By Lee Crockett, Ian Jukes, and Andrew Churches

A few years ago, we were asked to speak at an international educational conference. Shortly after our presentation, the commentator, the minister of education from a high-profile country, made the following statement: “Our students are amongst the very best performers academically in the world on the TIMS [Third International Mathematics and Science Study].”

He then added, “The problem is that most of them couldn’t think their way out of a wet paper bag if their life depended upon it. They’re nothing but highly educated, useless people.”

We were speechless. Highly educated, useless people? What was he really telling us? He was saying that his high-achieving students had school smarts and thus could excel at school-related activities. They could move smoothly through the school system because they had developed the necessary skills to cram for tests and write the answers.

He was suggesting that most academically successful students do well in large part because they have learned to play and excel at a game called school. But in describing them as “highly educated, useless people,” he was also suggesting that many students in his country, particularly the brainy ones with school smarts, did not have what is generally known as street smarts. To him, being street-smart was about having higher-level thinking skills and competencies that allowed students to go above and beyond success on written exams and enabled them to live and work in the real world, solving real-life problems in real time.

We were curious: What was the difference between being school-smart and being street-smart? What would make so many of these students who were good at school and able to do well on tests, inadequately prepared for life?

After much debate about our expectations of school learning and how to accomplish it, we believe we finally have an answer. This answer is related to how we teach our students to learn and think.

The Great Disconnect

When children enter primary school, they depend on their teachers to tell them what to do, how to do it, when to do it, where to sit when they are doing it, and even how long to sit. Their primary focus in school is mastering content and learning through memorization in a tightly controlled instructional environment.

In this world, content mastery is more important than critical thinking. Teachers tell their students what they need to know to pass the test, to pass the course, to pass the grade, to move to the next level, and finally to graduate. All the answers are prearranged, preformatted, and ready for absorption by those who are willing and able to play the game called school. These students are the academically successful. They are the students who are comfortable operating in a culture of dependency—dependent on the teacher, the textbook, and the test.

Then, after spending 13 or more years in the system, our students graduate from school, and the educational infrastructure that has held them up for all these years is suddenly removed. Many of the students fall flat on their faces as they enter the real world and we can't understand why, even though it is we, the educators, who were responsible for creating this culture of dependence in the first place.

Today, success in school clearly does not guarantee success in life. Somewhere along the way, in our efforts to ensure compliance in our learners, we have lost sight of the need to develop in our students the capacity to become independent thinkers and doers.

Becoming Redundant

If our students are to survive, let alone thrive, in the 21st century culture of technology-driven automation, abundance, and access to global labor markets, then independent thinking and its corollary, creative thinking, hold the highest currency.

To help our students make a successful transition from school to life, we must shift the responsibility of learning from the teacher, where it has been traditionally, to the learners, where it belongs. Our job as educators is to move from demanding that our students be compliant to making ourselves progressively redundant.

The new and different paradigm of teaching and learning is that of progressive withdrawal. Our responsibility must be to ensure that our students no longer need us by the time they graduate from school.

THE 21st CENTURY FLUENCIES

Solution Fluency

Solution Fluency is the ability to think creatively to solve problems in real time by clearly defining the problem, designing an appropriate solution, applying the solution, then evaluating the process and the outcome.

Information Fluency

Information Fluency is the ability to unconsciously and intuitively interpret information in all forms and formats in order to extract the essential knowledge, authenticate it, and perceive its meaning and significance.

Collaboration Fluency

Collaboration Fluency is team-working proficiency that has reached the unconscious ability to work cooperatively with virtual and real partners in an online environment to create original digital products.

Creative Fluency

Creative Fluency is the process by which artistic proficiency adds meaning through design, art, and storytelling. It regards form in addition to function, and the principles of innovative design combined with a quality functioning product.

Media Fluency

There are two components of Media Fluency: First, the ability to look analytically at any communication media to interpret the real message, how the chosen media is being used to shape thinking, and evaluate the efficacy of the message. Second, to create and publish original digital products, matching the media to the intended message by determining the most appropriate and effective media for that message.

This is no different than what we do as parents. As difficult and challenging as it might be, particularly during our children’s teenage years, our responsibility is still to help them become independent people who can stand on their own as they begin to make their way through life.

We live in the dynamic world of InfoWhelm, where content is growing exponentially in both quantity and complexity. In this shifting landscape, where digital content is readily available at our fingertips, learners must be able to move beyond mastery of content recall. They must become discerning and creative consumers of information.

The New Fluencies
In this new digital reality, the application of higher-order thinking and independent cognitive skills in the context of real-world, real-life, and real-time tasks is critically important. We call this Information Fluency.

Bubble tests will not get students the tools they need to achieve success in the world for which they are preparing. Their success in work, life, and play will depend in large part on their ability to deal with new environments, situations, and problems by adapting in real time. These are abilities they develop through Solution Fluency.

Information Fluency and Solution Fluency are two of the 21st Century Fluencies we must cultivate in our students if we want them to be productive digital citizens. The others are Collaboration Fluency, Creative Fluency, and Media Fluency. (See www.fluency21.com for a discussion of all the 21st Century Fluencies.)

The exponentially growing body of content has moved beyond traditional school subjects and into newer 21st century content areas of global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health and wellness awareness; leadership; ethics; and accountability—skills we refer to as global digital citizenship.

The Big Shift in Education
To unfold the full intellectual and creative genius of all of our children—to prepare them for their future, not the past—we must provide relevant 21st century skills that can form a bridge between their world and ours. This is what happens in a 21st century learning environment where students use higher-level thinking to create real-world products as solutions to relevant real-world problems.

Fostering street-smarts in school-smart students requires a major shift in the existing educational paradigm. This shift demands that we rethink our assumptions about instructional design, what constitutes learning, and even what it means to be intelligent. Ultimately, we must also rethink how we assess and evaluate effective instruction and effective learning.

We must look for alternatives to the traditional organization of schools. We need to uncover our long-standing and unexamined assumptions about teaching and learning, about what a classroom looks like, where learning takes place, and the resources needed to support it. 

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