Research Paper © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

Estimation about Education Teaching Competency at Degree Level with Selected Variables (Age and Gender): An Analysis

Dr. Debabrata Bhattacharjee

Post Graduate Teacher (Education), District Institute of Education and Training, Kakraban, Gomati, Tripura, India devovrata@rediffmail.com

٨	hei	hea	ωŧ	
\mathbf{A}	116	1134	1.1	•

The study has motivated to identify Education teaching competency of college teachers working at various degree colleges in Tripura. Review of related literature has helped to frame the hypothesis; descriptive method and stratified random sampling technique was applied for the study. A standardized tool (Content Validity Index: 0.73 & Reliability level of .875) consisting 30 items was administrated to measure Education teaching competency from the selected sample of the study. Inferential statistics had been applied to draw inference from the hypothesis. The result indicates that the Chi-squire value 0.252 is not significant at 0.05 level of significance which means there is no significant association between 'Age' and 'Education teaching competency' of degree level teachers; Chi-squire value .642 is not significant at 0.05 level of significance which means there is no significant association of 'Gender' and 'Education teaching competency'. Hence, it may be argued that individual attention must be given to poor performing students in Education subject; Education teachers belonging to degree colleges should give individual attention to each of the learners etc. Although, it has been acknowledged that there remains some limitations of the study, but from the findings and recommendations of the study, future road-map for further research can be sketched.

Key words: Education teaching competency, descriptive method, degree level, stratified sampling, age, gender

1. Introduction

© 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

The studies of Esu (2001), Isangedighi (2007), Mezieobi, Fubara and Mezieobi (2008), Yenilmez and Cemrek (2008), Akintayo (2008) revealed that without competent teachers, learning can never be effective. Numerous scholars argued that the most successful teachers were enthusiastic about their teaching (Cheung, 2006; Feldman, 1986). Murray (1991) identifies a positive rapport of the teachers among their students with competency in teaching (Dunkin, 1995; Lowman, 1996; Murray, 1991). According to the studies of Feldman (1986), Young and Shaw (1999), Cheung (2006), a competent teacher can provide to prepare a comfortable atmosphere that not only can motivate the learners to learn but also helps the learners to adjust in the classroom. According to Biddle and Ellena (1964), competency in teaching is related to teachers' knowledge and understanding of psychology of the learners' stimulation of interest of the learners. Feldman (1986) in his study revealed that proper knowledge of subject matter and helping attitude to the learners are the key factors of teaching competency. Borich (1977) found that proper knowledge about the learner and the ability to bring behavioural modification in the learners while imparting teaching is the hallmark of a competent teacher; knowledge of curricula and teaching methods, knowledge of proper skills of teaching etc. are some of the pre-requisite for competency in teaching.

2. Literature Review

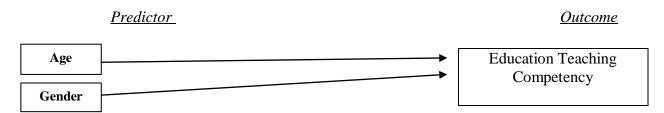
The study of McDonalds (1978) viewed that good communication skills and helping attitude of the teacher can be the characteristics of a competent teacher. As per the studies of Feldman (1986) and Chen and Lin (2009) proper classroom management and knowledge of learning situation etc. are some of the important factors which can ensure competency in teaching. Bargava (2011) argued that skill of presentation of subject matter, motivating the learners, warm and cordial behaviour are some of the important factors of a competent teacher. Henninger and Huribert (2006) emphasized the point that competency in teaching practice promotes studentteacher contact, cooperation among students themselves, and active learning; besides, it gives immediate feedback and stresses the idea of time on task. Oral instruction through lectures and scaffolded instruction (Addisson, 1988; Rueda, 2001; Fillmore & Snow, 2002; Echevarria et al., 2006); others handled interaction and use of supplementary materials (Echevarria, 2006; Vogt, 2000) etc. can promote competency in teaching. Henninger (2006) stressed that competencies in teaching related to preparation for teaching, implementation of instruction, review and assessment and setting the educational climate for learning were some of the prominent attributors for competency in teaching.

Rivers and Sanders (2002) suggested that teachers' competency in teaching increases dramatically each year during the first ten years of teaching. Aladejana and Odejobi (2006) indicated the professional qualification, teaching experience, age and gender of the teachers were related to competency in teaching. Although, the study of Cornwell (1974) showed that teachers' age was negatively related to teaching competency. But Clofterleter, Lass and Vigdor (2007) found that teachers with more experience are better teachers in terms of competency. Araoyinbo (1994) pointed that the male teachers differed from the female teachers in personality and social traits; the male teachers were much more emotionally stable and businesslike, but less friendly and responsible than their female counterparts. The impact of gender on competency in teaching (Rao, 1987; Hetherington & Parker, 1999; Pillai, 2002), educational qualification, teaching experience (Norton, 1996), locale (Panda, 1995) on teaching competency had been established. Khasnavis and Morris (2001) in his article identified the influence of locale on teaching ability and also opined that locale and teaching ability were significantly related with each other.

3. Emerging the issue

Education as a subject is becoming a very special choice of interest among the students from Arts background because various teacher education courses such as D.El.Ed, B.Ed, M.Ed etc. have their core papers that include Education subject. Besides, various competitive exams like CTET, TET etc. are both centripetally and centrifugally rely mainly upon Education subject. Hence, the trend to opt Education as a subject is emerging in a rapid way. The proficiency in teaching of Education subject is dependent on various variables and the present study has specified 'age' and 'gender' as predictor variable and 'Education teaching competency' as outcome variable so that their significant association can be estimated through this research paper. The proposed model will try to specify the contextual aspects related to the paper.

Conceptual model: Diagram: 3.1



3.1 The study and its delimitations

The present study was attempted to get a comprehensive picture about competency of Education teachers teaching at degree level belonging to various colleges of Tripura. But, this study was delimited which as follows:

- i) The study was delimited to the state of Tripura only.
- ii) Only graduation level was considered for the study.
- Only college students of B.A. (Education) were considered for the study. iii)

4. Materials and methods

4.1 Research Questions

R.Q.1: Is there lies any association between Education teaching competency of degree level teachers with respect to the age of the teachers?

R.Q.2: Is there lies any association between Education teaching competency of degree level teachers with respect to gender?

4.2 Objective and Hypothesis

The objective of the study was: to identify teaching competency of Education teachers at degree level of various colleges of Tripura with reselect to their age and gender; the corresponding hypothesis was: There is no significant association of Education teaching competency of degree level of various colleges teachers with respect to their age and gender.

Since all the two variables could not be tested together, two sub-hypotheses were proposed and are tested one by one. The sub-hypotheses were:

- 4.i-a) There is no significant association of Education teaching competency of degree level teachers with respect to their age.
- 4.i-b) There is no significant association of Education teaching competency of degree level teachers with respect to their gender.

4.3 Design

This part of the research paper discusses the strategy used to gather and analyze research data. It explains how population and sample of the study were identified, validity and reliability of the study tool, procedures, and the statistical method followed to analyze data.

The present study falls under descriptive research design. Education teachers who are teaching in degree level to various colleges of Tripura constituted the population of the present study. In the academic year of 2018-2019, twenty Education teachers were chosen as the sample of the study through stratified random sampling technique. Initially the researcher selected 10 colleges under the affiliation of Tripura University; for this the researcher first made a list of colleges under the affiliation of Tripura University, the urban and the rural colleges were separated out. From that stratum, 5 urban and 5 rural colleges were selected randomly from each board. This resulted in selection of 10 colleges and out of which 5 colleges from rural area, 5 colleges were from urban area.

4.4 Development and standardization of tool:

A tool (questionnaire) consisting of 30 items with major five areas with 5 point Likert scale was used ranged from strongly agree, agree, neutral, disagree, strongly disagree.

For the tool, it was decided to measure validity and the researcher decided to find-out content validity put forward by Lawshe (1975), hence, Content Validity Ratio (C.V.R.) and Content Validity Index (C.V.I.) were measured. Minimum C.V.R required to retain an item when scored by 20 experts is 0.42 and 30 items of the tool got a score more than .42. Content Validity Index (C.V.I.) was 0.73. Hence; items are found to be essential for the tool. Thus validity of the tool was secured.

Reliability is a measure of how consistent the results from a test are (Kombo & Tromp, 2006). The Cronbach's Alpha formula for the internal consistency of the questionnaire had been used. In this case, Alpha formula was the appropriate method because it involved a rating scale with five options. Items exceeding Alpha value over and above .860 were considered for the final study. The result yielded an Alpha level of .875 as for the 30 items of questionnaire. Hence, the questionnaire was considered as a reliable data collection instrument for the purposes of this study.

4.5.3 Scoring pattern of the tool: The highest score of the tool is 150 (30*5) and the lowest score is 30 (1*30). Three groups were identified through the administration of the questionnaire such as Low Competency Group (60-89), Average Competency Group (90-119) and High Competency Group (120 and above). Thus, these three groups helped to distinguish Education teachers on the basis of teaching competency.

5. Analysis

Based on the level of competency investigator find-out the association among 'Age', and 'Gender' with teaching competency, using 'Chi-squire Test' was used. The researcher decided to do the Non-parametric test since the sample size was not enough for generalization.

The hypothesis was proposed: There is no significant association of Education teaching competency of degree level teachers with respect to their age and gender; to test the hypothesis Chi-square method was applied which is presented through the table:

Education teaching competency of degree level teachers with respect to their age: Table 5.1 Association between 'Education teaching competency' and 'Age' of degree level teachers.

Competency		Age	Total	
		Below 50	Above 50	
Low competency	Count	7	6	13
	%	70.0%	60.0%	65.0%
Average Competency	Count	3	4	7
	%	30.0%	40.0%	35.0%
Total	Count	10	10	20
	%	100.0%	100.0%	100.0%

 $X^2 = 0.252$,p>0.05

From the above table, it is found that the Chi-squire value 0.252 is not significant at 0.05 level of significance. That means there is no significant association between 'Age' and 'Education teaching competency' of degree level teachers. So the hypothesis: There is no significant association of Education teaching competency of degree level teachers with respect to their age was not rejected. So it can be concluded that 'Age' of teachers is not an associative factor on 'Education teaching competency' of degree level teachers and had no difference irrespective to their 'Age'. But many studies (Gupta, 1998; McDonald, 2007) were not in tune with this finding. It can be attributed to the fact that the degree level teachers have to update their teaching competency to cope up with the demands of students and parents and irrespective of their age.

Education teaching competency of degree level teachers with respect to their gender: Table 5.2

Association between level of 'Education teaching competency' and 'Gender' of the degree level teachers.

Competency		Gender		Total
		Male	Female	
Low competency	Count	8	5	13
	%	72.7%	55.6%	65.0%
Average Competency	Count	3	4	7
	%	27.3%	44.4%	35.0%
Total	Count	11	9	20
	%	100.0%	100.0%	100.0%

 $X^2 = 0.642 \text{ p} > 0.05$

From the above table, it is found shows that the Chi-squire value .642 is not significant at 0.05 level of significance; that means there is no significant association of 'Gender' and 'Education teaching competency'. So the hypothesis: There is no significant association of gender on Education teaching competency of degree level teachers was not rejected. So it can be concluded that 'Education teaching competency' of degree level teachers had no association with their 'Gender'.

6. Findings

- 'Age' of teachers was not an associative factor on 'Education teaching competency' of college teachers and had no difference irrespective to their 'Age'.
- 'Education teaching competency' of college teachers had no association with their 'Gender'.

The sum-up of the findings Table No.5.1

Sl.	Hypotheses	Purpose	Test	Type	Rationale	Level	Hypothesis
No							Accepted/Hypothesis
							Rejected
6.	There is no	To know the	Chi-	Inferential	Random	0.05	Not Rejected
	significant	relationship	square	(Non-	sample,		
a)	association of	among two or	Test	Parametric)	Summarizes		
	Education	more			the		
	teaching	variables &			interactions		
	competency of	to examine			of		
	degree level	the			independent		
	teachers with	association			and		
	respect to their	between two			dependent		
	age.	or more			variables		
		variables			and		
		measured on			examines		

		antananiaa1			416 -		
		categorical			the association		
		scales.					
					between the		
					variables		
					can make		
					use of		
					numeric or		
					text entries		
					into		
					numerical		
					values for		
					goodness-		
					of-fit tests.		
6.	There is no	To know the	Chi-	Inferential	Random	0.05	Not Rejected
	significant	relationship	square	(Non-	sample,		
b)	association of	among two or	Test	Parametric)	Summarizes		
	Education	more			the		
	teaching	variables &			interactions		
	competency of	to examine			of		
	degree level	the			independent		
	teachers with	association			and		
	respect to their	between two			dependent		
	gender.	or more			variables		
		variables			and		
		measured on			examines		
		categorical			the		
		scales.			association		
					between the		
					variables		
					can make		
					use of		
					numeric or		
					text entries		
					into		
					numerical		
					values for		
					goodness-		
					of-fit tests.		

7. Recommendations

- Individual attention must be given to poor performing students in Education subject.
- Education teachers belonging to degree colleges should give individual attention to each of the learners.
- Workshop, seminar, refresher courses should be conducted on a regular basis in order to update the teachers of Education subject with the latest trends and development in teaching.

© 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

8. Conclusion

The objective of the study was: to identify teaching competency of Education teachers at degree level of various colleges of Tripura with reselect to their age and gender; the corresponding findings: 'Age' of teachers was not an associative factor on 'Education teaching competency' of college teachers and had no difference irrespective to their 'Age'; 'Education teaching competency' of college teachers had no association with their 'Gender'. Hence, it must be comprehend properly by the teachers that achievement of effective education can be brought in by the efforts of a team of high quality teachers. Teachers' role is vital in arousing enthusiasm and inspiring a person for learning and sharpening one's intelligence and wisdom and in this context, teaching competency is very vital. It can be achieved when the three phases of teaching (pre-active phase, inter-active phase and post-active phase) have their proper coordination. This coordination has its context-specific relevance in teaching as these three phases of teaching have their sub-elements such as preparation, announcement, black-board work, questioning, voice modulation, individual attention, eye-contact, impartial behaviour, sitting arrangement, recapitulation of lesson etc. These sub-elements are some of the process indicators which help to identify competency in teaching in specific teaching-learning context.

Acknowledgement

The researcher would like to acknowledge the contribution of the instructors who validated the study tool and those who helped at the time of data collection. Special thanks also goes to the principal/principal (I/C) who assisted to provide permission for academic purpose related to this present research work.

Reference

Addison, A. (1988). Secondary focus on sheltered content instruction: Adapting core curriculum materials for LEP Students. California Association for Bilingual Education Newsletter, 13. Akintayo, M.O. (2008). Leadership and organizational management: A critical review. *Initiative* in Education, 1(2), 21-43.

Aladejana, F.O., & Odejobi, C.O. (2006). Actualizing the effective learning of science in a globalized world: The place of the Nigerian indigenous science. Conference Proceedings. International Conference for School Effectiveness and Improvement, Florida, USA. Retrieved, July 29, 2018, from http://ww.leadership.fau.edu/icsei2006/archive.htm.

Araoyinbo, A. V. (1994). A causal model of some socio-psychological variables as determinant of learning achievement in secondary school social Studies. PhD thesis, Institute of Education. University of Ibadan.

Bargava, A. (2011). Perception of student teachers about teaching competencies. American *International Journal of Contemporary Research*, 1 (1), 77-81.

Biddle, B., & Ellena, W. (1964). Contemporary research on teacher effectiveness. New York: Holt Rinehart and Winsten, 1-10.

Research Paper © 2012 IJFANS. All Rights Reserved, UGC CARE Listed (Group -I) Journal

Borich, G.D. (1977). The appraisal of teaching: Concepts and process. Menlo Park, CA: Addison-Wesley.

Cheung, H.Y. (2006). The measurement of teacher efficacy: Hong Kong primary in-service teachers. *Journal of Education for Teaching*, 32(4), 435–451.

Chen, Y. J., & Lin, S.C. (2009). Exploring characteristics for effective EFL teachers from the perceptions of junior high school students in Tainan. STUT Journal of Humanities and Social Sciences, 2, 219-249.

Cornwell, C. D. (1974). Statistical treatment of data from student teaching evaluation questionnaires. Journal of Chemical Education, 51, 155-160.

Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). Teacher credentials and student achievement in high school: A cross-subject analysis with student fixed effects. Working Paper 11 Washington, DC: Urban Institute, National Center for Analysis of Longitudinal Data in Education Research.

Dunkin, M.J. (1995). Concepts of teaching and teaching excellence in higher education. Higher Educational Research and Development, 14 (10, 21-33.

Feldman, K.A. (1986). The perceived instructional effectiveness of college teachers as related to their personality and attitudinal characteristics: A review and synthesis. Journal of Higher Education, 24, 139-213.

Echevarria, J., Short, D., & Powers, K. (2006). School reform and standards-based education: A model for English language learners. The Journal of Educational Research, 99(4), 195-210.

Fillmore, L. W., & Snow, C. (2002). What teachers need to know about language? In Adger, C. T., Snow, C. E., & Christian, D.(Eds.), What teachers need to know about language? (7-53). McHenry, IL: Delta Systems and Center for Applied Linguistics.

Esu, A.E.O. (2001). Competence for effective teaching. In Uche, S. C., & . Enukoha, O. L. (Eds.), Professional skills for effective teaching. Lagos: Rehoboth Favours.

Gupta, B.D. (1998). Intelligence, adjustment and personality needs of effective teachers in science and arts. Unpublished Ph.D. thesis, Department of Education, :University of Agra.

Henninger, E. A., & Huribert, J. M. (2006). Using the seven principles for good practice in undergraduate education. Journal of Business and Finance Librarianship, 12(2), 3-15.

Hetherington, E.M., & Parker, R.D. (1999). Child psychology: A contemporary viewpoint. New York: McGraw-Hill Inc.

Khasnavis, P. K., & Morris, J. P. (2001). A competency in teacher education program for the future. Education, 98(2), 185-187.

Kombo, K.D., & Tromp, A.L.D. (2006). Proposal and thesis writing: An introduction. Nairobi: Pauline Publications: Africa.

Isangedighi, A. J. (2007). Child psychology: development and education. Calabar: Eti-Nwa Associates.

Lowman, J. (1996). Characteristics of exemplary teachers. New Directions for Teaching and Learning, 65, 33-40.

McDonald, F. (1978). Evaluating pre-service teacher's competency. Journal of Teacher Education, 2, 29-33.

Mcdonald, R. (2007). Predictive variables on English teaching competency. Delhi: Joypee Books Concern Publishing House.

Mezieobi, K. Fubara, V., & Mezieobi, S. (2008). Social studies in Nigeria: Teaching methods, instructional materials and resources. Owerri: Acadapeak Publishers.

Murray, H.G. (1991). Effective teaching behaviors in the college classroom. In J.C. Smart (Eds.), Higher education: Handbook of theory and research (Vol. 6). New York: Agathon, 135-172.

Norton, V. R. (1996). Paradigms and emerging changes in society. C.R. Press: Jordon.

Pillai, T.S. (2002). Components of classroom teaching and learners perception. New Delhi: Aggarwal Publications Ltd.

Panda, N. (1995). Retrospection of teaching. Westbengal: Srirupa Publishing House.

Rivers, C., & Sanders, M. (2002). Statewide class-size studies prime time and star. Tennessee's Project Star Dallas: Texas.

Rao, V. (1987). Approaches and myths in teaching. Utkal Publishers: Bhubanewar.

Rueda, R., & Garcia, G. (2001). How do I teach Reading to ELLs? Ninth in a series: Teaching every child to read. Ann Arbor, MI: Center for the Improvement of Early Reading Achievement. Yenilmez, K., & Çemrek, F.(2008). Teaching motivation of the students in secondary teacher training schools in Turkey. International Journal of Environmental & Science Education, 3(2), 82 - 88.

Young, S., & Shaw, D. (1999). Profiles of effective college and university teachers. *Journal of* Higher Education, 70(6), 670-686.

Vogt, M. E. (2000). Content learning for students needing modifications: An issue of access. In McLaughlin, M., & Vogt, M.E. (Eds.), Creativity and innovation in content area teaching, 329-351. Norwood, MA: Christopher-Gordon.