Core Undergraduate Learning Experience

What Should All NDSU Graduates Know and Be Able to Do?

Pedagogical Lunch Presentation
Kevin McCaul, Susan Ray-Degges, Seth Rasmussen, & Rajesh Kavasseri
Background

- **1986**: Unsuccessful General Education (GE) revision
- **1991-1993**: First campus-wide GE
- **2007**: GE Committee discussed improvement options
- **2008**: Birmingham & Peterson prepared report for Provost
- **2009**: Provost sent team (Harrold, Martin, Myhre, McCaul, Peterson) to GE Institute
- **2009**: Team presented action plan to Provost and met with Deans
- **2010**: Creation and Charge of the Undergraduate Curriculum Review Committee
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
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<tbody>
<tr>
<td>Marion Harris</td>
<td>College of Agriculture, Food Systems, and Natural Resources</td>
</tr>
<tr>
<td>RaNelle Ingalls</td>
<td>Associate Registrar, Student Affairs</td>
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<tr>
<td>Rajesh Kavasseri</td>
<td>College of Engineering and Architecture</td>
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<tr>
<td>Kevin McCaul</td>
<td>College of Science and Math, Deans’ Liaison</td>
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<tr>
<td>Andrew Mara</td>
<td>College of Arts, Humanities and Social Sciences</td>
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<tr>
<td>Charlene Myhre</td>
<td>NDSU Libraries</td>
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<tr>
<td>Cynthia Naughton</td>
<td>College of Pharmacy, Nursing and Allied Sciences</td>
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<tr>
<td>Lisa Nordick</td>
<td>Distance and Continuing Education</td>
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<td>Larry Peterson</td>
<td>Provost’s Representative</td>
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<tr>
<td>Seth Rasmussen</td>
<td>College of Science and Mathematics</td>
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<td>Susan Ray-Degges</td>
<td>College of Human Development and Education</td>
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<td>Carolyn Schnell</td>
<td>College of University Studies</td>
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<tr>
<td>Herbert Snyder</td>
<td>College of Business</td>
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Committee Charge

• Faculty-driven, campus-specific vision

• Campus-wide discussion: What should all NDSU graduates know, understand, and be able to do?

• How are those learning outcomes woven throughout their undergraduate experiences?
What Have You Told Us?

• Department Discussions
  – Process
  – Results

• Survey Data
  – Process
  – “What should we be doing”
  – Gaps in “should” vs. “are”

• What is next?
Department/Unit Discussions

• Face to Face/Group Decision Center
• November 2010/January 2012
• Participation
  – 40 Academic Departments/Units/Divisions
  – 460 participants
Department/Unit Discussion

Participants were asked the following questions:

1. What do you believe is the purpose of a General Education Program?
2. What types of skill sets, knowledge, or understanding should be included in a General Education Program?
3. Should the General Education Program contribute to students’ majors? If so, how?
4. Should the General Education Program play a role in preparing students to be productive and responsible citizens? If so, how?
5. What do employers and other communities external to the university expect from a graduate of NDSU, and what is the role of General Education in meeting these expectations?
Common Themes

- Critical Thinking
- Problem Solving
- Synthesize
- Reasoning
- Communication (written, oral, graphic, develop an argument; express ideas; open to other’s perspectives)

- Life long learning
- Worldview/Global
- Skill Sets/Core Competencies
- Increased rigor
- Education over training
- Knowledge over technical skills
Thoughts to consider

• GE should link to the major by providing critical thinking opportunities, exposure to issues related to population demographics and lifespan, discussing micro and macro economics, and exposure to the scientific process. All of these would put students on a higher plane of learning and help foster success within a major and beyond.

• Students need to learn how to present their points of view and how to disagree with others respectfully and productively. They need to develop a willingness to question their own beliefs in the context of what they hear from others.
Thoughts to consider

• GE should prepare students intellectually to participate in the modern world by providing students with the foundation of knowledge they will need to later contextualize their specific chosen area of study.

• Personal and Social Responsibility/Cultural and International Perspectives could benefit from linked courses or interdisciplinary courses.
Thoughts to consider

• Explore General Ed offerings that allow professors in diverse disciplines to develop integrated courses that look at linkages across areas in specific historical periods, domains of knowledge, etc. For example, a history of civilization course taught by someone in psychology, physics, and the humanities.

• Encourage a diverse education with high expectations

• GE courses need to be more engaging in their pedagogy (problem-based learning, collaborative learning) and in their content (critical thinking, challenging material).

• [http://www.ndsu.edu/cule/](http://www.ndsu.edu/cule/)
Survey Process

• Asked about 28 learning outcomes
• Two crucial questions (with variations):
  – How well does our general education program prepare the average student in an area? And
  – What outcomes will be most important for future NDSU graduates?

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>379</td>
<td>3%</td>
</tr>
<tr>
<td>Faculty</td>
<td>209</td>
<td>24%</td>
</tr>
<tr>
<td>Alumni</td>
<td>581</td>
<td>4%</td>
</tr>
<tr>
<td>Employers</td>
<td>37</td>
<td>15%</td>
</tr>
<tr>
<td>Staff</td>
<td>116</td>
<td>7%</td>
</tr>
</tbody>
</table>
Quantitative Data

How are we doing?
How important is this area?

<table>
<thead>
<tr>
<th>Group</th>
<th>How are we doing?</th>
<th>How important is this area?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>4.56</td>
<td>4.62</td>
</tr>
<tr>
<td>Staff</td>
<td>3.69</td>
<td>4.58</td>
</tr>
<tr>
<td>Students</td>
<td>3.35</td>
<td>4.12</td>
</tr>
<tr>
<td>Alumni</td>
<td>4.04</td>
<td>4.50</td>
</tr>
<tr>
<td>Employers</td>
<td>3.69</td>
<td>4.12</td>
</tr>
<tr>
<td>Total Averages</td>
<td>3.69</td>
<td>4.62</td>
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Most Important

How important is this area?  How are we doing?

- Speak clearly
- Write clearly
- Work as team member
- Think creatively & innovatively
- Think critically

<table>
<thead>
<tr>
<th>Category</th>
<th>Importance</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speak clearly</td>
<td>5.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Write clearly</td>
<td>5.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Work as team member</td>
<td>5.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Think creatively &amp; innovatively</td>
<td>5.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Think critically</td>
<td>5.0</td>
<td>4.5</td>
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Least Important

Understand international forces
Understand human experiences
Understand scientific methods
Read & speak a 2nd language
Understand literature & fine arts

How important is this area? How are we doing?
Largest Gaps

1. How important is this area?
2. How are we doing?

- Read & speak a 2nd language: 1.51
- Understand viewpoints of other societies: 1.41
- Write clearly: 1.36
- Speak clearly: 1.29
- Understand democracy: 1.18
Differences in Gap by Group

Write clearly
(high average gap)

Understand scientific methods
(low average gap)
Alumni – What are we doing well?
Alumni - What is important?
Alumni - What needs to be fixed?
Future Directions - Next Steps

**Apr 2012:** Define/Share learning outcomes that are based on student learning, measurable and align with our vision.

**Sep 2012:** Initial proposed learning outcomes to faculty senate for discussion.

Capstone improvement – *Summer 2013* deadline

**Sep 2013:** Discuss and Evaluate Curriculum Revision models based on best current national trends and practices.

**Mar 2014:** Share Curriculum Revision models with campus
Identify a Curriculum Revision model that best serves NDSU.

**Sep 2014:** Present proposed Curriculum Revision model for Faculty Senate approval.

*Have one heckuva party! – Thank you!*