

21ST CENTURY TEACHING COMPETENCY OF STUDENT TEACHERS

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Abstract

A survey has been undertaken to probe the Teaching Competency of student teacher in Tamil Nadu state. 622 student teachers were selected from various Education Colleges in Tamil Nadu state through random sampling technique. Normative survey method was used. This study is proposed to find out the levels of Teaching Competency of student teachers and significant difference between the selected pairs of sub-samples. Teaching Competency scale constructed and validated by the researcher (2014) was used to collect the data. This study reveals that the majority of student teachers Teaching Competency were average. There exists significant difference between sub samples related to Locality, Email holders, Computer literacy and Parental income.

Keywords: *Computer Literacy, E-Mail Holder, locality of living, and Teaching Competency.*



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Introduction:

Twenty first century learning environment is accommodated with technology and communication equipment's. So the information's needed by students in the 21st century classroom is entirely different from the twentieth century students. The teachers act as facilitator of learning and learning environment facilitates knowledge construction (Constructivism) rather than behavior modification. Schools are acting as resource centers where students can hone their knowledge and skill based on their preference.

Teaching Competency:

Teaching Competency is the conscious use of one's own knowledge, abilities, skills, talents, values, attitudes and behavior patterns, in order to resolve issues and problems, overcome challenges, fulfilling one's duties and achieving the aims proposed.

Qualities required for 21st century teacher

21st century teachers cannot exhibit teacher centered approach. They are expected to change their professional qualities according to the needs of student population. Their role is needed to be modified according to the 21st century learning environment. The following qualities are expected from the 21st century teachers as mentioned below.

1. Facilitator of learning and learning environment.
2. Establishment of safe, supportive, collaborative and positive learning environment
3. Provides multiple learning experiences.

4. Implements effective classroom management techniques.
5. Plans for short term and long term learning goals.
6. Fosters co-operation in the learning environment.
7. Promotes democratic values.
8. Develops intrinsic motivation in learning.
9. Provides experiences to develop individuality, creativity, critical thinking and problem solving ability among students.
10. Emphasizes self-worthy team spirit.
11. Develop effective communication skills.
12. Listens thoughtfully and responsively.
13. Educates to respect individual, racial and cultural differences.

TEACHING COMPETENCIES OF 21st CENTURY EDUCATOR'S

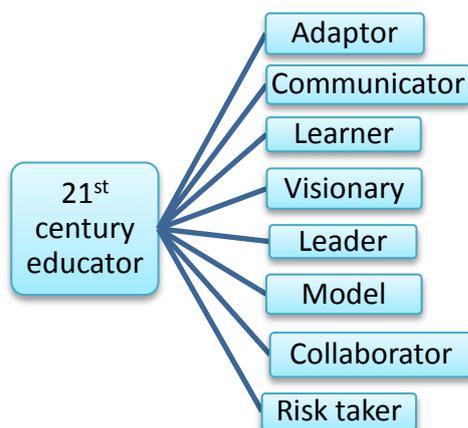


Figure1. 21st Century Educator's Competencies

The learners of 21st century are more exposed to technology and expect immediate and instant gratifications in their learning process. They are collaborative learners and adapted to information and communication technology. They are creative and innovative in nature. So the 21st century educators should be more competent than their students. They should be an adaptor, communicator, Learner, Leader, Model, Visionary, Collaborator, and Risk taker.

Model, Visionary, Collaborator, and Risk taker.

Adaptor

The 21st century educator should adapt to the learning pace of their students. Their teaching method should adopt with the available technologies with their relevant subject. They should be ready to handle any type of software's and hardware's. They should be willing to teach various age groups.

Communicator

They should possess good communication skills and efficient in handling communication tools.

Learner

As technological advancements foster lifelong learning, the educator need to develop certain qualities for lifelong learning. Knowledge is expanding its horizon as the technology changes. So teacher should be updated in their current knowledge.

Leader

The educator should be efficient in decision making, plan for long term and short term goals and able to face the success or failure.

Model

Using their reflective practices 21st Century educators act as a model for their followers. They should exhibit tolerance, acceptance, wider outlook, global awareness, good physical and mental health and expert in their subject knowledge.

Visionary

They are proactive in using new technologies in their classroom, and observe others ideas and approaches related to application of new methods and technologies. They prefer inter disciplinary approach.

Collaborator

The educators should be able to collaborate with their students through technological tools like blogs, wiki spaces etc

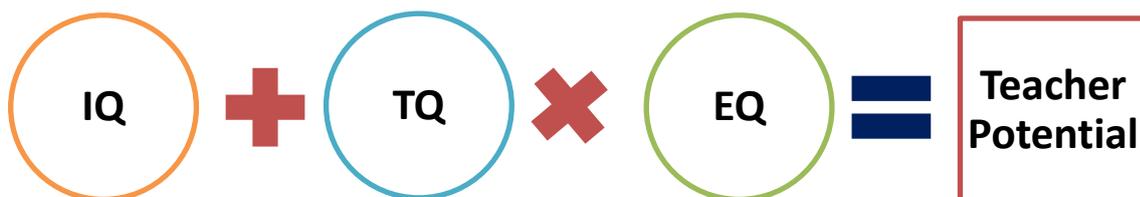
Risk taker

In this information age it is difficult for the educator to be updated fully. They should show their willingness to learn from their students.

TEACHER POTENTIAL

For the teachers Teaching competencies (Knowledge, Skill, Attitude and Values) are the Technical skills to perform their profession effectively. So the teacher potential is a product of IQ, TQ and EQ.

Figure 2. Teacher potential



Whereas IQ= intelligence quotient, EQ= Emotional quotient, TQ= Teaching Quotient

Need for the study:

The technological advancements make the student teachers to learn various competencies to survive in the LPG market. Most of the countries give training in ICT skills. This will create certain other unwanted psychological problems in return. The teacher education institutions along with technological skills need to cultivate certain knowledge, skill, attitudes and values to bring a holistic education environment. The present education environment makes ample challenges for the student teachers such as Professionalization of teaching profession, compulsory competitive examinations, Privatization of teacher education and Emergence of international schools. The student teachers are in the emotional turmoil to develop new skills to prepare for the competitive examinations, Technology related skills. To survive in the above challenging environment, the student teachers must have to develop certain teaching competencies. Hence, the researcher intends to study some of the factors influencing the development of teaching competencies.

Objectives of The Study: This study has been conducted in order to find out the following:

1. To assess the level of Teaching Competency of student teachers.
2. To find the significant difference between the selected pairs of sub-samples in respect of their Teaching Competency.

Hypotheses:

1. The level of Teaching Competency of Student teachers is high.
2. There is no significant difference between the selected pairs of sub-samples of student teachers in respect of their Teaching Competency.

Materials and Methods:

Normative Survey Method has been used. By using Random Sampling Technique 622 student teachers are selected from Tamil Nadu and used as subjects of this study. The Teaching Competency Scale Constructed and Standardized by the researcher (2014) has been utilized to collect the data from the above mentioned sample of the study. In the present study the word Teaching Competency mean the scores gained by sample subject on Teaching Competency Scale. The Teaching Competency scale comprises of ten factors viz. The Adaptor, The Visionary, The Collaborator, The Risk taker, The Learner, The Communicator, The Model and The Leader. The **maximum score** indicates **high Teaching Competency** and **minimum score** indicates **low Teaching Competency**.

Analysis and Interpretation

The collected data were analyzed with SPSS IBM19 and results were interpreted as below.

Table-1 Percentage analysis of Teaching Competency score of the total sample

	Teaching Competency	Score	Percentage
1	Low	Below 154	26.37
2	Average	154-308	49.68
3	Good	Above 309	23.95

The above table shows that 49.68% of student teachers have average teaching Competency. Lokanadha Reddy,G.(2006) , Abdul Rahim,H., Ghaffar,A., Najib,M. and., Li, L. T. H. (2010) and Sathiyaraj ,K.(2013) showed moderate level of teaching competency. Chilambarasan, D.(2011) found high level of teaching competency among B.Ed teacher trainees. Panda, S. (2012) showed low percentages of science teachers (19.5 %) have high level of Pedagogical competency. Anbuthasan, A. and Balakrishnan, V. (2013) revealed that the teachers have high level of teaching competency. Seetharaman,D.& Rajasekar,S. (2014) reported majority of the B.Ed student s are below average in respect of their teaching aptitude.

Table 2.
Mean and Standard Deviation of Teaching Competency Score for Total Sample

Variable	Mean	N	Std. Deviation
Teaching Competency	296.12	62 2	24.92

The above table shows the mean score and standard deviation of Teaching Competency of student teachers, which are found to be 296.12 and 24.92 respectively. It is concluded that the student teachers teaching Competency is average.

Table 3.
t-test Results comparing sub samples means of student teachers in Teaching Competency.

Variable	Sub samples	N	Mean	S.D	't'/ F Value	Decision
Locality	Rural	26 5	291.86	23.44	3.71	S
	Urban	35 7	299.29	25.54		
Gender	Male	14 6	297.83	29.59	0.95	N S
	Female	47 6	295.60	23.31		
Medium	Tamil	40	295.13	26.45	1.43	N S

		2				
	English	22	297.95	21.80		
		0				
	Holders	27	299.30	24.15	2.86	S
E-Mail		6				
	Non Holders	34	293.59	25.27		
		6				
	With	38	298.10	23.73	2.50	S
Computer Literacy		1				
	With out	24	293.00	26.45		
		1				
	Salaried	26	295.39	22.82	0.65	N S
Parental Occupation		5				
	Self Employed	35	296.67	26.40		
		6				
	Below forty	54	297.38	24.6	2.98	S
Parental Income (in thousand)		0		3		
	Above forty	80	288.58	24.9		
		2		2		
	Government	10	305.13	29.3	12.7	S
		2		9		
College type	Government Aided	96	300.56	25.9		
		8		8		
	Self-Financing	42	292.95	22.8		
		4		0		
	Arts	14	294.50	30.7	1.53	N S
		3		2		
Main subject	Science	34	297.68	21.9		
		5		2		
	Language	13	293.86	25.2		
		4		1		

An independent sample t test showed that the difference in score between urban and rural student teacher is statistically significant. $t(620) = -3.714, p= 0.00$. Urban and rural student teachers are differing in their teaching Competency. Urban student teachers have more teaching Competency. **Aziz, M.A.(2010) Chauhan,R.,& Gupta,P.(2014)** reported difference in teaching competency of rural and urban teachers. **Kaur, R.,Kaur Ranu,S. & Kaur,S.(2012)** revealed a significant difference in the professional commitment. **Yadav, M.(2013), Shah,B.C.& Shah,G.(2014)**, reported gender doesn't make any difference in teaching competency.

The difference in score between male and female student teacher is statistically significant. $t(620)= .945, p=0.345$. Male and female student teachers are differing in their teaching Competency. Male student teachers have more teaching Competency.

The difference in score between Tamil and English medium student teachers is not statistically significant. $t(620) = -1.350, p=0.178$. Student teachers studying in Tamil and English medium are equally Competency in teaching.

The difference in score between E-Mail holder and non-E-Mail holder student teacher is statistically significant. $t(620) = 2.856, p=0.004$. E-Mail holders are more Competency in teaching than non-email holder student teachers.

The difference in score between computer literate and computer illiterate is not statistically significant. $t(620) = 2.5, p=0.013$. Computer literate and computer illiterate are equally Competency in teaching. **Parr, K.M. (2006)** observed that preservice teachers who spent more time viewing academic web pages showed higher levels of competence. **Antony Gracious,F.L.(2014)** revealed that there was a significant influence of ICT awareness on teaching competency. **Vincent,W. (2003)** listed the preferred teaching competencies of teachers as strong global outlook, visionary, leadership and networking skills in order to reach out and participate in business education curriculum development and reform in the 21st century.

The difference in score between salaried and self-employed parent's children are not statistically significant. $t(606.9) = -.650, p=0.516$. Salaried and Self Employed parent's children are equally Competency in teaching.

The difference in Teaching Competency scores between the student teachers parent income of below forty thousand and above forty thousand were statistically not significant. $t(620) = 2.92, p=0$. Student teacher's parental income does not show any influence on teaching Competency.

A one-way ANOVA showed that the difference in Teaching Competency scores among the Government college, Government Aided college, Self-financing college students were statistically significant. $F(621) = 12.024, p=0.000$. Government college students are more Competency in teaching than the others.

The difference in Teaching Competency scores among the Arts, Science and Language student teachers were statistically significant. $F(621) = 1.527, p =.218$. Science student teachers are more Competency in teaching than the others.

Conclusion:

The student teachers Teaching Competency is average. The Urban, Email Holders, Computer Literate, Parents earning below forty thousand and studying in government college student teachers are more in 21st century teaching competency than their counter parts. Teacher education institutions should inculcate 21st century teaching skill like adapter, communicator, Learner, Leader, Model, Visionary, Collaborator, and Risk taker in their

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curricular aspects. It will help student survival in the future Society. **The Teacher Quotient can be assessed for the appointment of teachers.** The professionalism should not stop with increasing duration of the course.

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