Assessment Series Part 4:
Direct Assessment Techniques

J. Dickinson
Provost’s Faculty Fellow for Assessment

Libby Miles
Director, Foundational Writing and Information Literacy
Goals for today:

- Review direct vs. indirect assessment techniques
- Discuss factors in selecting examples of student work that demonstrate student progress towards program-level outcomes
- Present examples of tools for direct assessment of students’ work
- Offer suggestions for collecting and assessing student work in a “rating event” with faculty
Focusing exercise:

• Choose one outcome to focus on today

• This outcome should be one that warrants direct assessment

• Take two minutes to look at your outcomes and choose one

• Be prepared to talk about why you chose this outcome and why does it warrant direct assessment
Steps in Program Assessment Planning

1. Develop program-level outcomes with input/drafts by faculty
2. Map curriculum to identify places where students learn, practice and demonstrate their mastery of the outcomes, as well as gaps
3. Gather additional information about student progress within this curriculum through both direct and indirect assessments, e.g.:
   - Surveys of majors and/or alums
   - Faculty summaries of students’ performance on expected skills
   - Rating of samples of student work against a rubric based on an outcome
   - Other indicators (retention of skills from prerequisite courses; identifying predictors of students success, etc.)
4. Use this initial information to develop a plan for assessment of student progress towards/achievement of learning outcomes
5. Progress through the assessment cycle, making sure to regularly review information and “feed it back” into planning and assessment
Components of an assessment cycle

• Assessments (direct and indirect)
• Frequency of each assessment
• Processes for regular review and reporting for each assessment activity (can be combined)
  • For example, a department may conduct and review a majors’ survey every year, but do an alumni survey every three years, as well as create a combined report on findings from both with recommendations for action every three years
• Processes for using data from assessments to inform curricular change; each change should be monitored in the next cycle of assessment
Selecting assessment methods

“When developing assessment methods, make sure your selections:

• answer questions that are important to you
• are manageable, given available resources (including time and money)
• result in useful feedback that highlights accomplishments and identifies areas requiring attention”

-From “Program-based Review and Assessment” Stassen, et al., pg. 29
## Value of both Indirect and Direct Assessments

<table>
<thead>
<tr>
<th>Indirect assessments usually:</th>
<th>Direct assessments of student work:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• are less resource-intensive</td>
<td>• are considered the ‘gold standard’ in assessing student learning</td>
</tr>
<tr>
<td>• require less faculty time</td>
<td>• can provide more accurate and nuanced information about overall strengths and weaknesses of student work</td>
</tr>
<tr>
<td>• can be conducted on an ongoing basis</td>
<td>• Involve faculty evaluating students progress towards the goals faculty have identified for the program</td>
</tr>
<tr>
<td>• introduce other voices (student voices, alumni voices, employer/supervisor voices) into your assessment process</td>
<td></td>
</tr>
</tbody>
</table>
Example assessments

**Indirect**

- Survey of majors
- Survey of alums
- Feedback forms for internship supervisors or alumni employers*
- Evidence of program success (job placement; graduate school placements; passing of licensing exams)
- Forums/town halls
- Interactive exercises (e.g. student maps of their own progress through the major)

**Direct**

- Samples of student work are rated against a rubric by faculty
- Faculty review work in a course they teach and summarize strengths and weaknesses of majors at a particular level
- Exam questions are identified and student performance on those questions rated/evaluated against program goals
- Pre-post tests/samples of student work identify whether target aims of a course are being fulfilled.
More direct assessment examples:

• Student performance on degree-level assignments, projects or exams (e.g. thesis)
• Student performance on qualifying, certification or external exams that closely correspond to program outcomes
• Performance in juried competitions
• Evaluation/rating sheets filled out by supervisors (e.g. internships, externships, research supervisors) that give information about performance levels in specific outcomes areas
Questions:

• Which of the direct assessment examples we just covered would work for the outcome you are focusing on today?

• Can you envision a different example that might work for you?
Choosing what to collect
Q: Where is the outcome being taught?

First look at the level of your curriculum map:

• In which courses does the outcome you are looking at appear?
• In which courses is it introduced, in which is it reinforced and complicated, and in which is it engaged the most deeply?
• Do you want evidence of early, middle, or later student work?
• Are there events outside of the official curriculum that demonstrate it?
Where is the outcome being taught?

Then look at the level of courses where it is being taught:

• What assignments offer evidence of progress towards that outcome?
• Is there a common in-class activity where it is visible?
• Is there a take-home project that demonstrates it?
• Is there a longer project that shows it?
Questions to guide your choices:

• Try a fill-in-the-blanks exercise: Evidence of _______[outcome component] will look like _____________.

• What is the smallest thing you can look at to see evidence of student achievement of that outcome?
Remember:

• Some of your outcomes may need to be assessed in other ways than collecting assignments or exam responses

• Focus on the outcomes that are in your assessment plan for the current year, even if there is evidence of other outcomes in the material you are looking at. Consider looking through one/two lenses a year.

• Value of “both/and” - use a cohort lens, but also see where data aggregated across cohorts/years can be helpful
Practical considerations

- Ease of collection
- Ease of anonymizing and enumerating
- Do multiple copies need to be made/circulated?
- Are grades/scores already calibrated to an outcomes measurement?
- What is the total time per artifact to prepare examples for scoring?
- What is the total time required to score and process the scoring sheet for an artifact?
- How much staff/faculty/worker time is available to manage this project?
Questions:

• Do you have an assignment in mind for your direct assessment?

• How might you collect it? What challenges might arise?
Approaches to scoring/rating
Some types of scoring methods

• Rubric
  • Holistic
  • Primary trait

• Likert scale

• Competency-based/specs scoring
Factors to consider

• Richness of information vs. time required to score

• If your scoring method/scale is very complex, how much of that complexity will be used in the analysis?

• What resources do you have for analysis of collected data (e.g. descriptive vs. inferential statistics)?

• No matter what kind of scale you use, you will want to have a way to “norm” (reach agreement on) examples that match different scores on the scale
Let’s consider some examples

• Take out your handout with examples of scoring sheets from different direct assessment events
Planning and organizing a direct assessment session
Shaping the event:

• NORM:
  • Provide time for everyone to calibrate their readings and expectations, to get on the same page

• RATE:
  • Have a dedicated time and space, even if you have a “distributed” process with clear deadlines and responsibilities
  • Keep rating sheet document design as simple as possible (even if the rating sheet is the rubric)

• DEBRIEF:
  • Set aside time at the end for debriefing, discussion, and quick applications
Care and feeding of raters

• Offer food or nicer venue to make it a bit special and different
• Make rating packets a manageable size, with flexibility for varied speeds of reading and scoring
• Have a “command central” for distributing packets and collecting rating sheets throughout the event
• Packets should be purposefully organized so the artifacts are as random-seeming as possible
• Pre-stamp rating sheets with artifact number to minimize human error; color code to distinguish Rater 1 from Rater 2
Processing and making sense of your direct assessment results
Closing the loop on the rating day

• Always report out the raw qualitative and quantitative results to the program or department and to the participants in the rating day

• As part of this process, solicit insights - what do the raw results say to them?

• Always record and retain questions that arise, for example by using a “parking lot” method during the final discussion during a rating day
Tackle the analysis

• Stay open to both qualitative and quantitative analytical methods for your data.
  • For example, look for themes, things that resonate with faculty; emerging consensus about areas of strength and weakness. If possible and sample sizes allow, both descriptive and inferential statistical methods can help to check perceptions

• Choose the area(s) where you would like to drill down into the data based on the questions that arise from discussion
Remember your overarching goal

The end goal of this process is an evaluation of how your curriculum is doing in this specific area:

• What you think you are teaching them?
• Are students learning or doing what you think they are?
• What you want to be doing (if it is not what you are doing now)

If there is a need for action based on your answers to these questions, put forward actionable items/suggested changes soon after the rating day.
Closing the loop on assessing an outcome

• Create clear plans and timelines for implementing changes informed by assessment

• Publicize changes made as a result of this process; make it visible to make it meaningful
Questions?

J. Dickinson: jadickin@uvm.edu
Libby Miles: Libby.Miles@uvm.edu