

Teachers' competency: A critical evaluation by students and HoDs

Indumathy R

Research Scholar and Assistant Professor [SG], Department of MBA, SNT Global Academy of Management Studies and Technology, Coimbatore, Tamil Nadu, India

Abstract

India's higher education system is the third largest in the world. According to the latest report on the All India Survey on Higher Education (AISHE), number of educational institutions are overwhelming. The quantitative flareup in higher education institutions has not been coordinated by the quality of the education they provide. Consistency reports on employability by various organizations exposed that there is a dearth of 'Job Ready' skills among the graduates and only very less per cent of them were employable. This made the researcher to ponder in a way that, "Is this situation is due to lack of competency of the teachers?". Hence, the researcher conducted a study on evaluation of Teachers' competency in Self-financing Arts and Science and Engineering Colleges of four districts in Coimbatore Region. The study used both the primary and secondary data. The primary data were collected with the help of questionnaire among the sample of 460 Students and 196 HODs. The primary data collected have been analyze by using Statistical Package for the Social Sciences (SPSS) software. The study identified various factors of Teacher competencies which are commonly categorized in to four groups such as Teaching, Behavioural, Managerial and Research competencies. All the four groups of teacher competencies are evaluated by both the Students and HoDs and found that there is a difference in their evaluation. Based on the students' evaluation, central competencies of teachers viz. Teaching and Research are at a lower level among the educators. Appropriate suggestions are given in order to improve those competencies.

Keywords: competency, education, educator, teacher, quality

Introduction

India's higher education system is the third largest in the world, next to the United States and China. According to the latest report on the All India Survey on Higher Education (AISHE), there are 903 Universities, 39,050 Colleges and 10,011 Standalone institutions in India. These numbers are overwhelming. (AISHE, 2017-18)

The quantitative flareup in higher education institutions has not been coordinated by the quality of the education they provide. In fact, the gap between quantity and quality is so large and that stands as one of the major problems in the way of India being a world leader. To become such a leader, India needs to advance a world class higher education system. (Outlook, 2018)

Statement of the problem

The higher education system must meet the needs of potential employers and prospective employees. The higher educational system must prepare itself to be the provider of first resort and give the country the skilled workforce it requires. Currently there is a disparity.

It is also quoted in various reports that,

"The lack of 'Job Ready' skills in the course curriculum in majority of colleges and the assessment system with high weightage on theoretical competencies instead of practical know-how is definitely a cause of concern."

- **Thakur Institute of Management Studies, Career Development and Research (TIMSCDR)**

"Of the general pool of graduates across all streams only 25 per cent have employable skills. When we look

specifically at tech graduates then only 35-40 per cent are readily employable"

- **The National Association of Software and Services Companies (NASSCOM)**

"Only 26 per cent of India's engineering graduates were employable"

- **NASSCOM – McKinsey Report**

These consistency reports on employability made the researcher to think in a way that "Is the shortage of 'Job Ready' skills of graduates are due to lack of competency of Teachers in the Higher Education System?". Competencies are the skills and knowledge that enable a teacher to be successful. To maximize student learning, teachers must have expertise in a wide-ranging array of competencies in an especially complex environment where hundreds of critical decisions are required each day. Hence, the researcher wanted to evaluate the competency of Teachers in Higher Education Institutions.

Review of Literature

McClelland (1973) ^[6] defined Competency as the capability of applying or using knowledge, skills, abilities, behaviours and personal characteristics to successfully perform critical work tasks, specific functions or operate in a given role or position. Personal characteristics may be mental / intellectual / cognitive / social / emotional / attitudinal and physical / psychomotor attributes necessary to perform the job.

Preeti Jayachandran Nair (2012) ^[7] defined Competency mapping as the process of comparing jobholder's

competencies against the targeted competencies. Kuzmanovic (2011) revealed that the indicators of good teaching and quality according to the students are the availability of the professor, his/her clarity of presentation, the methodological and systematic approach, the information given to the students regarding the coursework, encouraging active participation in class and as well as considering and responding to the students' questions. Kanupriya M Bakhru (2013) [5] carried out a study resulting in the identification of behavioural competency of teachers and were explained in terms of analytical and problem solving, emotion handling, adaptability, concern for standard and discipline. Katarina (2012) defined that Managerial Competency is important to achieve both the mission and vision in creating added value and improve business performance and especially the development of their own people. Ryndina (2011) reported that modern teachers should include a research component as a characteristic of his / her willingness to innovate.

Objectives

Following are the objectives of the study:

1. To identify the core factors influencing teacher competencies.
2. To analyse the evaluation of Students and Heads of the Department (HoDs) on their teachers' competency.
3. To recapitulate the findings and offer suggestions to improve the teachers' competency.

Research Methodology

The study analyses the competency of Teachers in Higher Education Institutions of four districts in Coimbatore Region viz. Coimbatore, Erode, The Nilgiris and Tirupur. The study used both the primary and secondary data. The primary data were collected with the help of questionnaire. The sample includes 460 Students and 196 HODs of Self-financing Arts and Science and Engineering colleges of select districts in Coimbatore region. The multistage sampling technique was adopted for the study based on the proportion of the colleges in select districts. The primary data collected have been analysed with the help of Factor

Analysis and Arithmetic Mean Score Analysis by using Statistical Package for the Social Sciences (SPSS) software. The reliability statistics of Cronbach's Alpha were calculated and the Likert Scale used in the questionnaires are considered to be excellent as the coefficients are above 0.90.

Limitations

- The study was restricted only on the Self-financing Arts and Science and Engineering Colleges in four districts of Coimbatore Region viz. Coimbatore, Erode, The Nilgiris and Tirupur.
- The study was made only among sample of respondents and this may not give the exact opinion of the rest of the universe.
- Though the results of the study undertaken is unbiased, there may exist some biased responses that may affect the results of the study.

Analysis and Interpretation

Objective 1: Identification of the core factors influencing teacher competencies

Competencies required for teachers are commonly categorized in to four groups viz. Teaching / Academic, Behavioural, Managerial and Research competencies. There are several factors under each group of competencies and they are reduced to fewer set of factors for further analysis with the help of Factor Analysis.

Group 1: Teaching competency

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.797
Bartlett's Test of Sphericity	Sig. .000

The KMO measure is .797, which is very close to .8 and therefore can be acceptable and Bartlett's Test of Sphericity is significant (.000) which is less than .05 which means that correlation matrix is not an identity matrix. Taken together, these tests provide a minimum standard which should be passed before a Factor Analysis (Principal Component Analysis) should be conducted.

Table 2: Total Variance

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.042	13.612	13.612	2.000	13.330	13.330
2	1.389	9.257	22.869	1.366	9.107	22.437
3	1.280	8.534	31.403	1.216	8.109	30.546
4	1.171	7.809	39.212	1.194	7.961	38.508
5	1.109	7.393	46.605	1.114	7.428	45.935
6	1.081	7.204	53.809	1.112	7.415	53.350
7	1.025	6.833	60.642	1.094	7.292	60.642
8	.964	6.428	67.069			
9	.935	6.231	73.301			
10	.892	5.948	79.249			
11	.837	5.581	84.830			
12	.800	5.334	90.165			
13	.742	4.944	95.109			
14	.679	4.529	99.638			
15	.054	.362	100.000			

Extraction Method: Principal Component Analysis

It is found that eigenvalues of first seven factors are greater than one and their cumulative percent accounts for a larger percentage (60.642%) of the variability. So, the first seven factors of Teaching competency can be used for further analysis. They are knowledge of subject matter, ability to explain in detail, providing appropriate examples, gaining students' attention, encouraging students in questioning / discussions / hands-on activity, teaching till the students get the concept clear and completion of syllabus work before deadline.

Group 2: Behavioural competency

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.698
Bartlett's Test of Sphericity	Sig. .000

The KMO measure is .698 and therefore can be acceptable and Bartlett's Test of Sphericity is significant (.000). Taken together, these tests provide a minimum standard to proceed with Factor Analysis.

Table 4: Total Variance

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.319	18.846	18.846	1.302	18.603	18.603
2	1.175	16.784	35.630	1.176	16.807	35.410
3	1.050	15.005	50.635	1.047	14.953	50.363
4	1.003	14.331	64.965	1.022	14.603	64.965
5	.902	12.890	77.856			
6	.851	12.162	90.018			
7	.699	9.982	100.000			

Extraction Method: Principal Component Analysis

Eigenvalues of first four factors are greater than one and their cumulative percent accounts for a larger percentage (64.965%) of the variability. So, the first four factors of

Behavioural competency such as honesty, generous, discipline and compliance with order and emotional stability can be used for further analysis.

Group 3: Managerial competency

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.773
Bartlett's Test of Sphericity	Sig. .002

The KMO measure is .773 and therefore can be acceptable and Bartlett's Test of Sphericity is significant (.002). Taken

together, these tests provide a minimum standard to proceed with Factor Analysis.

Table 6: Total Variance

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.231	15.382	15.382	1.190	14.873	14.873
2	1.116	13.951	29.333	1.120	14.002	28.875
3	1.075	13.442	42.775	1.099	13.742	42.618
4	1.049	13.108	55.883	1.061	13.265	55.883
5	.958	11.979	67.862			
6	.914	11.431	79.293			
7	.850	10.631	89.924			
8	.806	10.076	100.000			

Extraction Method: Principal Component Analysis

Eigenvalues of first four factors are greater than one and their cumulative percent accounts for a larger percentage (55.883%) of the variability. So, the first four factors of

Managerial competency viz. planning and organizing, analytical and problem solving, decision making and communication skill can be used for further analysis.

Group 4: Research competency

Table 7: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.763
Bartlett's Test of Sphericity	Sig. .003

The KMO measure is .763 and therefore can be acceptable and Bartlett's Test of Sphericity is significant (.003). Taken

together, these tests provide a minimum standard to proceed with Factor Analysis.

Table 8: Total Variance

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.147	22.933	22.933	1.144	22.873	22.873
2	1.065	21.305	44.239	1.067	21.345	44.218
3	1.018	20.367	64.605	1.019	20.387	64.605
4	.898	17.953	82.558			
5	.872	17.442	100.000			

Extraction Method: Principal Component Analysis

Eigenvalues of first three factors are greater than one and their cumulative percent accounts for a larger percentage (64.605%) of the variability. So, the first three factors of Research competency such as presentation of papers and publication of books and articles, participation in professional association and carrying out quality research work can be used for further analysis.

Objective 2: Evaluation of teachers’ competency by Students and HoDs

Evaluation on overall level of teachers’ competency by both the students and HoDs have been analysed for all the four groups viz. Teaching, Behavioural, Managerial and Research with the help of Arithmetic Mean Score Analysis.

Table 9: Overall evaluation of teachers’ competency

Type of Competency	Students	HODs
Teaching Competency	Average (2.16)	Very Good (3.94)
Behavioural Competency	Good (2.89)	Excellent (4.52)
Managerial Competency	Good (2.86)	Very Good (4.11)
Research Competency	Poor (1.33)	Very Good (3.62)

Overall level of Behavioural (2.89) and Managerial competency (2.86) of teachers are evaluated as ‘Good’, Teaching (2.16) as ‘Average’ and Research (1.33) as ‘Poor’ by the students. At the same time, Teaching (3.94), Managerial (4.11) and Research (3.62) competencies are rated as ‘Very Good’ and Behavioural competency (4.52) as ‘Excellent’ by the HoDs.

Findings

- Teacher competencies are commonly categorized in to four groups such as Teaching, Behavioural, Managerial and Research competencies.
- Core factors of Teaching competency of educators are knowledge of subject matter, ability to explain in detail, providing appropriate examples, gaining students’ attention, encouraging students in questioning / discussions / hands-on activity, teaching till the students get the concept clear and completion of syllabus work before deadline.
- Essential factors of Behavioural competency of teachers are honesty, generous, discipline and compliance with order and emotional stability.
- Factors such as planning and organizing, analytical and problem solving, decision making and communication skill are considered to be the vital factors of Managerial competency of teachers.
- Presentation of papers and publication of books and articles, participation in professional association and

carrying out quality research work are the crucial factors of Teachers’ Research competency.

- There is a mismatch between Students and HoDs evaluation on their teachers’ competency. Central competencies of teachers like Teaching and Research are at a lower level in the students’ assessment.

Suggestions

Students’ evaluation to be taken as serious as their assessment is a part of the agenda for measuring the quality of education. As both the Teaching and Research competencies of educators are at a lower level in the students’ assessment, following are the suggested measures to develop on the same.

- The teacher should carry out a true subject knowledge assessment in order to be conscious of the gaps. Set aside time in department meetings to address the identified gaps.
- Subject hub to be formed among the educators of several institutions to share and converse about the subject thoughts and its updates.
- The teacher should use diverse teaching methods in one session to keep the students’ attention.
- Teachers should design their hands-on activities shared with old-style learning from books to make learning more effective.
- Research should be a noteworthy activity of a teacher. Every teacher should be involved in research activities, connecting students. Seed money can be offered by the institutions to start the research activity.
- Teachers should actively involve themselves in professional associations which helps them informed about new statistics, hot topics and best practices in their own field.

Conclusion

The study concentrates on the evaluation of various teacher competencies by both the Students and HoDs. It is implicit that out of four groups of teacher competencies, Teaching and Research competencies of teachers are assessed by the students are at a lower degree. Therefore, it is appreciable to initiate the process of developing the core competencies needed by the teachers in higher education sector. It helps the management for effective recruitment and selection of teachers based on the right competencies which in turn helps to provide quality education.

References

1. Jackson PW. *Life in classrooms*. New York, Teachers College Press, 1990.
2. Kothari CR. *Research Methodology*, New Delhi, New Age International Publishers, 2011.
3. Paneerselvam R. *Research Methodology*, New Delhi, PHI Learning Private Limited, 2010.

4. Rice JK. *Teacher Quality: Understanding the effectiveness of teacher attribute*, Washington DC, Economic Policy Institute, 2003.
5. Kanupriya Misra. A principal component analysis of teaching competencies required for management education. *Journal of Higher Education*. 2013; 1:15-21.
6. McClelland DC. Test for competency rather than intelligence. *American Psychologist*, 1973; 28:1-14.
7. Preeti Jayachandran Nair. Is talent management accentuated by competency mapping?: With special reference to educational sector. *International Journal of Social Science & Interdisciplinary Research*. 2012; 1(11):132-147.
8. Suitable Teaching and Learning Resources (2007), Available at: <https://www.education.vic.gov.au/school/principals/spag/curriculum/Pages/resources.aspx> (accessed 28 March 2019)
9. What are the advantages and disadvantages of Hands-on learning? (2012), Available at: <http://www.technology.com/teachers/methods/theories/hands-on.html> (accessed 25 March 2019)
10. Teacher Competencies (2019). Available at: <https://www.winginstitute.org/quality-teachers-competencies> (accessed 23 March 2019)
11. What are Behavioural Competencies? (2017). Available at: <https://www.breathr.com/blog/what-are-behavioural-competencies> (accessed 19 March 2019).
12. What does Managerial Competencies mean? (2019). Available at: <https://bizfluent.com/info-8216837-managerial-competencies-mean.html> (accessed 18 March 2019).
13. List of core competencies for Educators (2018). Available at: <https://work.chron.com/list-core-competencies-educators-8916.html> (accessed 19 March 2019).