

# DRAFT

College of Human Ecology  
Student Learning Outcome Report  
Academic year: 2004-05  
Date: 1/16/06

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Academic year: 2004-05  
Department/Program: Apparel, Textiles, and Interior Design  
Degree program: B.S. Apparel and Textiles  
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Date submitted: January 27, 2006.

*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.*

**I.C. Textiles and Materials Knowledge: Students will demonstrate the ability to apply textile knowledge in selecting, developing and evaluating products.**

**Specific student learning outcome:** Upon completion of AT 265 Textiles, students will be able to:

- Identify generic fibers, yarn structures, fabric structures (including carpet), finishes, and methods of coloration.

**I.D. Apparel Product Development Knowledge: Students will demonstrate knowledge of product development from idea development through production, relative to cost requirements, aesthetic and functional requirements, production, and market needs.**

**I. F. Apparel Product Evaluation Knowledge: Students will demonstrate an ability to evaluate apparel product quality and serviceability from the standpoint of materials and construction performance, product standards and specifications, and cost.**

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

**I.C. Textiles and Materials Knowledge:**

This SLO was assessed in Spring 2005 in AT 265 Textiles where 77 students were enrolled. The fiber identification part of the SLO was measured on the unknown fibers lab test where each student was given

an envelope containing three white pieces of fabric. The students then conducted experiments to determine the fiber content of each fabric sample. Nine fiber types were each given three code numbers and were randomized among the student envelopes in sets of three (27 possible coded fabrics). Each student received at least one natural fiber sample and at least one manufactured fiber in their envelope. The third sample could be either type. The identification of each fiber type was worth 4 points, and the entire lab test was worth 12 points (out of 100 possible on all the labs).

The other components of the SLO were measured with 77 of the 125 questions on the final exam. A packet of yarn, fabric, and carpet samples was given to each student with their exam. The students were asked to identify the name, structure, method of coloration, and/or finish on the samples. Some of the questions were in matching format and others were in multiple choice format. Subtotals for these questions were calculated for each of the students in the class.

#### **I.D. Apparel Product Development Knowledge:**

This SLO was assessed beginning in Spring 2005 in AT 645: Private Label Product Development. The SLO was assessed as part of the evaluation of each project and was measured in the following way: The work builds on previous project's work and eases synthesis with future projects. Important knowledge addressed in earlier projects is taken into consideration or new information is highlighted for future consideration. (poor, good, excellent)

This counted as 10% of each project grade and was recorded on the evaluation sheets for each group. These results will be compared to those of the approx. 20-30 students in the Spring 2006 and Spring 2007 sections of the same course.

#### **I. F. Apparel Product Evaluation Knowledge:**

This SLO was assessed beginning in Spring 2005 in AT 460: Apparel and Textile Evaluation. Thirty-seven Apparel and Textile juniors and seniors in the spring section of AT460 were assessed through a combined method of laboratory scores (direct), exam scores (direct), and evaluation project scores (direct). These results will be compared to those of the approx. 50-80 students in the Fall 2006 and Fall 2007 sections of the same course.

*3. Describe the results of the assessment. (What did you learn? What is working well? Where are improvements needed?) If specific results are not available, describe the progress that has been made on the initiatives included in the approved assessment plan.*

#### **I.C. Textiles and Materials Knowledge:**

**Table 1: Textiles and Materials Knowledge:**

<b>Percent of 77 students scoring</b>	<b>90-100% (A)</b>	<b>80-89% (B)</b>	<b>70-79% (C)</b>	<b>60-69% (D)</b>	<b>Below 60% (F)</b>		
<b>Fiber ID</b>	46%	23%	13%	1%	17%		
<b>Yarn/Fabric/Carpet ID</b>	36%	48%	16%	----	-----		

**Fiber Identification.** The results indicated that out of a possible 12 points, the highest score was 12, the lowest score was 2.5, and the mean score was 9.8. Thus, 82% of the students scored 70% or higher on the test, and the departmental criteria of 75% of the students scoring 70% or higher was met.

**Yarn, Fabric, and Carpet Identification.** The results indicated that out of a possible 77 points, the highest score was 76, the lowest score was 56, and the mean score was 67.2. Thus, 100% of the students scored 70% or higher on the selected test questions, and the departmental criteria of 75% of the students scoring 70% or higher was met.

#### **I.D. Apparel Product Development Knowledge**

All students achieved average grades of 70% or higher on this portion of the assignments.

#### **I. F. Apparel Product Evaluation Knowledge:**

**Table II: Apparel Product Evaluation Knowledge:**

<b>Percent of 37 students scoring</b>	<b>90-100% (A)</b>	<b>80-89% (B)</b>	<b>70-79% (C)</b>	<b>60-69% (D)</b>	<b>Below 60% (F)</b>
<b>Laboratory</b>	78%	15%	5%	2%	0%
<b>Exam</b>	17%	44%	28%	9%	2%
<b>Evaluation Project</b>	51%	38%	7%	4%	0%

The mean laboratory score was 146 out of 150 points, with a standard deviation of 7 points, a minimum of 117 and a maximum of 150. Because the laboratory scores are assessing the completion of worksheets related to the laboratory activities during each lab session, this measure, while direct, assesses effort related to the laboratory portion of the course. Students are given all the time needed to successfully complete the activities. When the textile testing portions of the laboratory were taught as a separate course, the students were required to take a laboratory practicum that assessed their ability to complete a selected assessment task in a specific period of time. This type of practicum may be a better method of assessing hands on evaluation abilities than the 2-page lab report currently required for the course.

The mean exam score was 83 out of 100 points, with a standard deviation of 10 points, a minimum of 51 points and a maximum of 98 points. A target mean score of 82 has been used to calibrate the difficulty of the exams over the past 3 semesters the course has been taught. The exams appear to be assessing this student learning outcome well. The item percentages are monitored to ensure a good mix of questions and this should be continued from semester to semester, as well as the practice of re-evaluating each exam to keep the exam material closely tied to the materials presented in lecture during any given semester.

The mean evaluation project score was 97 out of 110, with a standard deviation of 8, a minimum of 73 and a maximum of 106. The evaluation project is a team project developed during the semester and evaluated during the last week of class. The project successfully brings together the theoretical and practical elements of the course. Allowing students the opportunity for feedback and revision of key elements of the project allows them to assimilate group input in a manner consistent with occupational expectations. The written portion of the project remains the area where improvements are most needed. Perhaps incorporating more written assignments into the laboratory activities would improve students' technical writing skills.

Overall, the student learning outcomes met the stated criteria of 75% of students earning 70% or higher.

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

#### **I.C. Textiles and Materials Knowledge:**

Faculty reviewed the results of the assessment at an Apparel and Textiles Group meeting on January 19, 2006, approved this report, and determined that no changes in instructional methods needed to be made.

#### **I.D. Apparel Product Development Knowledge:**

No actions were taken as data was not provided.

#### **I. F. Apparel Product Evaluation Knowledge:**

Team discussions of the course at the end of each of the previous two semesters, including the GTA currently teaching the course, have been used to create new assessment measures and refine those brought in from previous formats of the course. This decision was confirmed in the AT faculty meeting on January 19, 2006.

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

#### **I.C. Textiles and Materials Knowledge:**

**Fiber Identification.** Although the majority of students passed the lab, 17% failed it. The students had the most difficulty getting the fibers in focus under high power on the microscope. The instructor plans to check every student's slides during the first two labs on samples of known fiber content to make sure that they are really learning this skill and not depending upon their lab partner for help. Hopefully, this tactic will improve performance when they have to conduct experiments alone.

**Yarn, Fabric, and Carpet Identification.** The instructor will continue to organize and update all of the learning materials used in this course. Specifically, the samples of yarns, fabrics, and carpets are provided for students to study in the:

- lab stations
- student's lab book
- classroom hang file (samples are passed around)
- digital photographs on K-State Online
- 15 large notebooks and 2 boxes of carpet samples on reserve in Hale Library
- a practice lab final with a packet of fabric swatches

#### **I.D. Apparel Product Development Knowledge:**

Since, Dr. Dickson left the Department/University at the end of Spring semester 2005, there were no actions or revisions provided.

#### **I. F. Apparel Product Evaluation Knowledge:**

A stronger focus will be placed on relating materials presented during the lecture to the activities performed in the lab. The current lab handbook and worksheets will be reviewed for possible revisions to allow for improvements in assessing lab related outcomes. Individual exam questions will continue to be evaluated for ability to assess at the appropriate level of difficulty and the bank of proven exam questions will be slowly expanded.

6. In second and subsequent years (2005-06, 2006-07, 2007-08, etc., respectively), describe the effects on student learning of the previous year's actions.

NA yet.