Assessment re-loaded:
beyond testing
in distance education



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Ask yourself . . .

What are two characteristics of effective assessment?



What two questions do you have now about designing assessment?

Purpose of continuing professional education



Competencies
integrated with
Wise Judgment
through
Performance

in
"swamps of
everyday practice"



Capability is	
"having justified <i>confidence</i> in one's ability to take appropriate and effective action to formulate and solve problems in familiar and unfamiliar changing settings." (Cairns, 2000)	
Purposes of assessment	
 SUMMATIVE Compare actual learner performance to instructional goals Determine learners' competence, performance, and capability Help learners make decisions about their next actions Determine learners' satisfaction 	
Provide information for other stakeholders	
Purposes of assessment	
 FORMATIVE Determine learners' prior knowledge Monitor learners' ongoing progress Create learning opportunities Evaluate and improve instructional method 	
Develop learners' capability for self-assessment and self- monitoring	

Heritage Hockey Watching: Pre-test

- Why does the heritage hockey game excite Canadians?

 - a. Canadians get excited over anything with a puck.b. It's the first hockey game ever played in an outdoor rink.
 - c. About 60,000 people are expected to attend.
 - d. All of the above.
- List three ways you can tell the difference between the teams:

 - a. They wear different coloured uniforms.b. One team swears in French and the other in English.
 - c. The players sit on different benches.
- Icing is:
 - a. Making sure the beer is cold.

 - Making sure the cake is frosted.
 To relieve pressure on the goalie, the defensive team fires the puck past the other team's endline



AUTHENTIC ASSESSMENT

- ✓ Valid and reliable
- ✓ Ongoing
- ✓ Instructive
- ✓ Multi-modal
- ✓ Communicative
- ✓ Comprehensive
- ✓ . . . yet feasible



Authentic assessment is Valid and Reliable

- Measures what it is supposed to measure
- Measures consistently
- Recognizes own limitations

Allows for knowledge demonstration beyond its own pre-determined limits



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Authentic assessment is Ongoing

- Occurs frequently aims for surprise
- Embedded throughout instruction process
- Engages learner in different ways:
 - recalling new information
 - making personal sense of it
 - · connecting with prior knowledge
 - solving problems
 - critically questioning the knowledge
 - extending the knowledge
 - integrating knowledge into everyday embodied practice

Authentic assessment is Instructive

- Contributes to learning -helps learner streeetch
- Recognizes how assessment shapes what is learned
- Aims to cultivate learner's ability to self-assess





Authentic assessment is Multi-modal

Humans and knowledge are too complex to be judged with one instrument!



- Aims to capture different expressions of learning
- Draws on multiple methods
- Engages learner through multiple modes
 recalling, reflecting, solving, building, practicing . . .
- Helps ensure redundancy and triangulation

Authentic	asses	sment	is
Comr	nuni	cati	ve



- Criteria are clear and transparent
- Feedback is timely
- All results and rationale are clearly communicated
- Learner is involved: forming criteria, identifying indicators, responding to external assessment, providing self-assessment

Authentic assessment is Comprehensive

 Provides information about learner's knowing that knowing how knowing in action



- •Incorporates multiple perspectives:
 - •self, peer, expert



Authentic assessment is Comprehensiveyet Feasible

- Incorporates different purposes:
 - summative, formative
 - information for learner, for peers, for instructional design
 - develops learner's self-assessment

.... within constraints of available resources (time, people, knowledge), contexts, and community norms



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Traps of assessment

- Measuring what's easiest to measure (What gets measured gets learned)
- Reductionism
- Underestimating the message embedded in the evaluation



Ways to sample learners' knowledge & skill

- Performance observation
- Growth plan, portfolio
- Interview
- Learner teaching others
- Peer ratings, narratives
- Artifacts of everyday work
- Other stakeholder reports
- Written test
- Problem analysis, solution
- Personal checklists
- Written reflection
- Presentation to peers (debate, panel, etc)
- Prepared product (solution, design, teaching tool, video, display, etc)

Assess at different times



- **BEFORE**: prior knowledge
- **DURING**: learner's responses, comprehension, application
- IMMEDIATELY AFTER: learner's recall of knowledge, problem-solving using it
- LONG TERM AFTER: incorporation into everyday practice

National Forum on Continuing Pharmacy Education, November 21-22, 2003

Your and	Diabetes Practice Self-Ass	sessment ou will be able to assess your progress by	
reviewin	g them at the end of the course when yo	u complete a similar post-course survey.	
1.	me.	It services in diabetes management intrigues ractice is like for pharmacists who are	
	providing services for patients with d	liabetes.	
3.	I am interested in learning more abo diabetes patient care activities.	ut what a pharmacist does when performing	
4.	patients.	cist who provides diabetes management for	
5.	Diabetes management has a place in	the role of the pharmacist.	
6.	I firmly believe that I should be invol	ved in diabetes management.	
7.	How would you assess your comfort in the treatment of type 2 diabetes?	level with explaining the rationale for insulin	
12.	From the following list, which item do	you feel was the most important to learn	
	Assessing patients on oral Interpreting laboratory dat	hypoglycemic therapy	
	Providing patient education Understanding the drug the	1	
14.	Please list the top 5 topics you need	to learn about diabetes?	
	Assess diffe	went levels	
		rent levels	
Passii	ng skills		
	Level 1: Can p	eass puck to another	
	player from s	stationary position.	
	Level 2: Can a	dvance puck up the ice	
and complete a pass while skating forward. Level 3: Can anticipate movements of,			
		3	
		inticipate movements of.	
-		ck to, other forwards.	
	Level 4: During	g game action can	
	anticipate an	id complete passes.	
	Bloom's T	01/01/01/01/1/	
	Pidoili 2 i	axonomy	
1	: knowledge	1. Describe, label, define, locate, list	
2	: comprehension	Explain, give examples, summarize	
3	: application	3. Predict, relate, show, solve	
4	: analysis	Differentiate, classify, find issues, show causes, critique	
5	: synthesis, creativity	5. Solve, design, extend, integrate	
6	: evaluation	Compare, prioritize, draw	
0	. GvaluatiOH	conclusions, recommend and justify	

Questions	that	engage-	HOCKEY
RECALLING		CONNECTII	VG

Which of the following is *not* a goal of the Edmonton Oilers or Montreal Canadians on Heritage Hockey Night?

- a. Winning the hockey gameb. Earning money for the
- C. Having fun with the boys
- d. Dressing like Don Cherry



(Interviewing Coach Craig McTavish of the Edmonton Oilers)

- Craig, in preparing your young men for the big game, what three goals would you like to achieve?
- What do you think about
 Wayne Gretsky back on home
 ice, if only for one night?
- Are you encouraging your players to make this game a special if only for a night?

Questions that engage

RECALLING

Which of the following is not a goal of harm reduction strategies?

- **a.** Prevent transmission of HIV INFECTION.
- b. Reduce social isolation.
- C. Create a drug-free society.
- d. Save lives.
- **C.** Improve health and wellbeing of drug users.

CONNECTING

In providing harm reduction strategies, what are three goals you would like to achieve?

What are your feelings or emotions toward Jane?

Is there a needle/syringe exchange program in your community? Would you refer a patient to it?

Questions that engage- HOCKEY!

ANALYZING

Which of the following did not cause your humiliating loss to the Oilers?

- a. Your heavy travel schedule
- b. Inexperience on your blue line
- C. Injuries to top players
- d. The secret Ukrainian umppa band that played all night outside the players' dressing room

PROBLEM-SOLVING

(To the Edmonton Coach):

Playing short handed all night makes it difficult to sustain an offensive flow. What strategies will you put in place to reduce penalties for your team?



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Questions t	that engage	
ANALYSING Which of the following likely did not expose Jack to injection drug use? a. Homelessness b. Mental illness c. Ethnicity (Caucasian) d. Family disruption	PROBLEM-SOLVING What harm reduction strategies would be appropriate for Paul? a.******* b.********** c.***********	
	hat engage- :KEY!	
CRITICAL QUESTIONING	EXTENDING	
What concerns can you see as your young defensemen	What three actions could you take to improve your young defensemen's play prior	
try to gain experience and poise in their own end?	to the All Star break?	
	16 10 12	
Questions t	that engage	
CRITICALLY QUESTIONING	EXTENDING	
What concerns can you foresee with the expanded role of pharmacists in providing HIV- preventative services to clients?	What three actions could you take now to improve your provision of harm reduction strategies?	

Questions that	engage- <i>HOCKEY!</i>	
PROJECTING INTO PRACTICE • How will you anticipate	ASSESSING INTEGRATION INTO PRACTICE	
Montreal forechecking? • If we are short handed, how will you relieve Montreal's	I am able to relieve pressure on my goalie with a safe pass: a. Every time	
 offensive pressure? On the power play, where will be your winger on the ice? 	b. Most times if I concentrate c. Only with help and luck	
 What is the least risky pass you can make to head man the puck? 	d. Pack my bags mama, I'm on my way to the minors	
·		
Questions	that engage	
PROJECTING INTO PRACTICE	ASSESSING INTEGRATION in	
	PRACTICE	
1 Land	9	
	ance Education	
	rint modules	
 Questions embedded multiple choice, open- 	=	
Activity choices with a	submitted product	
produce a practice guproduce a test for a p	ide (protocol summary) eer	
 create behavioral indi 	cators for personal action plan	

• list other performance indicators to track over time

Assessment in Distance Education	
Computer-based instruction	1
 Manipulate images on screen Arrange protocol steps in appropriate sequence Respond to video clip of patient or patient-pharmacist interaction Multiple-choice case analysis questions Written analysis (scoring guide provided, or webboard of collected responses) etc 	
Assessment in Distance Education Online (group) instruction • Post case responses and analyses to group • Assess peer's analyses • Formulate a problem or case for the group • Develop with group specific indicators of best practice for the new knowledge	
 Post video clip of own practice for peer (or other) to assess Share progress with group at 3- or 6-month intervals - through narrative or artifacts 	
Ask yourself	
What were your two original questions? Can you answer them now? What understandings were reinforced for you today? What one new idea will you remember? What one new practice will you look into?	