Hey It’s Elementary – The Elephant in the Room

LYNDA COLGAN
E-MAIL: colganl@educ.queensu.ca

Lynda Colgan’s career has included roles as a classroom teacher, a university professor, and newspaper columnist. Her contributions to mathematics and its teaching have been recognized through awards such as the Marshall McLuhan Foundation Distinguished Teacher award. Lynda always exhibits a passion for mathematics and views her professional mission as dispelling the myth that math is the bad guy.

Over the past few months, you will, no doubt, have seen ads in the media about the elephant in the room. In this recent ad campaign, the elephant is alcohol—more specifically, the issue of impaired driving. The ads are a powerful illustration of one (sadly) all-too-common example of silence and denial in everyday life: everyone at a house party, from the hosts to all of the guests, strive to ignore the elephant (figuratively, as well as literally, since an enormous inflatable pachyderm takes over the room) when one guest, who has consumed too much alcohol, pulls out her car keys and announces that she is going home.

The phrase “elephant in the room” is an English idiom for an obvious truth that is being ignored or goes unaddressed. The idiomatic expression also applies to an obvious problem or risk that no one wants to discuss. The phrase is based on the idea that an elephant in a room would be impossible to overlook; thus, people in the room who pretend the elephant is not there have made a choice to concern themselves with irrelevant issues rather than deal with the large one.

Banksy wanted to communicate his belief that the only way to destroy the elephant is to face it squarely to finally “see” and accept what is really going on. For this show, Banksy wanted visitors of his warehouse installation to face the elephant of poverty and social injustice.

What do impaired driving and performance art have to do with elementary mathematics education? Elephants, of course.

In March 2010, there was a large conference in New York entitled A Celebration of Teaching and Learning. At the conference, in a keynote address, PBS journalists David Brancaccio and Jim Simons1 presented a talk called The U.S. Math-Teaching Crisis: ‘The Elephant in the Room.’ The talk was an attempt to answer the question, “Why we [the U.S.] do so poorly as a nation in math?”

The speakers began their talk by saying that they actually think the answer to that question is straightforward: “We don’t have enough teachers of math and science who actually know math and science,” they said bluntly. “It’s the elephant in the room.” They went on to ask: “Why are we passing poor math students through unchallenging courses that result in teaching degrees?” They also questioned why teacher education programs focus more time on “methods” teaching instead of

---

1 Jim Simons is the founder of a teacher-recruitment program called Math for America and the mathematician who made a fortune as the CEO of Renaissance Technologies, a private investment firm.
content based on the belief that “all the skills and teaching methods in the world are useless if you do not have a firm grasp of what you are teaching.”

The pair also wondered, why it is, for example, that many elementary-level teachers can casually and openly admit to not liking or not being good at math. How would we react, they asked, if teachers said that about reading?

They also raised the issue of teacher accountability: why is no one insisting that teachers employ the most advanced instructional techniques that have been so clearly identified and supported by research over the last 30 years?

Brancaccio and Simons may have disturbed the cognitive tranquility of many conference delegates by challenging them to confront a small number of “professional” elephants and consider their own compliance in several conspiracies of silence. However, one keynote address to a limited (and elite audience) about these important issues is not enough to remove the elephants from the room.

Once awareness of the elephants’ existence has been accomplished, the next logical step is to raise the issue in a public forum by inviting those most affected to do the following:

1) **Broach the issues.** No matter how uncomfortable it may be, no one can move ahead without confronting the elephant and its reach.

2) **Tell it like it is.** There is no value in using euphemisms or vague language to describe the elephant, no matter how malodorous.

3) **Describe their emotions** surrounding the elephant.

This may sound impossible. Well, it’s not. These steps were taken by a significant number of leading language educators across Ontario as part of a recent visionary initiative in literacy education coordinated by the Ontario Association of Deans of Education (OADE).

The OADE recognized that a broad consensus now exists among researchers and educators regarding the knowledge and skills that children need in order to read, the experience that influences the development of such knowledge and skills, and the basic components of reading instruction. Thus, they charged Dr. Wade-Woolley to ensure that all prospective teachers in Ontario are provided with comparable opportunities to learn about the practical applications and implications of reading research so that they can make a difference where it matters most—in the classroom.

The goal of the meeting was to design a reading program for Primary/Junior teacher candidates that communicates the important consensus that exists within the scientific community about the teaching of reading. The meeting was about how to design a teacher education program that integrates good research (e.g., that effective reading instruction compensates for risk factors that might otherwise prevent children from becoming successful readers) and the practical considerations of the components of an effective reading program.

This project was an important first step in capturing the best knowledge currently available to design curriculum for Ontario’s teacher candidates so that all early career teachers, regardless of their choice of teacher education program, will have experienced instruction in how to implement common early reading instruction. In turn, this means that all district school boards and principals can expect a certain common denominator in terms of expertise from all novice teachers, which will, in turn, assist curriculum leaders who are designing local professional development programs, and which should assure parents about the quality of their children’s language program.

Why is this initiative so revolutionary? Just as all elementary classroom teachers are bound by the provincial Literacy curriculum document, the OADE was trying to establish a provincial Faculty of Education literacy curriculum document that would guide and inform all elementary language curriculum “methods” courses: a first in Ontario (and perhaps, in Canada).

In Ontario, the elementary school curriculum is determined by and measured using policy documents governed by the Ministry of Education (MOE). The primary mandate of the MOE is to oversee and coordinate all aspects of schooling in publicly funded

---

2 Lesly Wade-Woolley, PhD is a professor of Language and Literacy at the Faculty of Education, Queen’s University, and was a member of the panel who developed The Early Reading Strategy: The Report of the Expert Panel on Early Reading in Ontario.
schools in Ontario. There is a common curriculum for all subject areas in all grades in all schools and in all individual classrooms. While delivery of instruction is left to the discretion of the individual classroom teacher, there are many checks and balances and systems of accountability, including provincial report cards.

Faculties of Education fall under the jurisdiction of the Ministry of Colleges and Universities, not the Ministry of Education. Faculties of Education, as schools within universities, have their own elephants: tenured versus adjunct faculty members, academic freedom, individual programs of research, and offshore competition. Currently, each BEd instructor is free to design his or her own course. Some courses have required textbooks and assigned readings; some do not. Some Faculties of Education have examinations (in both content and pedagogical content knowledge); some do not. Some Faculties of Education require that teacher candidates complete courses in all elementary subject areas; some do not. Some teach elementary mathematics education in large lecture settings (sans benefit of hands-on experience with manipulatives and technology); some do not. Some elementary mathematics curriculum courses include content; some do not. Some universities have 36-hour curriculum courses; some do not. There are more differences than similarities when it comes to teacher education programs across Ontario, and there are fewer checks and balances. While all Faculties of Education must be accredited by the College of Teachers and meet the academic requirements of their individual universities with respect to teaching, research, and service, there are no common standards and few forums for faculty members to meet or share resources and ideas.

The OADE initiative, under Dr. Wade Woolley’s leadership, is an acknowledgement of the fact that Ontario is the only province to have an eight-month BEd program and that every effort must be made to make the most of the extremely limited number of instructional hours available to “prepare” future teachers by equipping them with the knowledge, skills, and attitudes that they will need to be successful instructors of reading. A first step is to articulate essential learning outcomes.

In 1905, poet and philosopher George Santayana said, “Those who cannot remember the past are condemned to repeat it.” This is a most appropriate quotation, given that it is often said that research in mathematics education trails that in language by some 50 years, and that mathematics educators have often walked in the missteps of language researchers.

I urge OADE to strike a committee to begin a BEd articulation process in mathematics curriculum that parallels the one begun in language. Given the increased rigour of the elementary mathematics curriculum, the demands of a conceptually-based instructional program, and the logistics and expert knowledge required to enact dynamic, formative, and summative assessment, there is a need for the explication of a common denominator for all elementary mathematics education programs at all Faculties of Education in Ontario.

It is our choice to live in rooms crowded by elephants or in spacious rooms liberated from elephants.