

**Annual Progress Report on  
Assessment of Student Learning  
Narrative Format**

Academic year: 2006-07  
Department/Program: Kinesiology  
Degree program(s): **B.S. and B.A. in Kinesiology**  
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- 1. List the student learning outcomes that were assessed during the academic year, including those for which data were gathered as well as those for which developmental work was done, such as the creation or piloting of assessment measures.**

**SLO 1.** Ability to **comprehend, analyze, and interpret research** related to the biomechanical, physiological, behavioral, and sociological correlates of physical activity, fitness, and health.

**SLO 10.** Ability to **communicate effectively** both orally and in writing.

- 2. For each learning outcome, describe the measures used (over a three-year period approximately one-half of the measures used are to be direct measures, and at least one direct measure must be used for each student learning outcome), the sample of students from whom data were collected, the timetable for the collection, and the forum in which the measures were administered.**

**SLO 1** This learning outcome was assessed using direct measures consisting of a required term paper and 4 exams administered in KIN 310 Measurement and Research Techniques, a core course required of all majors with approximately 50 students enrolled each semester. Exam scores and term paper evaluations using an approved rubric were used as assessment criteria. Baseline data were established during the 2005-2006 academic year.

**SLO 10** This learning outcome was assessed using direct measures consisting of evaluations on term papers and oral presentations in 2 classes: (1) the aforementioned KIN 310 core class and (2) KIN 345 Physical Activity and Public Health, a core course required of all majors with approximately 50-80 students enrolled each semester. Approved rubrics were used in these evaluations.

- 3. Describe the results of the assessment. (What do they tell you about student learning? What did you learn about strengths and weaknesses of your program?) If specific results are not available, describe the progress that has been made on the initiatives included in the approved assessment plan.**

**SLO 1** This learning outcome was assessed in our core courses KIN 310.

**KIN 310: Comprehend, analyze, and interpret research**

Exams: Four 75 point exams were used to measure knowledge and comprehension of the different aspects of research and measurement

Exam 1: What is research, variables, hypothesis, theory	<b>Avg score 62/75 (83%)</b>
Exam 2: Sampling, experimental/non-experimental research	<b>Avg score 59/75 (79%)</b>
Exam 3: Descriptive statistics, correlations	<b>Avg score 67/75 (89%)</b>
Exam 4: Inferential statistics	<b>Avg score 62/75 (83%)</b>

Additional focus on integration of concepts into own lives and professions. Continued development of additional resources online to help students enhance understanding. Working on more comprehensive review of material, more applications in last two sections focused on basic statistical analysis. Future directions would include having access to computer software to run data analysis and writing conclusions based on analysis. Students are required to identify components of a research article in each test, and show improvement in the ability to read and comprehend research on the exams.

Critique of a research paper: Groups of 6-8 students completed the first three chapters of a thesis research project. These three chapters included an introduction, a literature review, and a methods section with a reference section. The paper was assessed on five concepts. **Avg Score: 61/75 (81%)**

APA style (15): (Superior 11-15 pts, Average 6-10 pts, Poor 0-5 pts)

Groups completed an initial draft of paper that was corrected by instructor. One focus area in the corrected draft was correct use of APA style in writing the paper including a running head, citations, and references. With this feedback, groups scored in the **Superior category (12.4/15; 83%)**. APA style was superior based on more access to resources provided, more emphasis in lessons, and feedback from instructor. Department is instituting policy to use plagiarism software in future, though that has not been prominent in these papers, more emphasis will be placed on recognition of resources and paraphrasing findings.

Introduction Chapter 1 (15): (Superior 11-15 pts, Average 6-10 pts, Poor 0-5 pts)

Students performed at a **Superior level (11.8/15; 78%)** on the Introduction. Future focus needs to be on writing clearer hypotheses and building a scientific case for research in Introduction. Even with repeated exposure to research articles, students still have trouble writing an adequate introduction. Students are reading more articles this year, and more time is being spent on the framework and structure of the article.

Review of Literature/Chapter 2 (15): (Superior 11-15 pts, Average 6-10 pts, Poor 0-5 pts)

Students scored at the **Superior level (11.9/15; 79%)** on this section of the paper. Students need more exposure to literature reviews and how to organize material into logical sections. Students still struggle with concept of organizing literature into logical sections. More emphasis on defining variables and addressing research in variables. More time being spent on sample literature reviews.

Methodology/Chapter 3 (15): (Superior 11-15 pts, Average 6-10 pts, Poor 0-5 pts)

Biggest issue in methodology is getting the idea of replication. With feedback, groups scored at **Superior level (12.5/15; 83%)**, but issue of replication of study needs to continue to be stresses. Still working on development of the research idea to the level where replication is possible. Students do an adequate job, but not at the level desired

Overall (15): (Superior 11-15 pts, Average 6-10 pts, Poor 0-5 pts)

Section looks at research question, depth of material, logic of research, and overall quality of proposal. Students work with instructor to develop question, so performance was at **Superior level (12.5/15; 83%)**. Overall papers this semester were weaker than expected. Overall experience for students, while beneficial, seemed to frustrate some individuals as they had to shoulder more of the work. Working on ways to help groups define responsibilities, but that is part of learning to work in a group setting. Future issues also

include working with library staff to provide more insights on securing research and reading research early in the semester

**SLO 1** This learning outcome was assessed in two of our core courses (KIN 310, KIN 345).

**KIN 310 Group Oral Presentation:** In groups of 6-8, students developed and presented a novel research study. This oral presentation was in the form of a powerpoint presentation that was assessed by peers and instructor. Each group had opportunity to get feedback prior to presentation on quality of material and structure of powerpoint. **Avg Score 67/75 (89%)**

Understanding of Material/Knowledge Content: (Superior 11-15, Average 6-10, Poor 0-5)  
Groups scored **Superior (13.5/15; 90%)** in this area on instructor feedback. Future courses need to emphasize even more the importance of reviewing literature in the development of the research question. Students were able to provide a good basis for research idea, did a nice job of integrating previous research, though some sources were not as appropriate as could have been.

Methodology: (Superior 11-15, Average 6-10, Poor 0-5)  
Groups scored **Superior (12.4/15; 83%)** in this area based on instructor feedback. One issue to emphasize is the concept of replication. Additional time spent examining research and evaluating how thorough the methods are and if they are replicable. Biggest issue is validity of measurements and replication of research. Ideas not as well fleshed out as possible given the amount of feedback provided, even on the slides prior to presentation

Professionalism: (Superior 7-10, Average 4-6, Poor 0-3)  
Groups scored **Superior (9.5/10; 95%)** in this area. Student presentations were practiced ahead of time and effort was put into powerpoint presentations. One area of emphasis may include additional resources related to professional presentations. Students were organized and provided a mostly professional approach. Practice sessions ahead of time and feedback on information seemed to be beneficial

Explanations: (Superior 8-10, Average 6, Poor 0-4)  
Groups scored **Superior (8.8; 88%)** in this area. Students gave thoughtful responses to questions posed by instructor and peers. May in future have students brainstorm a list of possible questions prior to presentation to help them think like the audience. Since methods were weaker in some presentations, the ability to explain choices and flaws in research was limited.

Overall presentations stayed at an above average level. Again the group issues were the biggest factor this semester. Future approaches may include more group team-building type activities, and continued within group evaluations.

Student evaluation totals (20 points) scores: 16, 18, 18, 18, 17, 17, 19, 18

### **KIN 345: Written competency: Physical Activity and Chronic Disease Epidemiology Paper**

#### **Description**

On the first day of class students are assigned this paper to ensure they have adequate time for preparation and research. Students select from a list of chronic diseases (e.g. heart disease, diabetes) and were expected to prepare a paper that was a synthesis of current research from a variety of sources. They reported on the incidence of the disease, risk factors, pathology and treatment. The second half of

the paper required students to use knowledge learned in class from epidemiological studies showing how physical activity can help in the prevention of the chronic disease, including proposed mechanisms and dose-response issues.

### **Activities designed to help the student achieve written competency**

1. In class lectures from English department staff on preparing a scientific literature review
2. Laboratory activities with Library staff on using databases, RefWorks
3. Peer review of rough draft of paper
4. Instructor review of 2<sup>nd</sup> draft of paper
5. Laboratory assignments for APA style referencing (Fall 07)
6. Required tutorial on preventing plagiarism
7. Laboratory assignments for paraphrasing and critical reading skills

### **Assessment**

Student scores for Paper

Spring 2007 (48 students)     **15.99/20 (80%)**

Summer 2007 (40 students)   **14.32/20 (77.6%)**

Fall 2007 (74 students)       **15.90/20 (79.5%)**

### **Comments on the paper writing process from student evaluations**

“I thought the writing process was highly effective. The process allowed students to not be overwhelmed by deadlines and gave us a chance to write our papers in a timely manner.”

“ I really liked how we were able to turn it in twice for revisions. This helped me to get most of my paper done early and there wasn't a lot to do for my final draft.”

“The APA style information provided online was a great help and the teacher provided great feedback to help keep the paper on track and in the correct format.”

“I thought the assignment where we had to do the references was really helpful to help us learn the correct way to do our reference page.”

“I think having the librarian come in and teach us how to search for research articles was helpful.”

“I thought the process was great. I never felt overwhelmed and all the feedback I got really helped me for my final draft. I really enjoyed the research and learned a lot about my subject.”

**Oral competency:** Walking Assessment and Presentation

### **Description**

The second half of KIN 345 covers influences on physical activity and physical activity promotion. A substantial portion of class time is devoted to the impact of the built environment on physical activity. The students conduct a “walkability” assessment of a location of their choosing using an audit tool. The students were then expected to synthesize the results of their assessment based on known influences on physical activity as learned in class, summarize in a written report and present their findings to their classmates in a brief presentation.

### **Activities designed to help the student to achieve oral competency**

1. Students are shown a video of assessing the “walkability” of an area
2. A field trip to locations in Manhattan (e.g. Aggieville or Poyntz Ave.) using evidence based audit tools help the students apply knowledge from the classroom to real-world settings.

### **Assessment**

Scores for Walking Assessment (includes written and oral portions)

Spring 2007 (48 students)    **13.9/15 (93.5%)**  
Summer 2007 (40 students)   **14.1/15 (94%)**  
Fall 2007 (48 students)       **13.3/15 (89%)**

Our initial assessment plan included provisions for identifying two additional SLOs for assessment in subsequent years. Our faculty has recently identified the following SLOs as additions to those that were identified initially:

**SLO 4.** Ability to know and comprehend the impact of physical inactivity on fitness and health in a societal context.

**SLO 11.** Ability to retrieve and manage information effectively in the examination and communication of problems and issues related to physical activity, fitness, and health.

Specific assessment activities are in the process of development.

**4. Describe the process by which faculty reviewed the results and decided on the actions and/or revisions that were indicated by them.**

All results from tools related to each specific course (KIN 310, KIN 345) were tabulated and summarized by the faculty involved in delivery of the course. The chairman of the curriculum committee compiled these summaries and placed them in a file along and other assessment tools not directly associated with a specific course. All members of the curriculum committee as well as instructors of all courses involving objectives related to the SLOs being assessed reviewed these files. The course instructors will consider modifications in course content and instructional methods that are indicated from the assessment results. Also, the curriculum committee will consider both course and curriculum modifications that are appropriate after reviewing and considering the assessment results. All recommendations for curriculum and course change will be presented to the entire faculty for consideration. Recommendations for modifications in courses or curricula beyond the department level will be presented to the college curriculum committee.

**5. Describe the actions and/or revisions that were (or will be) implemented in response to the assessment results.**

The current approach to delivering KIN 310 and KIN 345 will be evaluated next year and compared to baseline data and appropriate actions will be taken at that time.

**6. When reporting on second and subsequent years, describe the effects on student learning of the previous year's actions.**

Due to recent hiring of new faculty, and reassignment of instructional responsibilities, the faculty in Kinesiology will be examining the undergraduate curriculum over the spring and fall 2008 semesters. As part of this review, we will also examine the current undergraduate SLOs and uphold and/or modify them as it makes sense during this process. In addition, a timetable will be developed which identifies when each of the graduate SLOs will be assessed and in which course(s) will the assessment be conducted.