BACKGROUND
Ontario’s Ministry of Training, Colleges and Universities, together with industry, has emphasized the need for graduates to have sustainability skills and knowledge (Knibb, 2012; OECD, 2011). George Brown College has a strategic focus on ensuring graduates understand how sustainability relates to their work and to society. This led to our sustainability-across-the-curriculum project in 2013.

In order to render visible all courses that deliver and measure student acquisition of sustainability skills and knowledge, the College undertook an audit to determine current levels of sustainability teaching and learning within all active programs of instruction (cf. Rusinko, 2010; Bridges, 2008; Jahan & Mehta, 2007; Springett, 2005).

We now know which of our programs provide a framework for learning that emphasizes environmental, social and economic sustainability skills and knowledge, particularly as these relate to one’s own field of study. We also know precisely in which courses this takes place. As a result of our sustainability-across-the-curriculum audit we are better able to link our sustainable research mandate to broader industry productivity and graduate preparation (cf. United Nations Development Program, 2014; Sibbel, 2009; Tilbury, 2004).

METHODS
Graduate and course learning outcomes from all diploma, advanced diploma, graduate certificate and degree programs were individually assessed for sustainability content. Our search terms and criteria were informed by the standard economic sustainability principles (United Nations General Assembly, n.d.).

Our search terms and criteria were informed by the standard three pillar understanding of sustainability encompassing environmental, social and economic sustainability content. Our search terms and criteria were informed by the standard economic sustainability principles (United Nations General Assembly, n.d.).

RESULTS
Sustainability teaching and learning at the outcome level occurs across all College divisions.

- **Percentage by division of programs with 1 or more program-outcomes addressing sustainability:**
  - Business Arts & Design: 41%
  - Construction and Engineering Technologies: 53%
  - Health Sciences: 47%
  - Hospitality and Culinary Arts: 33%
  - Preparatory and Liberal Studies: 18%

- **Percentage by division of programs with 1 or more courses addressing sustainability:**
  - Business Arts & Design: 41%
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  - Preparatory and Liberal Studies: 18%

- **Number of sustainability-focused courses:**
  - 61% of sustainability-related learning outcomes
  - 50% of sustainability-related learning initiatives

- **Number of programs with:**
  - 50% with more than one sustainability-related learning outcomes
  - 27% with no or very few sustainability-related learning initiatives

- **Number of diploma, advanced diploma, graduate certificate and degree programs with sustainability-related teaching and learning outcomes:**
  - 50% of programs contain at least one sustainability-related learning initiative
  - 24% contain no or very few sustainability-related learning outcomes

- **Percentage of Sustainability in All Courses**
  - 50% of courses

- **Exemplary Sustainability Program Outcomes:**
  - Environmental literacy
  - Social justice and community engagement
  - Economic stewardship

- **Challenges:**
  - Identifying sustainability-related learning outcomes
  - Quantifying sustainability-related teaching and learning across programs

- **Next Steps:**
  - Develop a sustainability skills and knowledge audit to inform future planning and resource allocation
  - Enhance sustainability awareness and understanding among faculty and staff
  - Expand sustainability acumen among students

NEXT STEPS
The audit results have allowed us to identify which of our diploma, advanced diploma, graduate certificate and degree programs have integrated sustainability teaching and learning at the vocational and course learning outcome level. We also know which programs are at early stages or have not yet begun this work. Where integration of sustainability themes was found within vocational or course learning outcomes, results also indicate the extent of the integration: for example, whether sustainability themes appear just once within a single program, in a program, or multiple times, reinforced across multiple locations (i.e. within both vocational and course learning outcomes and/or within several courses across a single program).

Using the audit results, we can target our efforts to increase sustainability learning within specific programs and courses. Beginning with programs that contain no or very few sustainability-related learning outcomes, we are now in a position to calibrate the continued integration of sustainability themes across the curriculum in a way that is focused, logical and reflective of each program’s unique connection to sustainability issues (cf. Jones et al., 2010; Desha & Hargroves, 2007).

Integration of sustainability themes at the learning outcome level allows the College to do three key things:

- Provide highly relevant sustainability skills & knowledge to George Brown graduates—because these are valuable to their employers and communities
- Quantify sustainability-related teaching and learning across our programs
- Recognize students’ sustainability skill & knowledge gains through a digital “badging” initiative, which in turn ensures students recognize the value and importance of these skills.

REFERENCES


