Our Time to Lead: Learning is more than a lecture

Opinion by: Julia Christensen Hughes, The Globe and Mail, October 18, 2012

Students have been complaining about the lecture since at least the late 1800s. In How Scholars Trumped Teachers (1999), Larry Cuban cites an 1895 student newspaper editorial challenging Stanford University professors to improve the effectiveness of their teaching. The article complains about students not being “called upon daily to recite” and professors who prefer “to spend most of [their] time in lecturing.”

About this same time, noted educational philosopher John Dewey was advocating for a form of teaching that fully engaged the student – one in which learning is tailored to the needs of the individual and facilitated through efforts to resolve social problems. It was Dewey’s view that “education is not preparation for life; education is life itself.”

Fast-forward to 1976, when educational researchers Ference Marton and Roger Saljo coined the terms “deep learning” and “surface learning” to describe the different approaches they observed in their students. Students who are said to exhibit surface learning may stay up all night before an exam to read the textbook or someone else’s notes – perhaps for the first time – in an effort to absorb enough material into short-term memory to pass the course and move on. Deep learning, in contrast, involves being fully present in the learning process, working hard to understand and apply concepts, drawing connections between one class and another, and generating new insights.

Most interestingly, these same researchers discovered that rather than labelling an individual student as a “deep learner” or “surface learner,” the same student could be either one, depending upon the learning environment. Learning environments that have been found to promote deep learning are those that resemble the ideas of the Stanford student editors and John Dewey – those in which students have the opportunity to discuss, debate and apply ideas, and where learning activities and assessments additionally require the development of communication, teamwork and other important skills. Problem-based or enquiry learning, community-based projects and co-op work terms are examples of learning approaches that help foster the application of knowledge and skill development.

This is not to say that the lecture has no use. A well-conceived and artfully delivered lecture can be both informative and motivational, particularly if, like a TED Talk, it is time-limited and perhaps accompanied by powerful visuals. However, education must be much more than this. Like dialogue from a gripping movie, most of a clever lecture can soon be forgotten.

In order to foster “learning that lasts,” students must come to be perceived not as empty vessels waiting to be filled, but as active participants in the learning process. They must be required to “do” something with the information they receive if it is to become internalized and ultimately useful. Given the ubiquity of information today (made possible by the Internet and the pace at which new knowledge is being created),
students may be much better served if they are taught how to find it for themselves. Increasingly, the task of education should be to help students become savvy consumers of this information – learning how to effectively ask questions as well as to seek, assess and apply information in the resolution of important issues.

If we have known most of this for at least 35 years – if not 100 – why then has the traditional lecture had such staying power? The Globe and Mail’s educational advisory panel has already identified some of the reasons, including serious funding declines and growth in class sizes. But the Stanford classes weren’t large. Nor were those encountered by John Dewey. Other factors are at play, including the preparation and socialization of the professoriate. Graduate education by and large teaches students (who become faculty) how to conduct research. And while there are increasing opportunities for new faculty and graduate students to learn about innovative approaches to teaching and learning through the educational development centres and organizations such as the Society for Teaching and Learning in Higher Education, participation on most campuses is strictly voluntary and in the case of graduate students, can even be actively discouraged by research supervisors.

Another reason is the physical structure of classrooms. Rooted chairs with tablet arms, all facing forward, sends a powerful message about what is expected to occur in the space. We need flexible classrooms with moveable tables and chairs, to encourage the exchange of ideas.

Finally, there is room to challenge the resources paradigm. As class sizes have grown, many programs have adopted the “Trust us, this will get interesting” model, where large first-year class sizes are gradually reduced, providing the opportunity for senior undergraduates with the opportunity to engage in more interesting, self-directed work. This model needs to be challenged – first-year students should have the opportunity to learn how to learn, in engaging first-year seminars. In fact, if all students had just one such class each year of their program, they would have the opportunity to synthesize learning across all of their courses and learn essential skills in the process.

More attention is being given to teaching and learning now than at any other time in recent history. Dedicated faculty and educational developers are engaging in teaching and learning innovations despite the fiscal challenges. But there is no question that more is needed. The increasing focus on program-level learning outcomes and their assessment should help identify priorities for additional investment (such as faculty development, improved classroom space and targeted courses across all year levels). This is a good thing. A robust higher education system is essential to Canada’s economy and quality of life.

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