Using NSSE as Indirect Assessment of Learning

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Can the NSSE items be used to assess learning?

Yes, when

- response rate is high and representative
- items are relevant
- key campus groups are involved
Questions Types

Student effort & activities

Institutional Resources & Learning Opportunities
Questions Relevant for Learning Assessment

NSSE Item 2.b How often have you connected your learning to societal problems or issues?

Aligned with Institutional Learning Objective: Civic participation
Questions Not Appropriate to Assess Learning

**NSSE Item 14 How much does your institution emphasize the following?**

This question speaks to institution’s intent and effort, not students’ values and activities.
What students did/believed that show abilities/skills value

Items as indirect assessment of learning

knowledge
abilities/skills
value
What learning outcomes did UH Mānoa assess?
Big Five

1. WC: Written Communication
2. OC: Oral Communication
3. QR: Quantitative Reasoning
4. CT: Critical Thinking
5. IL: Information Literacy
Institutional Learning Objectives for undergraduate students

<table>
<thead>
<tr>
<th>KNOW</th>
<th>Breadth &amp; depth of knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a.</td>
<td>Gen Ed</td>
</tr>
<tr>
<td>1.b.</td>
<td>Major study</td>
</tr>
<tr>
<td>1.c.</td>
<td>Hawaiian culture and history</td>
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</tbody>
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<table>
<thead>
<tr>
<th>DO</th>
<th>Intellectual &amp; practical skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.a.</td>
<td>Think critically &amp; creatively</td>
</tr>
<tr>
<td>2.b.</td>
<td>Conduct research</td>
</tr>
<tr>
<td>2.c.</td>
<td>Communicate and report</td>
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</table>

<table>
<thead>
<tr>
<th>VALUE</th>
<th>Personal and social responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.a.</td>
<td>continuous learning &amp; personal growth</td>
</tr>
<tr>
<td>3.b.</td>
<td>respect for people &amp; cultures</td>
</tr>
<tr>
<td>3.c.</td>
<td>stewardship of the natural environment</td>
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<tr>
<td>3.d.</td>
<td>civic participation</td>
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</table>
Who can decide what items are relevant for assessment?
Knowledgeable campus groups at Manoa Identified NSSE Learning Questions

- ILO Implementation Committee
- Committee on Educational Effectiveness
- Assessment & Curriculum Support Center
1. During the current school year, about how often have you done the following? 1=Never, 2=Sometimes, 3=Often, 4=Very Often

a. Asked questions or contributed to course discussions in other ways
b. Prepared two or more drafts of a paper or assignment before turning it in
c. Come to class without completing readings or assignments
d. Attended an art exhibit, play or other arts performance (dance, music, etc.)
e. Asked another student to help you understand course material
f. Explained course material to one or more students
g. Prepared for exams by discussing or working through course material with other students
h. Worked with other students on course projects or assignments
i. Given a course presentation

2. During the current school year, about how often have you done the following? 1=Never, 2=Sometimes, 3=Often, 4=Very Often

a. Combined ideas from different courses when completing assignments
b. Connected your learning to societal problems or issues
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
d. Examined the strengths and weaknesses of your own views on a topic or issue
e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
f. Learned something that changed the way you understand an issue or concept
g. Connected ideas from your courses to your prior experiences and knowledge

3. During the current school year, about how often have you done the following? 1=Never, 2=Sometimes, 3=Often, 4=Very Often
How has NSSE contributed to learning assessment work?
1. Provided data on Institutional Learning Objectives not assessed prior.

- **Continuous Learning and Personal Growth**: Seniors reported frequent activity/substantial learning (NSSE, 2015) - 54%
- **Civic Participation**: Seniors reported frequent activity/substantial learning (NSSE, 2015) - 48%
- **Respect for People and Cultures**: Seniors reported frequent activity/substantial learning (NSSE, 2015) - 43%
2. In-depth analysis answered specific learning questions

% participated in civic activities?

- Freshmen:
  - In Any Potential Civic Engagement Activities: 7%
  - Field Experience: 56%
  - Co-curricular: 39%
  - Community Service: 7%
  - Total: N = 434

- Seniors:
  - In Any Potential Civic Engagement Activities: 81%
  - Field Experience: 52%
  - Co-curricular: 55%
  - Community Service: 55%
  - Total: N = 1255
3. Supplement other learning evidence for a deeper understanding of learners’ needs

<table>
<thead>
<tr>
<th></th>
<th>Strongest Areas</th>
<th>Weakest Areas</th>
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</table>
| **2015 Information Literacy Assessment Project** | • **Use** information ethically and legally (61%)  
• ... | • **Evaluate** information and its sources critically (39%)  
• ... |
| Sample = 114 students | Evidence = student papers                                                        |                                                                               |
| **2015 NSSE**         | • **Used** outside sources for assignments (85%)                                  | • Rejected sources of questionable quality (35%)  
• ... |
| Sample = 1176 – 1186 seniors |                                                                               |                                                                               |
4. Provided a more comprehensive picture of ILO achievement

Undergraduate Student Learning Achievement and Student Perceptions: General Education and Institutional Learning Objectives

Key findings in

• Civic participation
• Continuous learning and personal growth
• Critical thinking
• Ethical reasoning
• Information literacy

• Oral communication
• Quantitative reasoning
• Respect for people and cultures
• Written communication
5. Motivated campus groups to take actions to use results

ILO Implementation Committee prioritized learning areas for action and implemented an action plan.
What NSSE apps are most relevant for program learning assessment?
Most appropriate for assessing learning

Many relevant items for assessing learning
College ○
--- Any ---
- Architecture
- Arts & Humanities
- Business
- Education
- Engineering
- Hawaiʻinuʻaʻkea
- Lang, Ling & Lit
- Law
- Medicine
- Natural Sciences
- Nursing & Dental Hygiene

Department ○
--- Any ---
- Academy for Creative Media
- American Studies
- Anatomy, Biochem & Physiology
- Anthropology
- Architecture
- Art and Art History
- Asian Studies
- Atmospheric Sciences
- Biochemistry
- Cell & Molecular Biology
- Center on Disability Studies

Major ○
--- Any ---
- Accounting
- Advanced Library Info Science
- Advanced Women's Studies
- Agricultural & Resource Econ
- Agronomy & Soil Science
- American Studies
- Animal Sciences
- Anthropology
- Architecture
- Art
- Art History
- Asian International Affairs
- Asian Studies
- Astronomy
- Astrophysics
- Athletic Training
- Atmospheric Sciences
- Biochemistry
- Biological Engineering

Program ○
--- Any ---
- Accounting-BBA
- Accounting-GCERT
- Accounting-MAcc
- Adv Library & Info Sc-GCERT
- Agricultural & Resource Econ-PHD
- Agronomy & Soil Science-MS
- Agronomy & Soil Science-PhD
- American Studies-BA
- American Studies-MA
- American Studies-PhD
- Animal Sciences-BS
- Animal Sciences-MS
- Anthropology-BA
- Anthropology-MA
- Anthropology-PhD
- Architecture - BARCH
- Architecture-D Arch
- Art History-MA
- Art-BA
"How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?"

### Mean Likert value (1-4), Selected (N of FR=13, N of SR=13)

- Writing clearly: 2.8
- Speaking clearly: 2.6
- Thinking critically: 2.8
- Analyzing quantitative info: 2.4
- Acquiring job skills: 2.2
- Working with others: 2.3
- Values and ethics: 2.4
- Understanding diversity: 2.8
- Solving problems: 2.6
- Active citizenship: 2.7

### Mean Likert value (1-4), UHM (N of FR=780, N of SR=1581)

- Writing clearly: 2.7
- Speaking clearly: 2.6
- Thinking critically: 2.9
- Analyzing quantitative info: 2.7
- Acquiring job skills: 2.3
- Working with others: 2.8
- Values and ethics: 2.7
- Understanding diversity: 2.9
- Solving problems: 2.8
- Active citizenship: 2.6

<table>
<thead>
<tr>
<th>Writing clearly and effectively</th>
<th>Mean score</th>
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<tr>
<td></td>
<td>Selected</td>
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<tr>
<td></td>
<td>N  mean</td>
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<tr>
<td>FR 13</td>
<td>2.8</td>
</tr>
<tr>
<td>SR 13</td>
<td>2.8</td>
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### Top 2 answers

- FR: 62% 8% 453 599 61% 59% 64%
- SR: 69% 9% 1127 71% 69% 69% 73%

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<td>N  mean</td>
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<td>FR 13</td>
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<td>SR 13</td>
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<td><strong>Writing clearly and effectively</strong></td>
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<td>SR</td>
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<td><strong>Top 2 answers</strong></td>
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<td>FR</td>
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<td><strong>Mean score</strong></td>
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<td><strong>Selected</strong></td>
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<td><strong>UHM</strong></td>
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<td>FR</td>
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The most important: Engage faculty and students in data interpretation and action!