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### Perception of Secondary level Teachers towards Competency based Education

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#### Abstract

*The purpose of this study was to find out the perception of secondary level teachers towards competency based education based on their educational qualification and the schools in which they are working. Sample of 100 secondary level teachers teaching in schools affiliated by CBSE and RBSE board. 25 CBSE schools and 25 RBSE schools of Jodhpur city were selected by random sampling method. Researcher used a self-made scale to measure the perception of secondary level teachers towards competency based education. Reliability and validity of this tool was calculated which were 0.907 and 0.95 respectively. The result of the study shows that most of the secondary level teachers are neutral in their perception towards competency based education. Graduate and post graduate secondary level teachers do not show any difference in their perception towards competency based education. Secondary level teachers working in CBSE and RBSE affiliated schools differ significantly in their perception towards competency based education.*

**Keywords:** *Secondary Level Teachers, Competency Based Education, CBSE and RBSE Board, Graduate and Post Graduate Teachers.*

Rapid changes in technology and economy job market are also evolving fast. Today's job market required individuals who are having practical skills that are relevant to the workplace. Our traditional education system does not allow students for the acquisition of skills and knowledge as per their need and goal. Traditional education approach prioritizes memorization and retention of information which focus on acquiring of knowledge. Our youth who have passed out by this education system and now in job market for searching the job are lacking the essential practical skills required for work place. This creates a gap between the skills required by job market and the skills possessed by the individuals. Keeping this in view, and for improving the quality of education our new National Education Policy 2020 introduced Competency Based Education (CBE) in school

education. Competency based education is relatively a new concept for Indian education system. This new educational approach is tailored according to the needs and goals of individual students. It is designed to be more practical and application oriented thus help learner to develop the required abilities for success in their workplace. Competency based education is an innovative approach where students focus on mastery of skills not on completion of content. Time is variable and learning is constant in this setting. Assessment of students in this approach is also competency based which provide meaningful feedback to students. This education approach focused on learning outcomes and development of skills and knowledge. Competency based education is a system which empowered students to make decision about their learning experience. They can create their learning experience

according to their individual need (Eliot Levine, Susan Patrick, 2019). Teachers give differentiated support to students. Teachers provide meaningful feedback to students. The education setting in this approach provides students an opportunity to advance through their studies by demonstrating their competence in particular subject or skills according to their own pace. Competency based education provides hands on training and practical experience to students, which makes them ready for the job. Thus, it is easier for students to transition into a job after completing their education. This educational approach differs from traditional education system which focus on mastery of specific skills, rather than amount of time spent in classroom. Teacher's play an important role for the successful implementation of CBE from designing of curriculum for CBE to assessing the students by competency based assessment. This requires a shift from teacher's thinking and working as this model need teachers who think holistically (Hoogveld, 2003). Teachers consider competency based education as a permanent change in education system and they are open for this new education approach, they felt that teachers' training programs are important for the successful implementation of competency based education program (Chrappan Magdolna, 2011, Serdenciuc Laura Nadia, 2013). Fan Jun-Yu, Wang Hsin Yu, Chao Fen Li, Jane whi Sui, Hsu li-Ling (2015) studied that students perform better in their academic who are taught by competency based education. Teachers found competency based education as a time taken process but it is an interesting approach which improve their teaching style. Students also appreciate this approach of education, as it provides students to learn according to their own pace. (Rainwater S.M.T., 2016). Papahiu Covarrubias, Patricia (2016) studied that teachers who are comfortable in traditional method found competency based education difficult to implement because of their unfamiliarity for this approach and their institutions are also not providing any support. While, some teachers found it interesting because it opposes rote learning. Competency based education is an effective tool for improving the quality of education system. It significantly affects the student's engagement in their academic field. (Everett, Daniel P., Newmes Amanda, 2019). Endeley N.M. and Melissa R. Bowman Foster (2020) observed that students higher order thinking skills and their level of competencies are increased by teaching through competency based education. Competency based education is a new tool to teach, guide and assess students based on their ability of demonstration of learned skills. Faculties are the important part for the success of its implementation if the institution provide opportunity to teachers to participate in designing curriculum and assessment process, they will get a proper view of how this model work and how they can give their best (Imed Bouchrika, 2022). Competency based education is a relatively new concept for Indian schools and teachers. After reviewing the literature, it was observed that the no. of researchers on CBE are less in our country. Central board of Secondary Education (CBSE) started taking efforts for the implementation of CBE in schools. But as we know the success of this approach depend on teachers. Teachers play crucial role in the competency

based education system by helping students to identify their competencies and helping them to master their skills. Researcher want to know the teacher's perception towards competency based education. If the teachers are aware about this concept and have positive mindset only then this approach can function properly. The present study has been carried out to find out the perception of secondary level teachers towards competency based education with reference to schools affiliated by CBSE and RBSE board and the educational qualification of teachers.

### Objectives

1. To find the nature of perception of secondary level teachers towards competency based education in toto and with regards to its dimensions.
2. To find the nature of perception of secondary level teachers working in CBSE and RBSE schools, towards competency based education.
3. To find the nature of perception of secondary level graduate and post graduate teachers towards competency based education.
4. To compare the mean scores of perceptions of secondary level teachers working in CBSE and RBSE schools, towards competency based education.
5. To compare the mean scores of perceptions of graduate and post graduate secondary level teachers towards competency based education.

### Hypotheses

1. The secondary level teachers are mostly neutral in their perception towards competency based education in toto and with regards to its dimensions.
2. The secondary level teachers working in CBSE and RBSE schools are mostly neutral in their perception towards competency based education.
3. The graduate and post graduate secondary level teachers are mostly neutral in their perception towards competency based education.
4. There is no significant difference between the mean scores of perception of secondary level teachers working in CBSE and RBSE schools towards competency based education.
5. There is no significant difference between the mean scores of perception of graduate and post graduate secondary level teachers towards competency based education.

### Methodology

**Method:** In the present study descriptive survey method was used to collect data from secondary-level teachers. The data was collected from the graduate and post graduate teachers who are working in schools affiliated by CBSE and RBSE board of Jodhpur city.

**Tool:** The tool used for measuring the perception of secondary level teachers towards CBE was developed by researcher. The scale is a Likert scale which has 88 statements. Every statement has five alternatives for

response: Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree. Scale was developed in both Hindi and English version. The reliability of scale was established by split half method which was found to be 0.907 hence, the tool is highly reliable one. For establishing the validity of tool namely content validity, intrinsic validity were used. For content validity scale was evaluated by experts in the field of education. Intrinsic validity was established by finding out the square root of reliability value of tool which was found to be 0.95. Hence the tool is highly valid.

**Population and Sample:** Population of study was secondary level teachers teaching in CBSE and RBSE affiliated senior secondary schools of Jodhpur city. A Sample of the 100 secondary level teachers teaching in senior secondary schools affiliated by CBSE and RBSE board of Jodhpur city were selected on the basis of purposive stratified random sampling for the study. Sample was equal on socioeconomic status.

**Statistics Used:** For analysis and interpretation of data Percentage, Mean, S.D., Critical Ratio (C.R.) statistics were used.

**Analysis and Interpretation:**

The result of the data analysis is presented under following heading:

- I. Descriptive Analysis
- II. Inferential Analysis

**Interpretation**

**Descriptive Analysis**

Descriptive analysis was used to analysis the perception of secondary level teachers towards competency based education. To measure the perception of secondary level teachers towards competency based education Mean and S.D. of the scores obtained by secondary level teachers on attitude scale towards competency based education were calculated. On the basis of mean and S.D. the perception of secondary level teachers was classified into following categories namely; Positive Perception, Neutral Perception and Negative Perception based on normal distribution criteria by using formula  $Mean \pm 0.6745 * S.D.$  The details of groups are shown in table No.1.

**Table No.1**

Criteria For Categorization of Perception of Secondary Level Teachers Towards Competency Based Education

S.N.	Criteria	Category
1.	Mean + 0.6745*S.D.and above	Positive Perception
2.	Between Mean +0.6745*S.D. and Mean-0.6745*S.D.	Neutral Perception
3.	Mean - 0.6745*S.D.and below	Negative Perception

**Perception of secondary level teachers towards competency based education in toto and with regards to its dimensions.**

**Table No. 2**

Categorisation of Perception of Secondary Level Teachers Towards Competency Based Education in Toto and With Regards to Its Dimensions (N =100)

S.N	Dimensions	Mean	S.D.	Range of scores		
				Positive	Neutral	Negative
1.	Effective Implementation of CBE Approach	78.87	9.94	86 & above	73-85	72 & below
2.	Curriculum Design	70.55	6.92	75 & above	67-74	*66 & below
3.	Assessment Of Student's Learning Outcomes	32.36	4.71	36 & above	30-35	29 & below
4.	Enhancement Of Students Skills	43	6.56	47 & above	40-46	39 & below
5.	Professional Competence	34.16	4.96	38 & above	32-37	31 & below
6.	Pedagogical Approach	30.68	3.66	33 & above	29-32	28 & below
7.	School Culture	38.25	4.84	42 & above	36-41	35 & below
	<b>Total</b>	329.17	31.93	351 & above	309-350	308 & below

**Hypothesis 1:** The secondary level teachers are mostly neutral in their perception towards competency based education in toto and with regards to its dimensions.

To test the hypothesis percentage and frequency were calculated. The result of analysis is presented in table No.3

**Table No.3**

Frequency and Percentage of Perception of Secondary Level Teachers Towards Competency Based Education in Toto N=100.

S.N.	Dimensions	Frequency	Nature of perception		
			Positive	Neutral	Negative
I	Effective	N	28	46	26

	implementation of CBE approach	Percent age	28%	46%	26%
II	Curriculum Design	N	22	56	22
		Percent age	22%	56%	22%
III	Assessment Of Student's Learning Outcomes	N	31	48	21
		Percent age	31%	48%	21%
IV	Enhancement Of Students Skills	N	32	48	20
		Percent age	32%	48%	20%
V	Professional Competence	N	24	52	24
		Percent age	24%	52%	24%
VI	Pedagogical Approach	N	30	46	24
		Percent age	30%	46%	24%
VII	School Culture	N	31	46	23
		Percent age	31%	46%	23%
	TOTAL	N	26	56	18
		Percent age	26%	56%	18%

The table no.3 shows the categorization of nature of perception of secondary level teachers towards competency based education in total and with regards to its dimensions. It is evident from above table that out of 100 selected sample of secondary level teachers 56 secondary teachers have neutral perception towards competency based education only 26 teachers have Positive perception and 18 teachers have Negative

perception which when converted to percentage becomes 56%, 26% and 18% teachers respectively. Out of 100 teachers on 'Effective Effective implementation of CBE approach' 46 teachers have neutral perception, 28 teachers have positive and 26 teachers have negative perception towards competency based education. In Curriculum Design 56 teachers have neutral perception, while 22 teachers have positive and same 22 teachers have negative perception towards competency based education. In Assessment of Student's Learning Outcomes 48 teachers have neutral perception, while 31 teachers having positive and 21 teachers have negative perception towards competency based education. In Enhancement of Students Skills 48 teachers have neutral perception, 32 teachers having positive and 20 teachers have negative perception towards competency based education. In Professional Competence 52 teachers have neutral perception, 24 teachers having positive and same 24 teachers have negative perception towards competency based education. In Pedagogical Approach 46 teachers have neutral perception, 30 teachers having positive and 24 teachers have negative perception towards competency based education and in School Culture 46 teachers have neutral perception, 31 teachers having positive and 23 teachers have negative perception towards competency based education. From 100 secondary level teachers 46%-56% of teachers comes in neutral perception category, 22%-32% secondary level teachers come under positive perception category and 26%-20% secondary level teachers come under negative perception category. From the above data it is clear that most of the secondary level teachers have neutral perception towards competency based education. Hence, hypothesis 1 is accepted.

**Perception of secondary level teachers working in CBSE and RBSE schools, towards competency based education.**

**Table No. 4**

Categorization of Perception of Secondary Level Teachers Towards Competency Based Education Working in CBSE And RBSE Schools

Variable	Sub Group	N	Mean	S. D.	Nature of Perception		
					Positive	Neutral	Negative
School Board	CBS E	50	339.66	27.56	358 & above	322-357	321 & below
	RBS E	50	318.89	33.07	341 & above	298-340	297 & below

Table no. 4 shows the mean and S.D. of perception of secondary level teachers working in CBSE and RBSE affiliated schools which are 339.66, 27.56 and 318.89,33.07 respectively.

Hypothesis 2: The secondary level teachers working in CBSE and RBSE schools are mostly neutral in their perception towards competency based education.

To test the hypothesis percentage and frequency were calculated. The result of analysis is presented in table No.5

**Table No.5**

Frequency And Percentage of Perception of Secondary Level Teachers Working in CBSE And RBSE Schools Towards Competency Based Education N=50.

Variable	Sub Group	Nature of Perception					
		Positive		Neutral		Negative	
		N	%	N	%	N	%
School Board	CBSE	15	15%	27	27%	8	8%
	RBSE	14	14%	24	24%	12	12%

The table no. 5 shows the perception of secondary level teachers working in CBSE and RBSE schools, towards competency based education. Out of 50 Teachers working in CBSE school 27 teachers have neutral perception,15 teachers have positive and 8 teachers have negative perception towards competency based education which shows in percentage 27% 15% and 8% teachers for neutral perception, positive perception and negative perception respectively. Likewise, out of 50 Secondary level teachers working in RBSE schools 24 teachers have neutral, 14 teachers have positive and 12 teachers have negative perception towards competency based education. In converting percentage, it shows 14 %, 24% and 12% teachers have positive, neutral and negative perception towards competency based education respectively. It is evident from above that mostly secondary level teachers working in CBSE and RBSE schools have neutral perception towards competency based education. Hence, Hypothesis 2 is accepted.

**Perception of graduate and post graduate secondary level teachers towards competency based education.**

**Table No. 6**

Categorisation of Perception of Graduate and Post Graduate Secondary Level Teachers Towards Competency Based Education

Variable	Sub Group	N	Mean	S. D.	Nature of Perception		
					Positive	Neutral	Negative
Educational Qualification	Graduate	40	32.057	37.63	346 & above	296-345	295 & below
	Post Graduate	60	33.49	26.54	353 & above	318-352	317 &

e	2	e	below
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Table no. 6 shows the mean and S.D. of perception of graduate and post graduate secondary level teachers towards competency based education which are 320.57,37.63 and 334.92, 26.54 respectively.

Hypothesis 3: The graduate and post graduate secondary level teachers are mostly neutral in their perception towards competency based education.

To test the hypothesis percentage and frequency were calculated. The result of analysis is presented in table no.7.

**Table No.7**

Frequency And Percentage of Perception of Graduate and Post Graduate Secondary Level Teachers Towards Competency Based Education.

Variable	Sub Group	Nature of Perception					
		Positive		Neutral		Negative	
		N	%	N	%	N	%
Educational Qualification	Graduate N= 40	9	22.5%	21	52.5%	10	25%
	Post graduate N=60	15	25%	32	53.3%	13	21.6%

The table no. 7 shows the perception of Graduate and post graduate secondary level teachers towards competency based education. Out of 40 Graduate Teachers 21 teachers have neutral perception, 9 teachers have positive and 10 teachers have negative perception towards competency based education which shows in percentage 52.5%, 22.5% and 25 % teachers for neutral perception, positive perception and negative perception respectively. Likewise, out of 60 Post graduate Secondary level teachers 32 teachers have neutral, 15 teachers have positive and 13 teachers have negative perception towards competency based education. In converting percentage, it shows 25 %, 53.33% and 21.66% teachers have positive, neutral and negative perception towards competency based education respectively. It is evident from above that mostly graduate and post graduate secondary level teachers have neutral perception towards competency based education. Hence, Hypothesis 3 is retained.

**2.Inferential analysis:**

Inferential analysis is used to compare the mean scores of perception of secondary level teachers towards competency based education with reference to school board and educational qualification

**To Compare the perception of secondary level teachers towards competency based education in**

**relation to their educational qualification and schools affiliated by CBSE and RBSE board.**

Hypothesis 4: There is no significant difference between the mean scores of perception of secondary level teachers working in CBSE and RBSE schools, towards competency based education.

To test the above hypothesis Critical Ratio (C.R.) between the mean scores of perception of secondary level teachers working in CBSE and RBSE schools were calculated.

**Table No.8**

Mean, Standard Deviation and C.R. of The Scores of Perception of Secondary Level Teachers Working in CBSE and RBSE Schools Towards Competency Based Education N=100

S. N.	Variable	Sub-Group	Mean	S.D.	C.R.	Level of significance
1.	School Board	CBSE	339.66	27.56	3.41	Significant at .01 level
		RBSE	318.89	33.07		

(For df 98 C.R =2.63)

The table No.8 reveals that the obtained C.R. of perception of secondary level teachers working in CBSE and RBSE schools 3.41 which is greater than the tabulated value 2.63 at .01 level of significance for df 98. The result indicates that the difference in the mean scores is significant. The mean score of secondary level teachers working in CBSE schools was high. These teachers are regularly getting training related to competency based education therefore, there understanding is high which affect their perception towards competency based education. So, there is a significant difference between the mean scores of perception of secondary level teachers teaching in schools affiliated by CBSE and RBSE board. Hence the hypothesis 4 is rejected.

Hypothesis 5: There is no significant difference between the mean scores of perception of graduate and post graduate secondary level teachers towards competency based education.

To test the above hypothesis C.R. between the mean scores of perception of graduate and post graduate secondary level teachers were calculated.

**Table No.9**

Mean, Standard Deviation and C.R. of The Scores of Perception of Graduate And Post Graduate Secondary Level Teachers Towards Competency Based Education.(Graduate Teachers N=40, Post Graduate Teachers N=60).

S.N.	Variable	Sub-Group	Mean	S.D.	C.R.	Level of significance
1.	Educational Qualification	Graduate	320.57	37.63	2.08	Not significant at 2.63
		Post graduate	334.92	26.54		

1.	Educational Qualification	Graduate	320.57	37.63	2.08	Not significant at 2.63
		Post graduate	334.92	26.54		

(For df 98 C.R =2.63)

The table No.9 reveals that the obtained C.R. of perception of graduate and post graduate secondary level teachers is 2.08 which is less than the tabulated value 2.63 at .01 level of significance for df 98. The result indicates that the difference in the mean scores is not significant which indicates that the perception of teachers does not affect by their level of education. So, there is no significant difference between the mean scores of perception of graduate and post graduate secondary level teachers. Hence the hypothesis 5 is accepted.

**Findings and Conclusion**

1. Secondary level teachers have neutral perception towards competency based education in total and with regards to its dimensions.
2. Secondary level teachers working in CBSE and RBSE schools have neutral perception towards competency based education.
3. Graduate and post graduate teachers are mostly neutral in their perception towards competency based education.
4. There is significant difference in the mean scores of perception of Secondary level teachers working in CBSE and RBSE schools towards competency based education.
5. There is no significant difference in the means scores of perception of graduate and post graduate secondary level teachers towards competency based education.

**Discussion**

This study helps in better understanding of perception of secondary level teachers towards competency based education with regards to school board and educational qualification of teachers. The findings of this study revealed that most of the secondary level teachers are neutral in their perception towards competency based education. The result indicated that educational qualification of secondary level teachers does not affect their perception towards competency based education. Training given to teachers for competency based education will help them to develop better understanding of CBE and thus, affect their perception towards competency based education. It does not relate to the educational qualification of teachers. Any teacher whether graduate or post graduate will develop their perception after receiving training.

Findings of the study also showed that there is significant difference between the mean scores of perception of secondary level teachers working in CBSE and RBSE schools, towards competency based education. The mean score of secondary level teachers teaching in CBSE schools is higher than the mean score of secondary level teachers working in RBSE schools. The reason of high mean score of secondary level

teachers working in CBSE schools is due to the rigorous training they are receiving for competency based education. Teachers are participating in online and offline workshops, MOOCs etc. This is helping them to have a better understanding of CBE and thus helping them to develop their perception towards competency based education. On the contrary teachers working in RBSE schools are not getting enough training for CBE. State board (RBSE) is not providing as much training, online programmes, seminars to teachers regarding competency based education which in return affect their perception towards it.

### Educational Implications

1. It was observed from this study that majority of the teachers have neutral perception towards competency based education. CBE is a promising approach to develop the skilled employees for job market and thus increase our economy. Positive perception of teachers will help students to develop their skills according to their need and goal. So, more training and orientation programmes should be organised for teachers to change their perception towards competency base education.
2. Central board of secondary education (CBSE) are taking actions for successful implementation of CBE. CBSE is providing training, orientation program to teachers, teaching resources are also available on their official website to help teachers for better implementation of competency based education in their classrooms. Same efforts should be done by state board for complete implementation of this new approach in our education system.
3. Training should be provided to school administrators, principal and school management for proper functioning of CBE.
4. CBE should be introduced from primary level for students so that teachers can understand this new concept and mold students to develop required skills.

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