Open Education

The development, adoption and practice of open education has been found to influence many spheres of the STEEP framework. Its growth has been driven by the drive for equity, access, sustainability, and positive student outcomes. The continued advancement of the open education medium and the fact that TRU utilizes it as an important component in its educational platform demonstrates the value of looking into its practice in the context of higher education. This report will address the following questions: What is open education? Why does our society need open education? What is the potential and what are some of the challenges open education presents?

Four Interpretations of 'Openness' in Education

From the flourish of open universities in the 1960s, to the emergence of Massive Open Online Courses (MOOCs) in 2012, there have been many open education initiatives.[1] While we cannot discuss all of the initiatives in this report, we do identify four broad interpretations of openness in higher education based on the historical development of said initiatives. These include: *open admission*, *open as free*, *open educational resources (OER)*, and *open educational practices (OEP)*.[2]

Open Admission. The first interpretation of "open" is open admission to higher education.[2][3][4] The open admission policy is based on the principle of an open society where individuals can move freely between social strata.[4] Open admission policy gave rise to a new type of "open" university that did not require prior education for entry.[2]

Free-from-Cost. The second interpretation of "open" is focused on the cost dimension of teaching materials.[2] In this context, open could mean that educational resources are available for free (users may be required to register to access these free materials).[2] The free resources may also be subject to copyright restrictions.[3]

Open Educational Resources. Third, the creation of open educational resources (OER) in 2002 represented a conceptual change in openness of education.[5]

Open education initiatives in Canada

1970

Athabasca University

1978

Open Learning Institute (BC Open University in 1988)

2003

BCcampus

2008

"Connectivism & Connectivity Knowledge" – First MOOC developed by Siemens & Downes

2015

eCampus Ontario

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There was a need to personalize or modify educational resources for a diverse group of learners in the new millennium.[5] The focus of openness was gradually shifted from the idea free-from-cost but copyrighted to the "5 Rs of Openness": retain, reuse, revise, remix, and redistribute.[5] Essentially, these R's represent the ability to revise, adapt and improve OERs to better meet needs. To remix the OER with other elements to produce new materials. Reuse the OER in different and wider context, and sharing copies of it with others.[5]

Open Educational Practice. Recently, there have been critical reflections on "openness" in the field of open education.[6] Practitioners have acknowledged that expanding access to educational resources alone is not enough to promote quality teaching and learning.[6] Essentially, education practitioners can create innovative teaching methods to use the OER materials.[6]

OEP also represents a new paradigm of learning: Traditionally, learning is the transmission of knowledge from teachers to students.Then, learning becomes a dialog between teachers and students. But in OEP, learning is through collaboration and sharing among learners. [6] The shift from OER to open educational practice marks another conceptual development in open education. This dimension of open education still includes a focus on learning materials, but also includes a greater emphasis on the way in which teaching and scholarship are conducted.[6]

The scope of OEP continues to evolve and now comprises several areas like *open scholarship*, *open pedagogy*, *open technology* and *open data*.[2] Yet, the primary objectives remain the same. Open education practices are collective practices that:

(1) Support the production and the 5Rs of OER,
(2) Promote innovative pedagogical practices,
(3) Use educational technologies and social networks to facilitate collaborative, flexible learning and to empower learners.[2]

Social Drivers of Open Education

Open education is a philosophy of creating and disseminating knowledge.[7] Sharing knowledge, insights, and information with others is the most basic form of facilitating education.[8] Essentially, if teachers do not share their knowledge and skills with students, there can be no continuation of that transfer and it becomes impossible to create new knowledge, ideas, and skills.[9]

A shift in belief towards openness in education began to grow through the 20th century. From *On the role of openness in education: A historical reconstruction* "The 20th century continued to see education "open" as the belief in the people's right to access society's knowledge grew."[9] It went on to state that knowledge is a common good; therefore, it should be accessible as openly as possible.[9] Moreover, because a substantial proportion of education and research are publicly funded, the populace should ultimately have access to public education and research findings.[3] [5]

Open education policy may also have positive economic effects.[11]. Governments adopt open education because of the perceived value in open access.[10] Australia is a case in point. According to a 2009 study by the Centre for Strategic Economic Studies in Australia, open access would generate a substantial return of AU$165 million per annum for the Australian government's expenditure on research and

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development.[11] The Australian government implemented the open access policy in 2012.[10]

In response to a strong demand for higher education in the 1970s, there was a range of demographic, social, and economic pressures in Western societies to increase access.[4] The creation of open universities such as: The Open University (UK), Athabasca University (Canada), The University of South Africa, The Indira Gandhi National Open University (India), aimed to give working adults a second chance so that they could have a fair share of the economic benefits from higher education.[14] The significant development in communications technology and mass media in the 1970s made the creation of open universities possible.[10] In short, open education can be interpreted as a response to public demand.

The Potential of Open Education

Open education motivates learners to be actively engaged in the learning process.[12] Engaged learners will use innovative educational technologies to create, collaborate, share, and discuss their learned concepts.[12] As such, they will develop digital literacies and soft skills that are important to the future of work.[13] In short, open education can foster personal development and prosperity of a new generation in a "knowledge society".[14]

Open education can reduce barriers to learning opportunities by broadening the access to high quality resources.[14] In this way, open education expands access to lifelong learning and facilitates social inclusion, gender equity and special needs education.[14] Also, open education can foster new ideas through collaboration among learners, who can then address social issues in an innovative way.[14]

Open Education gives teachers opportunities to innovate through educational technologies.[14] A prime example is the advent of Massive Online Open Courses (MOOCs).[15] MOOCs offer unique opportunities for educators to experiment with new teaching methods. [13] [16] [17] Lessons learned from these experiments could also improve on-campus student learning experiences.[2] [16]

The University of Alberta (U of A) is one Canadian example. To better understand how to promote student success, the U of A launched three versions of the same online course: a free MOOC version; an online credit course for U of A students; and a blended-learning course for U of A students that included class time and field work.[17] [2] Researchers were surprised to see the high completion rates and improved grades among students on academic probation.[17] [2] It was determined that flexibility promoted student success.[17] [2]

Challenges of Open Education

The challenges that may hamper the growth of open education practices include quality assurance, copyright issues, and the sustainability of these practices.[18]

The quality of the many open-access educational resources is of concern to both educators and learners. As shown in an Ontario study, "high-quality" is the top criterion for choosing a resource among post-secondary educators.[19] High-quality OER must keep pace with the dynamic growth of the knowledge economy. Specifically, OER must:

- Reflect new developments in the subject area they cover[23]
- Reflect new learning theories to support high-quality learning experience[23]

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- Meet the needs of a diverse group of learners[23]

Keeping pace with the dynamics in a knowledge-based society is a challenge to open education.[23]

In an information era, faculty can easily gain access to a vast number of publications. Under this circumstance, the faculty must be aware of and understand copyright issues.[18] According to a 2018 study by eCampusOntario, post-secondary educators were modestly aware of Canadian Copyright.[18] Copyright issues are complicated (as illustrated in the *Access Copyright vs. York University* case). [20] [21] [22] The lack of awareness and comprehension of complicated copyright issues among education practitioners could hinder the growth of open education.

Furthermore, the expansion of open educational resources has created competition for funding.[18] Many projects rely on short term funding from institutions that will cease after a few years, and therefore the challenge becomes ensuring the sustainability of open education initiatives.[18]

Next in the Series
The next reports in the Envision TRU Environmental Scan series will focus on Enrolment Trends, High School Transitions, and the Future of Work.

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Sources

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