An Overview of graduating from an National Board of Accrediation Certified College and Vision and Mission of organizations

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Abstract: *The two major bodies that are responsible in India for Higher educational accreditation are* **National Board of Accreditation** *(NBA) and National Assessment and Accreditation Council (NAAC). NBA was established by AICTE in 1994 and operating as an autonomous body since 2010 that are responsible for the accreditation various technical and professional programs of institutions across the country. They monitor and suggest necessary progressive changes both in and around the curriculum. Institutes are not accredited by NBA but only the programmes. The Programmes includes diplomas, undergraduate and postgraduate programs. Going for accreditation is voluntary and in 2017 AICTE announced that it provides approval for institutes which atleast fifty percent of the programs are accredited. Students who are graduated from Tier-I Technical Institutions like IIT,NIT,IIM,IIIT,etc. which pursues NBA Accredited Program, three facilities from the countries like India, Srilanka, USA, UK, Malaysia,Canada,Australia which are the members of Washington Accord, can continue their further education like M Tech,MBA in any accredited Universities of the member countries, can do consultancy by becoming charted professional, and start their own business and industry. These facilities are not available to the graduates from Tier-II colleges. If the college was maintaining NBA accreditation for the whole period of the study many Indian Industries recognize graduates even from Tier-II colleges who have passed from NBA accredited Engineering programs. It is mandatory for the institutions to publish the status of accreditation on the official website , so that the stakeholders, students, parents may know about the infrastructure and other important details about the institution before enrolling. This will also help the institutions to go for a National Institutional Ranking Framework(NIRF) that will help them compete with other premier institutions globally. The Mission and Vision of School of Education,VISTAS syncs with Outcome Based Education. Therefore as one of the Best Practices followed by the School of Education is Outcome-Based education and this paper deals with outcome attainment of the papers that are dealt by the investigators.*

Key Words: Attainment Value, Course Outcome, Programme Outcome, Outcome- Based education, National Board of Accrediation

Outcome-Based Education (OBE)

Ever increasing global competition and demand for quality of education and employable work-force from industries and new business requirements have led to raising the employability and career professionally. While constructing curriculum care if taken to improve not only the technical skills but also the soft skills the employability for such graduates increases. While formulating and revising the curriculum the course outcomes which led to programme outcomes plays a major role.

The Mission and Vision of School of Education,VISTAS syncs with Outcome Based Education. Therefore as one of the Best Practices followed by the School of Education the course outcomes are identified to realize the programme outcomes. Courses within a curriculum, student learning outcomes are more specific and describe achievement expected in a particular course student learning outcomes for an academic program are defined as the knowledge, skills, or behaviours that a program's students should be able to demonstrate upon program completion. Course outcomes are compiled using Bloom's taxonomy, the learning outcomes are measurable and stated with action verbs that clearly describes the knowledge, skill and application of the students. The learning outcomes are achieved by the efficient faculties, digital library, labs, e-learning resources, etc. The COs and POs are identified and formulated to meet the global standards as per the norms of NBA, NAAC, etc. The Course outcomes are designed to cover the entire syllabus.

Mechanism of Communication

Syllabus for the programme are well planned in advance before the commencement of the classes. The syllabus and the list of prescribed text books and reference book, learning objectives and learning outcomes are made while formatting and also the respective faculties are made to prepare lesson plans. Course handouts are prepared and communicated to students. Also, the details of COs and POs are communicated to students in departmental meeting. The students are given clear instructions about learning outcomes through mentors and faculty members in the class rooms. Booklets containing syllabus, Course and Programme objectives and outcomes with reference books are printed and circulated to all the students. A few hard copies of syllabus booklet are made available in the library and also in the department. Orientation programmes for students and teachers about COs, POs and the method of attainment of learning outcomes are conducted by the department. Workshops are conducted to develop the course and programme learning objectives and outcomes. Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by

the department. Course coordinator should specify which COs were not achieved satisfactorily and action plan to achieve them next year.

CO-PO Mapping

School of Education at VISTAS collects and evaluates data on program and course outcomes and uses them to assess the Outcome-Based Education. The assessment takes place at course level and program level. The method of attainment of COs, POs and PSOs start from writing appropriate COs for each course of the program from 1st year to final year . The COs are written by respective faculty members using action words. Then a correlation is established between COs and POs in the scale of 1 to 3, 1 being low, 2 being medium and 3 being high. A mapping matrix is prepared in this regard for every course including elective courses. The COs written and their mapping with POs are reviewed by the Program Outcome Assessment Committee (POAC). The following tables show the COs and POs mapping matrix for a sample course Pedagogy of teaching Tamil and for a elective paper Understanding the Self which had been handled by the present investigators. Course outcome mapping is tabulated to measure the course outcomes.

VISTAS

School of Education

Program Name   : **B.Ed. (2016-2018)**

Course Name   : **Pedagogy of teaching Tamil**

Semester   : **I**

Table:1.1 Course outcome

Co.No		Course outcomes
		Students will be able to
CO1O4.1		Discuss the role of teaching
CO1O4.2		Use different teaching aids to suit the needs of learners
CO1O4.3		Distinguish the methods of teaching
CO1O4.4		Select the individualized instruction

Table:2.1 Mapping of Course outcomes and programme outcomes

PO→	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	1	0	0	2	-	-	-	-	-	-	-
CO2	3	2	1	1	3	-	-	-	-	-	-	-
CO3	2	3	2	2	3	-	-	-	-	-	-	-
CO4	1	2	3	3	3	-	-	-	-	-	-	-
Avg.	2	2	1.5	1.5	2.75	-	-	-	-	-	-	-

PO – Program Outcomes

CO - Course Outcomes

Overall Average – 1.95

VISTAS

School of Education

Program Name   : **B.Ed. (2016-2018)**

Course Name   : **Pedagogy of Teaching Tamil**

Semester   : **II**

Table:1.2 Course outcome

Co.No		Course outcomes
		Students will be able to
CO2O3.1		Support Co-Scholastic activities in School
CO2O3.2		Select practical areas in Evaluation and administration of Test
CO2O3.3		Examine teacher professionalization and teacher commitment
CO2O3.4		Appraise ways and means of enhancing teacher commitment

Table:2.2 Mapping of Course outcomes and programme outcomes

PO→	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	2	3	3	3	1	-	-	-	-	-	-
CO2	1	2	3	3	3	1	-	-	-	-	-	-
CO3	2	3	2	2	2	2	-	-	-	-	-	-
CO4	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

VISTAS

School of Education

Program Name   **: B.Ed. (2016-2018)**

Course Name   **: Pedagogy of Teaching Tamil**

Semester   **: III**

Table:1.3 Course outcome

		Course outcomes
		Students will be able to
CO301.1		Examine the types of learning ressources in teaching
CO301.2		Appraise the results of classroom research
CO301.3		Organize Action researches in schools whenever necessary
CO301.4		Implement ICT and Cybernetics in Education

Table:2.3 Mapping of Course outcomes and programme outcomes

PO→	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3	2	2	3	-	-	-	-	-	-	-
CO2	1	2	3	3	3	-	-	-	-	-	-	-
CO3	2	3	2	2	3	-	-	-	-	-	-	-
CO4	3	2	1	2	3	-	-	-	-	-	-	-
Avg.	2	2.5	2	2.25	3	-	-	-	-	-	-	-

PO – Program Outcomes

CO - Course Outcomes

Overall Average – 2.35

VISTAS

School of Education

Program Name   : B.Ed. (2016-2018)

Course Name   : Pedagogy of Teaching Tamil

Semester   : IV

Table:1.4 Course outcome

Co.No		Course outcomes
		Students will be able to
CO4O4.1		Understands the curricular development
CO4O4.2		Demonstrate community activities
CO4O4.3		Select the appropriate instructional materials
CO4O4.4		Indentify the suitable techniques

Table:2.4 Mapping of Course outcomes and programme outcomes

PO→	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO4O4.1	3	3	1	1	3	-	-	-	-	-	-	-
CO4O4.2	3	2	1	1	3	-	-	-	-	-	-	-
CO4O4.3	1	2	3	3	1	-	-	-	-	-	-	-
CO4O4.4	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

VISTAS

School of Education

Program Name   : B.Ed. (2016-2018)

Course Name   : Elective - Understanding the self

Semester   : IV

Course Code   : 16GEED44

Table:1.5 Course outcome

Co.No		Course outcomes
		Students will be able to
CO4O8.1		Value the categories of population
CO4O8.2		Distinguish the types of educational problems
CO4O8.3		Implement the acquired knowledge in the appropriate situations
CO4O8.4		Investigate the various datas, policies and variance

Table:2.5 Mapping of Course outcomes and programme outcomes

PO→	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO4O8.1	-	2	3	3	3	-	3	-	-	-	-	-
CO4O8.2	-	3	2	2	2	-	2	-	-	-	-	-
CO4O8.3	-	2	1	1	1	-	1	-	-	-	-	-
CO4O8.4	-	1	2	2	2	-	2	-	-	-	-	-
Avg.	-	2	2	2	2	-	2	-	-	-	-	-

PO – ProgramOutcomes

CO - Course Outcomes

Overall Average - 2

From the mapping matrix of COs and POs for the courses as above, a 'Program level Course-PO matrix' of all the courses including first year course is prepared.

Attainment of COs

Course Outcomes are narrower statements that describe what students are expected to know, and be able to do at the end of each course. In School of eduation, at VISTAS, the CO attainment levels are measured based on the results of the internal assessments and end semester examination. This is a form of direct measurement of attainment of outcomes. Two internal assessment tests are conducted for each course in a semester in our School of Education. In each test the percentage of students who achieve above 60% of marks (24 out of 40) for the COs are computed. Based on the average percentage of these tests the attainment level is decided.

Attainment level 1: 60% of students who scored more than 60% marks.

Attainment level 2: 70% of students who scored more than 60% marks.

Attainment level 3: 80% of students who scored more than 60% marks.

TABLE - 4

Percentage of students attaining course outcomes and attainment level

		CAT - I				CAT - II				UE	TL
		CO1	CO2	ATTAINM	TL	CO3	CO4	ATTAINM	TL	CO1 - CO4	
		10M	15M	25M	>=60%	10M	15M	25M	>=60%	10 GPA	>=60%
S.No.	Reg. No.										
1	16511101	7	8	15	Y	8	9	17	Y	7	Y
2	16511102	7	9	16	Y	7	10	17	Y	7	Y
3	16511103	7	11	18	Y	7	9	16	Y	7	Y
4	16511104	6	11	17	Y	9	10	19	Y	8	Y
5	16511105	6	12	18	Y	7	13	20	Y	8	Y
6	16520101	8	10	18	Y	8	11	19	Y	8	Y
7	16520102	7	9	16	Y	6	9	15	Y	6	Y
8	16520103	8	9	17	Y	8	10	18	Y	7	Y
9	16520104	8	11	19	Y	8	9	17	Y	7	Y
10	16520105	8	10	18	Y	6	10	16	Y	7	Y
11	16520106	5	11	16	Y	8	7	15	Y	6	Y
12	16520107	8	10	18	Y	9	10	19	Y	8	Y
13	16520108	7	8	15	Y	9	9	18	Y	7	Y
14	16520109	6	8	14	Y	9	8	17	Y	7	Y
15	16520110	9	12	21	Y	8	12	20	Y	9	Y
16	16520111	7	8	15	Y	5	11	16	Y	7	Y
17	16520112	6	11	17	Y	6	12	18	Y	7	Y
18	16520113	9	12	21	Y	9	13	22	Y	9	Y
19	16520114	8	8	16	Y	6	9	15	Y	6	Y
20	16520115	9	14	23	Y	9	13	22	Y	8	Y
21	16520116	AB	AB	AB	NA	AB	AB	AB	NA	AB	NA
22	16520117	7	10	17	Y	6	12	18	Y	7	Y
23	16520118	10	13	23	Y	9	13	22	Y	8	Y
24	16520119	6	10	16	Y	6	9	15	Y	6	Y
25	16520120	9	13	22	Y	8	13	21	Y	8	Y
26	16520121	8	13	21	Y	8	14	22	Y	8	Y
27	16513101	10	12	22	Y	9	14	23	Y	9	Y
28	16513102	7	11	18	Y	7	11	18	Y	7	Y
29	16513103	8	10	18	Y	7	10	17	Y	7	Y
30	16514101	5	7	12	Y	4	6	10	N	6	Y
31	16514102	AB	AB	AB	NA	AB	AB	AB	NA	AB	NA
32	16514103	6	9	15	Y	5	5	10	N	6	Y
33	16514104	5	7	12	N	4	5	9	N	5	N
34	16515101	6	3	9	N	5	4	9	N	4	N
35	16515102	7	9	16	Y	6	11	17	Y	7	Y
36	16515103	7	9	16	Y	7	10	17	Y	7	Y
37	16515104	4	7	11	N	6	3	10	N	6	Y
38	16515105	5	9	16	Y	7	10	17	Y	7	Y
39	16515106	5	8	15	Y	7	9	16	Y	7	Y
40	16515107	AB	AB	AB	NA	AB	AB	AB	NA	AB	NA
41	16515108	9	13	21	Y	8	12	20	Y	8	Y
42	16518101	8	9	17	Y	8	10	18	Y	7	Y
43	16518102	6	8	14	N	4	6	10	N	5	N
44	16518103	8	9	17	Y	8	10	18	Y	7	Y
45	16518104	4	6	10	N	5	7	11	N	6	Y
46	16518105	4	6	10	Y	4	5	9	N	5	N
47	16518106	8	12	20	Y	8	11	19	Y	8	Y
48	16518107	6	12	18	Y	8	9	17	Y	7	Y
49	16518108	5	12	17	Y	3	6	9	N	6	Y
50	16518109	8	11	19	Y	8	10	18	Y	7	Y
51	16518110	7	9	16	Y	8	9	17	Y	7	Y
52	16518111	4	8	12	N	8	7	15	Y	6	Y
53	16518112	6	12	18	Y	6	6	12	N	6	Y
54	16518113	6	10	16	Y	6	7	15	Y	6	Y
55	16518114	7	7	14	N	5	12	17	Y	6	Y
56	16518115	7	8	15	Y	7	6	13	N	6	Y
57	16518116	6	7	13	N	4	6	10	N	5	N
58	16519101	6	8	14	N	6	9	15	Y	6	Y
59	16519102	AB	AB	AB	NA	AB	AB	AB	NA	AB	NA
60	16519103	7	11	18	Y	6	11	17	Y	7	Y
61	16519104	6	11	17	Y	7	10	17	Y	7	Y
62	16519105	6	9	15	Y	6	9	15	Y	6	Y
63	16519106	6	9	15	Y	7	10	17	Y	6	Y
64	16519107	7	10	17	Y	9	9	18	Y	7	Y
65	16522101	8	10	18	Y	8	9	17	Y	7	Y
66	16522102	8	11	19	Y	9	9	18	Y	7	Y
67	16522103	6	8	14	N	7	8	15	Y	5	Y
68	16522104	7	8	15	Y	8	10	18	Y	7	Y
69	16522105	7	9	16	Y	6	11	17	Y	7	Y
70	16523101	6	8	14	N	7	8	15	Y	5	N
71	16523102	7	11	18	Y	8	9	17	Y	7	Y
72	16523103	7	12	19	Y	7	12	19	Y	8	Y
73	16523104	6	8	14	N	4	8	12	N	5	N
74	16523105	7	9	16	Y	5	12	17	Y	6	Y
75	16523106	6	8	14	N	6	9	16	Y	6	Y
76	16523107	7	8	15	Y	8	7	15	Y	6	Y
77	16523108	6	7	13	N	6	9	15	Y	6	Y

				Y-59				Y-60		Y-66	
				N-14				N-13		N-7	
				NA - 4				NA - 4		NA - 4	
Avg. of Course Outcome Attainment				0.8				0.82		0.9	

| Overall Course Outcome Attainment Level | | | 3 | → | (3 X 0.5 + 3 X 0.5 = 3) | |

TL - Target Level	> = 60%					
CAT - CONTINUOUS ASSESSMENT TEST				Y - TL Achieved		0.5 - 50% of CAT
AVG. - AVERAGE				N - TL Not Achieved		0.5 - 50% of UE
				NA - Not Applicable	UE.	UNIVERSITY EXAMINATION

VISTAS
School of education
Programme Name : B.Ed (2016-2018)

Table : 5 : Programme outcome attainment values

	Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	Overall CO Attain
1	C101	1.87	2.33	1.87	2.10	2.80	-	-	-	-	-	-	-	2.8
2	C102	2.33	2.33	1.40	1.40	2.80	-	-	-	-	-	-	-	2.8
3	C103	1.67	2.08	1.67	1.67	1.67	1.67	-	-	-	-	-	-	2.5
4	C104	2.00	2.00	1.50	1.50	2.75	-	-	-	-	-	-	-	3
5	C105	1.88	1.88	1.46	1.46	2.50	1.46	-	-	-	-	-	-	2.5
6	C106	1.40	1.87	1.87	1.87	2.57	1.87	-	-	-	-	-	-	2.8
7	C107	1.25	1.67	1.67	1.67	2.29	-	-	-	-	-	-	-	2.5
8	C201	2.00	2.50	2.00	2.25	3.00	-	-	-	-	-	-	-	3
9	C202	-	1.67	2.08	2.08	2.29	-	2.29	-	-	-	-	-	2.5
10	C203	0.96	1.92	2.11	2.11	2.11	0.96	-	-	-	-	-	-	2.3
11	C204	1.53	1.92	1.53	1.53	2.30	-	1.53	-	-	-	-	-	2.3
12	C205	1.00	1.50	1.50	1.50	2.00	1.00	-	-	-	-	-	-	2
13	C206	1.34	2.11	1.73	1.73	1.73	-	-	-	-	-	-	-	2.3
14	C207	2.08	1.25	0.42	-	2.08	2.08	-	-	-	-	-	-	2.5
15	C208	1.04	1.88	1.88	1.88	2.50	1.04	-	-	-	-	-	-	2.5
16	C301	2.00	2.50	2.00	2.25	3.00	-	-	-	-	-	-	-	3
17	C401	2.25	2.25	1.75	1.75	2.75	-	-	1.75	-	-	-	-	3
18	C402	2.50	2.50	1.50	1.75	2.50	-	-	-	-	-	-	-	3
19	C403	1.73	1.73	1.34	1.34	2.30	-	-	-	-	-	-	-	2.3
20	C404	1.73	1.73	1.34	1.34	1.73	-	-	-	-	-	-	-	2.3
21	C405	-	-	-	-	1.87	-	-	-	-	2.10	2.10	2.10	2.8
22	C406	-	-	-	-	1.53	-	-	-	1.53	1.53	-	-	2.3
23	C407	1.25	2.25	2.25	2.25	2.75	1.25	-	-	-	-	-	-	3
24	C408	-	2.00	2.00	2.00	2.00	-	2.00	-	-	-	-	-	3
25	CPR1	2.75	2.25	-	-	-	-	-	-	-	-	-	-	3
26	CPR2	-	-	-	-	--	-	-	-	3.00	3.00	3.00	3.00	3
	Direct PO attain	1.74	2.00	1.68	1.78	2.33	1.42	1.94	1.75	2.27	2.21	2.55	2.55	
	Iirect PO attain	2.84	2.77	2.82	2.7	2.62	2.59	2.67	2.61	2.59	2.59	2.7	2.66	
	Overall PO attain	1.960381	2.157188	1.904	1.965397	2.384278	1.6505	2.087333	1.922	2.331333	2.286889	2.58	2.572	
	Target set	1.5	2	1.5	1.5	2	1.5	2	1.5	2	2	2	2	

As per NBA Student exit surveys, employer survey, co-curricular and extra-curricular activities can be used for determining in-direct attainment of POs and PSOs. Here in the School of Education exit survey is taken for consideration. 80% of direct attainment and 20% in-direct attainment are taken into consideration. Detailed summary reports of attainment of each CO and POs presented to the POAC and if the Here the computed values are compared with the set values of Pos. The target values are set in discussion with the management and senior faculty members. It is found from the table that all the Pos are attained in pedagogy of Tamil and in elective course Understanding the Self. Since the investigators are the faculties handling Pedagogy of Tamil and Understanding the self, the values are compared about the concerned papers alone for discussion in this paper and found to be above the target values which in turn assures quality in the course and in turn brings credit to the institution.

Conclusion:

NBA accreditation is for accrediting program of an institute. An institute often has a number of programs, like CSE, ECE etc. NBA lays down its criteria of assessment in a document called "Self Assessment Report." The degree to which a program demonstrates its firmness on all criteria forms basis of its grade. NBA is a reflection of an institute's competence, capacity and ability to deliver on academic, research and governance aspects. It builds brand and public perception of the institute. Students studying in high rated accredited colleges receive high quality of education and superior job placements since industry too prefers to visit campus with proven credentials. Institutes scoring top grades receive graded autonomy. They receive government funding for research. These institutes literally get wings to fly high and be in the eminent league of institutes in the country.

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5. http://tll.mit.edu/help/intended-learning-outcomes

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7. http://www.businessdictoinary.com/ result is found to be non-attained then reasons for non-attainment are analyzed. Based on the analysis, action plan with remedial measures are implemented to address the gaps in learning outcomes.