collect survey data from department members regarding how they are utilizing the assessment process.
 - b. proficiencies selected
 - i. The Office of Academic Affairs has recommended that the psychology department focus on assessing Quantitative Skills for the 2006-2007 academic year. This will be extension of the department's previous assessment focus on selecting appropriate scientific methodologies. The psychology department has focused much of its

assessment efforts, at both the department and institutional levels, on research methodologies, since this is so central to the discipline of psychology and it is a core subject area that is generally covered in all courses taught.

- ii. The department would benefit from continued discussion of core proficiencies valued across courses. Articulation of these learning outcomes would aid in future choices regarding assessment focus.
 - c. performance indicators used to measure proficiency
 - i. Al Bugaj has developed an instrument to measure performance indicators 1: Solve quantitative and mathematical equations and 3: Use statistics appropriately and accurately.
 - d. assessment activities
 - i. Continue assessment activities as outlined in previous comments about assessment process.
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6. **Course of action** - After discussion of the results by the department, what course of action will the department take to improve student performance with respect to the assessed proficiency?
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 - b. This assessment coordinator has prepared a brief data analysis evaluating the reliability of the instruments and developing departmental data that can be used by individual department members to look back over their own 2005/2006 data and evaluate the performance of their own students based on assessment information. See Appendix 6.
 - c. The psychology department is somewhat unique in that we have a high enrolled course such as Introductory Psychology that most instructors teach to focus our assessment efforts on. In addition, the department has re-invigorated a dialogue about approaches to teaching this course. At the Spring 2006 department meeting, discussion was held regarding grading patterns across instructors within the department. The department will continue such discussions.
 - d. Some department members have expressed interest in sharing teaching techniques with each other and that process will continue. A "best

practices" packet has been compiled for research methods, based on submissions by department members. This packet will be provided to department members prior to start of the 2006/2007 academic year. See Appendix 7.

PART 3: Additional Assessment and Contributions

Section 1: Please discuss activities that were supported by the assessment budget for the department assessment committee. In particular outline the department assessment committee activities for the academic year.

The assessment budget was used to reimburse Al Bugaj for time spent developing instruments for Psychology and Education for use during the 2006/07 academic year per arrangements with Gregg Nettesheim and other central office staff.

The assessment committee met frequently via email exchange to work out instrument development and assessment plans for the Fall 2005 and Spring 2006 semesters.

Section 2: Please discuss activities that were supported by the assessment budget for overall department assessment activities. In particular outline the department assessment activities for the academic year.

The department discussed assessment at its Fall and Spring department meetings. No other department wide activities were conducted.

Section 3: Please ask for and include in the report information from department members about any other assessment activities they have conducted, particularly in conjunction with grant-funded innovations. Also ask for and describe briefly any additional contributions to assessment such as publications, presentations, qualitative classroom innovations (**such as** Scholarship of Teaching and Learning activities), and other items relating to assessment that the department wishes to note.

Four department members (Linda Tollefsrud, Dennis Carpenter, Maureen Crowley, and Linda Reinhardt) are working on a Scholarship of Teaching and Learning project. They have met regularly over the past two years for the purposes of project development. They are investigating the correlates of academic success and failure in our high enrolled course, PSY 201/202: Introductory Psychology. In addition, each member is planning an intervention project in which they will examine the effectiveness of that intervention in improving academic control and academic success. Linda Tollefsrud and Dennis Carpenter have already conducted pilot data collection projects. All four members are preparing proposals for interventions and data collection during the 2006/07 academic year.

PART 4: Historical Trends

Section 1: History of General Education activities. Please add more rows as necessary. This should be an on-going list copied from each previous report.

Proficiency	Year Assessed	Results	Year Assessed	Results	Year Assessed	Results
A4 (was A3 then)	2003 - 04	E = 435 M = 855 F = 485	2005 - 06	E = 696 M = 488 F = 415		E = M = F =
C3	2004 - 05	E = 916 M = 570 F = 245		E = M = F =		E = M = F =
A1 (EDU)	2005 - 06	E = 165 M = 48 F = 28		E = M = F =		E = M = F =

Section 2: History of department learning objective activities. Please add more rows as necessary. This should be an on-going list copied from each previous report.

Objective	Year Assessed	Results	Year Assessed	Results	Year Assessed	Results
Methods	2003 - 04	E = 435 M = 855 F = 485	2005 - 06	E = 696 M = 488 F = 415		E = M = F =
Methods Vocab.	2004 - 05	E = 916 M = 570 F = 245		E = M = F =		E = M = F =
Learning	2003 - 04	E = 106 M = 327 F = 106		E = M = F =		E = M = F =
WI 10 Standard	2005 - 06	E = 165 M = 48 F = 28		E = M = F =		E = M = F =

**Appendix 1
Education Department Proficiency 1 – Wisconsin’s 10 Standards**

After completing **ANY** education course, students should be able to demonstrate the following:

- A. An understanding of Wisconsin’s 10 standards for teacher education and certification, which includes the ability to:
 1. identify the definition of each of the 10 standards.
 2. identify which standard is best represented by an example of a educational situation.

The rubric for assessing this proficiency, along with the criteria to be applied to the assessment instrument, is outlined below.

**Note: This rubric has also been developed to assess
Institution-Wide General Education Outcome A.1
and to match the Institution-wide Rubric provided for it.**

Rubric:

A.1: Understands the definitional and applied aspects of Wisconsin's 10 Standards for teacher education and licensure.

Exceeds Expectations	<ul style="list-style-type: none">• Correctly interprets definitions and matches each to the correct standard for most to all of the 10 standards, at an accuracy of 80% or more.• Correctly interprets examples and matches each to the correct standard for most to all of the 10 standards, at an accuracy of 80% or more.
Meets Expectations	<ul style="list-style-type: none">• Correctly interprets definitions and matches each to the correct standard for many of the 10 standards, at an accuracy of 60% or more.• Correctly interprets examples and matches each to the correct standard for many of the 10 standards, at an accuracy of 60% or more.
Fails to Meet Expectations	<ul style="list-style-type: none">• Fails to correctly interpret definitions and match each to the correct standard for many of the 10 standards, at an accuracy of 60% or more.• Fails to correctly interpret examples and match each to the correct standard for many of the 10 standards, at an accuracy of 60% or more.

**Appendix 2
Education Assessment Tool, Fall 2005 and Spring 2006**

1. The Wisconsin Teacher Standard that involves techniques as well as instructional media and technology to foster active inquiry, collaboration, and supportive interaction in the classroom is:
 - (a) Standard 2: broad ranges of ability
 - (b) Standard 4: variety of instructional strategies
 - (c) Standard 6: verbal and nonverbal communication techniques
 - (d) Standard 8: formal and informal assessment strategies
2. The Wisconsin Teacher Standard that focuses on approaches to learning and barriers that impede learning including those with disabilities and exceptionalities is:
 - (a) Standard 1: subject matter
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 5: individual and group motivation and behavior
 - (d) Standard 7: teacher organizes and plans systematic instruction
3. The Wisconsin Teacher Standard that emphasizes a teacher who has interaction with a larger part of the community to support student learning is:
 - (a) Standard 2: broad range of abilities
 - (b) Standard 5: individual and group motivation
 - (c) Standard 9: reflective relationship
 - (d) Standard 10: fosters relationships

4. The Wisconsin Teacher Standard that focuses on children's learning and how teachers provide instruction that supports their intellectual, social, and personal development is:
 - (a) Standard 2: broad ranges of ability
 - (b) Standard 3: adapt instruction to the diverse needs of students
 - (c) Standard 5: individual and group motivation
 - (d) Standard 8: formal and informal assessment

5. The Wisconsin Teacher Standard that embraces the teacher's knowledge of subject matter, pupils, the community, and the curricular goals is:
 - (a) Standard 1: subject matter
 - (b) Standard 4: variety of instructional strategies
 - (c) Standard 6: verbal and nonverbal communication
 - (d) Standard 7: organizes and plans systematic instruction

6. The Wisconsin Teacher Standard that involves the teacher's understanding of the central concepts, tools of inquiry, and structures of the disciplines she or her teaches is:
 - (a) Standard 1: subject matter
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 4: variety of instructional strategies
 - (d) Standard 10: fosters relationships

7. The Wisconsin Teacher Standard that assesses the teacher's ability to use various approaches, including the use of technology, to encourage children's development of critical thinking, problem solving, and performance skills is:
 - (a) Standard 2: broad ranges of ability
 - (b) Standard 4: variety of instructional strategies
 - (c) Standard 6: verbal and nonverbal communication
 - (d) Standard 9: reflective practitioner

8. The Wisconsin Teacher Standard that appraises a teacher's ability to evaluate his or her own teaching is:
 - (a) Standard 1: subject matter
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 4: variety of instructional strategies
 - (d) Standard 9: reflective practitioner

9. The Wisconsin Teacher Standard that addresses a teacher's ability to use strategies to evaluate and ensure the continuous intellectual, social, and physical development of the pupil is:
 - (a) Standard 2: broad ranges of ability
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 8: formal and informal assessment
 - (d) Standard 10: fosters relationships

10. The Wisconsin Teacher Standard which focuses on the teacher's understanding of students' behavior and the teacher's ability to create a learning environment that encourages positive social interaction and the active engagement in learning is:
 - (a) Standard 1: subject matter
 - (b) Standard 5: individual and group motivation
 - (c) Standard 7: organizes and plans systematic instruction
 - (d) Standard 9: reflective practitioner

11. Mrs. McMurphy is in her second year of teaching and is thrilled with her new job. She is particularly proud of the sense of teamwork she has been able to build with her colleagues. In addition, she has discovered that the most effective way to deal with behavior problems in her classroom is to work closely with the parents of her students. The standard that best describes this situation is:
 - (a) Standard 1: subject matter

- (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 9: reflective practitioner
 - (d) Standard 10: fosters relationships
12. Mr. Barnes is a new second grade teacher who is struck by how much his students vary in terms of their potential to learn the basic reading skills he is presenting. He respects these students and their varying talents and tries to get all of his students actively involved in learning how to read. The standard that best describes this situation is:
- (a) Standard 2: broad ranges of ability
 - (b) Standard 3: adapt instruction to the diverse needs of students
 - (c) Standard 5: individual and group motivation
 - (d) Standard 8: formal and informal assessment
13. Mrs. Anundi teaches a full inclusion classroom with a number of students with learning and cognitive disabilities. She works as part of a team with two special education teachers, but recognizes how important it is for her to modify what she does in the classroom to reach all of her students. The standard that best describes this situation is:
- (a) Standard 1: subject matter
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 4: variety of instructional strategies
 - (d) Standard 10: fosters relationships
14. Mrs. Moledi teaches high school biology. She prefers to present some of the material to her class via PowerPoint presentations and other media or presentations via blackboard work. She also assigns worksheets for her students to master basic concepts. When appropriate, she assigns lab exercises to get hands-on experience. She is particularly excited to begin using the new computer simulation exercises she has received. The standard that best describes this situation is:
- (a) Standard 1: subject matter
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 4: variety of instructional strategies
 - (d) Standard 9: reflective practitioner
15. Mr. Green is a high school English teacher who assigns grammar worksheets to groups of students within the classroom. Each group works together to complete the assignment and the group who does the best job receives a prize. The performance of each student is rated by the other group members. This works to develop positive working relationships and provides incentives to get the job done. The standard that best describes this situation is:
- (a) Standard 1: subject matter
 - (b) Standard 5: individual and group motivation
 - (c) Standard 7: organizes and plans systematic instruction
 - (d) Standard 9: reflective practitioner
16. Mrs. Jones makes a point of calling on as many students in her class as she can in supportive and reassuring ways, ensuring that she provides equal opportunities for boys and girls, as well as those students from various cultural backgrounds. In addition, she ensures that all of the students in her classroom have equal access to computer resources in the classroom. High on her list of concerns is that her classroom has a supportive and collaborative atmosphere. The standard that best describes this situation is:
- (a) Standard 2: broad ranges of ability
 - (b) Standard 4: variety of instructional strategies
 - (c) Standard 6: verbal and nonverbal communication techniques
 - (d) Standard 8: formal and informal assessment strategies
17. Mr. Abernathy has been placed in a school where a large number of the students are from economically disadvantaged backgrounds and the school lags behind neighboring schools in

achievement scores. He works hard to plan his lessons to meet the needs of his students as well as to accomplish the districts goals of increasing basic reading, math, and writing performance.

The standard that best describes this situation is:

- (a) Standard 2: broad range of abilities
- (b) Standard 5: individual and group motivation
- (c) Standard 6: verbal and nonverbal communication
- (d) Standard 7: systematic instruction

18. Mrs. Adams realizes how important it is to judge her students' progress using a variety of information. When assigning grades, she takes into account test scores, essay ratings, classroom participation, and student self-evaluation. The standard that best describes this situation is:
- (a) Standard 2: broad ranges of ability
 - (b) Standard 4: variety of instructional strategies
 - (c) Standard 6: verbal and nonverbal communication techniques
 - (d) Standard 8: formal and informal assessment strategies
19. Mr. Franks has been teaching civics for three years and is somewhat dissatisfied with what he sees are the learning outcomes of his students based on his past ways of delivering information. He consults with other teachers about how to create a new and more effective approach to teaching civics. The standard that best describes this situation is:
- (a) Standard 1: subject matter
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 9: reflective practitioner
 - (d) Standard 10: fosters relationships
20. Mrs. Castello is a physics teacher who is teaching the principles of electricity. She knows this material extremely well. In addition, she knows how to describe the concepts in ways that the students will understand. For example, when describing how electricity flows through a circuit, she makes the analogy to how water flows through a pipe. The standard that best describes this situation is:
- (a) Standard 1: subject matter
 - (b) Standard 3: adapt instruction to meet the diverse needs of pupils
 - (c) Standard 5: individual and group motivation and behavior
 - (d) Standard 7: teacher organizes and plans systematic instruction

KEY:

- 1. c
- 2. b
- 3. d
- 4. a
- 5. d
- 6. a
- 7. b
- 8. d
- 9. c
- 10. b
- 11. d
- 12. a
- 13. b
- 14. c
- 15. b
- 16. c
- 17. d
- 18. d

19. c
20. a

Appendix 3: Psychology Department Proficiency 1 – Research Methods

After completing **ANY** psychology course, students should be able to demonstrate the following:

- B. An understanding of psychological research methods, which includes an understanding of:
1. key aspects of the experimental method
 2. the concept of correlation

The rubric for assessing this proficiency, along with the criteria to be applied to the assessment instrument, is outlined below.

Note: This rubric has also been developed to assess Institution-Wide General Education Outcome A.4 and to match the Institution-wide Rubric provided for it.

Rubric:

A.1: Understand the key aspects of the experimental method

Exceeds Expectations	<ul style="list-style-type: none">• Understands the limitations of experimental research• Understands the reasons for using random assignment• Can detect deficiencies in experimental control procedures
Meets Expectations	<ul style="list-style-type: none">• Correctly distinguishes between experimental and non-experimental studies• Correctly defines and identifies independent and dependent variables• Correctly identifies control and experimental groups
Fails to Meet Expectations	<ul style="list-style-type: none">• Fails to use terminology relating to experimental method in an accurate way• Fails to identify independent and dependent variables• Fails to identify control and experimental groups

A.2: Understand the concept of correlation

Exceeds Expectations	<ul style="list-style-type: none">• Understands the limitations of correlational research• Can distinguish between correlation and causation
Meets Expectations	<ul style="list-style-type: none">• Correctly identifies type of correlation that is present• Understands both components that comprise a correlation coefficient
Fails to Meet Expectations	<ul style="list-style-type: none">• Incorrectly identifies type of correlation that is present• Does not distinguish between correlation and causation

Appendix 4

Department of Psychology – Methods Instrument – Fall 2005

1. In which type of research would an investigator manipulate one variable in order to observe its effect on another variable, while holding all other conditions constant?
 - a. systematic observation
 - b. experimentation
 - c. case study
 - d. correlational study
2. In which type of research would an investigator measure two naturally occurring variables in order to describe the relationship between these variables?
 - a. correlational study
 - b. a single-blind study
 - c. experimentation.
 - d. a double-blind study
3. Researchers who were studying memory had participants learn a list of words after consuming a soft drink with caffeine or a decaffeinated version of the same drink. The researchers then counted the number of words that were recalled from the list. In this study, the type of beverage (caffeinated or decaffeinated) would be:
 - a. the independent variable.
 - b. an extraneous variable.
 - c. the dependent variable.
 - d. a placebo.
4. The independent variable in an experiment is:
 - a. the behavior that is observed or measured.
 - b. different for each participant in the experiment.
 - c. the aspect of the study that is manipulated or changed by the researcher.
 - d. an external, uncontrolled variable that changes during the experiment.
5. A group of researchers wanted to determine whether people would eat more food in a cool room than in a warm room. Half the participants ate in a warm room (75°F) and half the participants ate in a cool room (65°F). The researchers then measured how much food was consumed in each of the two rooms. In this study, the dependent variable is:
 - a. the amount of food that is consumed.
 - b. the temperature of the room (75°F or 65°F).
 - c. the type of food the researcher selects for the study.
 - d. how hungry the participants are at the start of the study.
6. A group of researchers believes that watching violent television programming produces an increase in aggressive behavior. The researchers design a study in which half the children watch a violent television program and the remainder watch a non-violent television program. They then measure aggressive behavior in these children on the playground at school. In this study, the control group consists of:
 - a. the children who watch the violent television program
 - b. the children who watch the non-violent television program
 - c. the children who behave the most aggressively at the end of the study
 - d. all the children who take part in the study.
7. In the control condition of an experiment the:
 - a. experimenter exerts the greatest influence on the participants' behavior.
 - b. research participants are exposed to all the different experimental treatments.
 - c. experimental treatment is absent.
 - d. research participants are exposed to the most favorable levels of experimental treatment.

8. A group of researchers believes that sleep deprivation results in slower reaction times when driving. The researchers design a study in which half the participants are kept awake for 24 hours straight and half follow their normal sleep routine. The researchers then measure reaction time on a simulated driving test. In this study, the experimental group consists of:
 - a. the participants who are kept awake for 24 hours straight.
 - b. the participants who follow their normal sleep routine.
 - c. all of the participants in the study.
 - d. the participants who have the fastest reaction times at the end of the study.
9. Dr. Macator predicts that people will act more aggressively during the heat waves of summer than they will during the cold spells of winter. This suggests that Dr. Macator believes that temperature and level of aggression are:
 - a. negatively correlated.
 - b. uncorrelated.
 - c. positively correlated.
 - d. correlated, but he has not specified a direction for the correlation.
10. If a correlation coefficient has a negative sign, it indicates that:
 - a. the two variables being measured move in the same direction.
 - b. the two variables being measured move in opposite directions.
 - c. there is no relationship between the two variables being measured.
 - d. there is a nonsignificant relationship between the two variables being measured.
11. Maria plans to study the relationship between self-esteem and being raised in a single-parent or a two-parent family. She decides she must do correlational research, rather than an experiment to investigate this problem. Maria most likely chose the correlation method because correlational studies:
 - a. tend to be more accurate than experiments
 - b. have higher internal validity than experiments when there are two dependent variables
 - c. can be used to investigate factors that would be impossible to manipulate in an experiment
 - d. can be used to study either positive or negative relationships, where experiments can only be used to study positive relationships
12. In experimental studies, random assignment to either the control or the experimental group is an important aspect of experimental procedures. Random assignment is used to ensure that:
 - a. a representative sample of participants is initially selected for the study.
 - b. expectancy effects are minimized within the experiment.
 - c. the independent variable will be reliable and valid.
 - d. the experimental group and the control group are as similar as possible.
13. Dr. Krenshaw believes that people who are under stress will develop more colds than people who are not under stress. He randomly selects 20 participants and exposes them to high levels of stress, and finds that 17 of the participants develop colds. Based on these results, Dr. Krenshaw concludes that stress causes an increase in the number of colds a person experiences. Based on his study, Dr. Krenshaw's reasoning may be flawed because:
 - a. his study lacked a dependent variable.
 - b. his study lacked a control group for comparison.
 - c. he only measured the independent variable.
 - d. he exposed participants to high levels of stress.
14. Suppose that Louise earned the highest score in the entire class on the first midterm exam, and in her class the final exam scores were the following: 12, 23, 24, 45, 56, 67, 78, 89, and 92. If the correlation between midterm exam scores and final exam scores for this class is +0.03:
 - a. you should expect that Louise earned 56 points on the final exam (the midpoint for the class).
 - b. you should expect that Louise earned 92 points on the final exam (the highest score in the class).

- c. you should expect that Louise earned 12 points on the final exam (the lowest score in the class).
 - d. you wouldn't be able to confidently guess Louise's final exam score because the correlation is so low.
15. If psychologists discovered that aerobic exercise is positively correlated with mental health, this would demonstrate that:
- a. exercise causes good mental health.
 - b. good mental health causes people to exercise.
 - c. not exercising causes mental illness.
 - d. the two variables of exercise and mental health are related, but no conclusions can be drawn about cause/effect relationships.

Key:

- 1. b
- 2. a
- 3. a
- 4. c
- 5. a
- 6. b
- 7. c
- 8. a
- 9. c
- 10. b
- 11. c
- 12. d
- 13. b
- 14. d
- 15. d

Appendix 5
Using Behavioral Contracts to Improve Student Study Habits
Rex Hieser, Psychology, UW-Fox Valley

- 1) Introduction
 - a) Assessment:
 - i) Most of my students meet or exceed expectations for the psychology assessment exercise, but some do not.
 - ii) As we “close the loop” we are supposed to consider the reasons why students do not meet expectations.
 - (1) The HLC assumption is that we should change instructional methods to help those students who do not meet expectations.
 - (a) However, most students perform adequately, so maybe the instructional methods are okay.
 - (2) Alternate interpretation: Students are not meeting expectations because they are not performing the basic role of the student:
 - (a) Attending class (non-attendees make up many who do not meet expectations)
 - (b) Studying (National statistics suggest average study time is about 1 hour per class hour)
 - iii) My hypothesis: Changing student study habits may be more effective as a means of increasing student class performance than changing instructional methods.
 - b) Method
 - a) Inspiration: Teaching Abnormal Psychology
 - i) Mental disorder is seen as maladaptive behavior that interferes with a person's ability to perform their job/school and maintain social ties.
 - ii) Various forms of therapy are used to treat disorder and return the person to behaving in more adaptive ways.
 - iii) Students who do not attend class or study enough are behaving maladaptively; therefore an intervention based on some form of therapy may be appropriate.
 - iv) Because this is a psychology class, I could have the students engage in an activity based on a therapy as a learning experience and as part of the class
 - b) Therapy selection
 - i) Drugs – Not a good idea and I'm not allowed to prescribe anything.
 - ii) Freudian psychoanalysis – takes three to five years and I'd have to listen to student's dreams.
 - iii) Client-centered therapy – I'd have to really like the person and provide unconditional positive regard
 - iv) Behavior contracts
 - (1) Designed to change specific behaviors
 - (2) Require self-monitoring of behavior, which often makes the person more aware of maladaptive choices
 - (3) Meeting specified behavioral goals has self-reinforcement as a consequence
 - c) Building it into the class structure
 - i) I required students to perform a project with options including:
 - (1) Service learning
 - (2) Internet evaluation project

(3) Personal project – change an aspect of personal life (often using behavioral contracts)

- ii) Simple to add a fourth option – Behavioral Contract to change study habits
 - (1) This makes it voluntary, as other options are available
 - (2) It is a learning experience, because even if it doesn't work, the student learns how it's supposed to work.
 - (3) Making it a part of the class may increase student motivation to stick with it and improve study habits.

d) Contract - See Handout (not included here)

3) Results

- a) 14 of 60 students in Psy 201 selected the Behavioral Contract option as their project.
- b) No statistically significant differences occurred, probably due to high standard deviations and a relatively low N.
- c) Interesting non-significant differences
 - i) The mean course grade was higher for Behavioral Contract students (2.79 vs. 2.49)
 - ii) The total points earned was higher for Behavioral Contract students (203 vs. 194)
 - iii) C- was the lowest grade for the Behavioral Contract students.
 - iv) Students submitted a commentary with their behavioral contract, and most indicated that it was a valuable experience even if they did not follow it as well as they should:
 - (1) Student comment: "After the first test, I started to slack off on the behavioral contract..... When we took the second test and I realized I knew almost nothing on it I realized that this is what the behavioral contract was for.
 - (2) Student comment: "My experience with behavioral contracts has proved to strengthen my grade, and although I had some failures, the self-assigned rewards I missed were enough to get me back on track quickly. This technique will definitely be applied as often as possible throughout the rest of my college career."

4) Discussion

- a) Methodological issue: Non-random assignment to Behavioral Contracts (voluntary)
 - i) Could be students who are more motivated to achieve good grades thereby accounting for the statistically insignificant higher grades
 - ii) But also could be students who realize that they have studying deficiencies from past poor grades, so that could have hidden the degree of impact.
- b) Which students may not benefit from a behavioral contract?
 - i) High ability students probably have worked out good study techniques already.
 - ii) Students who are only modestly engaged in the university probably will not follow through with the self-monitoring and self-reinforcement.
- c) Who is the best candidate?
 - i) A student who may know what form of studying is required, but needs a bit more structure or a bit more motivation to do it.
 - ii) The student who is really not aware of what study methods are best or will work for the specific class.

Appendix 6

Analysis of Fall 2005 Assessment Data

Subjects: Subjects were 977 students enrolled in Psychology 201 or 202: Introductory Psychology in the UW Colleges. Due to the large N of this sample, additional data collected during the Spring 2006 semester was not factored into the calculations and discussion presented here.

Instrument Assessed: This data examines the results of the 15 item instrument utilized in assessing research methods during the Fall 2005 and Spring 2006 semesters. This instrument was previously used during the Fall 2003/Spring 2004 assessment cycle and was statistically evaluated by Paige Muellerleile. Changes were made to the original instrument by Dennis Carpenter and Paige Muellerleile, based on this statistical analysis. This revised instrument is the current one being used by the department.

Overall Student Performance

On a scale of 0-15 (each of 15 items worth 1 point), overall student performance is as follows:

Average # of items correct: 10.35

Standard Deviation: 3.156

Note to department members: If you refer back to the excel files that you created to submit data, you will be able to easily calculate your overall average # of items correct (column AF in the excel reporting document) and compare your overall student performance to that of the overall department reflected here. In addition, the difficulty numbers in the next section represent the average number of students scoring each item correctly. You can also compare your percentage of students scoring each item correctly by calculating the averages for columns Q-AE on your excel files. These columns are the ones that score each item as 1=correct, 0=incorrect.

Item Difficulty and Item Discrimination

An important component of item analysis is an examination of the concurrent item difficulty and item discrimination. The item difficulty and various discrimination criteria are explained below.

Item	Difficulty	Discrimination
		Total Score
Q1	.742	.478
Q2	.830	.417
Q3	.724	.556
Q4	.741	.507
Q5	.673	.494
Q6	.675	.607
Q7	.633	.592
Q8	.750	.474
Q9	.685	.424
Q10	.799	.373
Q11	.570	.432
Q12	.451	.444
Q13	.829	.451
Q14	.609	.359
Q15	.635	.386

$$\text{Item Difficulty} = \frac{\# \text{Correct Answers}}{\# \text{Respondents}}$$

- The formula yields a number between 0 and 1, where numbers closer to 1 indicate that the question was easy, and numbers closer to 0 indicate the question was difficult.
- Difficulty should be greater than chance (that is, there are 4 choices for each item, and a person who is merely guessing has a 25% chance of getting each question correct).
- To gauge appropriate item difficulty, some test evaluators believe that 50% of respondents should get any given question correct. Factoring in guessing 25% correct, an appropriate difficulty rating for 4-item test questions is: $\frac{(1-.25)}{2} + .25 = .625$

$$\text{Item Discrimination} = r_{\text{item-criterion}}$$

Here, there was one possible criteria (1 internal); of course, correlations of larger magnitudes indicate the extent to which good students do well and poor students do not do as well.

- The internal criterion is the total score

A second way to examine difficulty is to examine item means and variances. If a mean is extreme, that means that most respondents answered either correctly or incorrectly, depending on which extreme the measure tends toward. In this case, you will note that the mean values are the same as the item difficulties noted above. Variances may also reveal difficulty; if variances are near zero, they will reveal that most respondents answered consistently.

In the case of this analysis, respondents either answered correctly (1) or incorrectly (0), so the mean is necessarily bounded by those values.

Item	Mean	Variance
Q1	0.74	0.19
Q2	0.83	0.14
Q3	0.72	0.20
Q4	0.74	0.19
Q5	0.67	0.22
Q6	0.68	0.22
Q7	0.63	0.23
Q8	0.75	0.19
Q9	0.68	0.22
Q10	0.80	0.16
Q11	0.57	0.25
Q12	0.45	0.25
Q13	0.83	0.14
Q14	0.61	0.24
Q15	0.64	0.23

Both ways of examining item difficulty reveal that questions 2, 10, and 13, in particular, appear to be easy items that most people get correct.

SCALE INTERNAL CONSISTENCY

The appropriate measure of the reliability of dichotomously-scored items is the KR-20, as follows:

$$KR20 = \frac{k}{k-1} \left(1 - \frac{\sum pq}{\sigma_x^2} \right) \text{ where}$$

Comment [UC1]: This, too, is easy to do in Excel. You already have p, which was the "difficulty" score you calculated earlier. Of course the complement, q, is just (1 - p). Until we change the number of items, k will be 15. If you follow the formula, it shouldn't be tricky at all. The variance in the denominator of the equation is the population variance for the column with the scale's total score. That you can calculate in Excel or SPSS. But the formula was one I just calculated by hand.

k = number of items in scale (here, 15)
 p = proportion of respondents who get item correct
 q = complement of p
 σ = variance (the usual variance of the total scores on the test; in this case, 9.5783)

Item	p	q	pq
Q1	.742	.258	0.191436
Q2	.830	.170	0.1411
Q3	.724	.276	0.199824
Q4	.741	.259	0.191919
Q5	.673	.327	0.220071
Q6	.675	.325	0.219375
Q7	.633	.367	0.232311
Q8	.750	.25	0.1875
Q9	.685	.315	0.215775
Q10	.799	.201	0.160599
Q11	.570	.43	0.2451
Q12	.451	.549	0.247599
Q13	.829	.171	0.141759
Q14	.609	.391	0.238119
Q15	.635	.365	0.231775
			$\Sigma = 3.064262$

Using the formula noted above, $KR20 = .7418$.

THE KR20 FOR THE ORIGINAL VERSION OF THIS INSTRUMENT WAS .726. PAIGE MUELLERLEILE NOTED THAT SUCH RELIABILITY ESTIMATES ARE CAUSE FOR SOME CONCERN, AS RELIABILITY COEFFICIENTS ABOVE .80 ARE GENERALLY RECOMMENDED. IN REVIEWING THE LITERATURE, I NOTE SOME OPINION THAT RELIABILITY ESTIMATES ABOVE .70 ARE ACCEPTABLE.

The $KR20$ for the original version of this instrument was .726. Paige Muellerleile noted that such reliability estimates are cause for some concern, as reliability coefficients above .80 are generally recommended. In reviewing the literature, I note some opinion that reliability estimates above .70 are acceptable. In considering the Action Research foundations of assessment and its emphasis on working with the data available to make decisions, it is my opinion that the present reliability estimates are sufficient for the purposes of the psychology department's assessment efforts and that we should move forward in our use of the information generated to "close the loop" in the ways discussed in this report. It is up to the discretion of each department member to evaluate the overall data based on the information provided, consider his or her students' performance, and consider what such information has to say regarding student learning.

Appendix 7

Department of Psychology “Best Practices” Assignments Research Methods

These materials were submitted by department members as requested by the assessment coordinator as part of assessment reporting. They are variously designed for individual and/or group work, but most appear to be easily adapted for a variety of instructional uses. These materials have been compiled and are presented to you as part of the Psychology Department’s “closing the loop” regarding the uses of assessment results. The identities of those submitting materials here have not been included by explicit or implied request of those submitting materials.

May our teaching improve through the mutual sharing of such information.
Compiled by Dennis Carpenter, July 2006.

MATERIALS SET 1 Psychology 202 – Research Methods Examples

1. Identify the various aspects of an experiment in the following examples.

Example 1: A group of researchers wants to determine if people are more likely to follow directions if the person giving the directions is in a uniform. Half the participants are directed to a parking spot by a uniformed security guard, the other half are directed to a parking spot by an individual wearing blue jeans and a t-shirt. An observer counts the number of individuals who follow directions and park where they are directed.

Hypothesis:
Independent variable:
Dependent variable:
Control Group:
Experimental Group:
Operational definition of dependent variable:

Example 2: An industrial designer wants to determine if the new design for a piece of office equipment will result in fewer errors. The designer sets up a machine with the old design in one room, and a machine with the new design in a second room. He randomly assigns workers to one of the two rooms. He counts how many errors are made using each of the two machines.

Hypothesis:
Independent variable:
Dependent variable:
Control group:
Experimental group:
Operational definition of dependent variable

Example 3: In a study designed to test the effects of a new drug developed to treat Alzheimer's disease half the patients were given the actual drug while the other half of the patients were given a placebo (sugar pill).

Hypothesis:
Independent variable:
Dependent variable:
Control group:
Experimental group:

Example 4: A group of researchers wanted to determine whether children would behave more aggressively after watching violent television programming. Half the children in the study watched a violent television show; the other children watched a non-violent television program. Their behavior was observed later that day and the number of aggressive acts were counted.

Hypothesis:
Independent variable:

Dependent variable:
Control group:
Experimental group:
Provide an example for how the dependent variable could be more operationally defined:

2. Respond to the following questions about these examples of descriptive/correlational research.

Example 1: A researcher believes that hyperactivity in children is related to the amount of sugar in their diet. The researcher records both sugar intake and activity level for 50 children over a five-month period. The results indicated that those children who consumed the most sugar tended to be the most active.

What are the variables studied?

Is there a positive or negative correlation?

Why?

Does this study show that sugar consumption causes hyperactivity? Why or why not?

Example 2: University officials believe that there is a relationship between scores on the ACT and grade point average for the first two years of university. They collect information about the ACT score and grade point average for all their current students to determine the nature of the relationship. The results indicated that students who scored high on the ACT exam tended to have higher overall grade point averages at the end of the semester.

What are variables studied?

Is there a positive or negative correlation? Why?

MATERIALS SET 2

PSY 202 (HybridSection) Online Group Project (20 pts.)

The psychology department will be assessing knowledge related to experimental method this semester. This assignment is designed to help you prepare for some of those test items.

Who is assigned to which group is on the next page. If you're listed as the first person, you are group member #1 for purposes of who does what (see the notes just below), the second person is #2, and so on.

The final answer will be worth 13 points. An additional seven points will be awarded based on individual effort. Points for individual effort can be earned by carefully following these project guidelines:

1. By Wednesday, Sept. 21, post an answer to the question you have been assigned on the D2L discussion board. Do not post answers for other questions. If you are the first person in your group, answer questions 1 and 2. The second person should answer questions 3 and 4. The third person gets to answer questions 5 and 6. Person 4 gets to answer #7 and #8. Person five gets to be group leader (see notes 2 and 3)! The sixth person should answer questions 9 & 10 (If a group has only five people, Person 3 should do #9 and Person 4 #10).
2. By Saturday, September 24 each group member should comment on the answers posted by at least two other people. The group leader should also comment on two members' answers. You should more-or-less be checking if the answers seem right. If you think they are wrong, say so! You can only get full credit for the assignment if all the answers are correct. If a group member has failed to post her or his assigned answers by this time, another group member should do so.
3. On Monday, September 26 the group leader should post a first draft of the answers. On Wednesday, September 28 the group leader should post a final answer. Everyone should try to look at the first draft to make sure it looks OK before then.

Here are the questions:

2. A researcher is interested in whether people are more likely or less likely to help someone in distress when others are present. Some subjects were tested when they alone were witness to someone in distress, while others were tested when many people were present. The researcher discovered that witnesses were much more likely to help when they alone witnessed the person in distress.

Experiment? Yes / No
If experiment: Independent Variable:
Dependant Variable:

3. In an attempt to determine which method would assure the best class attendance, an educational psychologist had one teacher reward students for attending class with extra points, a second teacher punish absences by deducting points, an third teacher scold students for absences, and a fourth teacher do nothing unusual. Attendance was best in the first class, where the teacher rewarded the students.

Experiment: Yes / No
If experiment: Independent Variable:
Dependant Variable:

4. A researcher who was suspicious that hyperactivity in children was related to the amount of sugar in their diet recorded both sugar intake and activity level for a sample of children over a five month period. The results indicated that those children who had consumed the most sugar tended to be the most active.

Experiment? Yes / No
If experiment: Independent Variable:
Dependant Variable

5. In an investigation of drug abuse, it was noted that there was a relationship between the age at which an individual first started experimenting with drugs and the severity of the drug abuse problem. Specifically, those who experimented with drugs at the earliest age tended to be those with the most severe drug abuse problems.

Experiment? Yes / No
If experiment: Independent Variable:
Dependant Variable:

6. To investigate the relationship between anxiety and test performance, three groups of subjects are tested under one of the following conditions: High anxiety, moderate anxiety, or low anxiety. The moderate anxiety group performs better on the test than either the high anxiety or low anxiety groups.

Experiment? Yes / No
If experiment: Independent Variable:
Dependant Variable:

7. Researchers looking at the relationship between intelligence and birth order found that the children with the highest IQ scores were most likely the first born in the family.

Experiment? Yes / No
If experiment: Independent Variable:
Dependant Variable:

8. In a study of animal motivation, researchers varied the number of hours their laboratory animals were deprived of food. While some had food continuously available, others were

Biff replicated Don's experiment (used random assignment etc.) except that he put both groups of participants into nice rooms. Biff found that the average score of the students in the classical music condition was 90 while the average score of those in the no-music condition was 68. Biff said "The results of this experiment support the hypothesis that listening to classical music facilitates learning".

Can you criticize Biff's study? Or, do you think it was pretty good?

Here are some further questions about Biff's study:

- (1) Would you worry that the participants in Biff's classical music condition might have been smarter (or just have known more about Chemistry) to begin with?
- (2) What's the independent variable here?
- (3) What's the dependent variable here?
- (4) What was the experimental group?
- (5) What was the control group?
- (6) If, upon hearing the results of this study, someone asked you whether rock music would have the same effect, what would you say?
- (7) Would you feel safe generalizing from undergraduate students to high school students?
- (8) Does Biff's experiment tell you WHY classical music has this beneficial effect? How might you investigate THIS question?

MATERIALS SET 6

WORKSHEET: Operational Definitions

Love, shyness, hunger, intelligence, and anxiety are all concepts that a psychologist might want to study. However, before the psychologist can study any one of these important concepts, he or she will have to operationally define it first. This exercise has been designed to illustrate the variety of ways in which a concept might be operationally defined as well as provide you with some practice of generating your own operational definitions.

Part 1: Five psychological concepts and ten operational definitions are listed below. Match the operational definitions with the appropriate concept.

<u>Concepts:</u>	Love	_____	_____
	Shyness	_____	_____
	Hunger	_____	_____
	Intelligence	_____	_____
	Anxiety	_____	_____

Operational Definitions:

1. The amount of food consumed in one sitting
2. The number of cigarettes one smokes in one hour
3. The number of reasoning problems one can solve in 30 minutes
4. The amount of money someone will pay for a hamburger
5. The number of conversations initiated with strangers at a party
6. Blood pressure, heart rate, respiratory rate, and sweating
7. The number of friends one claims to have
8. Agreeing with the statement "I would rather suffer than let my partner suffer"
9. The grade received in a psychology course
10. The number of times someone is thought of during the day

Part 2: Produce your own operational definition for each of the concepts listed below. When you do this, remember that your definition must be stated in terms of things that can be observed or measured, and it should be clearly related to the concept in question.

1. **Love:**
2. **Shyness:**
3. **Hunger:**
4. **Intelligence:**
5. **Anxiety:**

MATERIALS SET 7

WORKSHEET 4: Which Research Method?

For each of the research questions listed below, select from the following choices the research method or methods that would be most appropriate for providing answers for these questions: **Naturalistic Observation**, **Survey**, **Case Study**, **Correlational Study**, **Experiment**

1. _____ Does oat bran reduce cholesterol level?
2. _____ Does exposure to day care enhance children's social skills?
3. _____ Do couples who cohabit prior to marriage experience greater success in keeping the marriage together?
4. _____ How do gorillas mate?
5. _____ Do people exhibit more aggressive behavior when it is hot?
6. _____ How do people in elevators behave?
7. _____ Does taking vitamin C reduce the number of colds a person gets?
8. _____ Does touch affect the physical growth of children?
9. _____ Does eating fast make people obese?
10. _____ Is spanking an effective way to discipline children?
11. _____ Which of two new antidepressants is more effective in treating depression?
12. _____ In fifth-grade classrooms, are boys or girls more likely to say answers aloud without raising their hands?
13. _____ Is there a relationship between the number of books in a family's home and the children's school grades?
14. _____ The police have discovered a 6-year-old who has been kept in a room by herself since birth and not exposed to spoken language. Does the lack of early exposure to language result in an inability to learn language?
15. _____ How many hours of TV do 8-year-olds in the United States watch per day?