

Program Outcomes

The work put into establishing the vision, purpose, and goals of the program should help provide direction for creating program outcomes. Basically, it is necessary to take those goals and translate them into tangible, 'measurable' outcome statements. Biggs and Tang (8) describe an outcome as

...a statement of how we would recognize if or how well students have learned what is intended they should learn...[it] tells us what, and how well, students are able to do something that they were unable, or only partially able, to do before teaching. Good teachers have always had some idea of that...in outcomes-based teaching and learning, we are simply making that as explicit as we can – always allowing for unintended but desirable outcomes.

Biggs and Tang were referring to course-level outcomes in this quote; however, the principle is relevant to outcomes at any level. It is important to make explicit our expectations about what we want students to take away from a course or program. The last part of the quote is especially important – it is not possible to anticipate or account for everything a student is going to learn, and that is not what learning outcomes seek to do. The purpose of outcomes is to make the expectations and priorities clear, with the knowledge that there will be other things students take away from courses and programs.

Advantages of Learning Outcomes

- **Transparency to students** – outcomes statements (at the program, course, or lesson-level) articulate expectations for students, which helps them understand the focus of the experience, and what will be required of them.
- **Focused and strategic teaching and assessment planning** – by articulating what students should be able to accomplish by the end of an experience, other elements of the experience can be strategically aligned with those outcomes.
Outcomes can be the driver for:
 - Assignments and tests
 - Choice of instructional mode
 - Choice of course content
 - Assessment and feedback
 - Accreditation or program assessment
 - Curriculum development
- **Better learning and better performance on assignments and tests** – while this influence is indirect, the relevance driven by the alignment and transparency noted above leads to more focused and motivated work on the part of students, which improves performance on assessments (9).
- **Meeting internal requirements** (UTQAP) and external requirements (e.g., professional accrediting bodies) – internal and external quality assurance processes require units to have program outcomes and show how the program has been designed to support those outcomes.

Challenges and Limitations of Learning Outcomes

- **Reductionist** – by nature, outcomes are meant to be straightforward, active, and 'measurable' (i.e., assessable); therefore, they cannot easily capture amorphous, big-picture goals (e.g., developing a love of learning). As addressed earlier in the section, learning outcomes should be used with the acknowledgement that they cannot capture all learning that happens in a course or program.

- **An exclusive focus on measurement is results or product-oriented** – program outcomes are focused on the end goal of an experience, and therefore neglect what students take away from the process of achieving that end goal.
- **Can be perfunctory if not engaged with in a meaningful way** – it is entirely possible to write a list of outcomes just for the sake of it. Unless outcomes are tied to assessment, and are used to drive teaching and learning methods, they do not serve a real purpose.
- **Potentially challenging learning curve** and required commitment to establishing a new approach to course design. Orienting course design to a learning outcomes framework is a different way of thinking about a course for many instructors, which requires time and practice to feel comfortable [\(10\)](#).
- **Orienting and educating students on outcomes** – understanding learning outcomes statements is not necessarily intuitive, so it often takes a bit of work to walk students through outcomes so they understand how to read them and make use of them.

In program planning, outcomes should be aligned, or connected, with divisional and institutional goals, and with the Degree Level Expectations established by all University of Toronto divisions. Further along the renewal process, the program outcomes will be aligned with course level outcomes, as described in the introduction to this guide. The program outcomes are specific enough to explain how those broad expectations are accomplished within a given program, and course outcomes will specify what expectations an instructor has for the course, which are related to one or more program outcomes.

In the previous section, a sample vision statement was provided for the Scandinavian Department. The unit established that research needed to be a priority for the Swedish Studies program, and consequently made research a priority in the program vision. Now that the unit is determining learning outcomes for the program, they recognize the need to have one or two outcomes related to research skills to ensure the expectations for graduates represent the vision of the program. Starting from the broadest level, the DLEs, the unit would determine which expectation category is the most appropriate representation of the goals related to research (see the [Vice-Provost, Academic Programs website](#) for more information on the DLEs). Here's an example of how the Scandinavian Department might break down the research goal at different learning outcome levels:

Level: Institution-Level Outcome (i.e., DLE category)

Example: Knowledge of Methodologies

Level: Program-Level Outcomes

Example: Students will be able to use research within the field to make evidence-based decisions

Level: Course-Level Outcomes

Example: Students will be able to critique the findings of a peer reviewed academic article

Note: the Scandinavian Department might have additional program outcomes related to research, and in turn would have several more course-level outcomes present in a variety of courses that would align with the full suite of research-based program-level outcomes.

It is unnecessary to think about course-specific outcomes at this stage in the process. However, when creating program-level outcomes, it is useful to think about how students might demonstrate achievement of them – e.g., by the time they graduate, what will they have done throughout the program to show that they're able to use research within the field to make evidence-based decisions? Perhaps they will have created solutions for mock clients based on research findings. Perhaps they will have taken on a field research project with a faculty member and a team of students. Etc.

See [Appendix A](#) for examples of program outcomes.

In 2004, the Faculty of Engineering & Built Environment UKM has pioneered a move to transform the undergraduate curriculum into Outcome Based Education in accordance with requirements from the Board of Engineers, Malaysia and the Malaysian Qualification Framework introduced by the Ministry of Higher Education. In this approach, inputs from stakeholders are taken into account when reviewing the curriculum. As a result, there are courses in which their teaching approach have been changed the methods such as cooperative learning, student-centred learning and problem based learning. This new curriculum was implemented beginning from the 2005/2006 academic session.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

In this curriculum, based on inputs collected from the stakeholders, the faculty has developed the following Programme Educational Objectives in order to be achieved by the graduates several years after graduation:

- **PEO1** – Engineer / Architect who has **character and ethics**, as well as **high professionalism** and contributes to the **National Aspirations**.
- **PEO2** – Engineer / Architect who is **competent** in respective engineering practices that meets current and future needs.
- **PEO3** – Engineer / Architect who has a **creative and innovative, entrepreneurial** and leadership qualities that are global.

PROGRAMME

OUTCOMES

(PO)

In the Outcome Based Education curriculum, a student needs to possess features listed as the Programme Outcomes just after his/her graduation and these outcomes have to be assessed through designated measurement methods. Therefore, the Faculty has developed the following Programme Outcomes to be achieved by all students:

- **PO1 – Engineering Knowledge** – Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialisation to the solution of complex engineering problems.
- **PO2 – Problem Analysis** – Identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- **PO3 – Design/Development of Solutions** – Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- **PO4 – Investigation** – Conduct investigation into complex problems using research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
- **PO5 – Modern Tool Usage** – Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering problems with an understanding of the limitations.

- **PO6 – The Engineer and Society** – Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems.
- **PO7 – Environment and Sustainability** – Understand and evaluate the sustainability and the impact of professional engineering work in the solution of complex engineering problems in societal and environmental contexts.
- **PO8 – Ethics** – Apply ethical principles and commit to professional ethics & responsibilities and norms of engineering practice and contribute to the National Aspirations.
- **PO9 – Communication** – Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO10 – Individual and Team Work** – Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.
- **PO11 – Life Long Learning** – Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
- **PO12 – Project Management and Finance** – Demonstrate knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Social Work BSW

Educational Goals

Goals:

1. Prepare generalist social workers who are able to integrate the knowledge, values and skills of the social work profession for competent practice in settings with individuals, families, groups, organizations, institutions, and communities.
2. Acculturate students to the profession of social work through the study of its history, purposes, and philosophy.
3. Prepare students to practice ethically with diverse populations and systems of all sizes, to alleviate poverty and oppression and to provide social and economic justice for all citizens.

4. Provide students with content about social contexts of social work practice, the changing nature of those contexts, the behavior found in systems, and the dynamics of change.
5. Prepare students who will demonstrate a commitment to continue life-long learning and professional growth which may include graduate education in social work and other disciplines.

Educational Objectives

Students will be able to:

1. Apply critical thinking within the context of professional social work practice.
2. Understand the value base of the profession and its ethical standards and principles, and practice accordingly.
3. Practice without discrimination and with respect, knowledge, and skills related to a client's age, class, color, culture, disability, ethnicity, family structure, gender, marital status, national origin, race, religion, sex, and sexual orientation.
4. Understand the forms and mechanisms of oppression and discrimination and apply strategies of advocacy and social change that advance social and economic justice.
5. Understand and interpret the history of the social work profession and its contemporary structures and issues.
6. Apply the knowledge and skills of generalist social work practice with systems of all sizes.
7. Use theoretical frameworks supported by empirical evidence to understand individual development and behavior across the life span and the interactions among individuals, and between individuals and families, groups, organizations, and communities.
8. Analyze, formulate, and influence social policies.
9. Evaluate research studies, apply results to practice, and evaluate their own practice interventions.
10. Use communication skills differentially across client populations, with colleagues, and in communities.
11. Use supervision and consultation appropriate to social work practice.
12. Function within the structure of organizations and service delivery systems, and seek necessary organizational change.

