



Assessment For Learning: Moving Beyond the Strategies

Lorna Earl & Associates

123 Kenilworth Ave.
Toronto M4L 3S7
416 694 7934

**Stockholm
November 2012**

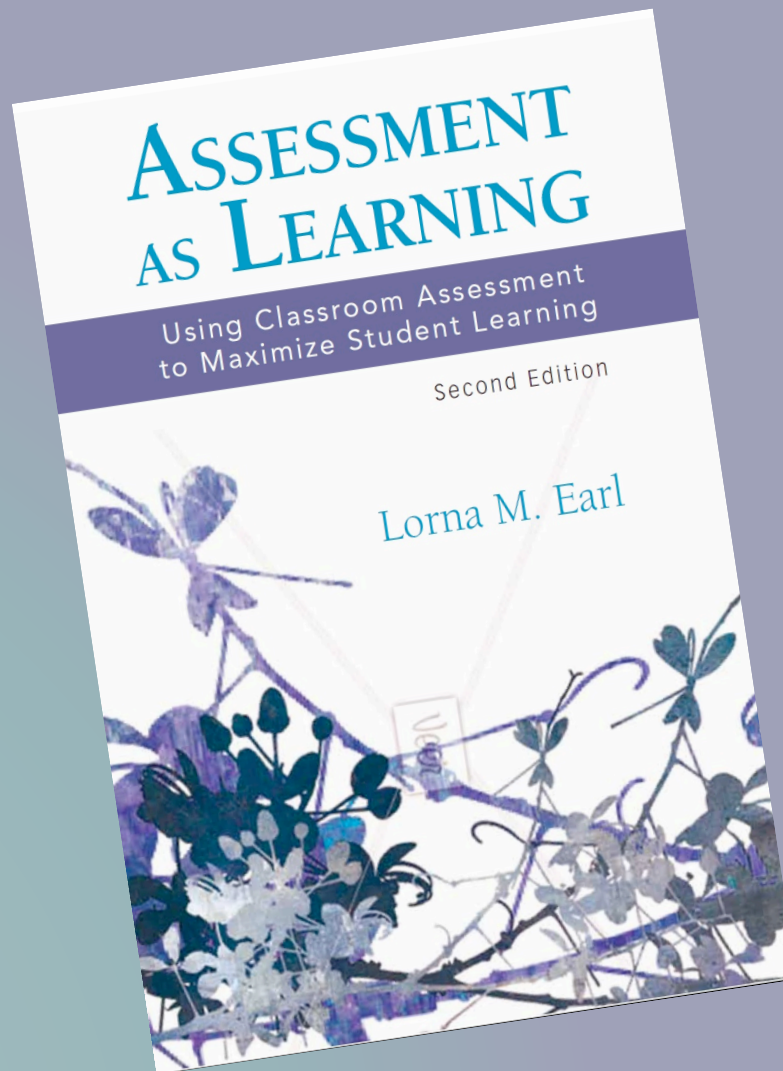
Lorna M. Earl, Ph.D.

What Does *Assessment for Learning* Mean to You?



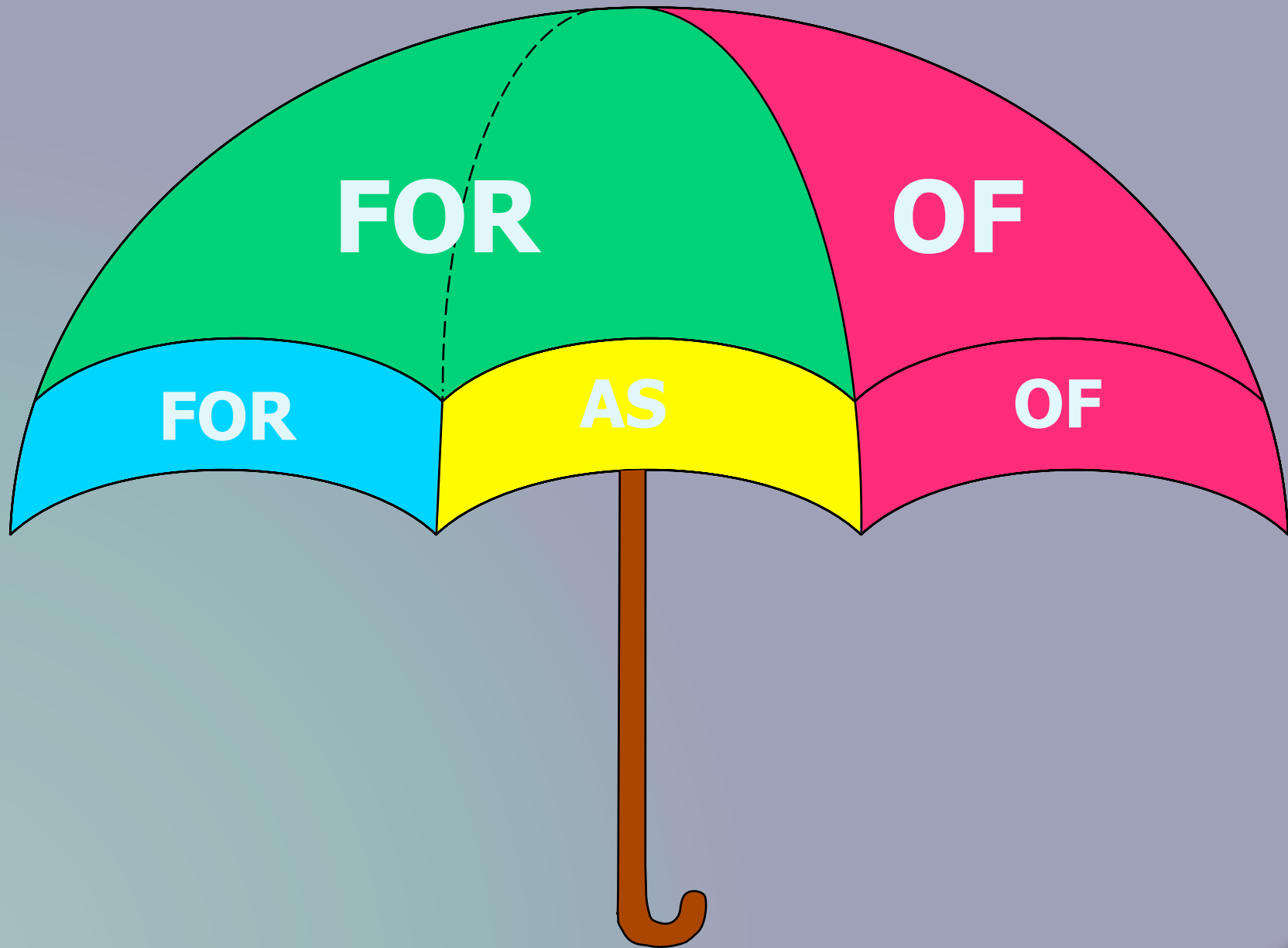
Moving Beyond the Strategies

- Recent research in England found that teachers in an Assessment for Learning project often reflected what they called the “letter” of AfL, focusing on the surface techniques, rather than the “spirit”, based on a deep understanding of the principles underlying the practices. Only about 20 percent of the teachers in this “Learning How to Learn” study were using AfL in ways that were designed to help students develop as learners.



Purposes of Classroom Assessment

- ◉ **Assessment for learning**
- ◉ **Assessment as learning**
- ◉ **Assessment of learning**
- ◉ **Balance and Tensions in Assessment Purposes**



Assessment for Learning

“Assessment for learning is any assessment for which the first priority in its design and practice is to help teachers promote students’ learning.

Earl, 2003



Assessment as Learning

“Assessment as learning is a metacognitive process in which students take ownership for improving their own learning. It involves students setting learning goals as well as monitoring, reflecting upon, and adjusting their own learning, often in response to feedback from the teacher and their peers.”

Earl, 2003



Assessment of Learning

Assessment of learning is assessment used to confirm what students know, to demonstrate whether or not the students have met the standards and/or show how they are placed in relation to others.

Earl, 2003



3 Powerful Insights about How People Learn (National Research Council)

- People come to learning with preconceptions about how the world works. If their initial understanding is not engaged, they may fail to grasp the new concepts and information that are taught or may learn them superficially and revert to their preconceptions in real



Using Assessment to Identify What They Believe To Be True

- ◉ Prior Knowledge
- ◉ Preconceptions
- ◉ Misconceptions
- ◉ The “Case of the Pool Table”

3 Powerful Insights about How People Learn (National Research Council)

- To develop competence in an area of inquiry, people must:
 - have a deep foundation of factual knowledge
 - understand facts and ideas in the context of a conceptual framework
 - organize knowledge in ways that facilitate retrieval and application

Periodic Table of the Elements

<http://www.ck12.org/periodic-table-of-elements>
©2010 Todd Helmenstine
About Chemistry

1A	2A																	3A	4A	5A	6A	7A	8A												
H	He																	B	C	N	O	F	Ne												
Li	Be																	Al	Si	P	S	Cl	Ar												
Na	Mg																	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr																		
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe																		
Cs	Ba	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu																			
Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr																			

Lanthanides: La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu

Actinides: Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr

Alkali Metals: Li, Na, K, Rb, Cs, Fr

Alkaline Earths: Be, Mg, Ca, Sr, Ba, Ra

Lanthanides: La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu

Actinides: Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr

Transition Metals: Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Cs, Ba, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Fr, Ra, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr

Main Group Elements: H, He, B, C, N, O, F, Ne, Al, Si, P, S, Cl, Ar, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Cs, Ba, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Fr, Ra, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr

Halogens: F, Cl, Br, I, At

Noble Gases: He, Ne, Ar, Kr, Xe, Rn

Metalloids: B, Si, Ge, As, Sb, Te, Po, At

Using Assessment to Make Connections

- ◉ Curriculum As Visible Targets For Learning
- ◉ Plan Learning; Plan Assessment and Expect the Unexpected
- ◉ Differentiation
- ◉ "The Case of The Literacy Hour"

Emergent

Proficient

No practical experience. Dependent on rules.

Expects definitive answers. Some recognition of patterns. Limited experience. Still relies on rules.

Analytical. Locates and considers possible patterns. Has internalized the key dimensions so that they are automatic.

Uses analysis and synthesis. Sees the whole rather than aspects. Looks for links and patterns. Adjusts to adapt to the context.

Understands the context. Has a holistic grasp of relationships. Considers alternatives in an iterative way and integrates ideas into efficient solutions. Solves problems and makes ongoing adaptations automatically.

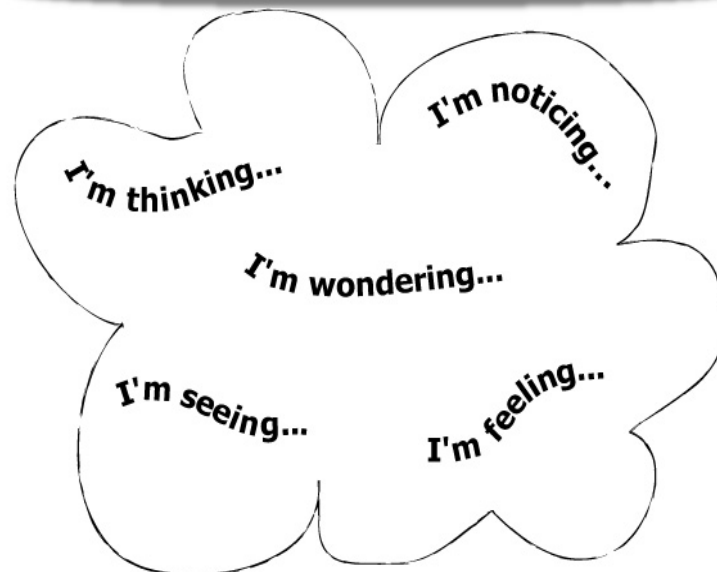
Stages in Growth from Emergent to Proficient

3 Powerful Insights about How People Learn (National Research Council)



Metacognition

Thinking about
our thinking



- “Metacognitive” or reflective opportunities help people take control of their own learning by defining learning goals and monitoring their own progress in achieving them.

- For students to be able to improve, they must develop the capacity to monitor the quality of their own work during actual production. This in turn requires that students possess an appreciation of what high quality work is, that they have the evaluative skill necessary for them to compare with some objectivity the quality of what they are producing in relation to the higher standard, and that they develop a store of tactics or moves which can be drawn upon to modify their own work.

- Sadler, 1989



Meta-cognition and Self-Regulation

• Human beings can:

- reflect on their own thinking processes through internal conversations – monitoring their own understanding, predicting their performance, deciding what else they need to know, organizing and reorganizing ideas, checking for consistency between different pieces of information and drawing analogies that help them advance their understanding.
- can stand back, monitor activities and make significant conscious and deliberate choices about their beliefs and their behaviour - learning and altering their responses based on new ideas or understanding.
- *Perkins, 1995*

Becoming Meta-cognitive

- Like all complex learning, self-regulation requires years of practice, concentration, and coaching. It does not have a beginning and an end but rather continues to develop and to be honed across disciplines and contexts (Costa, 2006).
- And, it doesn't happen by chance. If students are to become meta-cognitive thinkers and problem solvers who can bring their talents and their knowledge to bear on their decisions and actions, they have to develop these skills of self-assessment and self-adjustment, so that they can manage and control their own learning.

Fostering Meta-cognition (Earl, 2003)

- ◉ Habits of Mind for Self-Regulated Thinking
- ◉ Examples of “What Good Work Looks Like” (rubrics, exemplars)
- ◉ Real Involvement and Responsibility monitor learning)
- ◉ Targeted Feedback (descriptive, direct)
- ◉ Discussion, Challenge and Reflection (thinking together)
- ◉ Practice, Practice, Practice
- ◉ An Environment of Emotional Safety



Making the Change

◉ Changing Minds

- Schools are for learning
- Assessment has a significant role of learning

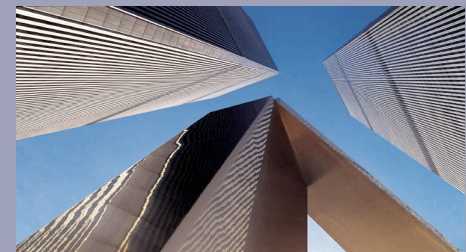
◉ Changing Practices

- Learning at the core
- Professional Learning that includes inquiry, reflection, pedagogical content knowledge
- Teaching each student “just in time” to maximise learning and minimise misconceptions
- Feedback for learning
- Communication to ourselves, to students, to parents, to the community

If it's not about learning, what is it about?

- **In a fast changing world, if you can't learn, unlearn and relearn, you're lost. Sustainable and continuous learning is a given of the twenty-first century.**

- Stoll, Fink and Earl (2003)



◎ If you make a change and it feels comfortable, you haven't made a change.

- Lee Trevino



◎ **Never doubt that a small group of thoughtful and committed citizens can change the world. In fact, it has never happened any other way.**

• Margaret Mead

