Design and Human Environment
Oregon State University
Regularly scheduled Academic Program Review of the Department

Jana Hawley, Elizabeth Missy Bye, Susan Sokolowski, Tom Wolpert, Theresa Filtz, Adry Clark, Sara Jameson
4/6/2011
# Table of Contents

Executive Summary .......................................................... 3  
Introduction ................................................................. 8  
Inputs ................................................................. 8  
  • Fit of the Mission.................................................. 8  
  • Quality of Students and Admissions Selectivity........... 9  
  • Level of Financial Support................................. 11  
  • Curriculum Strength.......................................... 12  
  • Level and Quality of Faculty and Adequacy to Achieve Mission and Goals .......................... 14  
  • Level and Quality of Infrastructure...................... 15  
  • Level and Quality of Organizational Support........... 17  
Productivity ................................................................. 17  
  • Level and Quality of Students............................ 17  
  • Viability of Scholarly Community......................... 19  
Outcomes ................................................................. 19  
  • Professional Viability of Graduates..................... 19  
  • Satisfaction of Students................................. 20  
  • Rankings.................................................. 22
Executive Summary
Review of Design and Human Environment
Oregon State University
April 2011

The Design and Human Environment department has many strengths including hard-working faculty that are committed to a student-centered educational experience. Several key strengths include the fact that DHE is the only Ph.D. program west of the Rocky Mountains, it is located in the center of a vast outdoor apparel industry, and it is in transition to a new academic home providing opportunity to realign itself as a School of Design and Human Environment with special focus on design and consumer behavior. Not surprisingly, reviewers from academia and from industry approached the review from somewhat different perspectives, regarding, for example, overall aspirations for the program, especially regarding curriculum, competitive ranking of programs, and preparation of graduates for working in today’s fast-paced design industry.

Currently DHE has a strong national reputation for its traditional broad-based textile, apparel, and interior design program. However, to transition to a School of Design and Human Environment, the Review Committee strongly suggests that a strategic plan be written that includes goal setting, benchmarking, and implementation plans that would better position the School to be a top-rated program. Important to this strategic plan is a focus on WHAT DHE wants to be—a design school or a strong broad-based program that includes design, merchandising, interior design, consumer behavior, and social aspects of design and human environment. Regardless, because of the vast outdoor apparel and sports industry located in the area, it would be strategic to revise the curriculum to better prepare students so they are competitive with the job opportunities in the area. At the same time, it is important to understand that not all students will remain in the Pacific Northwest; therefore a broad-based approach can prepare students for the vast opportunities across the nation and globally.

The Review Committee concludes that in order for DHE to become more design focused, attention must be given to the curriculum and the admissions process. Yet, without a strategic plan with a plan for implementation and goal-setting, it is unclear whether DHE wants to be a “design school” or, instead, provide a strong yet broad-based design, merchandising, interior design, and housing program. An assessment of current faculty strengths as compared to a strategic plan of what would be required to be a top-rated Design and Human Environment program needs to occur. As DHE evolves the curriculum, it should continue to build inter-departmental alliances in departments where students can take supporting courses.

Currently, the faculty has a diverse range of expertise; yet only a few faculty have the necessary design background to prepare students in the competitive field of apparel and interior design. According to the DHE program review documents provided by the Department, academic freedom is strongly supported (p. 8). Yet it is generally maintained that the reputation of university programs is supported by faculty that conduct research aligned with the strategic goals of the program. Should ‘design’ be the intent of the new school, much attention needs to be given to building a curriculum, research programs, selective admissions plan, and infrastructure including modern studios and technology support. This may require that some faculty be re-trained with a stronger focus on design;
and research would need to focus on strategic initiatives of the school. As new faculty is hired, it will be critical that the new hires meet the strategic goals of the revised program.

It is recommended that DHE implement a portfolio review as part of the selection process for admittance to the program and that a target date is set to execute this review process sooner rather than later. It is also suggested that DHE identify who their peer institutions are, and conduct a critical review of their programs so that the curriculum at DHE can evolve into a program that stands out among their peers and develops strong DHE graduates. Being mindful that the majority of companies in the Pacific Northwest are outdoor apparel companies, it is critical to seek advice from these industry partners to be able to prepare students for the wide variety of career options at these unique companies. To do this, it is recommended that a critical analysis is made of faculty strengths and a plan is implemented to hire additional faculty that would enhance the revised curriculum.

The Department of Design and Human Environment is challenged with the required relocation to a new ‘home’; yet this challenge can also be seen as an opportunity to evolve the program to become even stronger and more closely aligned with needs of industry. The Review Committee encourages DHE to develop a strategic plan that will create a strong place in their new academic home.

Our detailed report follows a summary of strengths and recommendations below.

Comments on the Review Process

The Review Committee would like to mention that the internal review process could have been better. The self-study data requested were (mostly) provided, with the exception of the Graduate School exit survey. However, there was very little analysis and evaluation of the data. A list of thesis titles does not address program outcomes, for example. Further, the Department did not provide a list of goals for the future. The trends and forecasts section was exactly that, a discussion of trends, not a thoughtful evaluation of future opportunities and threats. Goal setting with timelines and benchmarks was missing. Strategic planning is not evident. Overall, the self-study report did not present evidence of critical self-reflection amongst the faculty. They have high aspirations but no evidence of concrete plans to achieve them.

Overview of strengths and recommendations:

Strengths

- Dedicated but over-extended faculty
- Location
- Strong vision but lacking strategic plan to get there
- Broad-based program that meets the mission of the land-grant university
- Internationally recognized faculty with reputations in consumer behavior, functional design, housing, and history.

Overall Recommendation

- The Committee recommends that the DHE Graduate Program be maintained and improved.
- As DHE transitions to a new home, the mission will need to be revisited to make sure it meets the mission of the newly associated College and the strategic direction of DHE.
The Review Committee strongly suggests that a strategic plan be put in place that outlines the path to accomplish the new direction for the School of Design and Human Environment. The remaining recommendations below then follow from the assumption that the Department will be working with a revitalized strategic plan.

**Detailed Recommendations**

**1) Quality of Students and Admissions Selectivity**

**Undergraduate Program:**
- To be a leading undergraduate design program, DHE must change its student quality through its admissions process. It is highly recommended that potential students submit a portfolio or entrance project with their application. If help were needed in developing that requirement, external industry and academic partners would be more than happy to help facilitate expectations.
- It is also recommended that a team of DHE faculty and external advisors manage the admissions process, as the current staff in DHE is not strong enough in modern-day portfolio development and evaluation. Last, DHE should be more selective and focus only on the best student applicants, by reducing its acceptance rate.

**Graduate Program:**
- To be a leading Graduate Program, DHE must focus on recruiting top graduate students to their program. It is suggested that students interested in the design area should submit a portfolio or entrance project with their application for assessment. DHE could call on external industry and academic partners to assist with the portfolio development and review process.
- DHE faculty also need to focus tightly on research disciplines that are relevant to the newly developed strategic plan. Graduate students must be admitted that support the faculty’s research areas while at the same time build the reputation of the program. Strong, focused recruitment efforts will hone the Graduate Program to be highly effective, efficient, and reputation-building.

**2) Level of Financial Support**

**Undergraduate**
- The level of financial support should be increased so that there are enough faculty to meet the program needs. Supplemental fees and outside funding are sought to help support these efforts.

**Graduate**
- The review recommends that the Graduate Program be maintained with current funding for assistantships.

**3) Curriculum Strength**

**Undergraduate**
- As DHE repositions into a different academic “home”, it must critically analyze the curriculum to best meet the new strategic plan AND the general philosophy of the college for which it is associated.
- If DHE decides to focus on “design,” careful attention to how the design industry has exponentially changed in the past 15 years will be critical. Regardless of whether DHE
decides to become a “design” school or an iteration of its current program, all curriculum must evolve to meet the changing needs of society.

- If DHE aspires to be a leading School of Design and Human Environment with a focus in Functional Design and Consumer Behavior, then it must evolve from its current course offerings to one that best matches the revised mission and strategic plan. Attention should be paid to industry and society needs to make sure several key areas of study are offered or required from other programs across campus. For example, for functional design, necessary courses might include mechanical drawing, rendering, 3D, human factors/ergonomics/anthropometry/anatomy, design process/methodology, graphic design, ideation, mandatory design internships, consumer psychology and perception, textile science classes with attention to performance fabrics, business development, entrepreneurship & innovation, display/presentation design and modern day portfolio development. Many of these courses can be found in programs across campus, so it will be important to partner with strategic inter-departmental alliances.

Graduate

- The graduate curriculum in DHE must evolve to meet the revised strategic goals and mission of DHE. An analysis of the curriculum as it aligns with the strategic plan and the philosophies of the newly aligned college will be necessary. In the context of developing a detailed strategic plan, it will be important to determine whether the program desires that the majority of its graduate students will become academics or work for industry. Curriculum will need to provide adequate courses to meet these graduation/placement goals.

4) Level and Quality of Faculty and Adequacy to Achieve Mission and Goals

- New faculty hires should be focused on the needs arising from the revised strategic plan. Faculty should conduct research in areas that enhance the reputation of a top Graduate Program. It is recommended that creative scholarship be embraced to increase the stature of the program.

5) Level and Quality of Infrastructure

- The Department needs to raise funds to enhance technology. From computers to laboratory to studio equipment, it is important to provide up-to-date technology for both student learning environments and research purposes.

6) Level and Quality of Organizational Support

- The Department also needs to strongly consider budgeting dollars for computer and equipment upgrades, bringing in external speakers a few times a year (which may not cost much given the concentration of textile industry in Portland), and providing faculty travel funds to defray travel expenses for conferences. These funds may need to come at the expense of a GTA. However, the department should consider submitting for University RERF funds for equipment or appealing to donors.

7) Level and quality of students

Undergraduate

- Per the discussion in the curriculum section, the Undergraduate Program needs to be redeveloped so students can focus on a specific subject matter and learn up-to-date skills that will allow them to be more competitive in the job market upon graduation. Careful attention
must be made to hire the right product Design Faculty who understand the Design industry and its modern-day requirements to succeed.

**Graduate**

- A required graduate seminar needs to be developed that would prepare graduate students on proper format for academic presentations and how to write papers for publication. The seminar series could also be in conjunction with outside industry/research speakers, so students could interface and network with professionals. Graduate students should be strongly encouraged to submit work for publication and to presentations at national/international conferences such as International Conferences related to their area of expertise such as International Textile and Apparel Association; Costume Society; or Surface Design Association.
- DHE should consider as a goal that their graduate students and research be increasingly funded by local industry. To do that, the Graduate Program focus must change to reflect what is really going on in the local industry. Portland, Oregon is known as the Sports Design Product capital of the world, and companies continuously relocate their headquarters to Portland so they can acquire the best talent and create the most innovative products.
- One reviewer advised that DHE immediately re-focus key research so it is relevant to apparel/interior end uses. For example, if textile sustainability is important in the sports apparel industry – the research could be re-focused and better aligned, i.e., find a new recyclable spandex.

8) **Viability of the Scholarly Community**

- The Department should start a seminar program with external speakers every year. Utilize local (i.e. Portland) industry and/or the advisory board as a source of speakers or revenue to support speakers. Be clearer with graduate students regarding the importance of publishing, grant writing, and contracts with industry.

9) **Satisfaction of Students**

**Undergraduate**

- To increase the needs of Undergraduates, a stronger emphasis should be placed on technology across the curriculum. This includes both hardware updates and curriculum that teaches important software functions for both Interior Design and apparel-related applications. For faculty to gain industry experience, it is suggested that faculty development time is provided for faculty internships.

**Graduate**

- First, the Department needs to look at the Graduate School’s exit survey data and provide their own analysis.
- Second, although it is wonderful that the graduate students in the program feel supported and well mentored, there is concern that the students are perhaps a bit too satisfied. Are they being pushed outside of their comfort zones in terms of thinking about design, being creative with materials, or pursuing industry and grant funding? Students who are pushed beyond their comfort zone often rise to the occasion and are able to produce good results.
Introduction

The purpose of this regularly scheduled undergraduate/graduate review of the Department of Design and Human Environment (DHE) at Oregon State University is to recognize and document the program’s strengths and weaknesses and make recommendations for improvements that will enhance academic excellence. With forthcoming changes in the College structure and with the University-wide realignments, Design and Human Environment seeks a new academic home via the proposed creation of a School of Design and Human Environment. The Department and its programs have been evolving in order to meet these challenges and take advantage of the subsequent opportunities. Recommendations from this review are intended to guide DHE during this transitional process. All members of the Review Committee were involved in the entire process. Specifically, observations of the Undergraduate Program were conducted on February 2, 2011 by Elizabeth Bye, Adry Clark, Gary Beach, and Sara Jameson. Review and documentation of the Graduate Program were conducted by Jana Hawley, Susan Sokolowski, Theresa Filtz, and Tom Wolpert. Martin Fisk observed the graduate program review.

Design and Human Environment

Graduate and Undergraduate Program Reviewers

Jana Hawley
Professor and Department Chair
Textile and Apparel Management
University of Missouri

Susan Sokolowski
Senior Innovation Manager
Apparel Innovation
NIKE, Inc.

Elizabeth Bye
Associate Professor and Program Director
Apparel Design Program
Department of Design, Housing, and Apparel
University of Minnesota

Sara Jameson
Senior Instructor
English Department
Oregon State University

Theresa Filtz
Associate Professor
College of Pharmacy
Oregon State University

Adry Clark
Assistant Director
Career Services
Oregon State University

Thomas Wolpert
Professor
Botany and Plant Pathology
Oregon State University
The report of the Review Committee follows, with recommendations, in these sections:

Inputs:
- Fit of the Mission
- Quality of Students and Admissions Selectivity – Undergraduate and Graduate
- Level of Financial Support – Undergraduate and Graduate
- Curriculum Strength – Undergraduate and Graduate
- Level and Quality of Faculty and Adequacy to Achieve Mission and Goals
  - Number of Personnel, Faculty/Student Ratio, and Workload
  - Productivity of Personnel
  - Student Focus
- Level and Quality of Infrastructure
- Level and Quality of Organizational Support

Productivity:
- Level and Quality of Students – Undergraduate and Graduate
- Viability of the Scholarly Community

Outcomes:
- Professional Viability of Graduates – Undergraduate and Graduate
- Satisfaction of Students – Undergraduate and Graduate
- Rankings

Inputs

Fit of the Mission

Design and Human Environment has developed a mission that aligns well with the mission and goals of the College of Health and Human Services and the University. The Department practices their mission with attention to teaching, scholarship and service with the purpose of improving the lives of people and their designed environments. DHE approaches their curriculum and scholarship interests with a solid understanding of their multi-disciplinary approach and aligns their programs with strategic initiatives held by the College and University.

Recommendations:
As DHE transitions to a new home, the mission will need to be revisited to make sure it meets the mission of the newly associated College and the strategic direction of DHE. The Review Committee suggests that a strategic plan be put in place that outlines the path to accomplish the new direction for the School of Design and Human Environment.

Quality of Students and Admissions Selectivity

Undergraduate Program:
Evaluation:
Top ranked undergraduate design programs in the United States are known for their competitive and selective admissions process, including a portfolio review prior to acceptance. Some schools, such as the Fashion Institute of Technology (FIT) in New York City also require a panel interview with faculty, along with sewing and art tests prior to acceptance. The Fashion Institute of Design and
Merchandising (FIDM) in Los Angeles has an “entrance project” (even potential merchandising students partake) to which all perspective students must submit with their application. These additional admission requirements provide a more accurate picture of the applicant, their energy towards the program, and their creative potential.

By contrast, currently, DHE has traditional admissions criterion for undergraduates (3.35 GPA, average SAT 1473). The GPA is right at the national average, but slightly below the University and peer institution average. In contrast, the average SAT score is 31% higher than the national pool and 27% higher than University average. The admission rate is also higher than that of peer institutions. This presents a student who is well prepared for university studies.

But the Department does not evaluate potential undergraduate students for their design or creativity skills. By accepting students based only upon their scholastic abilities, DHE is not setting itself up to be a competitive design program in the United States. In addition, DHE admits a very high percentage of applicants to the pre-professional lower division courses- 88% - whereas schools such as the University of Cincinnati’s College of Design, Architecture, Art, and Planning (DAAP) are more selective, only admitting 52% and Otis College of Art and Design in Los Angeles admitting 50% of all applicants. As a result of high acceptance rate of undergraduate majors and without basing acceptance on creative potential, the average quality of undergraduates in the DHE program is bound to be lower than at more selective schools. This can be attributed to the quality of the cohort – “raising the bar” and pushing/competing with each other, which separates the serious from those without the drive and dedication.

The DHE professional programs in Apparel Design and Interior Design admit 72% of applicants to the upper level courses, with an average of 50 Apparel Design and 36 Interior Design students. Criteria include completion of 45 credit hours with a minimum GPA of 2.4. Students are ranked by GPA and accepted based on faculty and their availability.

In addition to selectivity based on grades, the faculty plans to introduce a portfolio review as part of the application process. The Committee strongly supports this decision; however, there is no target date. GPA is one indicator of potential for success in the design field, and the addition of a portfolio review will allow faculty to review the design thinking and creative abilities of students as well. This should result in a stronger cohort of designers who have the holistic qualities to succeed professionally. The number of students accepted currently results in a student/faculty ratio of 76 to 1, for students to TT faculty, which exceeds a strong student to faculty ratio that is needed to advance in a studio-based curriculum. Studio environments are typically held at approximately 18-20 students based on time and space requirements. A higher standard for acceptance that will result in a reduction of student enrollment, and/or adding faculty, are suggested to improve ratios and quality of personal attention for maximum student learning.

The average matriculated GPA of DHE students is slightly higher than the University’s and DHE failure/suspension rate is about third of the University’s. When compared to peer institutions, the Department compares favorably in matriculation.

Recommendations:
- To be a leading undergraduate design program, DHE must change its student quality through its admissions process. It is highly recommended that potential students submit a portfolio or
entrance project with their application. If help were needed in developing that requirement, external industry and academic partners would be more than happy to help facilitate expectations.

- It is also recommended that a team of DHE faculty and external advisors manage the admissions process, as the current staff in DHE is not strong enough in modern-day portfolio development and evaluation. Last, DHE should be more selective and focus only on the best student applicants, by reducing its acceptance rate.

**Graduate Program:**

**Evaluation:**

As commented above, DHE does not evaluate potential undergraduate students for their design or creativity skills. This is also true at the graduate level where it is even more essential that incoming students have high potential for professional productivity, including scholarship and teaching. At the Graduate level, students should be able to demonstrate a passion for their area of study and communicate why they want to be in the DHE Graduate Program at OSU before being accepted.

The PhD program in DHE started in 1993, and the masters program is 7 years old, with students studying a wide range of disciplines including: Culture, History, Design, Human Behavior, Merchandising and Applied Textiles for Near Environments. This broad-based program compares positively to similar programs at peer land-grant institutions. However, the department lacks enough design focus to develop a strong point of difference and make OSU’s DHE stand apart in the Design community. One might even argue that the DHE Graduate Program is sociologically based due to its focus on Design and Human Environments. If the program aspires to be a “design school,” it will be necessary to build a unique and focused design program that can be marketed to potential students and the local community. For example, if we know that Portland, Oregon is the sports product design capital of the world, then how should the DHE Graduate Program focus to support this industry better?

Another point of interest when reviewing the DHE Graduate Applicant Characteristics, it was noticed that a considerable percentage (28%) of students show interest in the program and apply, but then remove their application or refuse the offer of acceptance. It may be worth investigating why potential students discontinued their interest in the DHE program.

There is a rigorous process of review of graduate applicants for the MS and PhD that includes GPA, GRE, TOEFL, statement of professional goals, transcripts and letters of recommendation, but no portfolio review. A DHE faculty member must agree to advise the applicant to confirm admission. There has been growth over the past six years based on increased numbers that indicate the visibility and reputation of the program, though some variation in average credentials. DHE has a goal to increase average GPA and GRE scores of admitted students. The Committee supports the goal to increase the standards for acceptance and work towards increased diversity among graduate and undergraduate students. As more minority undergraduates are graduated, the graduate program can become more diverse.

**Recommendations:**

- To be a leading Graduate Program, DHE must focus on recruiting top graduate students to their program. It is suggested that students interested in the design area should submit a
portfolio or entrance project with their application for assessment. DHE could call on external industry and academic partners to assist with the portfolio development and review process.

- DHE faculty also needs to focus tightly on research disciplines that are relevant to the newly developed strategic plan. Graduate students must be admitted who support the faculty’s research areas while at the same time build the reputation of the program. Strong, focused recruitment efforts will hone the Graduate Program to be highly effective, efficient, and reputation-building.

Level of Financial Support

**Undergraduate Program:**
During the 2009-2010 academic year, $74,710 was awarded in undergraduate scholarships. In terms of internship, 47% of Apparel design, 48% of Merchandising and 25% of Interior design/Housing studies students receive paid internships to fund their tuition. For the non paid internships, about half of the students received some type of compensation whether it was in merchandise, or a discount or bonuses.

**Recommendations:**
- The level of financial support should be increased so that there are enough faculty to meet the program needs. Supplemental fees and outside funding are sought to help support these efforts.

**Graduate Program:**
The DHE department provides funding for approximately 20 graduate students per year. The vast majority of the funding comes in the form of graduate teaching assistantships (GTAs) with students receiving appointments usually ranging from 0.25-0.45 FTE (Full Time Equivalent)/appointment. A student with sole responsibility for one course/term is typically assigned a 0.35 FTE. Research assistantships (RAs) are very limited. For example, in the current funding year (FY 2010-2011) 20 students are supported on assistantships with 19 receiving GTAs ranging from 0.25 FTE to 0.45 FTE. In addition, one student is being supported on a combined GTA/GRA with a 0.49 FTE appointment. Salaries for students are approximately $33,056/FTE/year. In addition, some students are self-funded, and some GTAs are hired as teaching assistants in other academic units. The decision for determining who receives funding is made by the DHE Graduate Committee in collaboration with the Department chair. Typically, MS students are provided with two years of GTA funding support, and PhD students are provided with three years of funding support.

**Recommendations:**
- The Review Committee recommends that the Graduate Program be maintained with current funding for assistantships and encourages faculty to pursue grant funding to increase the availability of GRAs.

Curriculum Strength

**Undergraduate Program:**

**Evaluation:**
At the February 2011 DHE Program Review, the Department Chair described that the program was founded in Functional Design and Consumer Behavior. With further investigation, there are many
“splinter disciplines” in the current program, including research of local textile fibers, thermal manikin research, historical costume, merchandising, apparel design/pattern making, gerontology, housing, interior design, consumer behavior, cross cultural studies, pattern making/tech design and apparel design. Having so many different lines makes it difficult for DHE to train students sufficiently in any one area and market itself clearly to prospective students. Further, such a diverse curriculum makes it harder to attract funding when donors do not see a clearer picture of the Department’s mission. Universities and colleges with strong Design programs have a more specific focus. Can there be a “Design School” at a land grant institution and still meet the mission of the university? How would tenured faculty be retrained to the expert status they would need to be to offer a more focused curriculum?

Recommendations:

- As DHE repositions into a different academic “home”, it must critically analyze the curriculum to best meet the new strategic plan AND the general philosophy of the college for which it is associated.
- If DHE decides to focus on “design,” careful attention to how the design industry has exponentially changed in the past 15 years will be critical. Regardless of whether DHE decides to become a “design” school or an iteration of its current program, all curriculum must evolve to meet the changing needs of society.
- If DHE aspires to be a leading School of Design and Human Environment with a focus in Functional Design and Consumer Behavior, then it must evolve from its current course offerings to one that best matches the revised mission and strategic plan. Attention should be paid to industry and society needs to make sure several key areas of study are offered or required from other programs across campus. For example, for functional design, necessary courses might include mechanical drawing, rendering, 3D, human factors/ergonomics/anthropometry/anatomy, design process/methodology, graphic design, ideation, mandatory design internships, consumer psychology and perception, textile science classes with attention to performance fabrics, business development, entrepreneurship & innovation, display/presentation design and modern day portfolio development. Many of these courses can be found in programs across campus, so it will be important to partner with strategic interdepartmental alliances.

Graduate Program:

Evaluation:
At the February 2011 DHE Program Review, the D School at Stanford University was referenced as the benchmark program. In evaluation, the curriculums between the DHE Graduate Program and the D School will be compared:

To start, the Stanford University D School’s mission is “to teach design thinking and innovation methodologies aimed at creating highly leveraged graduates who, acting as change agents, tackle the “wicked problems” of sustainability, renewable energy, technology futures, design-driven behavior change and organizational transformation.” By contrast, OSU’s DHE’s mission is “a multi-disciplinary approach to understanding the interaction between people and the designed environment as that environment affects the social, psychological and physical well-being of individuals, families and communities,” according to the self-study. These missions are quite different as the D School program focuses on critical thinking, design process, and innovation, whereas the DHE program does not currently offer any classes in critical thinking and innovation.
To further demonstrate this point, a small listing of D School Graduate Classes is presented:

- The Designer in Society
- Creative Gym: A Design Thinking Skills Studio
- Storytelling and Visual Communication Salon
- Designing for Sustainable Abundance
- Entrepreneurial Design for Extreme Affordability (2 Quarter class)
- Design Garage: A Deep Dive in Design Thinking (2 Quarter class)
- Improv and Design
- Transformative Design
- Creativity and Innovation

The following table was created to classify all DHE classes, by specialty, to show the contrast between both programs:

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Percentage</th>
<th>Number of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>3% (1 class)</td>
<td></td>
</tr>
<tr>
<td>Non-Specific</td>
<td>38% (18 classes)</td>
<td></td>
</tr>
<tr>
<td>Policy/Legal</td>
<td>6% (3 classes)</td>
<td></td>
</tr>
<tr>
<td>Historical</td>
<td>10% (5 classes)</td>
<td></td>
</tr>
<tr>
<td>Apparel Design &amp; Development</td>
<td>6% (3 classes)</td>
<td></td>
</tr>
<tr>
<td>Commercial/Interior Design</td>
<td>6% (3 classes)</td>
<td></td>
</tr>
<tr>
<td>Merchandising</td>
<td>6% (3 classes)</td>
<td></td>
</tr>
<tr>
<td>Theory</td>
<td>10% (5 classes DHE Graduate)</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>8% (4 classes)</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>3% (1 class)</td>
<td></td>
</tr>
<tr>
<td>Cultural/Demographic</td>
<td>4% (2 classes)</td>
<td></td>
</tr>
</tbody>
</table>

**Recommendations:**
- The graduate curriculum in DHE must evolve to meet the revised strategic goals and mission of DHE. An analysis of the curriculum as it aligns with the strategic plan and the philosophies of the newly aligned College will be necessary. It will be important to determine whether the majority of the graduate students will become academics or work for industry. Curriculum will need to provide adequate courses to meet these graduation/placement goals.
Level and Quality of Faculty and Adequacy to Achieve Mission and Goals

Number of Personnel, Faculty/Student Ratio, and Workload:
DHE has 15 faculty: 9 tenured/tenure track, 4 full-time instructors, 1 part-time instructor and 1 adjunct instructor. The student/faculty ratio is ~ 56 students per faculty or 87 for T/TT faculty. Merchandising courses tend to have more students per faculty, while studio classes tend to be smaller. This is appropriate given the varying pedagogy for each program.

The current DHE faculty of 15 is severely strained in their ability to advance the Department’s mission and achieve their goals. The current ratio of T/TT faculty to students is 1/87. This large number coupled with demands for research, grant applications for funding, graduate student and service responsibilities and other expectations for faculty creates an unrealistic environment that prevents the faculty and students from achieving their full potential. If the current plans to add seven tenure/tenure track faculty and instructors over the next few years come to pass, that should help the department to slowly transition to a position of strength. The ratio of graduate students to faculty supports a strong graduate experience.

Quality of Faculty:
Design and Human Environment faculty are nationally and internationally recognized for the teaching and research they do. Much of the good reputation of DHE is based on student-centered learning, service to national organizations and on refereed presentations at national and international meetings. Unfortunately, not enough of these presentations move toward peer-reviewed publications. It is imperative that the faculty move the presentations to published manuscripts or nationally juried exhibitions. In addition, currently, the tenured/tenure-track faculty conducts scholarship in the widely diverse areas that fit the broad mission of the department. However, if DHE plans to become a “School of Design,” it will be imperative to review the mission to see if it meets the strategic goals necessary for a school of design and more strategically focus the research. The faculty’s commendable strong commitment to student centered learning comes at a detriment to research productivity.

Productivity of Personnel:
In addition to insufficient faculty, the productivity of the current faculty over the past several years has been less than expected with a few notable exceptions. Scholarship appears uneven between faculty and within individual faculty records. The current tenured faculty has the scholarly ability and creative abilities to contribute to the broader academic discourse in their disciplines with the support of additional faculty members to share responsibilities for teaching, mentoring graduate students, and essential department work. The faculty has a strong record of international scholarship, bringing international visibility to the department. However, there is a weak record of recent journal publications which could be improved by turning a good record of presentations into publications. Grant writing has been an area of development for this faculty, and efforts should continue to increase the quality and quantity of grant applications.

Student Focus:
Two particular strengths were observed. The faculty is very student focused despite the low faculty/student ratio, and there is a strong sense of community in the department.
As the only Ph.D. program west of the Rockies with a focus on Design and Human Environment, the Review Committee encourages the faculty to develop a stronger regional perspective and presence. With the proposed School of Design and Human Environment, the diversity of faculty backgrounds, experience and perspective needs to be expanded to build a stronger core focus on functional design and consumer behavior.

**Recommendations:**
- New faculty hires should be focused on the needs from a revised department curriculum. Faculty should conduct research in areas that enhance the reputation of a top Graduate Program. It is recommended that creative scholarship be embraced for promotion and tenure purposes.

**Level and Quality of Infrastructure**

The infrastructure will be described and then evaluated according to access, equipment, space, and general impressions.

**Description of Infrastructure:**
The Department resides in Milam Hall occupying approximately 30% of the building space spread out on several floors. Space occupied by the Department includes various classrooms, faculty office space, graduate student office space, undergraduate advising office space, two apparel design studios, a computer aided design laboratory, an interiors studio with associated resource rooms, textile laboratories including a chemical laboratory and a textile testing facility, and space holding the historic and cultural textile apparel collection.

One apparel design studio houses a variety of sewing equipment including sewing machines, pressing equipment and commercial manikins. Major equipment for industry pattern making, pattern grading and production sewing with industrial sewing machines is housed in another apparel design studio. The computer aided design laboratory utilizes basic AutoCAD software as well as specialized software programs for students to simulate apparel design and production functions. Design functions include creating garment designs and textile designs and producing garment technical drawings. The Computer Aided Design and Drafting (CADD) lab also provides studio courses in both Housing and Interiors design work.

The interiors studio contains drafting facilities for 20 students, and an adjacent interiors resource room contains samples of building and other interiors materials, product and pricing literature, kitchen, bath, and lighting catalogues and specifications, and lighting demonstration equipment. The studios have good natural north and/or west light.

The textile laboratories include a chemical laboratory, as well as a temperature and humidity controlled conditioning room. Combined, the laboratories are equipped with instruments and supplies necessary for the chemical and physical testing of fibers, yarns, and fabrics. These laboratories are used not only for student instruction, but also for faculty research, and for textile testing services for businesses within the industry. The laboratories are equipped to test thermal properties, appearance retention, abrasion resistance, textile strength, colorfastness, color evaluation, fiber identification and various other miscellaneous evaluations. A recent significant addition to these laboratory facilities is the thermal manikin “Newton.” The thermal manikin consists of a carbon-epoxy shell with internal
heater elements, temperature sensors, and an integrated fluid supply system to simulate metabolic heat and perspiration levels. The manikin enables testing a garment's insulating capability when exposed to various environmental conditions while the manikin either "walks" or remains stationary.

The historic and cultural textile apparel collection includes approximately 2,000 Euro-American and ethnic apparel pieces and other textile products. The artifacts range in date from an ancient Egyptian textile fragment, c. 1560 BCE to 1980s Euro-American dress and include artifacts from a variety of countries including China, India, Mexico, and Italy. Currently the collection is housed in two spaces in Milam Hall, with a small display case in the hallway.

Graduate students share offices, which is typical at OSU. The offices that were seen appeared to be adequate to their needs for their research and their teaching demands.

Conference room space on the third floor is adequate in size, with natural light.

**Evaluation of Infrastructure:**
A number of concerns were raised about the infrastructure in DHE, including student access, equipment to provide adequate training for current professional marketplace needs, and space.

**Access:** Students expressed concerns that the access to the computer-aided design laboratory is limited and in general, there is very little access to department-supported computers and those that are available are often outdated. Additionally, concerns were raised about limited access to the textile apparel collection, suboptimal storage facilities for the collection, and the fact that the collection is not properly cataloged and annotated.

**Outdated Equipment:** General concern was raised about the textile laboratories. Equipment in both the chemical laboratory and textile-testing laboratory, while functional, is very outdated.

Questions were raised regarding the relevance of student training on this equipment compared to what they would encounter in the “real world.” The quality and number of commercial sewing machines in the apparel design studio appeared limited, and in general, studio space and capacity, while currently adequate, is likely soon to present a limiting factor to program growth. The addition of the high-tech thermal manikin “Newton” while an outstanding resource, has only limited utility due to the lack of a properly-outfitted controlled environment chamber.

**Space:** The historic textile collection needs more space for proper storage and especially for display for teaching purposes.

**General Impressions:** Considering that DHE promotes itself on interior design, their third floor conference room could and should be a showplace of their design skills.

**Recommendations for Infrastructure:**
- The Department needs to raise funds to enhance technology. From computers to laboratory to studio equipment, it is important to provide up-to-date technology for both student learning environments and research purposes.
Level and Quality of Organizational Support

The Department has a Graduate Program coordinator, Dr. Carmen Steggell, who receives a one class reduction to serve in this position. The Department devotes a significant percentage of E&G funds to graduate student support in the form of GTAs. This may change with the addition of new faculty. This level of support is commendable and reflects the overall supportive atmosphere of the program that was mentioned by several students.

In contrast, the faculty and students report that there is no funding to support faculty or student travel to conferences and no funding for external speakers. This affects the viability of the scholarly community.

In addition, the students and the Review Committee noted that the equipment available for student training does not meet current industry standards. The graduate students in particular were vocal about their need for working, up-to-date computers in the graduate student offices.

Recommendations:
- The Department also needs to strongly consider budgeting dollars for computer and equipment upgrades, bringing in external speakers a few times a year (which may not cost much given the concentration of textile industry in Portland), and providing faculty travel funds to defray travel expenses for conferences. These funds may need to come at the expense of a GTA. However, the department should consider submitting for University RERF funds for equipment or appealing to donors. Faculty must also become active in grant writing to help support equipment and travel funds.

Productivity:

Level and quality of students

Undergraduate Program:
Evaluation:
The current DHE Undergraduate Program provides a very basic understanding of the apparel and interior design industries. Unfortunately, the program is in dire need of updating so there is a sharper focus for students to become experts in specific areas, as opposed to generalists. For example, students coming from the DHE program often do not have adequate skills with Microsoft Office Suite (Word, Excel, etc) or design skills to compete with students from other universities for entry-level positions.

Further, the Design portfolio is the #1 point of difference between DHE students and students from other Design universities. From the samples displayed during the team’s visit, DHE student portfolios are often presented poorly (lack of storytelling), with old-fashioned techniques (little computer work, rendering), missing information (seam lines, stitching and technical information) and no examples of ideation/sketching.

Many new graduates from DHE are hired into industry temp jobs for 1-2 years so they can learn the skills they did not get in the Undergraduate Program to become competitive in industry.
**Recommendations:**

- Per the discussion in the curriculum section, the Undergraduate Program needs to be re-developed so students can focus on a specific subject matter and learn up-to-date skills that will allow them to be more competitive in the job market upon graduation. Careful attention must be made to hire the right product Design Faculty who understand the Design industry and its modern-day requirements to succeed.

**Graduate Program:**

**Evaluation:**

Graduate student performance is hard to measure, as there was little record presented to show what graduate students have accomplished since graduation (except “current placement”). However, what is known based on graduate student interviews is that there is a lack of training and experience in research grant writing, presentation and publishing. Graduate students seek professional development workshops and/or courses to prepare them for professional presentations, academic manuscript writing, vita preparation, and interviewing to name a few. No grant writing courses are currently offered for DHE students. This lack of opportunity means that graduates of the DHE Graduate Program may not be adequately prepared to compete for teaching and research positions at other research institutions where publication and presentation experiences are preferred; hence, DHE graduate students may struggle to succeed.

Many DHE graduate students aspire to be academics and often graduate degrees are not valued in the design industry. However, for those DHE graduate students who do aspire to enter industry upon graduation, there is a disconnect between thesis project subject matter and how the research is relevant to the modern-day and local industry needs. This disconnect makes it difficult for graduates to market themselves for industry jobs, since they would have nothing in common with the companies they are trying to work with. Ideally, a graduate student should be able to obtain a mid-management position upon graduation, based upon their focus and expertise in a subject matter.

**Recommendations:**

- A required graduate seminar needs to be developed that would prepare graduate students on proper format for academic presentations and how to write papers for publication. The seminar series could also be in conjunction with outside industry/research speakers, so students could interface and network with professionals. Graduate students should be strongly encouraged to submit work for publication and to presentations at national/international conferences such as International Conferences related to their area of expertise such as International Textile and Apparel Association; Costume Society; or Surface Design Association.
- DHE should consider as a goal that their graduate students and research be increasingly funded by local industry. To do that the Graduate Program focus must change to reflect what is really going on in the local industry. Portland, Oregon is known as the Sports Design Product capital of the world, and companies continuously relocate their headquarters to Portland so they can acquire the best talent and create the most innovative products.
- One reviewer advised that DHE immediately re-focus key research so it is relevant to apparel/interior end uses. For example, if textile sustainability is important in the sports apparel industry – the research could be re-focused and better aligned, i.e., find a new recyclable spandex. DHE has to run its program like a business now, in order to be successful.
and survive in a time when universities are closing down departments that do not generate revenue.

**Viability of the Scholarly Community**

As noted under “Quality of Organizational support,” the Department does not have a seminar speaker series, does not appear to have a history of bringing industry speakers to campus, and does not support conference travel for students or faculty. Further, the productivity of the faculty, detailed above, is mixed. Students seem to be receiving mixed messages about the importance of publishing. Access to the historical collection appears to be hampered by lack of staff to monitor and maintain the collection.

However, faculty noted that they pay out of pocket to attend conferences and stay current, which is commendable. Faculty also help students in whatever way possible to defray travel expenses for conference attendance and for fashion and industry tours. Once again, this speaks to the support, encouragement and attention from faculty that the graduate students greatly value as strength of this program. The faculty conveys a sense of passion for the discipline, and there is camaraderie among the students. Further, the Department has interdisciplinary collaborations across campus with the Institute on Aging and Women’s Studies. Thus, the morale of the Department and the students seems good.

On campus, the students have started a chapter of the American Association of Textile Chemists and Colorists.

**Recommendations:**

- The Department should start a seminar program with external speakers. Utilize local (i.e. Portland) industry and/or the advisory board as a source of speakers or revenue to support speakers. Be clearer with graduate students regarding the importance of publishing, grant writing, and contracts with industry.

**Outcomes**

**Professional Viability of Graduates**

**Positions:** Data from the 2010 BS and MS/PhD alumni survey indicate that 90% of the respondents were employed in retail or managerial positions, with 81% in positions that related to their degree. (Missing is the response rate for the full survey.) This indicates strong viability of graduates from DHE.

**Internships:** Internship is not required in the program, but of students who participate in internship, 73% were offered permanent positions. According to the DHE Self-Study, responses from employers who provided undergraduate and graduate internship opportunities were generally positive.

The Apparel Design, Merchandising Management and Marketing, and the Interior Design programs could improve student academic experience, primarily related to technical experience, specific to their discipline and including experience with current software, CAD, and industrial equipment. Each program must develop a strategic plan to address these areas for improvement. Employers will be
more supportive of the DHE program and its students in terms of hiring and funding if they see evidence that their input is valued and has led to change. Undergraduate students indicated that they felt unprepared for some internships because they were lacking in technical and CAD experience. Students also requested a broader context to many of the merchandising courses which tend to focus more narrowly on apparel. There is also a need for more management content in the merchandising curriculum.

Plans for the Interior Design program to become CIDA accredited should be strongly supported. Additional T/TT faculty will be essential to achieve this goal. Future accreditation by NASAD will require a similar level of investment. Professional accreditation is a good way to strengthen the professional viability of the graduates. Financial investment in expanding and updating the DHE infrastructure and equipment is essential to educate students to be competitive.

The viability of students with a graduate degree is very good for both M.S. and Ph.D. with the majority finding positions in academia or industry, or pursuing an advanced degree. Positions are across the country as well as international.

Satisfaction of Students

Undergraduate Program:

Areas in which students expressed satisfaction:
Students expressed satisfaction with graduating from the program with portfolios they view as well-developed. They believe that the programs provide a good understanding of issues related to their field. They particularly liked how study abroad options are well organized and widely available. According to poll of students in 2010, students seem to think academics, advising, library resources, and policies are adequate or better. Alumni survey respondents rated their university experience 3.59/5.0.

Areas in which students expressed concern:
Some of the specific areas of complaints from students included lack of industry specific training, too much focus on apparel, lack of industry experience in faculty, and labs, technology, and equipment that is below industry standards. Students expressed concern about not being career ready coming out of the programs. Specifically they lack specification training and vendor relations background.

According to students, all general classes for all majors have an apparel emphasis, except for History, which is balanced. According to the Department Chair, this strong apparel focus reflects the relative size of the Apparel program compared to the Interior Design program based partially on the fact that marketing/merchandising classes are generally larger classes than studio based classes. However, it appears more students graduate with Interior Design than Apparel degrees. Merchandising plays a significant role in the program. Including the merchandising of home furnishings products would support the interior design program and interests. The Review Committee recognizes that interior design accreditation requirements leave little room for electives and this impacts whether ID students have place in their plan of study for merchandising course work.

Computer labs and software programs are behind advances in the industry. Labs need more updated software programs such as InDesign, Revit, and Google SketchUp, and students need training on how to use software common to their field, such as CAD. The students have resorted to teaching each
other CAD. Currently the students are taught hand-drafting, which is no longer practiced in industry. Students would like more access to the labs outside of class hours. Currently computer skills are only taught freshman and senior years, which means that skills may grow rusty in the interim. Students suggested integrating computer technology into the entire curriculum.

Students were overall satisfied with the internship program, but cited the Merchandizing Management program needs more internship options besides retail selling. They would like to apply more of what they’re learning in areas such as buying or forecasting.

Other comments included having difficulty staying on the Departmental listserv for receiving departmental e-mails and a lack of writing emphasis, especially style related writing. Finally, faculty were viewed as being too new and lacking industry experience.

**Recommendations:**
- To meet the needs of Undergraduates, a stronger emphasis should be placed on technology across the curriculum. This includes both hardware updates and curriculum that teaches important software functions for both Interior Design and apparel-related applications. For faculty to gain industry experience, it is suggested that faculty development time is provided for faculty internships.

**Graduate Program**

**Areas in which students expressed satisfaction:**
Graduate students appear to come to the program based on its reputation for being highly supportive. Students mentioned that they were recruited by specific faculty and, with the rare exception, were very satisfied with the program and the mentoring in particular. Student success after graduation appears to be good in terms of securing academic positions at good institutions.

**Areas in which students expressed concern:**
A few areas in which students would like to see improvement are in access to up-to-date computers, better access to the computer labs, better access to design software, and more access to the historical collection.

The Graduate School exit survey data were not included in the self-study, which is a major means of assessing graduate satisfaction. During the day of the review, these data were made available in a single hard copy.

**Recommendations:**
- First, the Department needs to look at the Graduate School’s exit survey data and provide their own analysis.
- Second, although it is wonderful that the graduate students in the program feel supported and well mentored, there is concern that the students are perhaps a bit too satisfied. Are they being pushed outside of their comfort zones in terms of thinking about design, being creative with materials, or pursuing industry and grant funding? Students that are pushed beyond their comfort zone often rise to the occasion and are able to produce good results.

**Rankings**
There is no national or international ranking system for programs of textile/apparel/design. However, DHE is well-recognized as the only program west of the Rockies that offers a Ph.D. For Interior
Design, the only well-recognized program for ranking is DesignIntelligence. However, without Council of Interior Design Accreditation (CIDA), it is doubtful that the Interior Design program would be ranked by DesignIntelligence. For purposes of comparison, peer institutions would need to be established so that the program evolves to become a nationally recognized, competitive program that is keenly focused on what it means to be a well-respected School of Design and Human Environment. Comparison to other state universities such as Minnesota State and Colorado State is appropriate because DHE must also meet the University’s land-grant mission of serving Oregon’s population.