**Case Study**: *Assessing the Curriculum of the Food Science Undergraduate Program at the University of Guelph.*

**Overview:** *This case-study, as part of the “Handbook for Curriculum Assessment”, explores the approach taken by Professor Art Hill and the Food Science Undergraduate Curriculum Committee to assess and continuously improve the curriculum of the Bachelor’s degree in Food Science. The assessment process, conducted in collaboration with Teaching Support Services and the Educational Research and Development Unit, utilized Kirkpatrick’s Four Levels of Evaluation and a Curriculum Development model to ensure the program meets student needs, industry expectations, and maintains professional accreditation.*

**Purpose of the Case Study:**

The primary purpose of the case study is to evaluate the effectiveness of the curriculum assessment methods employed in the Food Science program and to highlight areas for improvement based on feedback from various stakeholders, including students, graduates, employers, and faculty. The case also demonstrates how curriculum assessment can be integrated into a continuous improvement model that supports program evolution and alignment with industry standards.

**Background**: In the academic years of 2005-2006, the Food Science Undergraduate Curriculum Committee, led by Professor Art Hill, identified a need for a structured approach to assess the curriculum of their well-established Bachelor’s program. The committee's primary concerns were developing a continuous improvement model to ensure the program met the needs of both students and the food science community, as well as maintaining professional accreditation from relevant associations.

To address these concerns, the committee collaborated with Teaching Support Services (Peter Wolf) and the Educational Research and Development Unit (Professor Fred Evers) to systematically conduct curriculum assessments. They employed Kirkpatrick’s Four Levels of Evaluation—focusing on learner satisfaction, knowledge acquisition, behaviour change, and results—alongside a Curriculum Development model to create strategies for data collection and analysis.

A variety of assessment methods were implemented, including exit focus groups with graduating students, web surveys of recent graduates, focus groups with employers, and reviews of previous accreditation reports. The feedback collected during these assessments informed a comprehensive SWOT analysis, identifying the program's strengths, weaknesses, opportunities, and threats. This structured approach enabled the program to evolve continuously and adapt to changing needs, ensuring the education provided aligns with industry expectations and prepares students for successful careers in food science.

**Task for Participants:**

* **Go to the page 12 of the “Handbook for Curriculum Assessment”.**
* **Read carefully the Case Study presented, which explores the approach taken by Professor Art Hill and the Food Science Undergraduate Curriculum Committee to assess and continuously improve the curriculum of the Bachelor’s degree in Food Science.**
* **Pay particular attention on the charts provided, involving assessment data and process.**
* **Then answer the following questions:**

**QUESTION 1:** The Food Science program at the University of Guelph used Kirkpatrick’s Four Levels of Evaluation and the Curriculum Development model to assess and improve the curriculum. Do you think this combination of methods was effective in addressing the needs of both students and the food science community? If you were part of this curriculum committee, what alternative methods or additional assessment tools would you consider incorporating to further enhance the continuous improvement model?

**QUESTION 2:** The action plan from the retreat highlighted areas such as research, communication skills, and a senior marketing course as potential additions to the curriculum. Do you agree with these recommendations? What specific changes would you propose to better align the curriculum with current industry needs or professional accreditation requirements? Are there other areas or skills that you believe are missing from the program’s focus?