

Pedagogical Transitions Using Blooms Taxonomy

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Abstract: Objectives are the 'crux' and 'key' of the entire process of teaching and learning. It must be understood that objectives of teaching and learning will be in the consonance with the philosophy of education which in itself reflects the philosophy of a nation. Objectives are determined by as Overall objectives of a Nation (as reflected in its Constitution), Overall objectives of Education (Primary, Secondary and University etc), Subject wise Objectives (Objectives of teaching medicine, engineering, commerce, social studies etc), Class wise Objectives in general, and Instructional Objectives. An Instructional objective may be defined as a desirable change in behaviour through instruction (teaching). Educational objectives are very broad whereas the instructional objectives are very specific. The change may be in the cognitive, affective and psycho-motor domains. Student teachers develop their teaching competencies during their programme in the college classroom, peer group practice and during internship in the practice schools. This paper addresses and assesses with the of achievement level of practicing teachers who belong to a teacher training college in incorporating how to apply Bloom's Revised Taxonomy in teaching process. This paper also analysed the programme outcome of pedagogy commerce and accountancy for a semester in B.Ed Programme.

Keywords: Blooms taxonomy of objectives, Course Outcome, Educational Objectives, Instructional Objectives, and Programme Outcome.

Introduction:

Prof.B.S.Bloom of the University of Chicago (USA) is considered to be pioneer in the taxonomy of objectives. Taxonomy implies a classification of an idea or an object. Taxonomy of instructional objectives in terms of the precise teaching outcome and specific or learning appropriate to classroom action. Bloom's Taxonomy was created in 1956 under the leadership of educational psychologist. Dr Benjamin Bloom under his able leadership with his team created Blooms taxonomy to promote thinking forms in education at higher level namely to analyze and evaluate concepts, procedures, to processes ,and certain principles instead of simply memorizing the facts by way of rote learning. When designing educational, training to be designed, and any learning processes has to initiated his classification is being used till today. Bloom's

classified into three hierarchy in his model as a set in educational learning objectives. Classification were made according to the levels of nature as complex and specific. The model has been accepted in the committee of educators and named after the chairperson Benjamin Bloom.

It has been widely accepted and followed by the teachers thereafter to discuss the taxonomy as language in common among teachers to exchange the methods of learning and assessment. From the taxonomy, specific learning objectives are framed, and it is also used for assessment of learning on different varieties of cognitive levels. The classification of objectives are made in three *domains* as cognitive, affective and psychomotor for educational learning and activities.

Cognitive domain:

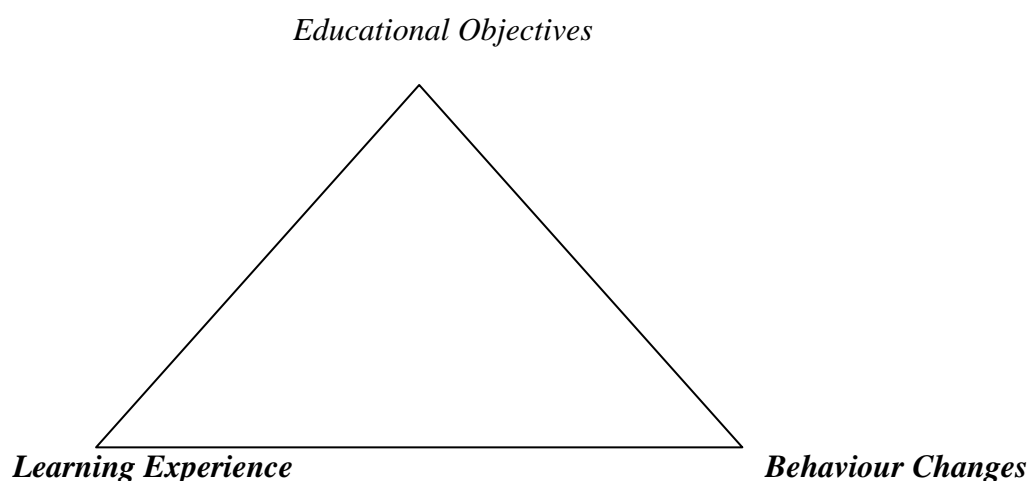
In cognitive domain knowledge and the development of intellectual skills of mental abilities is involved. Here inclusion of recalling or recognizing the specific things, accepted patterns, term, facts and concepts which promotes the development of intellectual skills and mental abilities. Cognitive processes are divided into six categories. It starts from the simple to complex.

1. Knowledge 2. Comprehension 3. Application 4. Analysis, 5. Synthesis and 6. Evaluation.

Categorization is made as per the degrees measured with difficulty level, usually one after the other is mastered.

Affective domain: In affective domain emotional things like feelings, values, appreciation, enthusiasms, motivations, and attitudes are dealt with. The categories are receiving, responding, valuing, and organizing which deals from the simplest behaviour to the most complex.

Psychomotor domain: In psychomotor domain physical movement, co-ordination, and the usage of the motor-skill areas are dealt in. Requirement to develop the skills is practicing in increasing speed, précised outlook, distance covered, procedures involved and techniques to execute. The major categories are seven again from simple behaviour to complex behaviour. They are perception, set, guided response, mechanism, complex overt response, adaptation and origination. Psychomotor domain actually develops manual or physical skills. Being this taxonomy was made for higher level in education, the usage of words looks to be little higher version than we practically make use of the most. The domains are fixed into categories and they are also referred as Knowledge, Skills and Attitude. The classification are fixed here of as the goals of the training process. Every learner on completing the training process shall acquire new skill, knowledge and attitudes. Teaching activities must be objective centred. According to Bloom, education is a tri-polar in nature. They are Educational objectives, Learning experience and Change of behaviour. His approach is Objective Centred and not Content Centered. It is diagrammatically represented as under:



Other Psychomotor Domains identified by Dave's (1975) such as Imitation, Manipulation, Precision, Articulation, and Naturalisation. Harrow(1972) has identified as fundamental movements, Perception, Physical abilities, Skilled movements.

The former student of Bloom, Lorin Anderson revised the cognitive domain in learning taxonomy and changes two important things in the middle of nineties. In the six categories with little modification in the arrangement he changed of names from noun to verb.

ORIGINAL DOMAIN	NEW DOMAIN
EVALUATION	CREATING
SYSNTHESIS	EVALUATING
ANALYSIS	ANALYZING
APPLICATION	APPLYING
COMPREHENSION	UNDERSTANDING
KNOWLEDGE	REMEMBERING

As a teacher educator the researcher wanted to see the semester results as a measure using outcome based education in the her particular pedagogy of student teachers. This practice will gain international recognition and global employment opportunities, as they become graduates of innovativeness with more professionalists, life skills with soft skills, socially responsible and the followers of ethics. This will also enable the teaching a far more creative and innovative career. She prepared the course outcome of pedagogy of Commerce, according to Programme outcome after having discussion with the board members and found the following result.

The Course Outcome

The course outcome mentions the major skills like Knowledge, attitude and ability that are to be acquired by students. It shows the measures and behaviours observed. The Course outcome must be accepted unanimously upon by the faculties in a program and must work towards the program outcomes and always to be specified with action verbs.

The Programme Outcome

The Programme Outcome will clearly specify the skills and knowledge that are developed at the finish of the programme which are the attributes of IEA. It has to be measurable and achievable. The dimensions of Programme outcomes are knowledge outcomes, skill outcomes, attitude and value outcomes and behavioural outcomes.

Assessment tools

The student's knowledge and skills from their performance in the continuous assessment tests, end-semester examinations, presentations, and classroom assignments are considered as direct methods. This direct methods are samples of what students have learnt and carry. This provide as strong evidence of student learning. This gives an indication of how a course is performing in terms of attainment value. Here target level set to score is 2.

Program Name : B.Ed.

Course Name : Pedagogy of Teaching Commerce

Table:1 Course outcome

Co.No	Program level	Course outcomes
		Students will be able to
CO104.1	K2	Discuss the role of teaching
CO104.2	K3	Use different teaching aids to suit the needs of learners
CO104.3	K4	Distinguish the methods of teaching
CO104.4	K5	Select the individualized instruction

Table:2 Mapping

the Course outcome and programme outcome

PO→	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12
CO-1	2	1	0	0	2	-	-	-	-	-	-	-
CO-2	3	2	1	1	3	-	-	-	-	-	-	-
CO-3	2	3	2	2	3	-	-	-	-	-	-	-
CO-4	1	2	3	3	3	-	-	-	-	-	-	-
Avg.	2	2	1.5	1.5	2.75	-	-	-	-	-	-	-

PO – Program Outcomes

CO - Course Outcomes

Overall Average – 1.95

Semester : II

Table:3 Course outcome

Co.No	Program level	Course outcomes
		Students will be able to
CO203.1	K5	Support Co-Scholastic activities in School
CO203.2	K5	Select practical areas in Evaluation and administration of Test
CO203.3	K4	Examine teacher professionalization and teacher commitment
CO203.4	K5	Appraise ways and means of enhancing teacher commitment

Table:4 Mapping

the Course outcome and programme outcome

PO→	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12
CO-1	1	2	3	3	3	1	-	-	-	-	-	-

CO-2	1	2	3	3	3	1	-	-	-	-	-	-
CO-3	2	3	2	2	2	2	-	-	-	-	-	-
CO-4	1	2	3	3	3	1	-	-	-	-	-	-
Avg.	1.25	2.5	2.75	2.75	2.75	1.25	-	-	-	-	-	-

PO – Program Outcomes

CO - Course Outcomes

Overall Average – 2.20

Semester : III

Table:5 Course outcome

Co.No	Program level	Course outcomes
		Students will be able to
CO301.1	K4	Examine the types of learning resources in teaching
CO301.2	K5	Appraise the results of classroom research
CO301.3	K4	Organize Action researches in schools whenever necessary
CO301.4	K3	Implement ICT and Cybernetics in Education

Table:6 Mapping

the Course outcome and programme outcome

PO→	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12
CO-1	2	3	2	2	3	-	-	-	-	-	-	-
CO-2	1	2	3	3	3	-	-	-	-	-	-	-
CO-3	2	3	2	2	3	-	-	-	-	-	-	-
CO-4	3	2	1	2	3	-	-	-	-	-	-	-
Avg.	2	2.5	2	2.25	3	-	-	-	-	-	-	-

PO – Program Outcomes

CO - Course Outcomes

Overall Average – 2.35

Semester : IV

Table:7 Course outcome

Co.No	K –level	Course outcomes
		Students will be able to
CO404.1	K3	Understands the curricular development
CO404.2	K3	Demonstrate community activities
CO404.3	K5	Select the appropriate instructional materials
CO404.4	K4	Identify the suitable techniques

Table:8 Mapping

The Course outcome and programme outcome

PO→	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12
CO404.1	3	3	1	1	3	-	-	-	-	-	-	-
CO404.2	3	2	1	1	3	-	-	-	-	-	-	-
CO404.3	1	2	3	3	1	-	-	-	-	-	-	-
CO404.4	2	3	2	2	2	-	-	-	-	-	-	-
Avg.	2.25	2.25	1.75	1.75	2.25	-	-	-	-	-	-	-

PO – ProgramOutcomes

CO - Course Outcomes

Overall Average – 2.05

Conclusion

Using tables and the overall course attainment levels of pedagogy of teaching Commerce and Accountancy the level is found to be 2.14. This indicates how a course is performing in terms of attainment values of course outcome and program outcomes. The attainment value thus computed is above the target level and hence course outcome and program outcomes framed works out well. If the attainment values happen to be below the target set then action plans may be tried and programme levels may be changed.

References:

- *Muhammad Tufail Chandio,(Jan 2017),Article Bloom’s Taxonomy:Improving Assessment and Teaching-Learning Process,DOI:10.22555/joed.v3i2.1034*
- *Improving Understanding of pre-service teacher experience with technology integration,The International Journal of Multimedia & its Applications(IJMA)*

- *Anderson et al., A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives. New York: Pearson, Allyn & Bacon.*
- *Bloom et al., (1956) Taxonomy of Educational Objectives, Handbook 1: The Cognitive Domain. New York: David McKay Co Inc.*
- www.researchgate.net/publication/310494139
- www.academia.edu