Session 9 - Classroom assessment techniques

Objective: to explore different assessment techniques
Kinds of pedagogy and innovation

Constructivism
Student centred learning
Authentic, reflective, collaborative learning
Understanding oriented knowledge acquisition
Problem based learning
Integrated studies
Experiential or hands on learning
Group or cooperative learning
Self-directed learning
The flipped classroom and peer instruction

Pedagogy and formative assessment
WHAT is formative assessment?

‘Formative assessment refers to frequent, interactive assessments of students’ progress and understanding to identify learning needs and adjust teaching appropriately’ (Looney, 2005)

‘A formative assessment is a tool that teachers use to measure student grasp of specific topics and skills they are teaching. It’s a tool to identify specific student misconceptions and mistakes while the material is being taught’ (Kahl, 2005)
Key Practices of the Formative Assessment Process

1. Clear lesson-learning goals and success criteria, so students understand what they’re aiming for;
2. Evidence of learning gathered during lessons to determine where students are relative to goals;
3. A pedagogical response to evidence, including descriptive feedback that supports learning by helping students answer: Where am I going? Where am I now? What are my next steps?
4. Peer- and self-assessment to strengthen students’ learning, efficacy, confidence, and autonomy; and
5. A collaborative classroom culture where students and teachers are partners in learning.
(http://ccsso.org)
Classroom assessment that involves students in the process and focuses on increasing learning can motivate rather than merely measure students.

Teachers use assessment information formatively when they:

- **Pretest** before a unit of study and adjust instruction for individuals or the entire group.
- **Analyze** which students need more practice.
- Continually **revise instruction** on the basis of results.
- **Reflect** on the effectiveness of their own teaching practices.
- **Confer with students** regarding their strengths and the areas that need improvement.
- **Facilitate peer tutoring**, matching students who demonstrate understanding with those who do not.
Self-assessment
Self-assessment involves students in examining their own learning performance using a set of explicitly stated criteria. It can take various forms, including teacher-student interviews, self-assessment checklists, reflection logs, writing conferences and group discussions among students.

In implementing self-assessment, teachers are advised to:

- communicate intensively with students before starting the process to ensure their thorough understanding of the rationale and procedures of the assessment;
- create an unthreatening classroom climate, making them feel comfortable with being honest about their own performance, and ensuring that the information derived will not be used against them;
- set out clear and explicit assessment criteria, and ensure that students understand what they are aiming for before the learning and teaching activities begin; and allow sufficient time for students to revise their work and adjust their strategies.
Seven Keys to Effective Feedback
Grant Wiggins

Feedback Essentials
Helpful feedback is
• goal-referenced;
• tangible and transparent;
• actionable;
• user-friendly (specific and personalized);
• timely;
• ongoing; and consistent.
The feedback lesson

The introduction to the lesson
Outlining the learning intention
Sharing the task
Identifying the success criteria
Children working at the task
Checking understanding
Giving feedback later in the class
Peer assessment

Peer assessment involves students in evaluating the performance and quality of the work of, or the level attained by their peers based on a set of predetermined criteria. The work to be assessed can include test performance, portfolios, oral presentation and writing. Peer assessment can be done on a one-on-one basis or in small groups.

To organise peer assessment effectively, teachers should pay attention to the following:

Clarify the purpose, rationale and expectations with students.
Involving students in developing and clarifying assessment criteria to give them a sense of ownership and reduce anxiety.
Match students according to their abilities. In general, aim for same-ability peer matching.
Provide training, examples, practice, guidelines and checklists.
Specify activities and timescale, making clear what needs to be done, within what time-scale, and what records, if any, need to be kept.
Monitor the process and coach as necessary.
Evaluate and give feedback to students on their performance.
What does a teacher want and need to know
what students know
what they have learned
how much they have learned
how they can improve?
what they can do to improve?
Processes and activities
• Observational assessment
• Projects and assignments tasks and units
• Teacher developed tests
• Responding to student work feedback
• Record keeping
• mark book, electronic portfolio and feedback
Classroom Assessment Techniques
the importance of engagement, commitment and responsibility
we are selling education and our subject – it has to be meaningful and worthwhile
education as personal enrichment and development

The ideal overview – knowing the child
We want to know where the children comes from family and background
values, hopes and dreams
likes and dislikes
attitudes and interests

The big teacher and school test
How well do we know this student?
How good a description could we give of this student and her/his abilities?
For our subject or a topic
We want to know
where students are in their learning
what can they do, and how well they perform
what the students know and think about the topic or activity.
what interests and engages them

Dialogue and oral interaction are important

**Teacher questions**
problem if questions are rhetorical or trivial
need for deep questioning

not the same students answering all the time
give students time to think
no hands up to answer?
Council for the Curriculum, Examinations & Assessment


Assessment for Learning (AfL)

Unit 2: Sharing Learning Intentions and Success

Assessment for Learning (AfL)

Unit 4: Effective Questioning

Assessment for Learning (AfL)

Unit 5: Helping Pupils to Reflect on their Learning
Feedback and reporting
goal based and rubric feedback
comments on the work, not just scores
term report
rubric reporting
continuous electronic reporting?

Self-assessment
potentially very powerful – why?
what have you learned?

Peer assessment
very challenging activity
potential problems, potentially powerful

importance of cooperation and collaboration
Instant feedback and small tasks
Hand signals – the fist and finger signals

End of the lesson feedback
The one minute summary
One sentence summary
What did you learn about …..
What was difficult to understand?

The problem of correcting work!!!!

Write questions about ….
Write test question about ….
Concerned with explicit and goal-driven thinking routines

‘For these routines to be effective, they usually consist of only a few steps, are easy to learn and teach, can be scaffolded or supported by others, and get used over and over again in the classroom.

For example, KWL (What do you know? What do you want to know? What did you learn?), brainstorming, pushing students to give evidence and to reason by asking them ‘Why?’, classroom arguments or debates, and journal writing.
Thinking routines?
Underlining text
Note form summary
Essay plan
Pro con grid

Diagrams and SmartArt
Concept map
The important thing is that students are learning, improving and growing. How do we know if students are learning, improving and growing?

- assessment based on goals and quality criteria
- finding out what students know and can do
- and what they have to learn to do next

**Total assessment in the classroom**

<table>
<thead>
<tr>
<th>Multiple choice questions</th>
<th>Inventories</th>
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<tbody>
<tr>
<td>True-False questions</td>
<td>Checklists</td>
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<tr>
<td>Sentence Completion</td>
<td>Peer ratings</td>
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<tr>
<td>Short answer</td>
<td>Self ratings</td>
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<tr>
<td>Essays</td>
<td>Journals</td>
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<tr>
<td>Practical exams</td>
<td>Portfolios</td>
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<tr>
<td>Papers/Reports</td>
<td>Observations</td>
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<tr>
<td>Projects</td>
<td>Discussions</td>
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<tr>
<td>Questionnaires</td>
<td>Interviews</td>
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<tr>
<td>Presentations</td>
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</table>
# Fig. 2.2 Assessment Tool Kit

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
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<tbody>
<tr>
<td>Questioning</td>
<td>asking focused questions in class to elicit understanding</td>
</tr>
<tr>
<td>Observation</td>
<td>systematic observations of students as they process ideas</td>
</tr>
<tr>
<td>Homework</td>
<td>assignments to elicit understanding</td>
</tr>
<tr>
<td>Learning conversations or interviews</td>
<td>investigative discussions with students about their understanding and confusions</td>
</tr>
<tr>
<td>Demonstrations, presentations</td>
<td>opportunities for students to show their learning in oral and media performances, exhibitions</td>
</tr>
<tr>
<td>Quizzes, tests, examinations</td>
<td>opportunities for students to show their learning through written response</td>
</tr>
<tr>
<td>Rich assessment tasks</td>
<td>complex tasks that encourage students to show connections that they are making among concepts they are learning</td>
</tr>
<tr>
<td>Computer-based assessments</td>
<td>systematic and adaptive software applications connected to curriculum outcomes</td>
</tr>
<tr>
<td>Simulations, docudramas</td>
<td>simulated or role-playing tasks that encourage students to show connections that they are making among concepts they are learning</td>
</tr>
<tr>
<td>Learning logs</td>
<td>descriptions students maintain of the process they go through in their learning</td>
</tr>
<tr>
<td>Projects and investigations</td>
<td>opportunities for students to show connections in their learning through investigation and production of reports or artifacts</td>
</tr>
</tbody>
</table>
**Interpreting Information**

<table>
<thead>
<tr>
<th>Developmental continua</th>
<th>Profiles describing student learning to determine extent of learning, next steps, and to report progress and achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checklists</td>
<td>Descriptions of criteria to consider in understanding students’ learning</td>
</tr>
<tr>
<td>Rubrics</td>
<td>Descriptions of criteria with gradations of performance described and defined</td>
</tr>
<tr>
<td>Reflective journals</td>
<td>Reflections and conjectures students maintain about how their learning is going and what they need to do next</td>
</tr>
<tr>
<td>Self-assessment</td>
<td>Process in which students reflect on their own performance and use defined criteria for determining the status of their learning</td>
</tr>
<tr>
<td>Peer assessment</td>
<td>Process in which students reflect on the performance of their peers and use defined criteria for determining the status of their peers’ learning</td>
</tr>
</tbody>
</table>

**Record Keeping**

<table>
<thead>
<tr>
<th>Anecdotal records</th>
<th>Focussed, descriptive records of observations of student learning over time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student profiles</td>
<td>Information about the quality of students’ work in relation to curriculum outcomes or a student’s individual learning plan</td>
</tr>
<tr>
<td>Video or audio tapes, photographs</td>
<td>Visual or auditory images that provide artifacts of student learning</td>
</tr>
<tr>
<td>Portfolios</td>
<td>Systematic collection of their work that demonstrates accomplishments, growth, and reflection about their learning</td>
</tr>
<tr>
<td>Communicating</td>
<td></td>
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<tr>
<td>------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>Demonstrations, presentations</td>
<td>formal student presentations to show their learning to parents, judging panels, or others</td>
</tr>
<tr>
<td>Parent-student-teacher conferences</td>
<td>opportunities for teachers, parents, and students to examine and discuss the student’s learning and plan next steps</td>
</tr>
<tr>
<td>Records of achievement</td>
<td>detailed records of students’ accomplishment in relation to the curriculum outcomes</td>
</tr>
<tr>
<td>Report cards</td>
<td>periodic symbolic representations and brief summaries of student learning for parents</td>
</tr>
<tr>
<td>Learning and assessment newsletters</td>
<td>routine summaries for parents, highlighting curriculum outcomes, student activities, and examples of their learning</td>
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</tbody>
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All sorts of assessment items and techniques can be used in the classroom. When are the different techniques most appropriate to use? To do what?
Formative Assessment for Students and Teachers: State Collaborative on Assessment and Student Standards 2008

Learning Progressions

Learning progressions should clearly articulate the sub-goals of the ultimate learning goal.

Learning Goals and Criteria for Success

Learning goals and criteria for success should be clearly identified and communicated to students.

Descriptive Feedback

Students should be provided with evidence-based feedback that is linked to the intended instructional outcomes and criteria for success.

Self- and Peer-Assessment

Both self- and peer-assessment are important for providing students an opportunity to think metacognitively about their learning.

Collaboration

A classroom culture in which teachers and students are partners in learning should be established.
West Virginia Formative Assessment Toolkit

The importance of peer parent and self assessment performances and audiences authentic activity

Assessment should be about progress towards targets and standards

classmark book
classjournal
classportfolio
classconference
Self assessment is an important part of any assessment – it helps learners to feel empowered and to become more reflective and autonomous. Self-assessment encourages students to reflect on their learning and results in students consciously improving how they learn.

**Strategies:**
- Reflection
- Journal writing
- Performance tasks

**Tools:**
- Checklists
- Rubrics
- Journals
- Behavioural Indicators
  (e.g., SE Competencies and 21st CC Benchmarks)

Peer assessment is the process whereby students give formative feedback to each other. Students learn that they have to be sensitive about the kind of feedback they give others and learn how to communicate with their peers in non-judgemental ways. These are important 21st century competencies that we hope to imbue in our students.

**Strategies:**
- Peer-to-peer questioning
- Observations by peers
- Co-operative learning
- Collaborative learning
- Performance tasks

**Tools:**
- Checklists
- Rubrics
- Behavioural Indicators
  (e.g., SE Competencies and 21st CC Benchmarks)

Teacher’s views of students will always be important in giving both summative and formative feedback. Feedback that focuses on learning can help students to understand their progress, identify the challenges they are experiencing and suggest how they can further improve in various aspects.

**Strategies:**
- Questioning to clarify
- Observations by teachers
- Teachable moments
- Performance tasks

**Tools:**
- Checklists
- Rubrics
- Holistic report card
- Behavioural Indicators
  (e.g., SE Competencies and 21st CC Benchmarks)

Another group of people whose views of students are important are the parents and significant others. They are the key influencers of their children's growth and can become engaged partners to help reinforce Cyber Wellness messages and principles at home.

**Strategies:**
- Observations by parents/significant others
- Teachable moments
- Cyber Wellness projects that involve parent-child collaboration

**Tools:**
- Checklists
- Rubrics
- Behavioural Indicators
National Council for Curriculum and Assessment

**Student Self-assessment** encourages students to take responsibility for their own learning. Self-assessment asks students to examine their strengths and weaknesses and to set their own goals to further their learning. When students make choices in setting goals about their learning, achievement can increase.
Peer feedback

These five steps can be shared with students to help them give each other feedback.

01. The first time you read through your partner’s piece of work hold off giving any comments. You don’t want to swamp your partner with suggestions. You want to focus on the main strengths and weaknesses of the work, based on the success criteria agreed with the teacher.
02. If you notice that there are misspellings or mistakes in punctuation, just point out the problem but let the person fix it themselves.
03. Then try to point out • What has been done well • What has been less successful • One or two suggestions on how improvement can be made
04. Make your comments as specific as possible reminding your partner of the success criteria.
05. Be honest with each other and sensitive too! Never say or write something harsh or critical that will hurt another student.
Evaluation and grading must reflect achievement and progress over time in relation to specific learning standards or student goals; evaluation is tied to learning, not behaviour and attitude.

“Honorable intentions don’t justify the use of misguided practices that no longer fit. These traditional grading practices (like averaging, giving penalties, grading everything, and using weighted task types) in fact, are downright wrong given today’s pedagogical landscape and what we now know about instruction and assessment.” (Schimmer, 2016)

Often teachers find that grading interferes with genuine student learning, and that grades, rather than learning, become the primary driver for students, ultimately, creating a disconnect in their learning. To more accurately reflect where students are with their learning and to illuminate what they understand and can do, teachers need to create assessments that are ongoing, varied in nature and administered over the course of the year. These assessments should be designed to closely tie to the curricular competencies and the content of the course, reflecting relevant and authentic experiences for the students that create a clear picture of student strengths and weaknesses.
Teachers strive to ensure the grades students receive are reflective of where students are with their learning; hence, grades should:

• measure learning, not behaviours
• reflect what the student knows, understands and can do
• be used to inform instruction
• be used to improve student learning
• be fair, transparent and equitable for all students
• be organized by the provincial curriculum learning standards
• separate process and content
• be balanced between formative and summative
A report card should:

- include a minimum of three pieces of evidence for each learning standard (curricular competencies and content)
- capture the trend in student achievement over the instructional period
- provide a snapshot of student growth over the instructional period
- reflect students’ most consistent achievement
- have a grade/level that reflects greater emphasis to more recent achievement
- not be skewed by extreme scores
- not be a surprise to students or parents
### The Assessment For and As Learning Movement

#### Desirable characteristics of Assessment for and as Learning

| 1. Alignment of curriculum, pedagogy, assessment and accountability | 25. Policy and practice-focused on teaching and learning |
| 2. Clear and explicit aims, goals, outcomes, standards | 26. Quality criteria and described levels of performance |
| 3. Collaboration and peer learning | 27. Recognising individual differences |
| 5. Criterion-referenced | 29. Reporting current and future student learning to others |
| 6. Curriculum requirements | 30. Reporting requirements |
| 7. Deconstruction of assessment | 31. Respectful, cooperative, interactive and democratic culture |
| 8. Describing and defining growth | 32. Rubrics for assessment |
| 9. Diagnostic | 33. Self-assessment |
| 10. Engagement and interaction with students and parents | 34. Self-directed learning |
| 11. Focus on how students learn | 35. Self-regulation |
| 12. Formal and Informal | 36. Standardized and individualized |
| 13. Formative | 37. Standards-based assessment |
| 14. Goal-setting and planning next steps | 38. Substantive feedback to students |
| 15. Higher Order Thinking | 39. Summative |
| 16. Integrated and connected learning | 40. Systematic, planned programming for innovation and continuous improvement |
| 17. Integration of learning and assessment | 41. Team teaching |
| 18. Ipsative | 42. Thinking routines |
| 19. Learning progressions | 43. Tracking progress |
| 20. Metacognition | 44. Use of informal and individualised as well as formal and standardised assessment |
| 21. Mixed ability teaching | 45. Use of standardised, external assessment methods and data |
| 22. Norm-referenced | 46. Using assessment data to adapt instruction |
| 23. Ownership and responsibility | 47. Varying instruction and assessment |
| 24. Peer assessment |
The line of assessment FOR and AS learning

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<thead>
<tr>
<th>Clear goals and quality criteria and standards</th>
<th>Deconstruct the task and the assessment</th>
<th>Reflection and metacognition</th>
<th>Self and peer assessment</th>
<th>Formative feedback</th>
<th>Summative reporting</th>
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