INTERPRETING AND ACTUALIZING LEARNING OUTCOMES

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NBA INITIATIVES

- Launching Outcome Based Accreditation

- Exhaustive Background Information

- Detailed Information for Self Assessment and Programme Evaluation

- Large number of Nodal centres and training workshops

- Highly Transparent system with little scope for corruption

- International Visibility

- New Norms and Standards are applicable since July 2013

CONCEPT OF OUTCOME BASED EDUCATION

In a traditional education system,
  - students are given grades and rankings compared to each other.
  - Content and performance expectations are based primarily on what was taught.

Outcome-based education (OBE) bases each part of an educational system around goals (outcomes).
  - By the end of the educational experience each student should have achieved the goal.
  - Classes, opportunities, and assessments should all help students achieve the specified outcome.

CONCEPT OF OUTCOME BASED EDUCATION

o Students will understand what is expected of them and teachers will know what they need to teach without specifying a specific method of instruction, recognizing diversity among students. Meant to be a <u>student-centered learning</u> model.

o Students are expected to do their own learning, so that they gain a full understanding of the material.

o Increased student involvement allows students to feel responsible for their own learning, and they should learn more through this individual learning

DRAWBACKS OF OBE

- Outcomes are subject to interpretation across different programs or even different instructors.

- A holistic approach to learning is lost.

- Learning can find itself reduced to something that is specific, measurable, and observable.

- Assessments may become too mechanical, looking only to see if the student has acquired the knowledge.

DRAWBACKS OF OBE

- Assessors must be willing to put in the time required to create a valid, reliable assessment, that ideally would allow students to demonstrate their understanding of the information, while remaining objective.
- Assessing liberal outcomes such as creativity, respect for self and others, responsibility, and self-sufficiency, can become problematic.
- There is not a measurable, observable, or specific way to determine if a student has achieved these outcomes.

ATTRIBUTES OF LEARNING OUTCOME

- ABET and NBA Similarity
- Knowledge of Maths; Science and Engineering;
- Problem Analysis; Design and Development of Solutions;
- Investigation of Complex Problems;
- Modern Tool Usage;
- Societal Concerns; Environmental Sustainability; Ethics;
- Individual and Team work; Communications;
- Project management and Finance;
- Life long Learning;

IMPLIED TASKS

- Formulation of Programme Objective with participation of all stakeholders

- Assessing Programme outcome Equipping students with knowledge, skills and attitudes relating to specified outcomes

- Developing instructional techniques and assessment procedures to prepare students to achieve those outcomes

CREATING A COURSE

- Planning and identifying course content and defining measurable objectives

- Selecting and implementing instructional methods to achieve the specified objective

- Selecting assessment methods that can show whether the objectives have been achieved.

EXPECTATIONS

- Nationwide Curricular revamping; Changing content driven courses.
- Developing a coherent curriculum in tune with the institutional and programme mission.
- Responsive to interests of all stakeholders
- Energizing all the faculty to understand the goals and approaches and ensure their full involvement.
- Not left only to those preparing SSRs

ILLUSTRATION

- The video lectures and course descriptions such as OCW-MIT or SEE-Stanford.edu are the best examples of programme objectives and learning outcomes.

- Senior Professors handling First Year Courses; Clear introduction to objectives and outcome

- Advance intimation about teaching methods and assessment procedures.

- Video Lectures available for repeated viewing. Can be useful for Evaluation during Accreditation visits.

PROGRAMMES AND COURSES

- A Programme consists of several courses.
- Each course has specific course objective and learning outcome.
- Sum of all these constitute programme objective and programme outcome.
- Each course teacher sets own objective and outcome.
- Website should outline all courses of a programme and corresponding objectives and outcome, textbooks, honor code, plagiarism policy, etc.

TYPES OF INSTITUTIONS

- IITs, IISc, IIITDM, IISERs, IIITs, NITs, CUs, State Universities (running Programs in their campuses)

- Private universities, Deemed Universities, Affiliated Colleges, Autonomous Colleges, Constituent colleges

- Estimated no. of programmes : > 30000

- Directions to fulfill demand not clear

AICTE APPROVED INSTITUTIONS 2015-16

Programmes	UG	PG
Engineering and Technology	3384	2304
Architecture and Planning	117	29
Hotel Management	77	4
Management	-	3452
MCA	-	1344
Pharmacy	1027	834
Applied Arts and Crafts	15	1

LONG WAY TO GO

Total number accredited : **247**
(Mostly Engineering)

Five year period : **80**
Two year period : **167**
No. of NITs : **71**

SHORTCOMINGS

- The Centrally funded technical institutions and some autonomous state universities and Colleges can meet the expectations of OBE

- Vast majority of other institutions (universities and affiliated colleges) downplay maths, science and humanities.

- Focus mainly on syllabus and examinations; Learning beyond syllabus is rare

- Innovative forms of teaching and learning and life long learning nonexistent.

DESIRABLE APPROACHES

- Some of the programme outcomes (eg. Communications, Ethics, Societal Implications, Contemporary issues) should be embedded in every course and not offer special courses

- Lab. Experiments to be innovative and challenging and objective oriented and not manual based verifications.

- Team based lab work with all members equally familiar with every aspect of the experiment.

QUESTIONS

- What happens to unaccredited or unaccreditable programmes?
- What is the standing of graduates from unaccredited programmes?
- How to persuade universities and colleges on the scope and value of OBE?
- Is Weightage given to Learning outcome in NBA table adequate?
- Should lack of probity be counted for negative scoring?
- Should undesirable governance practices (eg. Family control) account for negative score?

THANK YOU