

Advantages and Disadvantages of Various Assessment Methods

1. Standardized Exams (Commercial)

Advantages:

- Convenient
- Can be adopted and implemented quickly.
- Reduces or eliminates faculty time demands in instrument development and grading.
- Are scored objectively.
- Provide for external validity.
- Provide reference group measures.
- Can make longitudinal comparisons
- Can test large numbers of students.

Disadvantages:

- Measures relatively superficial knowledge or learning.
- Unlikely to match the specific goals and objectives of a program or institution.
- Norm-referenced data may be less useful than criterion-referenced.
- May be cost prohibitive to administer as a pre- and post-test.
- More summative than formative (may be difficult to isolate what changes are needed).
- Norm data may be user norms rather than true national sample.
- May be difficult to receive results in a timely manner.

Recommendations

- Must be selected carefully based on faculty review and determination of match between test content and curriculum content.
- Request technical manual and information on reliability and validity from publisher.
- Check with other users.
- If possible, purchase data disk for creation of customized reports.
- If possible, select tests that also provide criterion-referenced results.
- Check results against those obtained from other assessment methods.
- Embedding the test as part of a course requirements may improve student motivation.

2. Locally Developed Exams

Advantages:

- Can be tailored to match program and institutional objectives.
- Specific criteria for performance can be established in relation to the curriculum.
- Can be used to develop locally meaningful norms.
- Can obtain results more quickly.
- Cheaper than commercial exams.
- Easier to use in a pre- and post-test approach.
- May be embedded in specific course.

Disadvantages:

- Complex and time consuming to develop psychometrically valid exams.

- More costly in time and effort.
- Requires considerable leadership and coordination.
- May hinder curriculum change if it means that exam would have to be revised.
- Vulnerable to student theft and distribution.
- Results not can not be generalized beyond the program or institution.

Recommendations

- Development requires strong cooperation by program faculty.
- Use on-campus experts to assist with test construction and validation.
- Include outside experts and stakeholders in development and grading process.
- Consider embedding within a course common to all students in the program.
- Check results against those obtained from other assessment methods.

3. Performance Measures

Types

- Essays
- Oral presentations
- Oral exams
- Exhibitions
- Demonstrations
- Performances
- Products
- Research papers
- Poster presentations
- Capstone experiences
- Practical exams
- Supervised internships & practicums

Advantages

- Can be used to assess from multiple perspectives
- Using a student-centered design can promote student motivation
- Can be used to assess transfer of skills and integration of content
- Engages student in active learning
- Encourages time on academics outside of class
- Can provide a dimension of depth not available in classroom
- Can promote student creativity
- Can be scored holistically or analytically
- May allow probes by faculty to gain clearer picture of student understanding or thought processes
- Can provide closing of feedback loop between students and faculty
- Can place faculty more in a mentor role than as judge
- Can be summative or formative
- Can provide an avenue for student self-assessment and reflection
- Can be embedded within courses
- Can adapt current assignments
- Usually the most valid way of assessing skill development

Disadvantages

- Usually the mostly costly approach
- Time consuming and labor intensive to design and execute for faculty and students
- Must be carefully designed if used to document obtainment of student learning outcomes
- Ratings can be more subjective
- Requires careful training of raters
- Inter-rater reliability must be addressed
- Production costs may be prohibitive for some students and hamper reliability
- Sample of behavior or performance may not be typical, especially if observers are present

Recommendations

- Can be intimidating to students
- Develop specific, measurable criteria for observing and appraising
- When possible, use criterion-referenced rating approach instead of simple checklists
- Develop rubrics for greater consistency between raters
- Must clearly articulate expectations to students prior to initiation and provide models or performance criteria
- Consider possible award strategies for enhancing student motivations (best of show, etc)
- Performances could be videotaped
- If possible, base assessment on range of products or performances instead of on single items
- All raters should be trained and inter-rater reliability checked
- Consider training peers, alumni, and community members as raters

Capstone Experiences

- "A well thought-out project that is comprehensive in nature and allows students to demonstrate a range of abilities." (Palomba & Banta, 1999)
- Need to be carefully planned to provide useful information for assessment of specific learning outcomes and cap off a student's college experience
- Can be designed to provide information about SLOs related to the major and general studies
- Should be designed and evaluated by all of the program's faculty and not just course instructor
- May be a specific requirement outside of a course or as part of a designated capstone course
- Capstone course could also be used to administer standardized or locally developed exams or surveys
- Clarify effect of student's grade and/or graduation eligibility (be aware of issues associated with high stakes assessments)

4. Surveys & Questionnaires

Students, alumni, employers, public

Potential Advantages

- Easy to administer
- Can cover a variety of topics in a brief amount of time
- Helps to establish relationship with stakeholders
- Easier to communicate results to stakeholders
- Can be used to gather information from individuals who would be difficult to include in other assessment methods
- Demonstrates concern about gathering feedback/information

Potential Disadvantages

- Information on student learning (perception and opinion) considered to be indirect data
- Good surveys and questionnaires are difficult to develop
- Voluntary participation may result in biased results
- Forced-response choices may not allow individuals to respond as they wish
- Low response rate

Recommendations

- Pilot all instruments
- Use as a supplement to direct methods of assessment
- Include open-ended items with forced-choice response surveys

5. Portfolios

Types of Portfolios

- Learning Portfolios
- Assessment Portfolios
- Marketing Portfolios
- Job Portfolios
- Showcase Portfolios
- Performance Portfolios
- Personal Portfolios
- Proficiency/Competency Portfolios
- Process Portfolios
- Developmental Portfolios
- Hybrid Portfolios

Potential Advantages

- Shows sophistication in student performance
- Illustrates longitudinal trends
- Highlight student strengths
- Identify student weaknesses for remediation, if timed properly
- Can be used to view learning and development longitudinally

- Multiple components of the curriculum can be assessed (e.g. writing, critical thinking, technology skills)
- Samples are more likely than test results to reflect student ability when planning, input from others, and similar opportunities common to more work settings are available
- Process of reviewing and evaluating portfolios provide an excellent opportunity for faculty exchange and development, discussion of curriculum goals and objectives, review of criteria, and program feedback
- May be economical in terms of student time and effort if no separate assessment administration time is required
- Greater faculty control over interpretation and use of results
- Results are more likely to be meaningful at all levels (student, class, program, institution) and can be used for diagnostic and prescriptive purposes as well
- Avoids or minimizes test anxiety and other one-shot measurement problems
- Increases power of maximum performance measures over more artificial or restrictive speed measures on test or in-class sample
- Increases student participation (selection, revision, and evaluation) in the assessment process
- Could match well with Morningside's mission to cultivate lifelong learning
- Can be used to gather information about students' assignments and experiences
- Reflective statements could be used to gather information about student satisfaction

Potential Disadvantages

- Portfolio will be no better than the quality of the collected artifacts
- Time consuming and challenging to evaluate
- Space and ownership challenges make evaluation difficult
- Content may vary widely among students
- Students may fail to remember to collect items
- Transfer students may not be in the position to provide complete portfolio
- Time intensive to convert to meaningful data
- Costly in terms of evaluator time and effort
- Management of the collection and evaluation process, including the establishment of reliable and valid grading criteria, is likely to be challenging
- May not provide for externality
- If samples to be included have been previously submitted for course grades, faculty may be concerned that a hidden agenda of the process is to validate their grading
- Security concerns may arise as to whether submitted samples are the students' own work or adhere to other measurement criteria
- Must consider whether and how graduates will be allowed continued access to their portfolios
- Inter-rater reliability must be addressed

Recommendations

- Clear expectations about the purpose and collection responsibilities will help students succeed in using the portfolio method. The works that student select will be more satisfying if the student can compare to established criteria. If the faculty want student portfolios to represent student development over time, they will need to be scrupulous about setting forth the performance demand of collecting and examining works throughout the student's career. The success of the portfolio may be enhanced

when students reflect on how all the pieces work together to express their learning or meet department criteria.

- Consider having portfolios submitted as part of course requirements, especially a capstone course at the end of a program
- Use portfolios from a representative sample of students rather than having all students participate (this approach may save considerable time, effort, and expense but be problematic in other ways)
- Develop specific, measurable criteria for observing and appraising
- When possible, use criterion-referenced rating approach instead of simple checklists
- Develop rubrics for greater consistency between raters
- Have more than one rater for each portfolio, establish inter-rater reliability through piloting designed to fine-tune rating criteria
- Provide training for raters and check inter-rater reliability
- Recognize that portfolios in which samples are selected by the student probably represent their best work rather than typical work
- Cross-validate portfolios with more controlled student assessments for increased validity
- The conceptual framework for a student learning portfolio needs to be based on (1) agreed upon student learning goals and objectives, (2) consideration of what faculty want to learn from the portfolios, and (3) consideration of what students should learn from the process

Additional Portfolio Information

Five Stages of Electronic Portfolio Development (Barrett)

1. Setting the Portfolio Context (Beginning)
2. The Working Portfolio
3. The Reflective Portfolio
4. The Connected Portfolio
5. The Presentation Portfolio (Final)

Portfolio Planning (Adapted from Palomba & Banta, 1999)

1. Establish purpose(s) of portfolio
 - Decide what type of portfolio will be used (see above)
 - Identify how portfolios will affect students (required? graded?)
 - Identify what students should demonstrate/learn from portfolios (benefit)
 - Identify student learning outcomes that will be addressed
2. Determine content of portfolios
 - Identify types of items (writing samples, exhibits, exercises, etc)
 - Establish who will select items (student or faculty) and selection criteria
 - Decide if student should include reflective statements and at what point
3. Determine storage and access procedures
 - Identify primary mode (paper, electronic)
 - Determine how items will be stored
 - Determine how items will be accessed by students and faculty
4. Determine how portfolios will be assessed
 - Develop a timeline for portfolio activities, review and feedback

- Establish a review cycle
- Establish a feedback cycle
- Develop specific scoring criteria and rating scale
- Develop a reliable process for examining and rating portfolios
- Create review teams
- Provide for training of raters
- Check inter-rate reliability
- 5. Establish procedures for use in program assessment plan
 - Decide whether to review all portfolios or sample
 - Create process for summarizing results
 - Allow for faculty discussion of results
 - Provide opportunities for developing recommendations

A Taxonomy for Classifying Portfolios (AAHE)

Note: this taxonomy is broad and not restricted to student portfolios. For example, a faculty member's file submitted for promotion and tenure and accreditation self-studies could be considered portfolios - Petra

- Context
 - Course
 - Program
 - Institution
 - Inter-institutional
 - Independent (Self)
- Author
 - Student
 - Faculty
 - Administrator
 - Organization
 - Other
- Purposes
 - Development
 - Self-assessment
 - Advising
 - Documenting learning over time
 - Documenting professional development
 - Building the curriculum
 - Adding to the knowledge base of or among disciplines
 - Evaluation
 - Demonstrating achievement of learning outcomes
 - High stakes evaluation
 - Accreditation
 - Promotion and tenure
- Presentation
 - Showcasing achievement
 - Publicizing organizational reflection and progress
 - Responsiveness to state and nation need for information