Expected Outcome 1: Concept Sketching Ability
Upon graduation all students should have developed the facility to communicate problem analysis, evolutionary development and design resolution through conceptual rapid sketching techniques.

Assessment Method 1: 4th year Student Portfolio Review
Assessment Method Description
During the spring 2013 semester, work from (42) students in the fall 2010 portfolio class, INDD 5120, was presented to the INDD Advisory Council made up of (5) professionals from industry that review the INDD program twice each year. Attention was specifically directed at the evaluation of conceptual sketching presented within the context of the portfolios.

The spring semester 2013 portfolio review is better timed for assessment reporting than the fall 2012 review which now takes place after the assessment reports are due in October. We will continue to use the spring review for the standard of measure against which portfolios generated each fall will be evaluated.

Evaluations will be based on a (5.0) scale with (5.0) being the highest level of accomplishment.

1. Unacceptable
2. Marginal
3. Competent
4. Exceptional
5. Exceeds Expectations
### DIGD Assessment Form

**Department of Industrial and Graphic Design**

Assessment is based upon the average of individual student performance within a defined cohort group. Performance is evaluated by during the final semester of the curriculum.

**Semester and Year of Assessment:** Fall 2012 / March 2013

**Name of Professional Assessor:**

**COHORT GROUP**

- INDD Portfolio Review

**ASSESSMENT CRITERIA**

- Idea and Concept Sketching

The ranking is based on the quality of all the sketches in the student portfolio and not necessarily on the quantity.

**EVALUATION RANKING (circle one number)**

Student Portfolios have been assigned a number for reference.

<table>
<thead>
<tr>
<th>PORTFOLIO NUMBER</th>
<th>Unacceptable</th>
<th>Marginal</th>
<th>Competent</th>
<th>Exceptional</th>
<th>Exceeds Expectations</th>
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</table>
Findings
The mean evaluation of the (42) student portfolios reviewed by (5) INDD Advisory Council members spring 2013 was (3.2) on a (5.0) scale. This indicates some level of improvement over the (3.0) recorded in the 2012 Assessment Report. The emphasis placed on this particular skill will continue to be applied with aspiration for continued improvement in 2013-14.

How did you use findings for improvement?
At the spring and fall 2012 INDD retreats, discussion was focused on continued integration of conceptual sketching techniques into the design studios at every year level. Evidence of this effort currently is visually present in many of these studios, appropriately displayed as part of the product development process related to each studio.

Additional Comments
Participation in and communication at regional and national discipline related professional conferences by INDD faculty reinforce the need to continue to develop this vital skill set in our students. At these venues peer institutions and professionals confirm the importance of conceptual sketching ability in communicating innovation and demonstrating appropriate design skill and thinking.

Expected Outcome 2: Design Communication: Conveying and Presenting Information
Students in the 4th Year INDD 5120 Portfolio Class will be evaluated on their aptitude in using visual and narrative methods to communicate their design projects. Projects that are shown should be clear and effective and provide appropriate and sufficient content in the visual and written descriptions. Images, charts, and sketches should accurately and effectively support the communication of the project narrative.

Assessment Method 1: Design Communication Evaluation Survey.

Assessment Method Description
The undergraduate industrial design program at Auburn University utilizes a council consisting of alumni and industrial design professionals in an advising role. Each spring semester (before mid-semester) the industrial design advisory council visits the school to observe and review the academic programs.

These visits provide an opportunity for the council to observe our
students, faculty members and staff. The majority of the council members are practicing design professionals with notoriety and active with the Industrial Designers Society of America, our professions’ only international and national professional organization.

During the spring semester visit the council will evaluate the 4th year industrial design student within the Professional Portfolio class (INDD 5120). Members of the INDD Advisory Council will evaluate students’ skills in the area of Design Communication. The students design portfolio, which was compiled in the fall semester, will be used in the review.

Each council member will review a minimum of ten portfolios using the INDD Design Communication Evaluation Survey.

SIGD School of Industrial and Graphic Design

Design Communication Evaluation Survey
INDUSTRIAL DESIGN UNDERGRADUATE PROGRAM (IIIND) AUBURN UNIVERSITY

Assessment by Industrial Design Advisory Council
Rubric to assess the skills of 4th students as related to visual communication and narrative.

Date of Assessment: _______________ Name of Advisory Council Assessor: ________________________________

Title: _______________ Company/Organization: ________________________________

STUDENT NAME: ___________________________ YEAR LEVEL: _________ SCORE: ____ of 8

<table>
<thead>
<tr>
<th>DESIGN COMMUNICATION</th>
<th>4 Exemplary</th>
<th>3 Accomplished</th>
<th>2 Developing</th>
<th>1 Needs Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISUAL NARRATIVE - Projects</td>
<td>Projects presented are clear and very effective in the use of appropriate and sufficient content in the visual description.</td>
<td>Projects presented are clear and effective in the use of appropriate and sufficient content in the visual description.</td>
<td>Projects presented are somewhat effective in the use of appropriate content in the visual description.</td>
<td>Projects presented are ineffective in the use of content in the visual description.</td>
</tr>
<tr>
<td>Conveying of Information understanding of the projects</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>VISUAL NARRATIVE - Projects Presenting Ideas communication of images</td>
<td>Images (photographs, charts, sketches, etc) accurately and effectively support the communication of the project narrative.</td>
<td>Images (photographs, charts, sketches, etc) support the communication of the project narrative.</td>
<td>Images (photographs, charts, sketches, etc) somewhat support the communication of the project narrative.</td>
<td>Images (photographs, charts, sketches, etc) need improvement to support the communication of the project narrative.</td>
</tr>
</tbody>
</table>
Findings

Five members of the INDD Advisory Council evaluated students’ skills in the area of Design Communication. The students design portfolios of 24 students, were used in the review. One student portfolio was evaluated by four members of advisory council, 13 portfolios were evaluated by two members of advisory council, and the rest 10 portfolios were evaluated by one member of advisory council.

The average score for Conveying of Information was 3.29 and the average score for Presenting Ideas was 3.27.

How did you use findings for improvement?

Faculty was pleased with these findings. This evaluation was conducted by the INDD Advisory Council, which is made up of alumni who are design managers or senior industrial designers. Before the next evaluation more time will be devoted to reviewing the rubrics and our intent. Suggestions to the Portfolio Class will be to focus more effort on connecting the images to the message of the project.

Additional Comments

For Consideration: To ensure reliable data for assessment, next year data will be aggregated with this year’s data and the inter-rater reliability will be estimated.
Expected Outcome 3: Design Development: Idea Production, Critical Thinking and Resolution of Form

Students in the 3rd and 4th Year Design Studio’s will be evaluated on their aptitude in the Design Development phase by how the address the following three areas:

**IDEA PRODUCTION** - *Generating possible solutions and processing of ideas and concepts.* A student should be able to recognize the need for multiple ideas, which are reasonable and identify possible solutions. In addition, the student should be able to develop ideas into workable/creative solutions.

**CRITICAL THINKING** - *Well-informed concepts that meet the project criteria.* A student demonstrated the ability to develop concepts that are well-informed and they address the criteria of the project.

**RESOLUTION of FORM** - *Related to Purpose and Implementation. Use of product semantics – object language and communication.* A student should demonstrate the ability to develop the form of an object that is understandable and useable.

Assessment Method 1: Design Development Evaluation Survey

Assessment Method Description

Each spring semester (before mid-semester) an industrial design faculty committee (made up of four or more teaching faculty) will evaluate a random sampling of students’ design portfolios. Each committee member will evaluate a minimum of ten portfolios. More than one committee member may review the same portfolio.

Committee members will evaluate the student’s design concepts and solutions within the design process as related to developing an idea or concept. The method used to conduct this assessment will be reviewing a design project from the 3rd and 4th Year design studio classes.

Each member of the Faculty Committee will use the INDD Design Development Evaluation Survey.
Findings

An industrial design faculty committee evaluated 32 students’ design portfolios. On average, student portfolios were graded higher on Critical Thinking (2.81) and lower on Resolution of Form (2.50).
How did you use findings for improvement?
Overall the faculty members were pleased with the findings, but in the Resolution of Form area there was a deficit and additional “from literacy” exercises in the 2nd and 3rd year studios will be suggested.

Additional Comments
For Consideration: To ensure reliable data for assessment, next year data will be aggregated with this year’s data and the inter-rater reliability will be estimated.

Expected Outcome 4: Design Research: Problem Identification and Preparation
Students in the 3rd and 4th Year Design Studio’s will be evaluated on their aptitude of research skills. These skills will include, but not limited to, demonstration of understanding the problem and identifying specific factors that influence the approach used for problem solving. Also, the ability to extract and assimilate data in an understandable and professional method will be evaluated.

Assessment Method 1: INDD Design Research Evaluation Survey

Assessment Method Description

Design Research Problem Identification and Preparation (Industry professionals/and or INDD Faculty Committee): The undergraduate industrial design program at Auburn University combines faculty teaching and collaboration with professionals in industry. These collaborations enable a valuable, external assessment...
of student design skills in action.

Each fall semester a review committee will evaluate each industrial design student within the studio of their assigned responsibility. This will occur at both 3rd and 4th year levels (INDD3110 and INDD4110). The review committee will be comprised of external industry professionals (designers, engineers and marketing managers) and or INDD faculty. Review Committee members will evaluate students in the studio based upon their experiences working with them throughout the fall term and from their design presentations. They will evaluate their aptitude of their research skills using the INDD Research Solving Evaluation Survey. The timing of conducting this survey will be left to the discretion of the studio faculty of record, but may be conducted best during final presentations.

**Students will be evaluated on the following research components using the attached rubric - INDD Design Research Evaluation Survey**
Findings

Three members of the review committee comprising of external industry professionals evaluated work and presentations of 12 students. Each student was evaluated by each external industry professional. The information on evaluations is presented in the table below. The average score for Problem Identification is 3.19. The average score for Preparation is 3.08.
Because each student was evaluated by each external industry professional we could estimate inter-rater reliability. Cronbach’s alpha coefficient was used to estimate the inter-rater reliability. For Problem Identification, the inter-rater reliability is 0.61. For Preparation, the inter-rater reliability is 0.77.

**How did you use findings for improvement?**
The evaluations took place toward the end of the semester (the end of the design project) in order to see how the design research contributed to the final design solution. Even though this was an effective evaluation it is our plan, next year to conduct this evaluation before mid-semester.

**Additional Comments**
For Consideration: *To ensure reliable data for assessment, next year data will be aggregated with this year’s data and the inter-rater reliability will be estimated.*

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<tr>
<th>FACT FINDING</th>
<th>Avg. Score</th>
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<tbody>
<tr>
<td>PROBLEM IDENTIFICATION - clarification of the objective</td>
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<tr>
<td>Preparation - collecting and analyzing the data</td>
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