Research Paper

Standardization and Calibration of Teaching Aptitude Scale

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ABSTRACT

In research work, after problem selection and formulation of hypotheses, the researcher faces the problem of collecting data required to test the hypotheses, these are solved by research tools. Research instruments are those tools using which the researcher collects data. The conclusions of any research work are obtained on the basis of these data. Therefore, research tools provide scientific basis to any research. The term "teaching aptitude" refers to a condition or set of qualities that a person possesses that demonstrate their capacity to comprehend not only the subject matter but also the objectives and processes of education. It estimates one's ability to clarify obscurities and explain challenging points. Companies and higher education institutions have a competitive advantage when people have right skills. Because of this, focus should be given to finding and creating the right policies and strategies to help employees and teachers develop and evaluate their right skills. Teachers are the foundation of education, and students' success largely depends on the right talent and attitude of teachers. The teaching aptitude scale will prove to be very useful for students, teachers and all other people of the society. While constructing the teaching aptitude scale, the researcher first obtained the material for constructing the test by reading various books, observing experimental works and studying related literature in depth. After this, the initial draft of the teaching aptitude scale was prepared. In which 12 dimensions/areas and 135 statements were kept. Based on the suggestions of teaching experts and educational experts some statements were removed and necessary improvements were made in the scale by adding some new statements. On the basis of these suggestions, the second draft of the scale was prepared. In which 114 statements were selected. After this, each statement of the scale was analyzed. After post-analysis, 95 statements were obtained in the final format of the scale. The face and inter subject validity of the scale was determined by consulting teaching experts and educational experts. The reliability of the scale was determined by the Split-Half Method and Test-Retest Method. Which were obtained as 0.87 and 0.89 respectively. The results of the scale were interpreted using Z-score criteria.

Keywords: *Teaching Aptitude Scale, Standardization, Analysis, Validity, Reliability*

Teaching Aptitude Scale
Aptitude is the specific ability of a person to perform efficiently in a particular field. Aptitude is a quality on the basis of which success in a course or teaching profession is predicted.
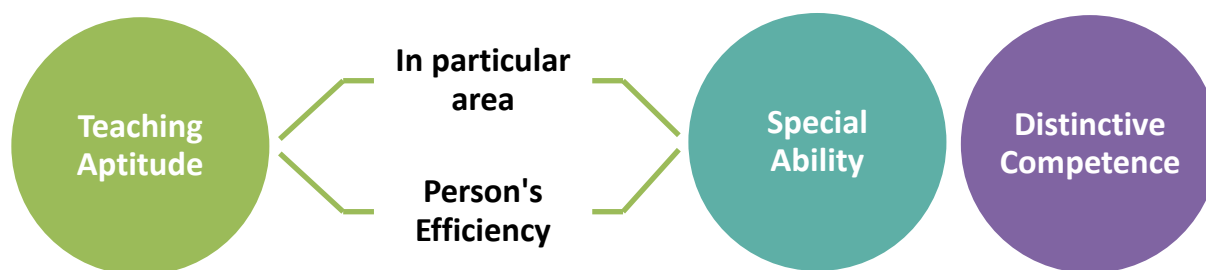
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According to Dr. Atmanand Mishra - "Innate ability to learn any work or action, which has natural tendency and interest, those innate or acquired characteristics found in a person, which indicate that through training, the person can master a certain work or field." The ability to acquire a skill is called the aptitude of that person."

According to Freeman- "Aptitude refers to a set of characteristics that are indicative of a person's abilities to acquire (after training) a specific knowledge, skill, or set of organized responses. For example, the ability to speak a language, to become a musician, to do mechanical work."

According to Traxler- "An aptitude is a condition, quality or set of qualities present in a person that represents the extent of any knowledge, understanding, skill or grouping of knowledge, understanding and skills that the person is capable of acquiring through appropriate training, would be able to."

According to Warren- "Aptitude is the ability of an individual to learn knowledge, skills or responses after training."

According to the dictionary- "The ability to do such a work on the basis of intellectual capacity in which the person himself is untrained is called aptitude."

Therefore, it is clear that aptitude is the inherent power of a person to learn any quality or skill in a specific field. Knowledge of aptitudes has special importance in the work of educational, vocational and psychological counseling and guidance. Aptitude is necessary and important to achieve success in a specific job, course or business. Aptitude refers to the ability to acquire proficiency in a particular area under appropriate conditions-

- Aptitude is the present condition of a person which indicates the future.
- Aptitude is the readiness, ability, capacity or propensity of a person that is necessary for future success in a job or occupation.
- Aptitude blossoms through education and practice, such talent, ability or ability is innate.
- Aptitude refers to the underlying ability that predicts success in a particular field.
- Aptitude is an inherent ability of a person or child.
- Aptitude is directly related to intelligence, the better a person is intellectually, the higher is his aptitude.
- Aptitude is gratifying to the individual.
- On the basis of aptitude, the future of the child or person can be predicted.
- Aptitude is an innate or culturally specific quality.
- Aptitude is closely related to learning.
- Aptitude is also phenomenal like intelligence, interest etc.

Characteristics of aptitude

Bingham has mentioned the following five characteristics of aptitude-

- Aptitude is a set of present qualities of an individual that indicate his future potentialities.
- Aptitude is a special quality innate or cultural.
- Aptitude refers to the suitability of a person to perform a task.
- Aptitude in the present also signifies future abilities.
- Aptitude is closely related to ability, interest and satisfaction.

Therefore, the teachers working in teaching who have the qualities of a skilled teacher i.e. teaching aptitude. Those teachers do the teaching effectively. Mastery in teaching aptitude is very important for any teacher. Mastery in teaching aptitude is essential for effective teaching of a teacher. The presented teaching aptitude scale will prove useful for measuring the teaching aptitude of teachers in various fields of teaching.

Dimension of the scale

1. **Academic Aptitude-** The academic aptitude dimension measures a teacher's skill in planning and awareness of topics, processes, strategies, and resources to facilitate student learning.
2. **Personality Aptitude-** Through this dimension, all the quality related to the personality of the teacher will be assessed.
3. **Communication Skills Aptitude-** The communication skills aptitude dimension aims to assess competence in effective communication, promoting effective interpersonal relationships and encourage exchange of ideas between teachers and students.
4. **Professional Development Aptitude-** Professional development aptitude approach is to assess the efforts made by a teacher to develop proficiency and search in the path of self-improvement, while living in teaching.
5. **Digital Aptitude-** Understanding of current educational technology. To assess how much a teacher has knowledge of digital strategies and how far they are able to implement it in their classroom. Digital education is an emerging field. It is related to the process of teaching-learning through digital medium. Today lessons are being shared through digital medium, ict, internet etc. have made digital education very progressive. Today a variety of content such as audio, video and multimedia resources have become available.

There are eight stages of implementation of digital education-
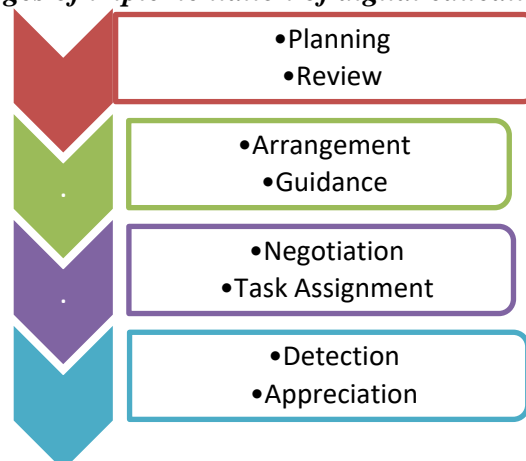
1. **Inclusive Measures Aptitude -** This approach seeks to find out whether a teacher shows an ability to appreciate diversity and to incorporate it into teaching practices and planning.
2. **Gender Sensitivity Aptitude -** The meaning of gender sensitivity is to change behavior and establish empathy in our traditional thinking towards ourselves and the opposite sex. Through this approach, it will be assessed that a teacher treats all students equally educationally, regardless of their gender, be it too.
3. **Research Aptitude-** Through this approach, the attitude of the teacher towards research is to be assessed. And also, to investigate what extent a teacher can improve through research in the field of teaching.
4. **Aptitude related to Moral Values -** This approach will assess whether the teacher exhibits the ability to develop positivity and positivity in students to help them incorporate moral attitudes during decision-making processes.
5. **Assessment Strategies Aptitude -** This approach examines the aptitude for using appropriate tools and cues to effectively assess learners and monitor their progress.
6. **Behavioral Aptitude -** This approach assesses a teacher's ability to apply processes for critical thinking and problem solving to continually facilitate collaborative, effective, and independent thinking among learners.
7. **Aptitude on Constitutional values-** Through the presented approach, a teacher's use of constitutional values in students, to create awareness in their minds and to assess their achievement during teaching-learning process.

Development of Teaching Aptitude Scale

For measuring the Teaching Aptitude ScaleLikert, five-point scales were adopted to degree numerous components of the Teaching Aptitude Scale. The scale is distributed with normal curve distributions with respect to the end points highest positive and negative distributions. There are five alternatives for which a solution has been decided: strongly agree, agree, undecided, disagree & strongly disagree. The Teaching Aptitude Scale literature associated with teaching specialists at the difficulty had been consulted earlier than the dimensions became advanced. The scale is for use by the teachers of each English and Hindi medium. So, keep in mind the occasions of various institutions. The scale became organized in each language. Content experts' involvement with face validity is organized with difficulty and discrimination validity established against each item. Initially, 135 (one hundred thirty-five) statements had been organized, retaining in mind the character and situations of primary, secondary, and higher education teachers within the scale. In this scale, components associated with academic attitude, personality attitude, communication skills attitude, professional development attitude, digital attitude, inclusive measures attitude, gender sensitivity attitude, research attitude, attitude related to moral values, assessment strategies attitude, behavioral attitude, and attitude toward constitutional values were included. Five options for each answer were determined respectively strongly agree, agree, undecided, disagree & strongly disagree There after contemplation of 18 experts, 114 (one hundred fourteen) statements were found suitable for measurement.

Validity:

The list of 114 items was administered on 500 primary, secondary and higher education teachers in high and low group formulated on the basis of obtained score of the subjects to compare the response of two groups in respect of each item t-test was applied. The range of significant level being was established within 0.05 and 0.01. The value of 95 items was found to be greater than table values of 1.67 and 2.66 with df = 52. The items that were insignificant were excluded and finally 95 items were selected for the Teaching Aptitude scale.

Table-1 Total numbers of selected statement

S.No.	Dimension of Teaching Aptitude Scale	Types of Items	Sr.No.of Items	Total Items
1.	**Academic Aptitude**	Positive Items	2,13,49,67,69,87,93	**10**
		Negative Items	28,48,95	
2.	**Personality Aptitude**	Positive Items	1,14,29,47,50,86,94	**08**
		Negative Items	68	
3.	**Communication Skills Aptitude**	Positive Items	3,15,46,51,70,85	**08**
		Negative Items	30,66	
4.	**Professional Development Aptitude**	Positive Items	16,27,31,45,52,84	**07**
		Negative Items	4	
5.	**Digital Aptitude**	Positive Items	8,17,32,53,65,71,92	**09**
		Negative Items	44,54	
6.	**Inclusive Measures Aptitude**	Positive Items	18,33,43,55,91	**08**
		Negative Items	9,64,72	
7.	**Gender Sensitivity Aptitude**	Positive Items	5,19,42,56,73	**07**
		Negative Items	26,83	
8.	**Research Aptitude**	Positive Items	10,34,41,57,63,81	**07**
		Negative Items	20	
9.	**Aptitude related to Moral Values**	Positive Items	21,40,58,82,90	**09**
		Negative Items	11,62,74,80	
10.	**Assessment Strategies Aptitude**	Positive Items	6,22,35,39,75	**07**
		Negative Items	59,78	
11.	**Behavioral Aptitude**	Positive Items	7,23,36,38,77	**07**
		Negative Items	60,89	
12.	**Aptitude on Constitutional values**	Positive Items	12,24,25,37,76,79	**08**
		Negative Items	61,88	
	Total			**95**

Reliability:

To obtain the reliability of the present Teaching Aptitude scale, it administrated to 500 primary, secondary and higher education teachers both male and female, government and private belonging to both rural and urban areas. for the computation of spilt- half reliability, spilt- half method along with Spearman- Brown's Correlation Formula was applied, which is given in the following tables.

Table-2 Reliability of the Test by Split-Half Method

S.NO.	Dimension	Split-Half Reliability	Index of Reliability
1	Academic Aptitude	.79	.88
2	Personality Aptitude	.82	.90
3	Communication Skills Aptitude	.73	.84
4	Professional Development Aptitude	.80	.89
5	Digital Aptitude	.77	.87
6	Inclusive Measures Aptitude	.76	.86
7	Gender Sensitivity Aptitude	.79	.88
8	Research Aptitude	.74	.85
9	Aptitude related to Moral Values	.75	.86
10	Assessment Strategies Aptitude	.71	.83
11	Behavioral Aptitude	.75	.86
12	Aptitude on Constitutional values	.82	.90
Total Teaching Aptitude Scale		**.77**	**.87**

The Test- retest reliability of the scale has also been calculated. For this type of test- retest reliability, the scale was administered twicely to 100 teachers not included in above sample. With an interval of 25 days and coefficient of correlation was calculated separately for the 12 dimensions, which is given in the following tables.

Table-3 Reliability of the Test by Test-Retest Method

S.NO.	Dimension	Split-Half Reliability	Index of Reliability
1	Academic Aptitude	.84	.91
2	Personality Aptitude	.79	.88
3	Communication Skills Aptitude	.74	.85
4	Professional Development Aptitude	.78	.87
5	Digital Aptitude	.83	.90
6	Inclusive Measures Aptitude	.80	.89
7	Gender Sensitivity Aptitude	.77	.87
8	Research Aptitude	.76	.86
9	Aptitude related to Moral Values	.82	.90
10	Assessment Strategies Aptitude	.84	.91
11	Behavioral Aptitude	.83	.90
12	Aptitude on Constitutional values	.85	.92
	Total Teaching Aptitude Scale	**.80**	**.89**

Administration of Teaching Aptitude Scale:
The present Teaching Aptitude scale is a self-administered scale and can be used for groups of any reasonable size. There was no time limit but students took about 45 minutes. Before going to the statements, the subject is required to fill the general information in the space provided in answer sheet. The standard instructions are printed both in Hindi and English on the front page of the test booklet.

Scoring Procedure:
The positive and negative statements along with their Weightage are shown in the below table.

Table-4
SCORING KEY

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Statistical Result of the scale:
Statistical Results have been given in below table.

Table-5

N	MEAN	S.D.	SCORE RANGE
400	**351.5**	**23.2**	**95-475**

Table-6 Mean and S.D. Dimensions Wise for Teaching Aptitude Scale

S.No.	Dimension of Lifestyle Scale	MEAN	S.D.
1.	Academic Aptitude	36.24	7.12
2.	Personality Aptitude	27.35	6.11
3.	Communication Skills Aptitude	29.19	5.27
4.	Professional Development Aptitude	26.46	5.08
5.	Digital Aptitude	33.53	8.29
6.	Inclusive Measures Aptitude	28.97	5.17
7.	Gender Sensitivity Aptitude	25.72	8.63
8.	Research Aptitude	28.41	4.99
9	Aptitude related to Moral Values	34.35	6.94
10	Assessment Strategies Aptitude	24.89	6.27
11	Behavioral Aptitude	25.55	4.25
12	Aptitude on Constitutional values	30.84	6.17
	Total Teaching Aptitude Scale	**351.50**	**23.20**

NORMS:

On the basis of the statistical result presented in Table-6 the Z-score Norms have been presented in Table-7. Dimension wise Norms in Table-8 to Table-19

Table-7 Z-Score Norms for Full Teaching Aptitude Scale

Mean: 351.50				S.D.: 23.20		N: 500	
RAW SCORE	**Z-SCORE**	**RAW SCORE**	**Z-SCORE**	**RAW SCORE**	**Z-SCORE**	**RAW SCORE**	**Z-SCORE**
301	-2.18	**326**	-1.10	**351**	-0.02	**376**	+1.06
302	-2.13	**327**	-1.06	**352**	+0.02	**377**	+1.10
303	-2.09	**328**	-1.01	**353**	+0.06	**378**	+1.14
304	-2.05	**329**	-0.97	**354**	+0.11	**379**	+1.19
305	-2.00	**330**	-0.93	**355**	+0.15	**380**	+1.23
306	-1.96	**331**	-0.88	**356**	+0.19	**381**	+1.27
307	-1.92	**332**	-0.84	**357**	+0.24	**382**	+1.31
308	-1.88	**333**	-0.80	**358**	+0.28	**383**	+1.36
309	-1.83	**334**	-0.75	**359**	+0.32	**384**	+1.40
310	-1.79	**335**	-0.71	**360**	+0.37	**385**	+1.44
311	-1.75	**336**	-0.67	**361**	+0.41	**386**	+1.49
312	-1.70	**337**	-0.63	**362**	+0.45	**387**	+1.53
313	-1.66	**338**	-0.58	**363**	+0.50	**388**	+1.57
314	-1.62	**339**	-0.54	**364**	+0.54	**389**	+1.62
315	-1.57	**340**	-0.50	**365**	+0.58	**390**	+1.66
316	-1.53	**341**	-0.45	**366**	+0.63	**391**	+1.70
317	-1.49	**342**	-0.41	**367**	+0.67	**392**	+1.75
318	-1.44	**343**	-0.37	**368**	+0.71	**393**	+1.79
319	-1.40	**344**	-0.32	**369**	+0.75	**394**	+1.83
320	-1.36	**345**	-0.28	**370**	+0.80	**395**	+1.88
321	-1.31	**346**	-0.24	**371**	+0.84	**396**	+1.92
322	-1.27	**347**	-0.19	**372**	+0.88	**397**	+1.96
323	-1.23	**348**	-0.15	**373**	+0.93	**398**	+2.00
324	-1.19	**349**	-0.11	**374**	+0.97	**399**	+2.05
325	-1.14	**350**	-0.06	**375**	+1.01	**400**	+2.09

Table-8 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Academic Aptitude
Mean: 36.24   SD: 7.12

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-4.95	14	-3.12	27	-1.30	40	+0.53
2	-4.81	15	-2.98	28	-1.16	41	+0.67
3	-4.67	16	-2.84	29	-1.02	42	+0.81
4	-4.53	17	-2.70	30	-0.88	43	+0.95
5	-4.39	18	-2.56	31	-0.74	44	+1.09
6	-4.25	19	-2.42	32	-0.60	45	+1.23
7	-4.11	20	-2.28	33	-0.46	46	+1.37
8	-3.97	21	-2.14	34	-0.32	47	+1.51
9	-3.83	22	-2.00	35	-0.18	48	+1.65
10	-3.69	23	-1.86	36	-0.03	49	+1.79
11	-3.54	24	-1.72	37	+0.12	50	+1.93
12	-3.40	25	-1.58	38	+0.25	-	-
13	-3.26	26	-1.44	39	+0.39	-	-

Table-9 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Personality Aptitude
Mean: 27.35   SD: 6.11

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-4.31	11	-2.68	21	-1.03	31	+0.59
2	-4.15	12	-2.51	22	-0.88	32	+0.76
3	-3.99	13	-2.35	23	-0.71	33	+0.92
4	-3.82	14	-2.18	24	-0.55	34	+1.09
5	-3.66	15	-2.02	25	-0.38	35	+1.25
6	-3.49	16	-1.86	26	-0.22	36	+1.41
7	-3.33	17	-1.69	27	-0.08	37	+1.57
8	-3.17	18	-1.53	28	-0.11	38	+1.74
9	-3.00	19	-1.37	29	+0.27	39	+1.90
10	-2.84	20	-1.20	30	+0.43	40	+2.07

Table-10 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Communication Skills Aptitude
Mean: 29.19   SD: 5.27

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-5.35	11	-3.45	21	-1.55	31	+0.34
2	-5.16	12	-3.26	22	-1.36	32	+0.53
3	-4.97	13	-3.07	23	-1.17	33	+0.72
4	-4.78	14	-2.88	24	-0.98	34	+0.91
5	-4.59	15	-2.69	25	-0.79	35	+1.10
6	-4.40	16	-2.50	26	-0.60	36	+1.29
7	-4.21	17	-2.31	27	-0.41	37	+1.48
8	-4.02	18	-2.12	28	-0.23	38	+1.67
9	-3.83	19	-1.93	29	-0.04	39	+1.86
10	-3.64	20	-1.74	30	+0.15	40	+2.05

Table -11 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Professional Development Aptitude
Mean: 26.46   SD: 5.08

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-5.01	10	-3.24	19	-1.56	28	+0.30
2	-4.81	11	-3.04	20	-1.27	29	+0.50
3	-4.61	12	-2.85	21	-1.07	30	+0.70
4	-4.42	13	-2.65	22	-0.88	31	+0.90
5	-4.21	14	-2.45	23	-0.68	32	+1.09
6	-4.03	15	-2.26	24	-0.48	33	+1.29
7	-3.83	16	-2.06	25	-0.29	34	+1.48
8	-3.63	17	-1.86	26	-0.09	35	+1.68
9	-3.43	18	-1.76	27	+0.11	-	-

Table -12 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Digital Aptitude
Mean: 33.53   SD: 8.29

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-3.92	13	-2.48	25	-1.03	37	+0.42
2	-3.80	14	-2.36	26	-0.91	38	+0.54
3	-3.68	15	-2.24	27	-0.79	39	+0.66
4	-3.56	16	-2.12	28	-0.67	40	+0.78
5	-3.44	17	-1.99	29	-0.55	41	+0.90
6	-3.32	18	-1.87	30	-0.43	42	+1.02
7	-3.20	19	-1.75	31	-0.31	43	+1.14
8	-3.08	20	-1.63	32	-0.18	44	+1.26
9	-2.96	21	-1.51	33	-0.06	45	+1.38
10	-2.84	22	-1.39	34	+0.06	-	-
11	-2.72	23	-1.27	35	+0.18	-	-
12	-2.60	24	-1.15	36	+0.30	-	-

Table -13 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Inclusive Measures Aptitude
Mean: 28.97   SD: 5.17

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-5.41	11	-3.46	21	-1.54	31	+0.39
2	-5.22	12	-3.28	22	-1.35	32	+0.59
3	-5.02	13	-3.08	23	-1.15	33	+0.78
4	-4.83	14	-2.90	24	-0.96	34	+0.98
5	-4.64	15	-2.70	25	-0.76	35	+1.17
6	-4.44	16	-2.51	26	-0.57	36	+1.36
7	-4.25	17	-2.32	27	-0.37	37	+1.55
8	-4.05	18	-2.12	28	-0.19	38	+1.75
9	-3.86	19	-1.93	29	+0.01	39	+1.94
10	-3.66	20	-1.74	30	+0.21	40	+2.13

Table 14 Z-Score Norms Dimension wise for Teaching Aptitude Scale

Dimension-Gender Sensitivity Aptitude

Mean: 25.72   SD: 8.63

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-2.86	10	-1.82	19	-0.78	28	+0.26
2	-2.75	11	-1.71	20	-0.66	29	+0.38
3	-2.63	12	-1.59	21	-0.55	30	+0.49
4	-2.52	13	-1.48	22	-0.43	31	+0.61
5	-2.40	14	-1.36	23	-0.32	32	+0.73
6	-2.29	15	-1.25	24	-0.20	33	+0.84
7	-2.17	16	-1.13	25	-0.08	34	+0.96
8	-2.05	17	-1.02	26	-0.03	35	+1.07
9	-1.94	18	-0.89	27	+0.15	-	-

Table -15 Z-Score Norms Dimension wise for Teaching Aptitude Scale

Dimension-Research Aptitude

Mean: 28.41   SD: 4.99

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-5.49	10	-3.69	19	-1.89	28	-0.08
2	-5.29	11	-3.49	20	-1.69	29	+0.12
3	-5.09	12	-3.29	21	-1.49	30	+0.32
4	-4.89	13	-3.09	22	-1.29	31	+0.52
5	-4.69	14	-2.89	23	-1.08	32	+0.72
6	-4.49	15	-2.69	24	-0.88	33	+0.92
7	-4.29	16	-2.49	25	-0.68	34	+1.12
8	-4.09	17	-2.29	26	-0.48	35	+1.32
9	-3.89	18	-2.09	27	-0.28	-	-

Table -16 Z-Score Norms Dimension wise for Teaching Aptitude Scale

Dimension-Aptitude related to Moral Values

Mean: 34.35   SD: 6.94s

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-4.81	13	-3.07	25	-1.36	37	+0.38
2	-4.66	14	-2.93	26	-1.22	38	+0.52
3	-4.52	15	-2.79	27	-1.06	39	+0.66
4	-4.37	16	-2.64	28	-0.91	40	+0.80
5	-4.23	17	-2.50	29	-0.77	41	+0.94
6	-4.08	18	-2.36	30	-0.63	42	+1.10
7	-3.94	19	-2.22	31	-0.49	43	+1.25
8	-3.79	20	-2.08	32	-0.35	44	+1.39
9	-3.65	21	-1.92	33	-0.21	45	+1.53
10	-3.50	22	-1.78	34	-0.05	-	-
11	-3.36	23	-1.64	35	+0.09	-	-
12	-3.21	24	-1.50	36	+0.24	-	-

Table -17 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Assessment Strategies Aptitude
Mean: 24.89   SD: 6.27

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-3.81	10	-2.37	19	-0.94	28	+0.50
2	-3.65	11	-2.21	20	-0.78	29	+0.66
3	-3.49	12	-2.06	21	-0.62	30	+0.82
4	-3.33	13	-1.90	22	-0.46	31	+0.98
5	-3.17	14	-1.74	23	-0.30	32	+1.14
6	-3.01	15	-1.58	24	-0.14	33	+1.30
7	-2.85	16	-1.42	25	+0.02	34	+1.45
8	-2.69	17	-1.26	26	+0.18	35	+1.61
9	-2.53	18	-1.10	27	+0.34	-	-

Table -18 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Behavioral Aptitude
Mean: 25.55   SD: 4.25

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-5.78	10	-3.66	19	-1.54	28	+0.58
2	-5.54	11	-3.42	20	-1.31	29	+0.71
3	-5.31	12	-3.19	21	-1.07	30	+0.95
4	-5.07	13	-2.95	22	-0.84	31	+1.28
5	-4.83	14	-2.72	23	-0.60	32	+1.52
6	-4.60	15	-2.48	24	-0.36	33	+1.76
7	-4.36	16	-2.25	25	-0.12	34	+1.99
8	-4.13	17	-2.01	26	+0.11	35	+2.22
9	-3.89	18	-1.78	27	+0.34	-	-

Table -19 Z-Score Norms Dimension wise for Teaching Aptitude Scale
Dimension-Aptitude on Constitutional values
Mean: 30.84   SD: 6.17

RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE	RAW SCORE	Z-SCORE
1	-4.84	11	-3.22	21	-1.60	31	+0.03
2	-4.67	12	-3.06	22	-1.44	32	+0.19
3	-4.51	13	-2.89	23	-1.27	33	+0.35
4	-4.35	14	-2.73	24	-1.11	34	+0.51
5	-4.19	15	-2.57	25	-0.95	35	+0.67
6	-4.03	16	-2.41	26	-0.79	36	+0.83
7	-3.86	17	-2.25	27	-0.63	37	+1.00
8	-3.70	18	-2.09	28	-0.46	38	+1.16
9	-3.54	19	-1.92	29	-0.30	39	+1.32
10	-3.38	20	-1.76	30	-0.14	40	+1.48

Interpretation:
Norms for interpretation, which is given in the following table.

Table -20 Norms for interpretation of the level of Teaching Aptitude Scale

S.NO.	Range of Z-Scores	Grade	Level of Teaching Aptitude
1	+2.01 and above	A	Extremely High Teaching Aptitude
2	+1.26 to +2.00	B	High Teaching Aptitude
3	+0.51 to +1.25	C	Above Average Teaching Aptitude
4	-0.50 to +0.50	D	Average Teaching Aptitude
5	-0.51 to -1.25	E	Below Average Teaching Aptitude
6	-1.26 to -2.00	F	Low Teaching Aptitude
7	-2.01 and below	G	Extremely Low Teaching Aptitude

CONCLUSION

The development of the Teaching Aptitude Scale has undergone a thorough and systematic process to ensure its validity, reliability, and practical utility. By following rigorous research methods, including expert consultations, multiple drafts, and item analysis, the final scale comprises 95 well-constructed statements that cover 12 key dimensions of teaching aptitude. The high reliability scores of 0.87 (Split-Half Method) and 0.89 (Test-Retest Method) confirm the consistency of the scale, ensuring that it can effectively measure teaching aptitude across various contexts. This scale provides a scientific and standardized tool for evaluating an individual's teaching aptitude, making it a valuable resource for educational institutions, teachers, and other stakeholders in the education sector. It can be instrumental in identifying the right skills and attitudes required for teaching, supporting teacher recruitment, training, and development. The Teaching Aptitude Scale will contribute significantly to enhancing the quality of education by helping to select and nurture educators with the potential to foster student success and overall educational excellence.

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