

Data Management System: A Guideline on Data Consolidation for OBE CDL Reports

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ABSTRACT

The implementation of Outcome-Based Education (OBE) in UiTM has reached its final stages at which every academic programme is required to carry out an evaluation on its performance based on several criteria. In conventional practice, the evaluation is usually made on the basis of students' performance in tests and examinations. However, with the introduction of OBE, specifically the reporting system known as OBE-CDL report, students grades are not the sole criterion in determining the success of an academic programme, but other criteria have been included to form the basis of evaluation. These criteria include teaching performance, entrance and exit survey, and assessment on the alignment of course information and delivery, to name a few. However, the committee in charge of preparing the OBE CDL reports for every programme and unit have experienced difficulties in gathering the data and this affects the process of consolidating data for the report. As such, there is a dire need for a systematic approach in consolidating the data for the report. This paper examines the difficulties experienced by faculties and OBE Committee in completing the report on time as requested by the Division of Academic and International Affairs (Bahagian Hal Ehwal Akademik dan Antarabangsa, HEAA). A guideline on data management system to consolidate data for the report is proposed to alleviate difficulties and minimize complexity during collecting data and reporting. The processes, approach, specific requirement involved for this exercise are discussed, which highlight the salient aspects of the problems.

Keywords: data reporting, Outcome Based Education (OBE), data management system

Introduction

Quality has become a major agenda in all levels of higher education. Lewis et al. (2001) defined quality as the degree to which the product or service meets the expectations of the customer and focuses to the degree to which the product or service conforms to design specifications. The more effective the organization is in meeting customer expectations and design specifications, the higher the implied quality level of its output (Lewis et al., 2001). Mischalska-Cwiek (2009) suggested the position of quality which is one that should be comprehensively understood and referred to by all areas of functions in organizations. Thus, quality movement is very vital to ensure graduates' survival in an increasingly competitive world market. The quality element is essential for all accredited programmes at Institutions of Higher Learning (IHL). This transformation is done to meet the needs of the globalised and diversified economy and to remain globally competitive (Sharifah Hapsah, 2007).

The main aspect of Outcome-Based Education (OBE) is for its implementation to be carried out in a complete cycle; that is, in one closed-loop cycle. This aspect begins with planning, implementation, assessment and ends with Continual Quality Improvement (CQI). UiTM uses Outcome-Based Education – Closing the Loop report (OBE-CDL) as the standard assessment. There are multi-level personnel involved in this process and the final report is consolidated for performance evaluation. The assessment is used to verify progress and setback during programme implementation to meet the following requirements: provide evidence of how the need of stakeholders are met; to exhibit how programme objectives (PeO) and programme outcomes (PO) are to be achieved; and to demonstrate CQI (Continual Quality Improvement).

Stakeholders, Documentations and Procedure

Quality of education is the skill of building the abilities of assimilating the knowledge in the area of educational needs and the implementation of this knowledge in creating mechanisms which allow the fulfilment of the

expectations of customers and educational services (Mischalska-Cwiek, 2009). In terms of teaching and learning (T&L), UiTM focuses mainly on two major aspects: students' grade (reported in LE15) and OBE-CDL report to be the documents for quality control.

The OBE-CDL report focuses on the aspects of planning, implementing, reporting and CQI. Items considered in this report include Students' CGPA (Cumulative Grade Point Average), CO-PO-LO-KI (Course Outcomes-Programme Outcomes – Learning Outcomes – Soft Skills (Kemahiran Insaniah)), exit-entrance survey, SUFO (Student Feedback Online), OBE-SCL(Student-centered Learning) and CQI. Figure 1 shows the relationship between stakeholders and OBE CDL report. Detailed procedure and method of execution are described in the standard manual procedure; Procedure for Management of Curriculum Implementation (Prosedur Pengurusan Pelaksanaan Kurikulum). The procedure focuses on the resource person (RP) and lecturers' responsibility in preparing the OBE CDL report and how it relates with policy. The report should be completed two weeks after the exam results are released. Table 1 describes the overall planning and implementation for both RP and team teaching.

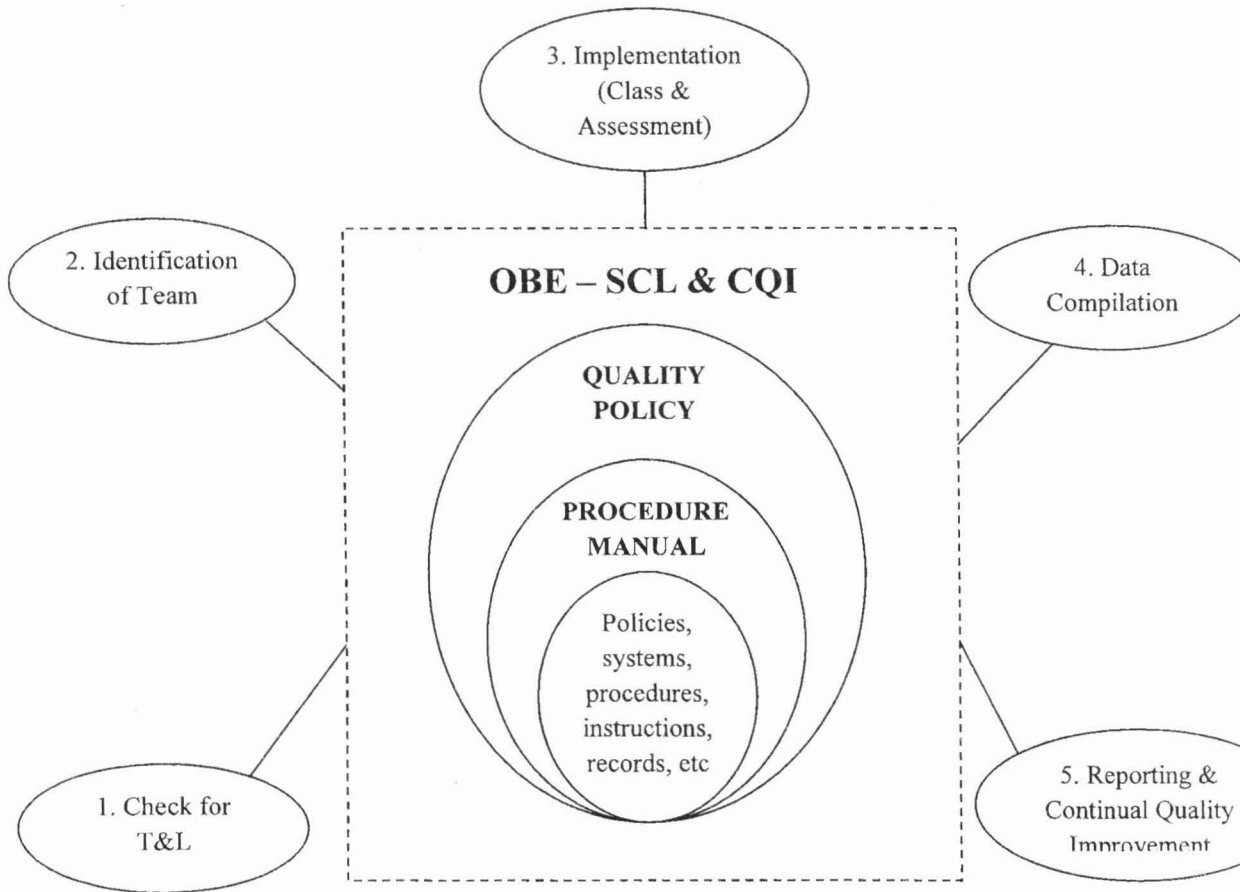


Figure 1: Relationship of OBE-CDL and Quality

Table 1: Planning and Implementation for Resource Person and Team Teaching

No.	Task	Person/Team in charge	Detail
1.	Checks on teaching and learning documents	Resource Person (RP)	Checks on Course Information: (Course Outcomes, Topics, Assessment, References) Constructing entrance & exit survey questions Conducting course meetings (assessments, CO, PO, LO, KI, rubrics for ongoing assessments, soft skills) Briefing for new lecturers on course implementation
2.	Identification of team teaching	RP & Team Teaching	Briefing on Course Implementation (entrance-exit survey, assessments, SUFO) Planning for audit/observation representing the implementation of new curriculum designed in compliance with OBE requirements.
3.	Implementation (Class and Assessment)	RP & Team Teaching	Checks on Course Information: (Course Outcomes, Topics, Assessment, References) Assessment items and rubrics Exam questions (using appropriate Bloom's Taxonomy level) Plan for T&L (consideration of course outcomes and programme outcomes) Identification of students in the group/class (invitation for completing entrance survey) Introduction for Course Outcomes Briefing on Programme Outcomes & Soft Skills (LCCEET: Leadership, Critical Thinking & Problem Solving, Creativity & Innovativeness, Effective Communication; Entrepreneurial, Teamwork) Introduction of topics and SLT (Students' Learning Time) distribution to students for every topic (explanation of learning time and credit unit) Briefing on types of assessments and the use of rubrics for students' evaluation Entrance & exit surveys Encouraging students to ask questions, discussing and helping them develop related skills Assessments (formative & summative) Guiding students to search for relevant information from multi sources (student-centered learning)
4.	Data Compilation	Faculty	Aspects of evaluation required in the OBE CDL report Course GPA, CO-PO-LO-KI, exit-entrance results, SUFO analysis, the extent of OBE-SCL implementation
5.	Report and CQI	Resource Person and OBE Committee	Compilation of data (RP) Reporting data Compilation of data (OBE committee) Meeting for CQI

Figure 2 displays the organizational chart suggested for the overall OBE SCL implementation in UiTM Pahang. The structure helps in organizing related events especially the data reporting activities for both diploma and degree levels, meetings and discussions, colloquiums (to share best practices of every aspect (for example classroom, process, reporting, simplifying, management and quality control). Table 2 shows the details for OBE CDL CQI reports, persons in charge and submission.

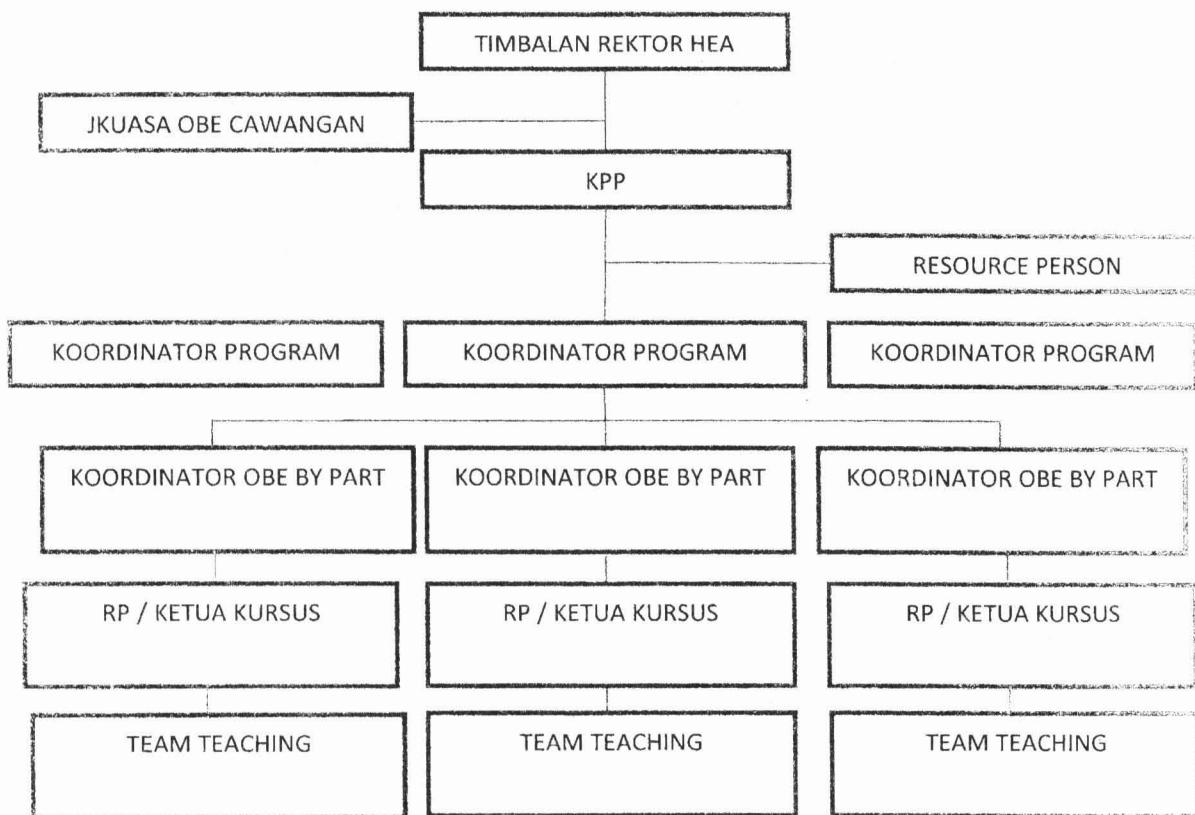


Figure 2: Organizational Chart for OBE CDL report

Table 2: Responsibilities of Persons in Charge

Persons in Charge	Appointed by	Types of Reports	Receive Reports from	Submit Reports to
Branch Committee Member	Unit of Akademik and Curriculum Affairs (UHeK)	Consolidated CQI	Program Coordinator/Head of Centre of Studies(KPP)	UHeK
Resource Person (Main)	Vice Chancellor, Academic and International	CQI/OBE CDL	Resource Person (RP)/Course Tutor	UHeK & Faculty
Program Coordinator	Vice Rector, Academic Affairs	CQI /OBE CDL	RP/Course Tutor	Branch OBE Committee & KPP
RP (Branch) / Course Tutor	KPP	CQI/OBE CDL	Team Teaching	RP & Programme Coordinator
Team Teaching	Programme Coordinator	OBE CDL		RP/Course Tutor

Utilising and Analysing Data for Programme Improvement

The results generated from OBE CDL reports can be used for improvement purposes at all levels. The results, presented in the forms of indicators (excellent, good, fair and poor), have their own significant meaning and provide salient information on the aspects of students' performance, the consistency and alignment of the CO-PO-LOKI components, students' perception on the course as well as the teaching and learning processes and the extent of OBE-SCL implementation. This information will form a good basis for curriculum review. From the report, Resource Person can consequently make comments, discuss and share on the best practices during classroom implementation, for example, active learning, problem based learning (PBL), video based learning (VBL) and others. As the quality movement is made visible to all lecturers, it is possible to internalize this practice in the future. Figure 3 provides recommendations on possible measurements and improvements to be made.

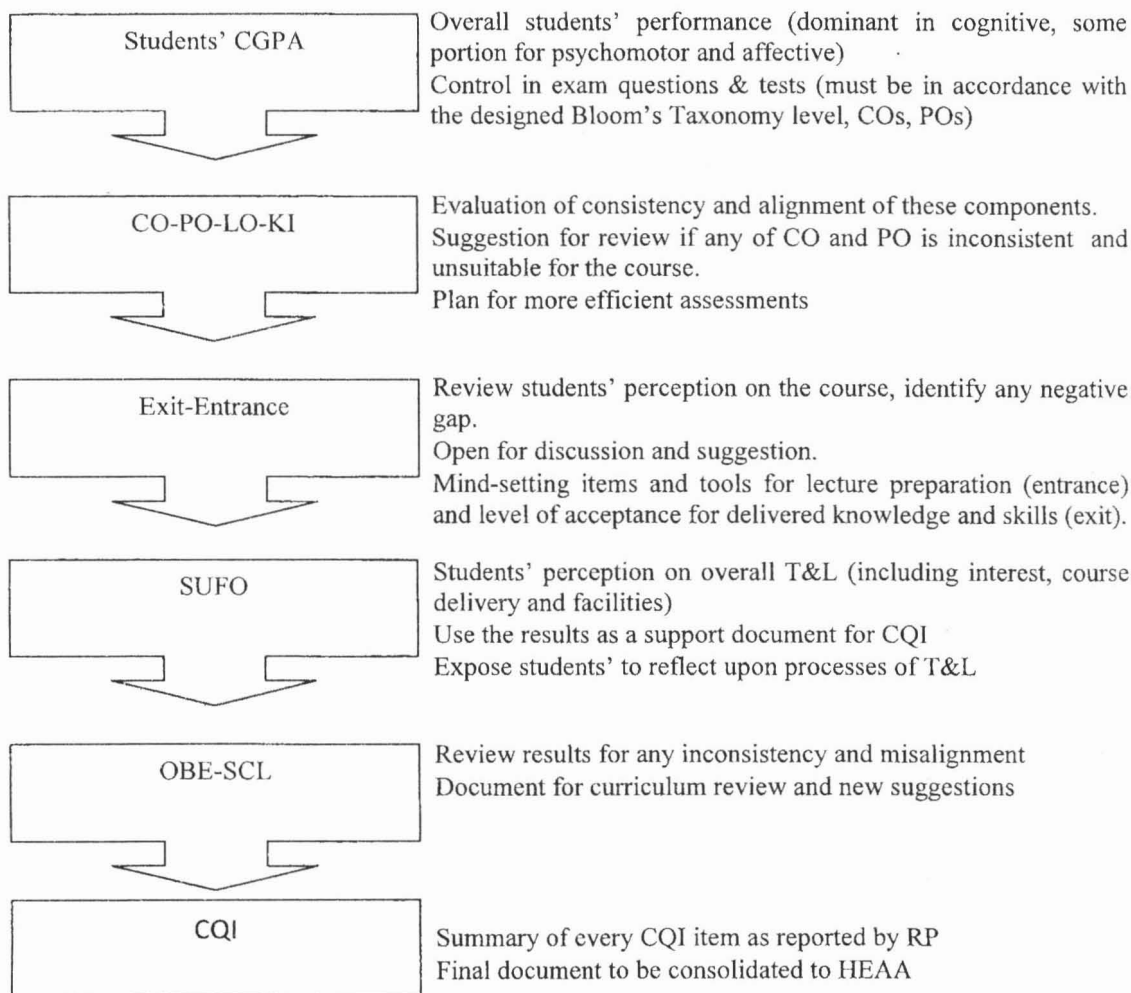


Figure 3: Measurements and Improvements based on results from OBE CDL Reports

Conclusion

As shown in the previous paragraphs that quality movement and OBE are inter-related, it is time for everyone involved in the process of teaching and learning of UiTM Pahang to acknowledge the importance of OBE-SCL.

One important element in the implementation of OBE-SCL is the preparation of OBE CDL report which provides information on the performance of each academic programme.

As this report requires data collection on five different criteria of evaluation namely students' CGPA, alignment of CO-PO-LO-KI components, exit/entrance survey, SUFO analysis and the extent of OBE-SCL implementation, it is vital that a systematic data management system be developed to ensure that all the data can be easily obtainable leading to a smooth process of data consolidation.

The process of data consolidation suggested in this paper requires commitment from multi-level personnel which include the Vice Rector of Academic Affairs, Head of Centre of Studies, Resource Person and individual lecturers. Therefore, it is hoped that everyone involved will play his role so that the report will be completed on time. This report will consequently provide information on the strengths and weaknesses of the programme's performance paving the way for possible measures of improvements. And with the improvements readily identified, it can be assured that the next cycle of OBE-CSL implementation which is aimed at ensuring quality of all academic programmes will be more effective and successful.

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