

ASSESSMENT OF OUTCOME BASED EDUCATION **AMONG COMPUTER SCIENCE STUDENTS IN** **COIMBATORE**

Dr. K.Vidyakala^{*}

Dr. Nithyakala^{**}

Dr. J.Deepa^{***}

L.Prathibha^{****}

P.Nandhini^{*****}

Abstract

OBE is an educational theory that bases each part of an educational system around goals (outcomes). By the end of the educational experience, each student should have achieved the goal. There is no single specified style of teaching or assessment in OBE; instead, classes, opportunities, and assessments should all help students achieve the specified outcomes. The role of the faculty adapts into instructor, trainer, facilitator, and mentor based on the outcomes targeted. The primary aim of OBE is to facilitate desired changes within the learners, by increasing knowledge, developing skills and/or positively influencing attitudes, values and judgment.

Key words: OBE, College students

^{*} HoD, Department of Business Administration, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India.

^{**} Assistant Professor, Department of Business Administration, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India.

^{***} Assistant Professor, Department of Business Administration, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India.

^{****} BBA Student, Department of Business Administration, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India

^{*****} Research Scholar (FT), Department of Business Administration, PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu, India

Introduction:

Outcome-based methods have been adopted in education systems around the world, at multiple levels. Australia and South Africa adopted OBE policies in the early 1990s but have since been phased out. The Washington Accord was created in 1989; it is an agreement to accept undergraduate engineering degrees that were obtained using OBE. Outcomes include knowledge, skills and attitudes. Its focus remains on evaluation of outcomes of the program by stating the knowledge, skill and behaviour a graduate is expected to attain upon completion of a program and after 4 – 5 years of graduation. In the OBE model, the required knowledge and skill sets for a particular engineering degree is predetermined and the students are evaluated for all the required parameters (Outcomes) during the course of the program.

Objectives of the Study:

- To analyze the perception of outcome based education among computer science students

Research Methodology

The analysis of this paper is based on primary data collected from students and secondary data collected from the related websites, books and articles from different journals.

Review of Literature:

Adam (2004) examined that outcomes are usually defined in terms of a mixture of knowledge, skills, abilities, attitudes and understanding that an individual will attain as a result of his or her successful engagement in a particular set of higher education experiences. Learning outcomes also provides a clear focus on what students achieve and lead to better qualifications and an improved student experience.

Tucker (2006) conducted a study on "Outcomes based education (OBE) which is a process that involves the restructuring of curriculum, assessment and reporting practices in education to reflect the achievement of high order learning and mastery rather than the accumulation of course credits."

Suskie (2009) found that "An expected learning outcome is a formal statement in which students are expected to learn in a course. Expected learning outcome statements refer to specific knowledge, practical skills, areas of professional development, attitudes, higher-order thinking skills etc. that faculty members expect students to learn, develop, or master during a course."

Akhir et al.,(2012) compared the impact of outcome-based education (OBE) in comparison to conventional teaching-learning approach. The findings indicated that there is significant difference in the mean grade point average between OBE students with aided technology learning in comparison to non-OBE students. Mean grade point average for OBE cohorts is significantly higher than mean grade point average for non-OBE cohorts

SAMPLING TECHNIQUES

The sampling technique used for the study is Census. 353 respondents are taken as sample for the study.

RELIABILITY:

Reliability is the extent to which the measurement of the constructs gives consistent results. The cronbach's alpha was used to measure the reliability of the constructs. The cronbach's alpha co-efficient for the overall instrument was found to be 0.966 which depicts that the reliability of the co-efficient value is at acceptance value.

Reliability Statistics

Cronbach's Alpha	N of Items
0.966	83

ANALYSIS AND INTERPRETATION

Assessment of OBE of BSc(CS)Respondents

Year of study	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total
Assessment of OBE Learning	N				MEAN				STD. DEVIATION			
QUESTION 01	59	58	58	175	4.12	4	4.38	4.17	0.83	0.9	0.72	0.83
02	59	58	58	175	3.92	4.05	4.36	4.11	0.68	0.78	0.69	0.74
03	59	58	58	175	3.97	4.05	4.17	4.06	0.76	0.87	0.9	0.85
04	59	58	58	175	4.02	4	4.29	4.1	0.86	0.92	0.75	0.85
05	59	58	58	175	3.8	4.14	4.4	4.11	1.05	0.87	0.72	0.92
06	59	58	58	175	3.8	3.84	4.19	3.94	0.92	1.12	0.85	0.98
07	59	58	58	175	3.97	3.91	4.38	4.09	0.83	0.92	0.7	0.84
08	59	58	58	175	3.85	4.02	4.28	4.05	0.85	0.87	0.91	0.89
09	59	58	58	175	4.12	3.97	4.14	4.07	0.83	0.86	0.87	0.85
10	59	58	58	175	3.76	4.07	4.29	4.04	0.97	0.81	0.84	0.9
11	59	58	58	175	3.85	3.84	4.22	3.97	0.83	1.11	0.77	0.92
12	59	58	58	175	3.98	4.12	4.29	4.13	0.82	0.96	0.75	0.85
Avg. Mean					3.93	4	4.28	4.07				

Interpretation:

The above table shows the agreeability towards student's assessment of OBE among BSc (CS) respondents. I am an active learner and our faculty motivates students by constant feedback and affirmation has the highest mean among I years which implied that there are many active learners and have constant feedback and affirmation. My class room is Learner-centred has the highest mean among II years which implied that the students are more effective in learner centred. I am an active learner and Comments and input from students is encouraged in classroom has the highest mean among III years which implied that most of the respondents are active learner and the students are encouraged in classroom for their involvement. My lecturers are facilitators and they constantly use teamwork has the lowest mean

The average of total mean score 4.07 implied that respondents agree in their opinion towards Assessment of OBE.

Critical cross outcomes

Critical cross outcomes of BSc (CS) Respondents

Year of study	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total
Critical cross outcome	N				MEAN				STD. DEVIATION			
QUESTION												
N 01	59	58	58	175	3.95	4.29	4.36	4.2	0.92	0.73	0.79	0.83
02	59	58	58	175	3.85	4.38	4.34	4.19	0.74	0.59	0.66	0.71
03	59	58	58	175	4.19	4.21	4.36	4.25	0.82	0.83	0.67	0.78
04	59	58	58	175	4.02	4.24	4.28	4.18	0.92	0.8	0.67	0.81
Avg. Mean					4	4.28	4.34	4.2				

Interpretation:

The above table shows the agreeability towards student's critical cross among BSc(CS) respondents. Identify and solve problems by using creative and critical thinking has the highest mean among I years which implied that the respondents will solve their problems by using creative ideas. Improve skills and presentation has the highest mean among II years which implied that students will improve their skills. Communicate effectively language has the highest mean among III years and also communicate effectively language has the lowest mean. The average of total mean score 4.2 implied that respondents agree in their opinion towards critical cross outcome.

Reflection Learning**Reflection Learning of BSc(CS) Respondents**

Year of study	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total
Reflection process Learning	N				MEAN				STD. DEVIATION			
QUESTION												
01	59	58	58	175	4.12	4.14	4.41	4.22	0.91	0.85	0.68	0.82
02	59	58	58	175	4	4.07	4.36	4.14	0.85	1.02	0.74	0.89
03	59	58	58	175	3.93	4.14	4.34	4.14	0.94	0.85	0.71	0.85
04	59	58	58	175	4.03	4.28	4.43	4.25	0.89	0.7	0.62	0.76
05	59	58	58	175	3.86	4.34	4.4	4.2	0.84	0.69	0.67	0.77
Avg. Mean					3.99	4.19	4.39	4.19				

Interpretation:

The above table shows the agreeability towards student's reflection learning among BSC(CS) respondents. My institution extends help students to communicate effectively by developing their language and written skills has the highest mean among I years which implied that the institution helped to develop their communication skills. My institution helps me to be aware of the importance of effective learning strategies, responsible citizenship, cultural sensitivity and entrepreneurial abilities has the highest mean among II years which implied that the institution helped in all their activities. I am able to understand that the world is a set of related systems problem solving do not exist in isolation has the highest mean among III years. My institution helps me to be aware of the importance of effective learning strategies, responsible citizenship, cultural sensitivity and entrepreneurial abilities has the lowest mean among I,II and III years.

The average of total mean score 4.19 implied that respondents agree in their opinion towards reflection process learning.

OBE process

OBE process of BSc (CS) Respondents

Year of study	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total	I Year	II Year	III Year	Total
OBE Process learning	N				MEAN				STD. DEVIATION			
QUESTION 01	59	58	58	175	4.02	4.33	4.41	4.25	0.78	0.63	0.68	0.71
02	59	58	58	175	3.86	4.19	4.41	4.15	0.84	0.69	0.59	0.75
03	59	58	58	175	3.88	4.17	4.36	4.14	0.83	0.82	0.64	0.79
04	59	58	58	175	4.02	4.12	4.28	4.14	0.75	0.77	0.7	0.75
Avg. Mean					3.94	4.2	4.37	4.17				

Interpretation:

The above table shows the agreeability towards student's OBE process among BSC(CS) respondents. Outcome-based education is a flexible, empowerment orientated approach to learning has the highest mean among all the three years which implied that Outcome Based Education has approached empowered among the respondents. OBE adaptation helped me to optimize learning and ensure the development of myself has also has the highest mean among the I years. OBE has helped in teaching and learning models and OBE adaptation helped me to optimize learning and ensure the development of myself has the lowest mean among the I, II and III years.

The average of total mean score 4.17 implied that respondents agree in their opinion towards OBE process.

CONCLUSION

From the analysis the study found BSc (CS) section students that **I and II year** students' perception towards **Critical Cross Outcomes** and **III year** section students perception towards **Reflection** is high in OBE..