Chapter 14
Teaching Engagement Scale Alignment Towards Purpose-Driven Delivery

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ABSTRACT

This work proposes a way in which the engagement scale is embedded into the existing educational framework and help to identify training needs that makes the teacher to play a greater role graduate capability achievements. The framework, the key components, and the tracking of the performance to align the set outcomes are presented. A seven dimensional teaching engagement scale (TES) assessment at the end of the semester often is the closest tool to evaluate the partnership. The extraction of the data, analytics of the data, the imperatives, and the solutions with reflections are presented in this work. The analysis showed a wider gap with the way the learner required wanted to learn is and the way the teacher facilitate the class. Analysis of the dimensions is presented with implications sounding out to the point teach less through conventional modes of learning and to make learning to happen through engaging tools towards educational sustainability. The outcomes of the action plan strategy over a semester is presented with reflections and effectiveness.

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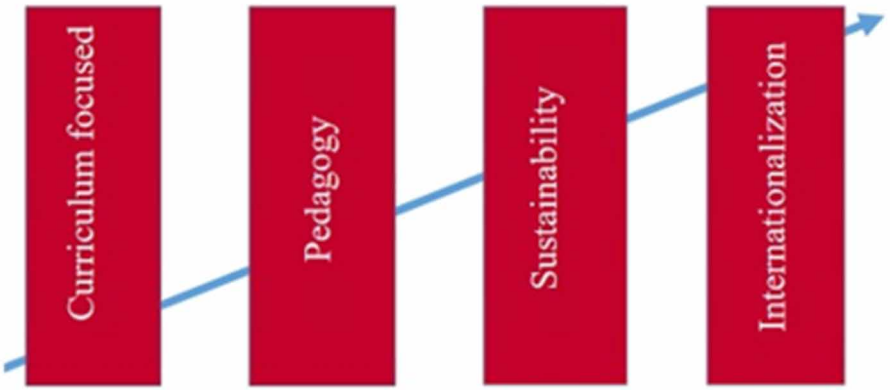
INTRODUCTION

Increasingly, millennial learners of today are entering higher learning institutions with multiple expectations. A common ground for transforming and altering what they want to identify as their presence globally is the key driver for ensuring that education sustainable. As such, the role of the university is to essentially support the students' needs and help them provide a broad-based and flexible way of learning with personalized options for learning to take place.

In a highly competitive and challenging 21st century workplace, graduates who are skilled will be relevant, responsive, and work-ready to start and stay ahead in the global marketplace. Figure 1 shows the futuristic common educational framework that map various stakeholders, developed by the Engineering Education laboratories, including various assessments at differing levels in order to make the loop dynamic. It starts with the key purpose of quality education, which is to make of sustainable future ready graduates, primary under the UN Sustainable Goals (SDG) in making the graduate globally employable. This is embedded into the four pillars of the futuristic engineering verticals including curriculum (design their own), pedagogy (learning on the go), sustainability (relevant to industry) and internationalization (global citizen).

Figure 1. Four pillars of modern engineering education



Industries that usually focus on domestic markets are now increasingly engaged in multinational and multidisciplinary projects brought about by the globalization of world economies. To be globally competitive, engineers should have the knowledge, able to work productively with radically different cultures, possess strong critical thinking skills, exhibit practical ingenuity; possess creativity, business and management skills, and leadership abilities. Engineers are expected to provide viable solutions to the complex engineering challenges of the 21st century. To provide the needed graduate attributes, the higher learning institutions (HLI) shifted its focus from the traditional input and teacher centered education into student-centered and outcome-based education (OBE). Under OBE, the focus is on "what is essential for students to know and be able to do" at the end of the learning process. In particular, the Malaysian Education Blueprint (MEB) 2015-2025 for higher education outlined 10 major reforms in the higher education system to enable