

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

**Regional Editor**

Manichander Thammishetty

Ph.d Research Scholar, Faculty of Education IASE, Osmania University, Hyderabad

**International Advisory Board**

Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Baktir English Language and Literature Department, Kayseri
Janaki Sinnasamy Librarian, University of Malaya	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus PopPhD, Partium Christian University, Oradea, Romania	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, Iasi	.....More

**Editorial Board**

Pratap Vyamktrao Naikwade ASP College Devrukh, Ratnagiri, MS India Ex - VC. Solapur University, Solapur	Iresh Swami Ex. Prin. Dayanand College, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University, Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU, Nashik
Salve R. N. Department of Sociology, Shivaji University, Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary, Play India Play, Meerut (U.P.)	Maj. S. Bakhtiar Choudhary Director, Hyderabad AP India.	S.KANNAN Annamalai University, TN
	S. Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	

# International Multidisciplinary Research Journal

## *Golden Research Thoughts*

Chief Editor  
Dr.Tukaram Narayan Shinde

---

Publisher  
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor  
Dr.Rajani Dalvi

Honorary  
Mr.Ashok Yakkaldevi



## DEVELOPMENT AND STANDARDIZATION OF TEACHER'S PROFESSIONAL COMPETENCY SCALE (TPCS)

S. Pondyselvi<sup>1</sup> and Dr. P. C. Naga subramani<sup>2</sup>

<sup>1</sup>Ph.D. Research Scholar ,Department of Pedagogical Sciences,  
Tamil Nadu Teachers Education University ,Chennai .

<sup>2</sup>Associate Professor ,Department of Pedagogical Sciences ,  
Tamil Nadu Teachers Education University , Chennai.

### ABSTRACT

**T**he term professional competency refers to the right way of conveying units of knowledge, application and skills to students. Also the knowledge, skills values, attitudes, capacities and beliefs people need for success in a profession. Teachers' professional competencies include various competencies in different areas such as pedagogical, cultural, communicational, personal, intellectual etc which are needed for effective teaching. The study of professional competency is a significant one and for which the investigator has decided to develop and standardize a scale to measure it.

**KEYWORDS:** Professional competency, skills, instructional practices, Professionalism.

### INTRODUCTION –

As the term 'profes



sional competency' is made of two words 'professional' and 'competency', to have a better understanding of the term, the meaning and definition of the two words will be helpful. A profession may be defined as an occupation based upon intellectual study and training, the purpose of which is to supply skilled service to others for a definite 'fee or salary'. When we use the term 'Professional' to any job or occupation it is supposed to have certain distinguishable features that normally go with a profession, such as A profession evolves in the process of responding to certain specific needs of a

society. A profession is characterized by systematized body of knowledge that is unique to that 'profession', service orientation, professional-client relationship; a code of ethics followed by its members and eventually constant development of new professionals. Professional competency means a wholesome activity which every teacher needs to produce better generation. Despite many tools available on professional competency, the researcher wants to update the tool to get appropriate results according to the recent development. The Likert

type scale is a five-point scale of "Always", "Often", "Occasionally", "Rarely" and "Never". In this scale, 64 items have been collected from the various sources like experts in this profession, Books, web sources and so on.

### PILOT STUDY:

This scale with 64 items has been administered to the sample of 100 high school teachers working in different schools in Chennai District, Tamil Nadu, India, in order to carry out the pilot study. Then their responses have been scored carefully and their marks secured by all the samples have been arranged in the descending order from the highest scorer to the lowest scorer. Then they were subjected to item analysis.

### ITEM ANALYSIS:

The next step in the standardization of the teacher's Professional competency scale after

pilot study is to find out the t-value of each item, which forms the basis for item selection in order to build up the final scale. The Likert type scale calls for a graded response to each item on a five-point scale ranging from "Always", to "Never". The individual score for all the 100 students and teachers were ranked from the highest to the lowest score. Then 25% of the subjects with the highest total scores and 25% of the subjects with the lowest total scores were sorted out for the purpose of item selection. The high and low groups, were selected, formed the criterion groups and each group was made up of 25 teachers (Edward. L. Allen, 1957).

**TABLE – I**  
**ITEM SELECTED FOR TPCS**

Item Number	't' Value	Item selected
1	2.26	S
2	1.84	S
3	3.26	S
4	2.32	S
5	1.98	S
6	1.26	NS
7	2.75	S
8	1.24	NS
9	1.18	NS
10	2.46	S
11	2.68	S
12	1.42	NS
13	2.42	S
14	3.53	S
15	2.52	S
16	1.25	NS
17	3.24	S
18	2.24	S
19	2.95	S
20	2.42	S
21	2.26	S
22	1.38	NS
23	0.92	NS
24	2.08	S
25	4.22	S
26	2.42	S
27	3.52	S
28	2.94	S
29	0.66	NS
30	2.68	S
31	1.97	S
32	2.84	S
33	2.85	S
34	1.92	S
35	2.26	S
36	3.16	S
37	3.84	S
38	2.02	S
39	1.46	NS
40	1.48	NS
41	2.24	S
42	2.06	S
43	0.62	NS
44	1.92	S

45	1.26	NS
46	3.62	S
47	1.52	NS
48	2.25	S
49	2.42	S
50	3.30	S
51	2.42	S
52	2.26	S
53	1.42	NS
54	3.92	S
55	2.08	S
56	2.68	S
57	1.94	S
58	2.84	S
59	0.85	NS
60	0.92	NS
61	3.26	S
62	0.66	NS
63	2.68	S
64	1.97	S

S – Selected

NS – Not selected

It may be recalled that each item is followed by five different responses of “Always”, “Often”, “Occasionally”, “Rarely” and “Never” in the Professional competency scale. Then each item was taken individually and the number of teachers who responded “Always”, “Often”, “Occasionally”, “Rarely” and “Never” was found out both the high and low groups separately. Thus for all the 64 items, the number of teachers coming under each category was found out separately for both the high and low groups and the t-values for all the 64 items have been calculated with the formula suggested by Allen Edwards (1957). As many as 48 items having the t value greater than or equal to 1.75 (Edward. L. Allen, 1957) have been chosen in order to form the final scale (vide: Table-I). Then this final scale has been administered to 100 teachers working in different high schools of Chennai District, Tamil Nadu, India, in order to establish the scoring procedure, validity and reliability of this scale.

### SCORING PROCEDURE

The Professional competency scale has 48 items, out of which 38 items are positively worded and the remaining 10 items are negatively worded. An individual score is the sum of the scores of all the 48 items. The scores range from 48 to 240. Higher score indicates the high work ethics and the details of scoring are given in the following table. The scoring to the response given by the respondents should be like the following

Table - II

Response	Positive	Negative
Always	5	1
Often	4	2
Occasionally	3	3
Rarely	2	4
Never	1	5

### Reliability:

Reliability refers to the consistency with which a test measures, whatever it measures. The concept of reliability suggests both stability and consistency of measurement. The investigator calculated the reliability analysis and it was given in the following table.

**Table – III**  
**Table Showing the reliability method and co-efficient values**

Method Of Reliability Analysis	Reliability Co-Efficient
Correlation between forms	0.642
Equal-length Spearman-Brown	0.651
Guttman Split-half	0.632
Unequal-length Spearman-Brown	0.623

Method of reliability Analysis reliability Co-efficient Correlation between forms 0.642 Equal-length Spearman-Brown 0.651 Guttman Split-half 0.632 Unequal-length Spearman-Brown 0.623

### Validity

Validity reveals the merits of our measurement. This Professional competency scale was given to the experts (20 members) in order to find out its content validity. The experts agreed that the items in the scale provided adequate coverage of the concept. This Professional competency scale also has construct validity.

The intrinsic validity is also called as the index of reliability (Guilford, 1954). The formula to be used to determine the intrinsic validity is the square root of its reliability. Thus the validity of this test is

$$V = R = \sqrt{0.642} = 0.801$$

### Percentile Norm

Percentile Norm The following table represents the percentile norm for this Professional competency scale.

Percentile	Score Range	Norm
Below P25 (Q1)	Below 90	Low level
P25 To P75 (Q1 to Q3)	Between 90 and 180	Average level
Above P75 (Q3)	Above 180	High level

### CONCLUSION

The results of a teacher's work are often visible only after a considerable time lag, in that good learning experiences tend to promote lifelong learning. Teachers can play a significant role in both the generation of positive learning experiences and reinforcement of learner's self esteem. Professional competency of teachers definitely creates positive impact in teaching learning process. Hence, this Teachers Professional competency scale contributes much to measure the competency level of teachers anywhere in India.

### REFERENCE:

1. Mehrotra, (1973). Thesis – a study of the effect of teacher education on the attitude of teachers towards teaching profession.
2. Muhammed Arifin (2015), "A study on the influence of professional competence, motivation and organizational culture to high school teacher's job satisfaction and performance. International Education Studies, Vol.8, No.1, 2015.
3. Prasertcharoensuk T., (2015) Influencing of teacher professional competency factor, organizational culture and achievement of school teachers. Sciencedirect.Com.
4. Naga Subramani P.C., (2016). "Development and standardization of Teachers Value Pattern scale", Journal of Contemporary Educational Research and Innovations, V.6, n6, P.231-234.
5. Naga Subramani P.C., (2016). "Development and standardization of Teachers Work Ethics scale", International Journal of Applied Research, V.2, n12, P.500-502.



**S. Pondyselvi**

**Ph.D. Research Scholar ,Department of Pedagogical Sciences,  
Tamil Nadu Teachers Education University ,Chennai .**

# Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

## Associated and Indexed, India

- ★ International Scientific Journal Consortium
- ★ OPEN J-GATE

## Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts  
258/34 Raviwar Peth Solapur-413005, Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : [www.aygrt.isrj.org](http://www.aygrt.isrj.org)