Chapter 5
OBE Assessment Tools for Mapping Learning Outcomes Identifying Slow Learners: A Congruent Approach

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ABSTRACT

The chapter sets out to explore the "congruent approach" to the student-centric educational model called output-based education (OBE), and in the framework of this approach to teaching, learning, and evaluation, the authors experimented how teaching the English language help slow learners pursuing courses in science and technology to attain programme education outcomes. In the chapter, the authors defined OBE as NBA requirement related to teaching and learning in the institute of science and technology; its practices according to its defined constituents like ILOs, COs, POs, PEOs, PSOs, and Missions of an institute; and how these outcome-based education (OBE) learning constituents work together towards a fixed direction (i.e., intended learning outcomes, being integral to the requirements of the NBA accreditation that demands holistic and quality technical education). To achieve the intended outputs through OBE practices, the authors devise an approach to the OBE called "congruent approach." The chapter supplements to existing mapping tools and delineates fundamentals of the approach.

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5. 1 INTRODUCTION: FUNDAMENTALS OF THE OBE

The outcome-based education was adopted and implemented in the 90s of twentieth century. It defined, theorized, and applied for exploring student-centrism, job-orienting graduates, and the completion of accreditations like the Washington Accord, the National Board of Accreditation (NBA). The chapter introduces congruent approach to the OBE for the slow learners (onwards the authors would use 'non-learning community despite cliché 'slow learners'). The OBE is often criticised for its more emphasis on outcomes than practical wisdom or knowledge, collaborative involvement, assessment issues and over-documentations. The chapter finds problems in approaches to deal with OBE and its actual implementation because adopting a framework is easier than to design new things out of the framework. And, designing requires novel and individual approach. The problem is not with the OBE, the problem is here cited in the applications of tools and the ways they are used. For this, the chapter explores possibilities to implement the teaching and assessment tools for attaining intended learning outcomes of a course. In the beginning, the chapter defines OBE, its structure and terminologies in terms of mapping techniques and why OBE is required; in the middle conceptual frameworks and theory of congruent approach to OBE, application and procedures; proceeds towards end with the concept of non-learning community, filtering and experimentations and findings. The approach experimented for the OBE implementation may also help apply effectively National Education Plan (NEP) 2020 which visualizes an imperative shift from summative assessment (one of the kinds of assessment used in OBE) to regular and formative assessment, which insists on competency-based assessment witnessing Higher-order thinking skills (HOTS), learning and cognitive development of learners pursuing education at all the stages from the nursery level onwards.

The requirement of this approach seemed important first time when the first author of the chapter had once started diagnosing the needs of slow learners and observing the learning-problems (not learning disabilities) in the slow learners at Central University of Rajasthan-Ajmer India. As it is known that the OBE constituents are based on Bloom's theory of six levels of learning (Bloom, 1956) used for assessment design that are observable and measurable divided into two measurable segments: Lower-order thinking skills (LOTS) and Higher-order thinking skills (HOTS) advocated by Bloom throughout life and founded the MESA (Measurement, Evaluation, Statistical Analysis) for exploration of the theory. (Bloom, 1956) Based on the segment, a course designer fixes Intended Learning Outcomes (ILOs), Course Outcomes (COs) for attaining the Programme Outcomes (POs) and Educational Programme Outcomes (EPOs) towards the direction of intended objectives. In these processes, how OBE works for the Slow Learners or Non-Learning Community lack any study and research. The chapter fills this gap and puts

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