Degree-Level Expectations and Course Learning Outcomes

**Introduction to DLEs**
Degree-Level Expectations (DLEs) are a threshold framework for the expression of the intellectual and creative development of students. All Ontario universities are expected to ensure graduates meet base-level expectations and acquire a set of skills defined by the DLEs framework.

Degree-level expectations set clear expectations for students pursuing a program of study. This ensures that programs have a clarified purpose, as well as a set of defined goals and expectations that provide guidance at the department, program, faculty, and student level.

**Benefits for faculty members**
1. Clarity regarding program and course expectations
2. Increased awareness of courses in context
3. Outcomes-oriented language to facilitate communication of program goals and course expectations
4. Outcomes-oriented language to facilitate assignment and assessment design

**Benefits for students**
1. Clarity regarding program and course expectations
2. Outcomes-oriented language to facilitate understanding of program goals and course expectations
3. Outcomes-oriented language to facilitate understanding of assignments and assessments
4. Experience of a more unified and coherent program

The Degree-level expectations (DLEs) specify six areas of ability required at the undergraduate and graduate levels. These areas include:

1. Depth and Breadth of Knowledge
2. Knowledge of Methodologies
3. Application of Knowledge
4. Communication Skills
5. Awareness of Limits of Knowledge
6. Autonomy and Professional Capacity

One example of a degree-level expectation for the “depth and breadth of knowledge” area would be “by the completion of the program students will have acquired the following set of skills: a developed knowledge and critical understanding of the key concepts, methodologies, current advances, theoretical approaches and assumptions in a discipline overall, as well as in a specialized area of a discipline.”
The full set of undergraduate and graduate degree-level expectations are available on the LTO website: [http://ryerson.ca/lt/programs/curriculum/degreelevexpectations/index.html](http://ryerson.ca/lt/programs/curriculum/degreelevexpectations/index.html)

**Outcomes-Based Curriculum**

Degree-level expectations are the starting point in a sequence that lead all the way from the academic plan down to individual course design:

**Degree-Level Expectations -> Program Goals -> Program Learning Outcomes -> Course Goals -> Student/Course Learning Outcomes**

Assessment determines if the students have achieved the goals of the program. For this we need some form of evidence, reference points, benchmarks, or results:

**Learning Objectives -> Course Activities and Assessments -> Learning Outcomes**

**Learning Objectives and Outcomes**

Learning objectives are statements that describe specific instructional goals that are both observable and measurable (Cusson, 2012). Learning outcomes describe what students are expected to have learned or achieved; as a result, they usually describe what students will be capable of doing, or what evidence will be provided to substantiate learning. Learning outcomes identify the various specific pieces that go into the cultivation of the knowledge, skills and attitudes the program is intended to develop.

As summarized by Deakin University, “each intended learning outcome should describe the observable knowledge or skills that you expect students to be able to demonstrate as a result of their work in the unit. It should contain:

- A verb that is appropriate to the type of knowledge or skill required
- A noun that describes the content that the verb is meant to address

Example of a learning objective and learning outcomes developed by Cusson:

- Learning objective: In this course, students will be expected to explain the political and economic factors that contributed to the start of WWII by contributing to in-class discussions and writing a research paper
- Learning outcomes:
  - By the end of this course, students will be able to explain the political and economic factors that contributed to the start of WWII
  - By the end of this course, students will be able to synthesize information from a variety of sources and express arguments, both orally and in written form (Cusson, 2012).
Writing Effective Learning Outcomes

One common way of structuring learning outcomes is through the use of Bloom’s Taxonomy as a framework. Bloom’s Taxonomy breaks learning down into six categories representing cognitive skills, and moves from the lowest to the highest order skills:

Knowledge -> Comprehension -> Application -> Analysis -> Synthesis -> Evaluation

A key part of an effective learning outcome is the assessment of learning. This part of the outcome describes what a student will be able to do if they have successfully met the learning outcome. For each level of Bloom’s Taxonomy, there are sets of skills that can be used to demonstrate student learning. The University of North Carolina gives the following examples as to how the cognitive levels of Bloom’s Taxonomy can be assessed:

1. Knowledge: rote memorization, recognition, or recall of facts
2. Comprehension: understanding what the facts mean
3. Application: correct use of the facts, rules, or ideas
4. Analysis: breaking down information into component parts
5. Synthesis: combination of facts, ideas, or information to make a new whole
6. Evaluation: judging or forming an opinion about the information or situation

When writing an effective learning outcome, there are verbs associated with the levels of Bloom’s Taxonomy to help clarify the level of learning you are hoping to achieve. Some of these verbs, as compiled by Kelly & McDonald, are included below:

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
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<tbody>
<tr>
<td>List</td>
<td>Summarize</td>
<td>Solve</td>
<td>Analyze</td>
<td>Design</td>
<td>Evaluate</td>
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<td>Name</td>
<td>Explain</td>
<td>Illustrate</td>
<td>Organize</td>
<td>Hypothesize</td>
<td>Choose</td>
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<td>Identify</td>
<td>Interpret</td>
<td>Calculate</td>
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<td>Describe</td>
<td>Use</td>
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<td>Define</td>
<td>Compare</td>
<td>Interpret</td>
<td>Compare</td>
<td>Write</td>
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<td>Recognize</td>
<td>Paraphrase</td>
<td>Relate</td>
<td>Distinguish</td>
<td>Report</td>
<td>Criticize</td>
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<td>Recall</td>
<td>Differentiate</td>
<td>Manipulate</td>
<td>Discuss</td>
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<td>State</td>
<td>Demonstrate</td>
<td>Apply</td>
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<td>Plan</td>
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<td>Visualize</td>
<td>Classify</td>
<td>Modify</td>
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<td>Devise</td>
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Common learning outcomes and ways to assess them

Regardless of discipline or program, there are some common learning goals that all professors have for their students. Here are some examples of learning goals, with appropriate learning outcomes and matching assessments.

1. Think critically
   a. Identify a problem
      i. **Assessment method:** In-class group work and short presentation.
      ii. Working together in small groups, the students will identify a problem and “acknowledge reasons for enduring uncertainty and absence of a single ‘correct’ solution.” They will work together to create a short presentation for the class that explains why people disagree about solutions to the given problem and why the solution to the problem can’t be known with certainty (Wolcott & Lynch, 2001).
   b. Propose a solution to a problem
      i. **Assessment method:** Discussion on Blackboard
      ii. **Learning outcome:** Working together in groups, the students will prepare a solution to the problem. The students will collaborate on a post on Blackboard that explains their solution to the class. The post must identify the issues they weighed while developing their solution, explain how they prioritized those issues, and describe how the solution might change given different priorities. Each group must also ask the other groups questions about their solutions, and be able to respond effectively to arguments that support other reasonable solutions (Wolcott & Lynch, 2001).
   c. Integrate, monitor, and refine strategies for addressing a problem
      i. **Assessment method:** Report
      ii. **Learning outcome:** Working together in groups, the students will acknowledge and explain the limitations of their endorsed solution, and demonstrate skill in “generating and using information to monitor strategies and make reasonable modifications.” The students will develop a professional report that includes their proposed solution to the problem, describes the limitations of their proposed solution, explains the implications of those limitations, and establishes a plan for monitoring the performance of their proposed solution (Wolcott & Lynch, 2001).

2. Write competently
   a. Evaluate academic sources
      i. **Assessment method:** Annotated bibliography
      ii. **Learning outcome:** The student will select five peer-reviewed journal articles to support their research paper’s argument, and evaluate the multiple viewpoints that each article presents. The student must demonstrate why they selected each article, explain the arguments being made by each, and explain how each article supports or disproves the other four, and how each article supports their paper’s argument.
b. Develop a thesis statement
   i. **Assessment method:** Research paper proposal.
   ii. **Learning outcome:** Using the five peer-reviewed journal articles that they analyzed in their annotated bibliography, the student will analyze the scholarly debate surrounding their research question and formulate an answer to their research question. The student will write a short research paper proposal that includes their thesis statement, the questions to be answered by their research, and a summary of their analysis of the relevant perspectives in the scholarly discourse.

c. Organize a research paper
   i. **Assessment method:** Research paper outline
   ii. **Learning outcome:** With their research paper proposal as a base, the student will create an outline for their research paper, detailing each topic and subtopic, and organizing their points to build their argument toward a conclusion. The student will create an outline that sets out their introduction and thesis statement, provides the background for their research, lays out the major and minor points of their argument, and gives a conclusion along with the next steps for their research (Walden University).

d. Critique writing
   i. **Assessment method:** Peer review of drafts
   ii. **Learning outcome:** The students will divide into pairs and each will conduct a peer review of the other’s paper. Using rubrics and models provided by the instructor, the student will provide constructive feedback on their fellow student’s draft. The student will praise what works well in the draft, comment on large issue with the draft (For example: Is the paper effectively organized? Is evidence used properly? Is there a clear focus?), identify what is missing, needs further explanation, or could be cut, make specific suggestions for revision, and explain in clear and specific terms the reasoning behind all their comments (University of Wisconsin).

3. Display their knowledge
   a. Explain their research
      i. **Assessment method:** Oral presentation
      ii. **Learning outcome:** The student will summarize the findings of their research paper in a clear and succinct manner. In a five-minute presentation to the class, the student will provide a brief background for their research, articulate the implications of their findings, and successfully defend their argument during a short question and answer period.

   b. Teach others about a topic in the course
      i. **Assessment method:** Slides for a presentation
      ii. **Learning outcome:** The student will build a slide deck that could accompany a presentation on a topic in the course. The student will choose a topic from the list provided by the instructor, an audience for their
presentation (i.e. high school, academic conference, etc.), and then use PowerPoint or Google Presentation to construct a presentation appropriate to that audience. The presentation should effectively organize the content, convey the important points of the lesson, and support the content via well-chosen visuals (Eggers & McNierney, 2007).

c. Answer a variety of questions on the course content  
   i. **Assessment method**: Final exam with both fixed-choice and open-ended questions  
   ii. **Learning outcome**: The student will be able to successfully answer a series of multiple-choice questions, selecting the correct response from one or more choices provided. The student will also be able to answer a series of short answer questions by supplying “the appropriate words, numbers, or symbols to answer a question or complete a statement.” Finally, the student will write a short essay that will “demonstrate through writing his/her ability to a) recall knowledge, b) organize this knowledge, and c) present the knowledge in a logical, integrated answer” (University of Texas).

**Work Cited**

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Prepared by Michelle Schwartz, Research Associate, for the Learning & Teaching Office,  
[http://www.ryerson.ca/lt/](http://www.ryerson.ca/lt/)