

EDUCATION, EMPLOYMENT & EXPERIENTIAL LEARNING

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IN AN INCREASINGLY KNOWLEDGE DRIVEN AND GLOBAL ECONOMY, THE IMPORTANCE OF EDUCATION HAS NEVER BEEN AS GREAT AS IT IS TODAY AND WILL BE TOMORROW.

The methods of dissemination and acquiring knowledge also continue to evolve, albeit slowly. Core skills any university-educated person must possess, including literacy, numeracy and critical thinking, will never change. On the other hand, sectors of our economy requiring specialized knowledge, such as engineering, law, medicine, music and technology, will continue progressing at an ever-faster pace.

Nations need jobs and good jobs to thrive and Canada is no exception. There is a strongly held myth in some quarters, however, that the education system is not meeting Canada's employment needs because it is failing to produce graduates who are "job ready". The slogan they use is "people without jobs and jobs without people".

That slogan may be valid for non-university graduates but the evidence for university graduates is exactly the opposite. The probability of a university graduate being unemployed or under employed is low.

What is true is that some businesses are being hobbled because they can't find people with the required skills to fill good jobs is true. This has resulted in a growing demand by various stakeholders to increase "experiential learning" with a primary focus on "co-operative education".

While experiential learning can help prepare graduates for the job market, it is not possible to draw a straight line connecting hands-on learning and job market needs. Experiential learning should be looked at more broadly as an effective tool in enhancing the learning experience of students in areas where applied skills are desired.

Waterloo has the best-known co-op education model in Canada, where students alternate between four months of study and four months of work. It is important to also recognize that there are many different paths to experiential learning. For example, the very real challenges businesses face today are brought to life in classrooms at Western and elsewhere through the Ivey Business School's case method of teaching.

"THE CURRENT MARKET FOR CO-OP AND INTERNSHIP OPPORTUNITIES IS ALSO OVERSATURATED. IT IS INCREASINGLY CHALLENGING FOR STUDENTS TO FIND **MEANINGFUL CO-OP EMPLOYMENT** IN CANADA. MANY, AND PARTICULARLY THOSE IN THE IT SECTOR, ARE HAVING TO GO THE UNITED STATES TO FIND CO-OP PLACEMENTS.

The table below shows the employment rates of graduates of three prominent Ontario universities, who started their university education in 2012. (Source: CUDO)

	EMPLOYMENT 6 MONTHS AFTER GRADUATION	EMPLOYMENT 12 MONTHS AFTER GRADUATION	ENTRANCE AVERAGE GRADE
QUEEN'S	91.00	94.81	89.00
WATERLOO	87.21	94.14	88.20
WESTERN	88.52	94.00	88.90

Nearly half of Waterloo students are in co-op programs, whereas only a small portion of students at Queen's and Western participate in co-op programs. The fact that Waterloo's employment rate, six months after graduation, is lower than for Queen's and Western graduates, means one could make the case that average entering grades are a better proxy for gaining employment than co-op experience.

In the following table, employment rates of engineering graduates are compared for the three universities. Co-op is mandatory for all Waterloo engineering students. (Source: CUDO).

	EMPLOYMENT 6 MONTHS AFTER GRADUATION	EMPLOYMENT 12 MONTHS AFTER GRADUATION	ENTRANCE AVERAGE GRADE
QUEEN'S	87.55	93.36	90.60
WATERLOO	91.77	96.91	91.00
WESTERN	90.14	95.83	89.20

Again, there is a correlation between employment rates and entrance average grades, and it doesn't prove that co-op education produces higher employment rates.

This is not to say that students don't gain tremendous benefits from co-op education. More universities should be encouraged to create work-integrated learning programs on a large scale. The point is that co-op education on its own is not a panacea to ensure students come out of universities with the exact skills employers are seeking at that specific moment in time.

The many forms experiential learning takes, including co-op education, should be a priority but that won't happen until we first understand the hurdles standing in the way.

The current market for co-op and internship opportunities is also oversaturated. It is increasingly challenging for students to find meaningful co-op employment in Canada. Many, and particularly those in the IT sector, are having to go the United States to find co-op placements.

That is not surprising, given that between 2006 and 2015, Ontario experienced total annual job growth of 0.82 percent, while Ontario universities granted over 30 percent more degrees during the same period. The fact the university graduate rate out paces the growth in jobs so substantially not only impacts full-time employment rates but also the availability of co-op or internship opportunities for our students.

We need the private sector to create more co-op and internship opportunities but that requires employers recognizing their current and future talent needs, as well as their willingness to investment in talent development. There needs to be agreement that students participating in work-integrated learning provide value to those businesses and all meaningful work should be paid work.

The federal government has taken a welcome step with plans to invest \$73 million as an incentive for private sector companies to hire 10,000 students, over the next four years, in areas such as information and communication technology, aerospace and aviation, the environment, and biotechnology and business. However, students studying non-STEM related courses can also benefit from intern opportunities.

Small and medium enterprises create most of the job growth, but these businesses have not traditionally been very active in co-op education, in part because of the cost.

Offering direct government subsidies to businesses, as the federal government plans, provides a strong incentive to participate.

Knowing there is a solid increase in meaningful positions available would, in turn, encourage more universities to get involved. But given that co-op and internship programs costs nearly 20 percent more to operate, universities will first need incremental resources to launch or expand experiential learning.

All of these obstacles can be overcome and the investment required will be more than repaid from the benefits a nation accrues from a workforce that is, not only capable of filling current job openings, but also has the knowledge and skills to keep creating employment opportunities for others.

The primary role of universities is not to educate our students so they can land a job today that won't even exist a decade later. Rather universities must continue to focus on basic and fundamental knowledge, as well as skill sets, that will enable students to thrive in a changing world.

If universities, businesses and governments collaborated to create a range of experiential and work-integrated opportunities open to all students, the result would be flexible life-long learners able to adjust to the constantly changing job market. And that's where Canada's competitive advantage lies.

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