

**Sistema Universitario Ana G. Méndez  
School for Professional Studies  
Florida Campuses  
Universidad del Este, Universidad Metropolitana, Universidad del Turabo**

**EDBE 510**

**INTRODUCTION TO RESEARCH: PURPOSES,  
ISSUES AND METHODOLOGIES**

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## STUDY GUIDE

<b>Course Title:</b>	Introduction to Research Purposes, Issues and Methodologies.
<b>Code:</b>	EDBE 510
<b>Time Length:</b>	Five weeks
<b>Prerequisite:</b>	<b>All Courses</b>

### Description:

Introduces the numerous frameworks that inform education research, the variety of methodologies used in gathering and analyzing data, and the advantages, restrictions and principles inherent in conducting and evaluating research. This course examines the basic questions, issues and theoretical frameworks essential to the rationale, conceptualization, manner, writing, reading and the use of educational research as means for informing educational theory.

### General Objectives

1. Appraise quantitative and qualitative research articles.
2. Use a basic statistical analysis program and to interpret basic statistical results, including descriptive, correlation, and mean differences statistics.
3. Identify and differentiate between scores used in educational research and assessment.
4. Discuss concepts of reliability and validity and their relationship to research and assessment.
5. Engage in research through manual and electronic technologies.
6. Develop research using quantitative and qualitative methods of inquiry.
7. Utilize and apply ethical research practices.

### Evaluation

Content Criteria	Punctuation	Percentage
Participation	10	20

Attendance	10	20
Portfolio	10	20
Journal Analysis	10	20
Poster	10	20
Quizzes	10	20
Quantitative Research	20	30
<b>Language Criteria</b>		
Oral Presentation	10	20
Essay	10	20
Qualitative Research	20	30
<b>Total</b>	120	220

**Participation:** The participation is highly recommended in each class. It is expected that all students will be attending class prepare to discuss the class topics and engage actively in the class (see **Appendix A**).

**Attendance:** The attendance to class is mandatory and each student will be receiving two points for each workshop to accumulate a total of 10 points.

**Portfolio:** each student need to complete a portfolio that will include all the material cover in class since workshop one. It will include the essay, homework, journal analysis, quizzes, qualitative research, quantitative research and the following **Appendixes H, I, J, K, L, M and N**.

**Journal analysis:** During each workshop the students are going to be writing a critical analysis about one Journal related to the qualitative research. The analysis will be writing according to the workshop language and will follow the APA Manual.

**Poster:** Each student is going to design a poster during workshop five that evidenced the results of the quantitative research. The poster must be written in English, very creative and visual (see **Appendixes F and G**).

**Quizzes:** The students are going to evaluated during workshop two and four with a short quiz. The quizzes will be covering the material discuss in class during workshops one and two and workshops three and four.

**Quantitative Research:** The students are going to divide in groups to conduct a quantitative research. The research need to be related to education and will be written in English during workshop five. The group will need to choose their research topic during the first workshop (see **Appendix E**).

**Oral Presentation:** Each student will be presenting orally the qualitative research during workshop five. The oral presentation is going to be in English, must be creative and will need to incorporate the technology (see **Appendix C**).

**Essay:** The students are going to be writing a two page essay during workshop four. The purpose of the essay is to mention the importance of conducting qualitative research in education. The essay must follow the guidelines of the APA Manual (see **Appendix O** for rubric).

**Qualitative Research:** The students are going to conduct a qualitative descriptive research with the same quantitative research topic. The objective of the research is to identify what the literature state about the selected topic. The qualitative research must be written in English during workshop five and will need to follow the guidelines establish by the APA Manual (see **Appendixes B and D** for format and rubric).

### **Text and Resources**

Hernandez, S. ( 2006). Metodología de la Investigación. 4ta edición, McGraw Hill Interamerica, Mexico.

Creswell, J. (2005). Planning, Conducting and Evaluating Quantitative and Qualitative Research. Pearson Education Inc. New Jersey.

McMillan, J. (2004). Educational Research: Fundamentals for the consumer (4<sup>th</sup> edition). Pearson: New York.

Harris, R. (2002). Using sources effectively: Strengthening your writing and avoiding plagiarism . Los Angeles: Pyrczak Publishing.

Bogdan, R., & Biklen, S. (2003). Qualitative research for education: An introduction to theories and methods. (Chapter 1: Available on blackboard). New York: Pearson.

Ethical Standards by AERA (American Educational Research Association)

<http://www.aera.net/about/policy/ethics.htm>

### **Qualitative Research**

- Kostelnik, J., Black, F., & Taylor, J. (1998). Whole language teaching as practiced by kindergarten teachers. *Reading Research and Instruction, 27*(3), 207- 216.
- Flowerday, T., & Schraw, G. (2000). Teacher beliefs about instructional choice: A phenomenological study. *Journal of Educational Psychology, 92*(4), 634-645.
- Harkrade, M., & Moore, R. (1997). Literature preferences of fourth-graders. *Reading Research and Instruction, 36*(4), 325-339.
- Price, J., & Everett, S. (1994). A national assessment of secondary school principals' perceptions of violence in schools. *Health Education & Behavior, 43*(1), 1-16.

### **Correlational Research**

- Muris, P., & Meesters, C. (2002). Symptoms of anxiety disorders and teacher reported school functioning of normal children. *Psychological Reports, 91*(2), 588- 590.
- Lee, S. (2002). The significance of language and cultural education on secondary achievement: A survey of Chinese-American and Korean-American students. *Bilingual Research Journal, 26*(2), 327-338.

### **Experimental Research**

- Pivik, J., Mccomas, J., Macfarlane, I., & Laflamme, M. (2001). Using virtual reality to teach disability awareness. *Journal of Educational Computing Research, 26*(2), 203-218.
- Wells, D., Miller, M., Tobacyk, J., & Clanton, R. (2002). Using a psychoeducational approach to increase the self-esteem of adolescents at high risk for dropping out. *Adolescence, 37*(146). 431-434.

### **Supplemental Material**

- Creswell, J. (2002). *Research Design*. (pbk. ed.). Thousand Oaks, CA: Sage.
- Creswell, J. (2005). *Educational Research*, 2<sup>nd</sup> ed. Thousand Oaks, CA: Sage. ISBN 0-13-112790-X
- Janesick, V. (2003). *Stretching Exercises for Qualitative Researchers* (pbk. ed.). Thousand Oaks, CA: Sage.

Other required selections (journal articles) will be distributed in class. Students are expected to read assigned chapters/articles prior to each class meeting.

### **References**

- Airasian, P.W. (1991). *Classroom Assessment*. New York: McGraw- Hill, Inc.

- Amato, C. J. (2002). *The World's Easiest Guide to Using the APA: A User-friendly Manual for Formatting Research Papers According to the American Psychological Association Style Guide*. New York: Stargazer Publishing.
- American Psychological Association. (APA; 2001). *Publication Manual of the American Psychological Association* (5<sup>th</sup> ed.). Washington, DC: American Psychological Association
- Babbie, E.R. (1990). *Survey Research Methods*. (2<sup>nd</sup> ed.). Belmont, CA: Wadsworth Publishing.
- Babbie, E.R. (2001). *The practice of social research*. (9<sup>th</sup> ed.). Belmont, CA: Wadsworth Publishing.
- Barlow, D.H., and Hersen, M. (1984). *Single Case Experimental Designs: Strategies for Studying Behavior Change*. New York: Pergamon.
- Bogdan, R., and Biklen, S. K. (1998). *Qualitative Research for Education*. (3<sup>rd</sup> ed.). Boston: Allyn and Bacon.
- Bruning, J.L., and Kintz, B.L. (1997) *Computational handbook of Statistics*. (4<sup>th</sup> ed.). New York: Longman.
- Creswell, J. W. (2001). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Boston: Pearson Education.
- Creswell, J. W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Thousand Oaks, CA: Sage Publications Inc.
- Gall, M. D., Borg, W. R., and Gall, J. P. (2002). *Educational Research: An Introduction* (7<sup>th</sup> ed.). Boston: Allyn and Bacon.
- Gay, L. R., and Airasian, P. W. (2002). *Educational Research: Competencies and Analysis and Application* (7<sup>th</sup> ed.). Boston: Prentice Hall.
- Gelfand, H., Walker, C., and American Psychological Association. (2002). *Mastering APA Style: Student's Workbook and Training Guide*. Washington DC: American Psychological Association.
- Gelfand, H. and Walker, C. (1994). *Mastering APA Style: Instructor's Resource Guide*. Washington DC: American Psychological Association.
- Glanz, J. (1998). *Action Research: An Educational Leader's Guide to School Improvement*. New York: Christopher—Gordon Publishing.

- Guba, E.G., and Lincoln, Y.S. (1989). *Fourth Generation Evaluation*. Beverly Hills, CA: Sage Publication, Inc.
- Hittleman, D. R., and Simon, A. J. (2001). *Interpreting Educational Research: An Introduction for Consumers of Research*. (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Johnson, B. and Christensen, L. B. (2003). *Educational Research: Quantitative, Qualitative, and Mixed Approaches, Research Edition* (2<sup>nd</sup> ed.). Boston: Allyn and Bacon.
- McMillan, J.H. (2000). *Educational Research: Fundamentals for the Consumer*. (3<sup>rd</sup> ed.). New York: Longman.
- Pallant, J. (2001). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows* (Version 10). New York: Open University Press.
- SPSS. (1999). *SPSS Base 10.0 Applications Guide*. Chicago: Marketing Department SPSS Inc.
- Siegel, S. (1956). *Nonparametric Statistics for the Behavioral Sciences*. New York: McGraw-Hill.

### **Description of Course Policies**

1. This course follows the Sistema Universitario Ana G. Méndez Discipline-Based Dual-Language Immersion Model® designed to promote each student's development as a Dual Language Professional. Workshops will be facilitated in English and Spanish, strictly using the 50/50 model. This means that each workshop will be conducted entirely in the language specified. The language used in the workshops will alternate to insure that 50% of the course will be conducted in English and 50% in Spanish. To maintain this balance, the course module may specify that both languages will be used during the fifth workshop, dividing that workshop's time and activities between the two languages. If students have difficulty with asking a question in the target language in which the activity is being conducted, students may choose to use their preferred language for that particular question. However, the facilitator must answer in the language assigned for that particular day. This should only be an exception as it is important for students to use the assigned language. The 50/50 model does not apply to language courses where

the delivery of instruction must be conducted in the language taught (Spanish or English only).

2. The course is conducted in an accelerated format and requires that students prepare in advance for each workshop according to the course module. Each workshop requires an average ten hours of preparation but could require more.
3. Attendance at all class sessions is mandatory. A student that is absent to a workshop must present the facilitator a reasonable excuse. The facilitator will evaluate if the absence is justified and decide how the student will make up the missing work, if applicable. The facilitator will decide on the following: allow the student to make up the work, or allow the student to make up the work and assign extra work to compensate for the missing class time.  
Assignments required prior to the workshop must be completed and turned in on the assigned date. The facilitator may decide to adjust the grade given for late assignments and make-up work.
4. If a student is absent to more than one workshop the facilitator will have the following options:
  - a. If a student misses two workshops, the facilitator may lower one grade based on the students existing grade.
  - b. If the student misses three workshops, the facilitator may lower two grades based on the students existing grade.
5. Student attendance and participation in oral presentations and special class activities are extremely important as it is not possible to assure that they can be made up. If the student provides a valid and verifiable excuse, the facilitator may determine a substitute evaluation activity if he/she understands that an equivalent activity is possible. This activity must include the same content and language components as the oral presentation or special activity that was missed.
6. In cooperative activities the group will be assessed for their final work. However, each member will have to collaborate to assure the success of the group and the assessment will be done collectively as well as individually.
7. It is expected that all written work will be solely that of the student and should not be plagiarized. That is, the student must be the author of all work submitted. All quoted

or paraphrased material must be properly cited, with credit given to its author or publisher. It should be noted that plagiarized writings are easily detectable and students should not risk losing credit for material that is clearly not their own (**see Academic Honesty Policy**).

8. If the Facilitator makes changes to the study guide, such changes should be discussed with and given to students in writing at the beginning of the first workshop.
9. The facilitator will establish a means of contacting students by providing an email address, phone number, hours to be contacted and days.
10. The use of cellular phones is prohibited during sessions; if there is a need to have one, it must be on vibrate or silent mode during class session.
11. Children or family members that are not registered in the course are not allowed to the classrooms.
12. All students are subject to the policies regarding behavior in the university community established by the institution and in this course.

**Note: If for any reason you cannot access the URL's presented in the module, do not stop your investigation. There are many search engines and other links you can use to search for information. These are some examples:**

- [www.google.com](http://www.google.com)
- [www.altavista.com](http://www.altavista.com)
- [www.ask.com](http://www.ask.com)
- [www.excite.com](http://www.excite.com)
- [www.pregunta.com](http://www.pregunta.com)
- [www.findarticles.com](http://www.findarticles.com)
- [www.telemundo.yahoo.com](http://www.telemundo.yahoo.com)
- [www.bibliotecavirtualut.suaqm.edu](http://www.bibliotecavirtualut.suaqm.edu)
- [www.eric.ed.gov/](http://www.eric.ed.gov/)
- [www.flelibrary.org/](http://www.flelibrary.org/)

**The facilitator may make changes or add additional web resources if deemed necessary.**

## Teaching Philosophy and Methodology

This course is grounded in the learning theory of Constructivism. Constructivism is a philosophy of learning founded on the premise that, by reflecting on our experiences, we construct our own understanding of the world in which we live.

Each of us generates our own “rules” and “mental models,” which we use to make sense of our experiences. Learning, therefore, is simply the process of adjusting our mental models to accommodate new experiences. As teachers, our focus is on making connections between facts and fostering new understanding in students. We will also attempt to tailor our teaching strategies to student responses and encourage students to analyze, interpret and predict information.

There are several guiding principles of constructivism:

1. Learning is a search for meaning. Therefore, learning must start with the issues around which students are actively trying to construct meaning.
2. Meaning requires understanding wholes as well as parts. And parts must be understood in the context of wholes. Therefore, the learning process focuses on primary concepts, not isolated facts.
3. In order to teach well, we must understand the mental models that students use to perceive the world and the assumptions they make to support those models.
4. The purpose of learning is for an individual to construct his or her own meaning, not just memorize the "right" answers and regurgitate someone else's meaning. Since education is inherently interdisciplinary, the only valuable way to measure learning is to make the assessment part of the learning process, ensuring it provides students with information on the quality of their learning.
5. Evaluation should serve as a self-analysis tool.
6. Provide tools and environments that help learners interpret the multiple perspectives of the world.
7. Learning should be internally controlled and mediated by the learner.

## Workshop One

### Specific Objectives:

At the end of the workshop, the students will be able to:

1. Understand the concept of research in education.
2. Describe the anatomy of a research article.
3. Identify different types of research in education.
4. Apply systematic inquiry to education.
5. Learn the process of identifying a research problem.

### Language Objectives:

1. Read and analyze various types of information to determine reading comprehension.
2. Determine the main idea and identify relevant details in a variety of written materials.
3. Express themselves orally using English as the language of communication with correct pronunciation, grammar, syntax, verb usage and vocabulary.

### Electronic Links (URLs):

Components of a Research Article

<http://www.survival.pitt.edu/library/documents/ComponentsofaResearchArticle.doc>

Writing Research

<http://www.ruf.rice.edu/~bioslabs/tools/report/reportform.html>

Steps Research Process

<http://www.library.cornell.edu/olinuris/ref/research/skill1.htm>

<http://www.crlsresearchguide.org/>

<http://iws.ohiolink.edu/~sg-ysu/process.html>

Definition of Research

<http://www.experiment-resources.com/definition-of-research.html>

<http://www.thefreedictionary.com/research>

Identifying a Research Problem

<http://writing.colostate.edu/guides/research/experiment/pop4a.cfm>

Quantitative Research

[http://en.wikipedia.org/wiki/Quantitative\\_methods](http://en.wikipedia.org/wiki/Quantitative_methods)

Qualitative Research

[http://en.wikipedia.org/wiki/Qualitative\\_methods](http://en.wikipedia.org/wiki/Qualitative_methods)

Qualitative and quantitative research

<http://wilderdom.com/research/QualitativeVersusQuantitativeResearch.html>

### **Assignments before Workshop One:**

1. Prepare a list with the steps of a research process.
2. Define the concept of a research problem using a conceptual map.
3. Identify the components of a research article using a drawing.
4. Describe in writing the different types of research in education: qualitative and quantitative.
5. Compare and contrast qualitative and quantitative research using a Venn diagram.
6. Using a circular map, identify the process of a research problem.
7. Identify at least three topics for a research in education.

### **Activities:**

1. Ice-breaker activity: The facilitator will ask the students to make a circle in the classroom. Each student is going to mention three facts about their life (one true and two false). The students in the class will need to identify the one that is true.
2. The facilitator will ask each student to write two words that will define the concept of research. The whole class is going to write their own definition of research.
3. The students are going to be divided in pairs and each pair is going to present their own definition of research.
4. The facilitator will present and read the article: <http://www.crlsresearchguide.org/> Basic Steps in the Research Process. The students will be describing these steps using a bubble map.
5. The students are going to be divided into groups. Each group is going to inquire the way to identify five research problems in education. Additionally, each group will need to present their research problems.
6. The class will be divided in two groups qualitative research (group A) and quantitative research (group B). Each group will need to identify the characteristics, advantages, disadvantages, differences and similarities of each one and present it with a visual.
7. The class will be debating the qualitative and quantitative research.

8. The students are presenting the components of a research article.
9. The class will be divided into groups of three and they have to identify from the journal article below the research problem, the literature review, research questions, data collection, data analysis and interpretation of results. <http://ourworld.compuserve.com/homepages/JWCRAWFORD/Krashen3.htm> The students will be presenting the components of the article.
10. Watch the Video: <http://www.youtube.com/watch?v=yEWve6T471w>  
Finding their passion: undergraduates conducting research
11. The students will be choosing the topic for the qualitative and quantitative research.
12. The facilitator will discuss the assignments for the next workshop.

**Assessment:**

1. The students are going to design a brochure selling the concept of research in education.
2. Learning diary: Explain the importance of conducting qualitative and quantitative research in education and its implications.
3. Written report rubric.
4. Class participation rubric.

## Workshop Two

### Specific Objectives

1. Identify the criteria to evaluate a hypothesis.
2. Recognize the literature revision process.
3. Consider the ethical aspects of an educational research.
4. Learn how to use the internet as an educational resource.
5. Identify how to cite Internet resources in a proper way.

### Language Objectives

1. Students will be able to express themselves in writing using proper grammar and syntax.
2. Students will read several articles to carefully analyze them.
3. Students will be able to express verbally using correct enunciation.

### Electronic Links

#### Literature Review

[http://www.unc.edu/depts/wcweb/handouts/literature\\_review.html](http://www.unc.edu/depts/wcweb/handouts/literature_review.html)

[http://en.wikipedia.org/wiki/Literature\\_review](http://en.wikipedia.org/wiki/Literature_review)

<http://www.library.ncat.edu/ref/guides/literaturereview03.htm>

#### Hypothesis

<http://www.accessexcellence.org/LC/TL/filson/writhypo.php>

[http://www.sciencebuddies.org/science-fair-projects/project\\_hypothesis.shtml](http://www.sciencebuddies.org/science-fair-projects/project_hypothesis.shtml)

#### Ethical Aspects

<http://www.oei.es/salactsi/mgonzalez5.htm>

[http://www.aera.net/AboutAERA/Default.aspx?menu\\_id=90&id=717](http://www.aera.net/AboutAERA/Default.aspx?menu_id=90&id=717)

#### Internet as an educational resource

<http://www.vts.intute.ac.uk/he/tutorial/education>

#### Using Citations

<http://webliminal.com/search/search-web13.html>

<http://www.library.ucla.edu/yrl/referenc/citing.htm>

### Assignments before the Workshop Two:

1. Identify the characteristics of a hypothesis in a research.
2. Define the variables, descriptive, co-relational, and null hypothesis.

3. Identify the process and steps to follow during the literature review research.
4. Mention the difference between primary and secondary resources.
5. Identify the advantages and disadvantages of using the Internet as a literature resource using a Venn diagram.
6. Analyze the different strategies on how to search information in the Internet.
7. Write a critical analysis from a Journal related to qualitative research.
8. Search five literature revisions in the Internet about the topic of the qualitative research.
9. Design a circular map about the literature revision of Bilingual Education in Florida.
10. Continue working in the qualitative and quantitative researches.

**Activities:**

1. Introduction activity: The facilitator will provide each student a paper to draw how to utilize the Internet as an educational tool. The students will place the drawing at front and will circulate in the class with the drawing. The class will choose one of the drawings as a consensus.
2. The students will present the definitions with mimics.
3. The facilitator will provide each student with an Index card in order to write their hypothesis. Each student will write the hypothesis to the class.
4. The facilitator will mention the ethical aspects that need to be consider Turing research using Electronic resources. Each student need to choose an ethical aspect and will be draw a picture with it.
5. The students are going to be divided in pairs and each pair will present the steps use in the process of literature revision using visuals.
6. The facilitator will divide the class in two groups and each group will debate primary resources and secondary resources.
7. The students will read the article about citing resources in the Internet and summarize it using map texting. <http://www.library.ucla.edu/yrl/referenc/citing.htm>
8. The students will present the advantages and disadvantages of using the Internet as a literature resource with a Venn diagram.

9. The students will choose one of the literature revision articles of the qualitative research and summarize it in 350 words.
10. Video: References for a Literature Revision  
<http://www.youtube.com/watch?v=Q5NIKaRqMHY>
11. The students will be discussing in pairs their literature revisions about qualitative research.
12. The students will be presenting the circular map about the Bilingual education in Florida.
13. The facilitator will take the students to the library to research about the weapon possession with high school students.

**Assessment:**

1. Test about the material learned in workshops one and two.
2. Learning Diary: explain the importance of considering the ethical aspects in an educational research.
3. Written report rubric.
4. Class participation rubric.

## Workshop Three

### Specific Objectives:

1. Understand how subjects and sampling can affect research.
2. Knowledge about the foundations of educational measurement.
3. Understand the concepts of validity and reliability.
4. Identify the anatomy of an experimental quantitative research study.
5. Learn the characteristics and different types of experimental designs.

### Language Objectives:

1. Read and analyze different information and texts to determine reading comprehension.
2. Determine the main idea and develop creativity in a variety of types of written materials.
3. Express themselves orally using English as the language of communication with no grammar errors.

### Electronic Links (URLs):

Experimental Design

<http://www.socialresearchmethods.net/kb/desexper.php>

<http://www.fammed.ouhsc.edu/tutor/expdes.htm>

Non Experimental

[http://www.une.edu.au/WebStat/unit\\_materials/c2\\_research\\_design/design\\_nonexperimental.htm](http://www.une.edu.au/WebStat/unit_materials/c2_research_design/design_nonexperimental.htm)

Choosing the Sample

<http://www.marquette.edu/writingcenter/ChoosingtheSample.htm>

Validity and Reliability

<http://www.socialresearchmethods.net/tutorial/Colosi/Colosi2.htm>

<http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>

<http://allpsych.com/researchmethods/validityreliability.html>

Likert item

[http://en.wikipedia.org/wiki/Likert\\_scale#Sample\\_question\\_presented\\_using\\_a\\_five-point\\_Likert\\_item](http://en.wikipedia.org/wiki/Likert_scale#Sample_question_presented_using_a_five-point_Likert_item)

Interview questions

<http://owl.english.purdue.edu/owl/resource/559/06/>

Quantitative Research Design

<http://www.sportsci.org/jour/0001/wghdesign.html>

### **Assignments before Workshop Three:**

1. Define the following educational measures: tests, questionnaires, observations and interviews.
2. Explain the purpose of experimental research using a visual.
3. Provide one example of validity and reliability of measurement.
4. Define the characteristics of an experimental quantitative research study.
5. Make a drawing of the different types of experimental designs.
6. Continue working on the qualitative and quantitative research assignments.
7. Write a one page critical analysis of a journal article related to the qualitative research.
8. Identify the procedure to construct or measure an instrument.
9. Define and explain the Likert scale.
10. Explain how to conduct a survey in qualitative research.

### **Activities:**

1. Introduction activity: The students are going to be interviewing another student with the following question: What do you think about parking?  
At the end each student will need to comment concerning the question.
2. The students are going to present the definitions using mimics: tests, questionnaires, observations and interviews.
3. The facilitator will explain the concepts of reliability and validity. The students will compare and contrast both using a circular diagram. Also, the students and the facilitator will be discussing the diagram on **Appendix Q**.

4. The students will be divided in pairs to write a time line on how to construct a survey in quantitative research.
5. The students will be designing a table that include the types of tests, definition of the tests and the example of the specific test, instruments or documents to collect quantitative data.
6. The students will be presenting the characteristics of experimental quantitative research study using a poster.
7. Read the article and summarize it using the method of Syntax Surgery  
<http://www.ncrel.org/sdrs/areas/issues/methods/assment/as5relia.htm>
8. The students are going to choose one critical analysis of a journal article related to the qualitative research and present it.
9. Video: Reliability and Validity  
<http://www.youtube.com/watch?v=H7fiJLUNQxl&feature=PlayList&p=260C00A0421C22AA&playnext=1&index=14>
10. The students are going to be divided in groups and each group will design a questionnaire to identify the self esteem of English language learners in High School. The students will be using a Lickert scale to design the questionnaire: Agree, Strongly disagree, Disagree, Neither agree nor disagree and strongly Agree. The students will have to revise another student questionnaire to determine the validity and reliability of the questionnaire.
11. The students will be presenting their drawings of the different types of experimental designs.

**Assessment:**

1. Learning Diary: Explain how subjects and sampling can affect research.
2. Design a brochure to sell the concept of experimental design.
3. Written report rubric
4. Class participation rubric
5. Oral presentation rubric.

## Workshop Four

### Specific Objectives:

1. Analyze the objective of non experimental research.
2. Identify the procedure to follow with the quantitative data analysis.
3. Understand the purpose and nature of inferential statistics.

### Language Objectives:

1. Read and analyze various types of information to determine reading comprehension.
2. Determine the main idea and identify relevant details in a variety of written materials.
3. Express themselves orally using English as the language of communication.

### Electronic Resources:

Experimental

[http://es.wikipedia.org/wiki/Dise%C3%B1o\\_experimental](http://es.wikipedia.org/wiki/Dise%C3%B1o_experimental)

<http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/5980/newpage2.htm> Quantitative Research Designs

<http://wilderdom.com/OEcourses/PROFLIT/Class4QuantitativeResearchDesigns.htm>

Non Experimental Research

<http://faculty.plattsburgh.edu/alan.marks/Exp%202005/Nonexperimental%20Research.pdf>

T Test

[http://ponce.inter.edu/cai/reserva/lvera/Prueba\\_T\\_ANOVA.pdf](http://ponce.inter.edu/cai/reserva/lvera/Prueba_T_ANOVA.pdf)

Inferential statistics

<http://www.mitecnologico.com/iem/Main/EstadisticaInferencial>

Pearson Coefficient

<http://eduso.files.wordpress.com/2008/06/coeficiente-de-pearson1.pdf>

[http://www.fisterra.com/mbe/investiga/var\\_cuantitativas/var\\_cuantitativas.asp](http://www.fisterra.com/mbe/investiga/var_cuantitativas/var_cuantitativas.asp)

Lineal Regression

[http://195.55.130.130/matemáticas\\_blecua/bacmat/temario/bac1/mat1\\_11regresion.htm](http://195.55.130.130/matemáticas_blecua/bacmat/temario/bac1/mat1_11regresion.htm)

Types of designs

<http://www.socialresearchmethods.net/kb/destypes.php>

**Homework before Workshop Four:**

1. Write an essay about the importance of conducting quantitative research in the educational field. The essay must follow the APA Manual writing (See **Appendix O**).
2. Write a critical analysis about an article related to qualitative research.
3. Explain the no experimental research utilizing a conceptual map.
4. Compare and contrast the experimental research with the no experimental research using a Venn diagram (see **Appendix P**).
5. Continue working with the class with the quantitative and qualitative research.
6. Define the following inferential statistics inferential statistics: T Test, Pearson Coefficient, lineal regression and (ANOVA).
7. Explain the procedure to follow with the quantitative data analysis.
8. Identify the computer program that will be utilized for data analysis.

**Activities:**

1. Introduction activity: The students are going to be divided in pairs to design the stops to follow during no experimental study. The students will have twenty minutes to complete this activity. The facilitator will provide glue, scissors, and markers to the students.
2. The facilitator will be assigning each student a definition that will be presented in class with mimics.
3. The students will be explaining the experimental research using a diagram.
4. The facilitator will explain the inferential statistics with electronic resources. The students will have the task of designing a newscast to explain the inferential statistics. The news will be composed of three students: reporter, and two interviewers.
5. Using a diagram the students will write the procedure to follow with quantitative data analysis. Also, the students will explain the computer program to be utilized.
6. The students will choose a research article and will explain each one of the parts with a drawing.
7. The students will be divided in groups of three. Each group will need to write a poem that evidenced the need to write a research in the educational field.

8. Debate: The students will be divided in two groups and each group will debate five concepts related with the experimental research and the no experimental research.
9. Video: <http://www.youtube.com/watch?v=GoQ9Zg8Fvf0> Quantitative Research
10. The students will complete the following exercise individually.

A researcher obtained in a sample the following frequencies for the attitude toward the school principal variable

CATEGORY	FRECUENCY
Completely unfavorable	69
Unfavorable	28
No favorable no unfavorable	20
Favorable	13
Completely favorable	6

- a) Calculate the frequencies related.
- b) Make a graphics about the percentage or histogram.
- c) Explain the results responding if the attitude toward the school director will be favorable and unfavorable.

### **Assessment**

1. Short test about the concepts learned during workshops three and four.
2. Learning diary: Explain the importance of conducting statistics inferences.
3. Written report rubric.
4. Class Participation Rubric

## Workshop Five

### Specific Objectives:

1. Identify and learn about ethnographic studies, case studies, descriptive studies, phenomenological studies and grounded theory studies.
2. Analyze the credibility of qualitative research.
3. Understand the interpretation of the results of a qualitative research.
4. Learn about the Mixed-Method Research Approach.

### Language Objectives:

1. Read and are going to be engage in different texts to determine reading comprehension.
2. Determine the main idea and develop their writing skills using a variety of types of written materials.
3. Express themselves orally using English as the language of communication with no grammar errors.

### Electronic Links (URLs):

Mixed Method Research

[https://aera.net/uploadedFiles/Journals\\_and\\_Publications/Journals/Educational\\_Research/Volume\\_33\\_No\\_7/03ERv33n7\\_Johnson.pdf](https://aera.net/uploadedFiles/Journals_and_Publications/Journals/Educational_Research/Volume_33_No_7/03ERv33n7_Johnson.pdf)

<http://www.socialresearchmethods.net/tutorial/Sydenstricker/bolsa.html>

Survey Research Design

<http://www.srl.uic.edu/seminars/Intro/introsrm.pdf>

<http://www.surveysystem.com/sdesign.htm>

Ethnography Studies

<http://www.otal.umd.edu/hci-rm/ethno.html>

Descriptive Studies

[http://www.fammed.ouhsc.edu/OKC/Department\\_info/Research/tutor/desstud.htm](http://www.fammed.ouhsc.edu/OKC/Department_info/Research/tutor/desstud.htm)

<http://www.ncbi.nlm.nih.gov/pubmed/11809274>

Phenomenological Studies

<http://www.staff.vu.edu.au/syed/alrnnv/papers/bev.html>

Grounded Theory

[http://en.wikipedia.org/wiki/Grounded\\_theory\\_\(Glaser\)](http://en.wikipedia.org/wiki/Grounded_theory_(Glaser))

Data Analysis

<http://hsc.uwe.ac.uk/dataanalysis/qualWhat.asp>

### **Assignments before Workshop Five:**

1. Bring a magazine.
2. Completion of qualitative and quantitative research studies.
3. Design a poster that evidenced the results of the quantitative research. The poster must be written in English, very creative and visual (See **Appendixes F and G**).
4. Completion of Portfolio. The portfolio will include the essay, homework, journal analysis, quizzes, qualitative research, quantitative research and the following **Appendixes: H, I, J, K, L, M y N**.
5. Come prepared for the Oral presentation of the qualitative research. The oral presentation, must be creative and will need to incorporate the technology (See **Appendix C**).
6. Define: ethnographic studies, case studies, descriptive studies, phenomenological studies and grounded theory studies.
7. The students are going to explain the Mixed-Method Research Approach with a bubble map.

### **Activities:**

1. Introduction Activity: The facilitator will request the students to design a collage. The students will identify 10 concepts related to qualitative and quantitative research. The facilitator need to provide glue, markers and papers to the students.
2. The students will be presenting the definitions.
3. The facilitator will explain the Mixed-Method Research Approach. The students will have to divide in groups to design on hands experience for this method.

4. The students will read: Experimental Research and Design and complete the self assessment test.

<http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/5980/newpage2.htm>

5. The students will be doing their oral presentations of the qualitative research study.
6. The students are presenting the poster that evidenced the results of the quantitative research study.
7. Video: Qualitative vs. Quantitative

<http://www.youtube.com/watch?v=XbTcYBIGKyc&feature=PlayList&p=41C583652DE0DE0E&playnext=1&index=3>

8. Using text mapping the students are going to read: Designing Qualitative Research Projects

[http://web.mit.edu/anthropology/faculty\\_staff/silbey/pdf/49DesigningQuaRes.doc](http://web.mit.edu/anthropology/faculty_staff/silbey/pdf/49DesigningQuaRes.doc) and explain it using a drawing.

9. The students will be analyzing the results of a qualitative research and the conclusion process.

**Assessment:**

1. Design a motto or slogan that defines qualitative research.
2. Learning Diary: explain the credibility of doing qualitative research.
3. Written report rubric.
4. Class Participation Rubric.

## **Appendixes**

**Appendix A**

**RUBRIC TO EVALUATE CLASS PARTICIPATION**

NAME: \_\_\_\_\_ FINAL GRADE \_\_\_\_\_

DATE: \_\_\_\_\_

**a. Attendance and Punctuality: \_\_\_\_\_**

\_\_\_\_\_ **0**=Absent in 4 or more workshops or absent in 3 workshops and was late in 2 workshops

\_\_\_\_\_ **1**=Absent in 3 workshops or absent in 2 workshops and was late in 3 or more workshops

\_\_\_\_\_ **2**=Absent in 2 workshops or absent in 1 workshops and was late in 3 or more workshops

\_\_\_\_\_ **3**=Absent in 1 workshop or attended all workshops but was late in 3 workshops

\_\_\_\_\_ **4**=Attended all workshops but was late in 1 or 2 workshops

\_\_\_\_\_ **5**=Perfect attendance

**0-NOT OBSERVED 1-DEFICIENT 2-AVERAGE 3-GOOD 4-VERY GOOD  
5-EXCELLENT N/A- NOT APPLY**

<b>CRITERIA</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>N/A</b>
1. Contributes frequently to class discussion.							
2. Demonstrates interest in class discussion.							
3. Answers questions made by the facilitators and classmates.							
4. Asks questions pertinent to the class subject.							
5. Arrives prepared to class.							
6. Contributes to class with additional material and information.							
7. Presents arguments based on class lecture and work.							
8. Demonstrates attention and opening towards arguments from classmates.							
9. Answers questions and expositions from classmates.							
10. Demonstrates initiative and creativity in class activities.							

Please remember that if you are absent to class you cannot participate nor contribute to class.

**Comments:** \_\_\_\_\_

## Appendix B

### Qualitative Research Format

**Title:** Topic that has been chosen

**Introduction:** Include all the background information related to your topic. Additionally, need to state the origins, history and most important dates of your topic. The introduction section will be two pages long.

**Literature Review:** Include all the framework of the authors or researchers that describe your topic. Need to choose at least two major authors that write about your topic. Also, must have at least five references.

**Methodology:** What methods of gathering data is use in the process of literature investigation. For example: surveys, telephone polls, questionnaire, interviews and etc. This section is one page long.

**Results:** The results will include if the hypothesis had been proven or not with data form the literature review.

**Conclusion and Recommendations:** This section will include one reference that sustained your hypothesis and any recommendation.

**References:** All the references must be cited using the APA style. Every five sentences a cited must be included to avoid plagiarism.

**Appendixes:** Include any extra material to support your work.

**Appendix C****RUBRIC TO EVALUATE INDIVIDUAL/GROUP PRESENTATION**

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

<b>Criteria</b>	<b>Value Points</b>	<b>Student Total Score</b>
<b>Content</b>		
Performs an effective introduction to the theme identifying the objectives, ideas and principles that are included in the presentation.	10	
The presentation is organized and coherent, and could be easily followed	10	
The presenter demonstrates domain of the theme or subject by means of properly explaining content without incurring in errors	10	
The ideas and arguments of the presentation are well founded by the resources presented, consulted or discussed in class	10	
Capture of the attention and interest of the audience and/or promote their participation, as applicable	10	
Effective personal projection, corporal posture and manage of the audience;	10	
Uses a variety of speaking strategies to define concepts, interpretation, application and evaluation of processes using experience on concepts or content of class.	10	
<b>Language</b>		
Student pronounces words in a clear and correct manner so as to make the correct language used understood to others.	10	
Correct use of grammar and verb conjugation.	10	
Use of correct use of vocabulary words to express message.	10	
<b>Total Points</b>	<b>100 (70% of content and 30% of language)</b>	<b>Student's Total Score:</b> _____

Student's signature: \_\_\_\_\_ Facilitator's Signature: \_\_\_\_\_

**Appendix D****RUBRIC TO EVALUATE QUALITATIVE RESEARCH**Name \_\_\_\_\_ Course EDUC 505

Puntuation Total: \_\_\_\_\_

**0- Not done      1-2 Deficient      3-4 Regular      5-6 Good      7-8 Very Good      9-10 Excelent**

<b>CRITERIA</b>	<b>0</b>	<b>1-2</b>	<b>3-4</b>	<b>5-6</b>	<b>7-8</b>	<b>9-10</b>
The topic selected is educational.						
The problem is properly identified.						
Include all the research elements or parts.						
The objectives were satisfied.						
The ideas and arguments are properly presented.						
Recommendations are presented according to the results.						
The data analysis is included as part of the research.						
The hypothesis was clearly stated.						
The references were properly cited.						
<b>LANGUAGE CRITERIA</b>						
The ideas, sentences and language structure were adequate.						
Demonstrate logic and sequence of ideas.						
Citation is properly used.						
<b>Total</b>						

**Appendix E**

**RUBRIC TO EVALUATE QUANTITATIVE RESEARCH**

Nombre \_\_\_\_\_ Curso \_\_\_\_\_  
 Puntuacion Total: \_\_\_\_\_

**0- Not done      1-2 Deficient      3-4 Regular      5-6 Good      7-8 Very Good      9-10 Excelent**

CRITERIA	0	1-2	3-4	5-6	7-8	9-10
The problem was correctly identified.						
The hypothesis was clearly stated.						
All parts of a research are included.						
All ethical aspects are considered..						
The sample is measured.						
A correct number of participants is selected.						
Data is correctly analyzed.						
The conclusion provides for future research. .						
The research was completed in the right time frame.						
<b>Language Criteria</b>						
The ideas, sentences and language structure were adequate.						
Demonstrate logic and sequence of ideas.						
Citation is properly used.						
<b>Total</b>						

Comments:

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## **Appendix F**

### **FORMAT FOR Poster Design**

Note: The poster design need to display the following information in a creative and visual format. It may include only pictures, newspaper, comics, collage, drawing and combination of visual and text.

1. Date and Place
2. Topic
3. Participants
4. Hypothesis
5. Procedures
6. Conclusions

### **DESCRIPTION**

1. Date and Place – Who conducted the study? When and where was the study conducted? Dates?
2. Topic – Describe the topic of the study. What is the study about?
3. Participants - Describe the sample or population. How many participants were there.
4. Hypothesis – Was the hypothesis the best or can it be changed?
5. Procedures – Describe and evaluate the tests and procedures used in the study. How was the study conducted?
6. Conclusions – What are the results of the study? What conclusions did the researchers report based on the analysis and results of the data? Are there any recommendations for a future research in this topic?

## Appendix G

### Poster Rubric

Name/Group \_\_\_\_\_

Course: \_\_\_\_\_ Date: \_\_\_\_\_

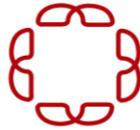
Criteria	Value Points	Student Score
	<b>Content</b>	
Student can accurately answer all questions related to facts in the poster and processes used to create the poster.	1.25 points	
Title can be read from 6 ft. away and is quite creative.	1.25 points	
Graphics are all in focus and the content easily viewed and identified from 6 ft. away.	1.25 points	
All items shown on the poster are highly relevant to the topic.	1.25 points	
The poster is exceptionally attractive in terms of design, layout, and neatness.	1.25 points	
All resources used in the elaboration of the poster were reliable scientific sources	1.25 points	
Capitalization and punctuation are correct throughout the poster.	1.25 points	
Poster presentation delivery is exceptional and unique with regular eye contact and no annoyances	1.25 points	
Total Points	_____	_____
	10 points	Total score: _____

Note: The score obtained by the student should be recorded as follows:

- Excellent: 1.25 points
- Good : 1.00 point
- Fair : 0.75 point
- Needs improvement:: 0.50 point

**Appendix H**

**PORTFOLIO INFORMATIONAL SHEET**



**Sistema Universitario Ana G. Méndez  
Metro Orlando Campus  
Universidad del Este, Universidad Metropolitana, Universidad del Turabo**

Check one:

- Universidad del Este
- Universidad Metropolitana
- Universidad del Turabo

Check one:

- Undergraduate
- Graduate

<b>Concentration</b>	
<b>Student's Name</b>	
<b>Facilitator's Name</b>	
<b>Course:</b>	
<b>Portfolio rated as</b>	
<b>Reason of this rate</b>	

## Appendix I: Log of Entries

Entry Description	Date of Entry	Date Submitted	Date Evaluated	Page #
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Appendix J: Reflection Process**

Directions: Please complete the following blanks:

This entry is an example of my strengths:

---

---

---

---

This entry is an example of an area I really need to improve:

---

---

---

---

This entry is an example of an area I have improved:

---

---

---

---

I think this exercise has been very helpful for my learning because:

---

---

---

---

---

---

## Appendix K - Self-Assessment

Dear Student: This form will assist you in monitoring your portfolio and determining the strengths and weaknesses of your writing

*Part I:* Read the statements below. Write the numbers that mostly honest reflects your self assessment (Scale 1-5: 5=strong, 4=moderately strong, 3=average, 2=moderately weak, 1=weak)

- \_\_\_\_\_ 1. My portfolio contains all of the items required by the facilitator.  
 \_\_\_\_\_ 2. My portfolio provides strong evidence of my improvement over the course.  
 \_\_\_\_\_ 3. My portfolio provides strong evidence of my ability to report factual information.  
 \_\_\_\_\_ 4. My portfolio provides strong evidence of my ability to write effectively.  
 \_\_\_\_\_ 5. My portfolio provides strong evidence of my ability to think and write creatively.

*Part II:* On the lines below, write the topic of each assignment. Rate your *effort* for each piece (5=strong effort, 1=weak effort). In the space below write one suggestion for improving that piece.

- \_\_\_\_\_ 1. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ 2. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ 3. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ 4. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ 5. \_\_\_\_\_  
 \_\_\_\_\_

*Part III:* In assessing my overall portfolio, I find it to be (check one)

Very satisfactory \_\_\_\_\_ Satisfactory \_\_\_\_\_  
 Somewhat satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

*Part IV:* In the space below list your goal for the next week and two strategies you plan to achieve it.

Goal: \_\_\_\_\_  
 Strategies:  
 1. \_\_\_\_\_  
 2. \_\_\_\_\_

## Appendix L

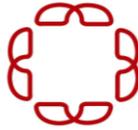
### Checklist for Portfolio Assessment

	Has the student set academic goals?
	Does the portfolio include enough entries in each area to make valid judgments?
	Does the portfolio include evidence of complex learning in realistic setting?
	Does the portfolio provide evidence of various types of student learning?
	Does the portfolio include students' self-evaluations and reflections on what was learned?
	Does the portfolio enable one to determine learning progress and current level of learning?
	Does the portfolio provide clear evidence of learning to users of the portfolio?
	Does the portfolio provide for student participation and responsibility?
	Does the portfolio present entries in a well-organized and useful manner?
	Does the portfolio include assessments based on clearly stated criteria of successful performance?
	Does the portfolio provide for greater interaction between instruction and assessment?

Adapted from:

Gronlund, N. E. (2003). *Assessment of student achievement*. 7<sup>th</sup> ed. Boston: Pearson Education, Inc.

## Appendix M Use and Return of Portfolio



**Sistema Universitario Ana G. Méndez**  
**Universidad del Este, Universidad Metropolitana, Universidad del Turabo**

I, \_\_\_\_\_, grant permission to the office of Assessment and Placement of the Ana G. Méndez University System, to keep in their records a copy of my portfolio. I understand that the portfolio is going to be used for accreditation or educational purposes only, and that is not going to be disclosed without my consent.

By signing this document I authorize the office of Assessment and Placement to keep a copy of my portfolio for six months and return it to me at the end of this period of time.

---

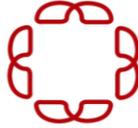
Student's Name (print)

Date

Student's Signature

Date

## Appendix N: Use and Discard of Portfolio



**Sistema Universitario Ana G. Méndez**  
**Universidad del Este, Universidad Metropolitana, Universidad del Turabo**

I, \_\_\_\_\_, grant permission to the office of Assessment and Placement of the Ana G. Méndez University System to keep in their records a copy of my portfolio. I understand that the portfolio is going to be used for accreditation or educational purposes only, and that is not going to be disclosed without my consent.

By signing this document I authorize the Office of Placement and Assessment to keep a copy of my portfolio for six months and discard it at the end of this period of time.

.

\_\_\_\_\_

\_\_\_\_\_

Student's Name (print)

**Appendix O****RUBRIC TO EVALUATE WRITTEN WORK**

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

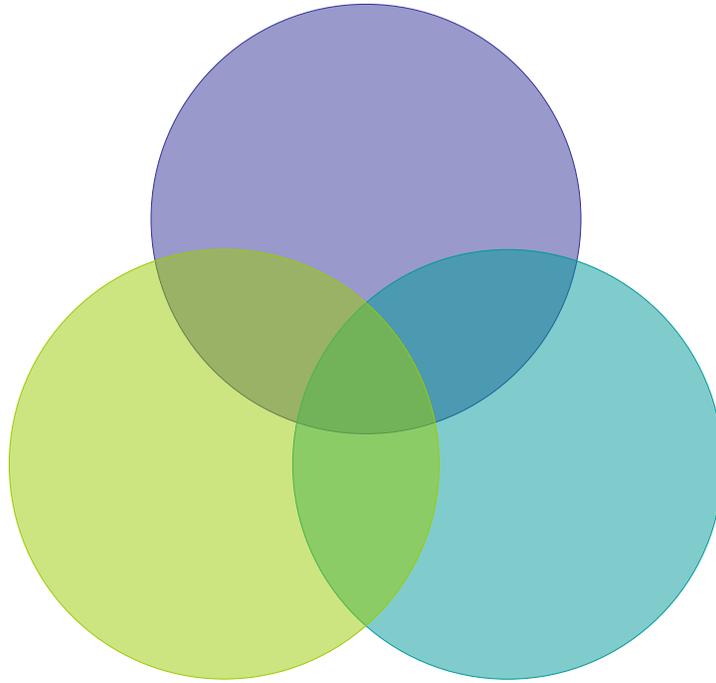
Date: \_\_\_\_\_

<b>Criteria</b>	<b>Value Points</b>	<b>Student Score</b>
<b>Content</b>		
The paper is clear, focused and interesting. Identifies purpose, objectives and principal ideas included in the paper	10	
Presentation of ideas is organized, coherent and can be easily followed	10	
The paper properly explains content.	10	
The presentation of ideas and arguments are based in sources presented, consulted or discussed in class.	10	
The paper demonstrates substance, logic and originality.	10	
The author presents his point of view in a clear, convincing and well based manner.	10	
Contains well-constructed sentences and paragraphs that facilitate lecture and comprehension.	10	
<b>Language</b>		
Demonstrate a command of standard English (vocabulary used, syntax and flow of ideas).	10	
Uses grammar appropriately and correctly.	10	
Manages and uses verbs appropriately and correctly.	10	
<b>Total Points</b>	<b>100 (70% content and 30% language)</b>	<b>Student's total Score:</b> _____

Student's Signature: \_\_\_\_\_ Facilitator's Signature: \_\_\_\_\_

## Appendix P

### Venn Diagram



## Appendix Q

### Reliability and Validity

#### *Validity and Reliability Compared*

So what is the relationship between validity and reliability? The two do not necessarily go hand-in-hand.

