ORIGINAL ARTICLE

DEVELOPMENT AND STANDARDIZATION OF AN ATTITUDE SCALEFOR USING ONLINE LIBRARY (ASUOL)

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Abstract:

Nowadays, it is commonly thought that new technologies can strongly help in education. In young ages especially, children can use the huge interactivity of new media, and develop their skills, knowledge, perception of the world, under their parents monitoring, of course. In no way traditional education can be replaced, but in this era of fast technological advance and minimization of distance through the use of the Internet, everyone must be equipped with basic knowledge in technology, as well as use it as a medium to reach a particular goal. Online library is a library in which collections are stored in digital formats (as opposed to print, microform, or other media) and accessible via computers. The digital content may be stored locally, or accessed remotely via computer networks. The study of teachers' attitude towards using online library is a significant one and for which the investigator has decided to develop and standardize a scale to measure it.

KEY WORDS:

Technology, Attitude Scale, Online Library.

.INTRODUCTION

Our school and college system must continually strive to unlock the full educational potential of digital technologies. The challenge for our schools and colleges is to create engaging learning environments with opportunities that stimulate, extend and deepen student learning, and embed the use of the technologies that students use so ubiquitously in their daily lives. Most students are well connected to technology, information resources and networks when they are away from school, college and they rightly expect to learn in a school, college environment that mirrors this. Researches confirm that integrating technologies in teaching and learning can drive to positive impact on student learning. As there is no suitable tool available to study the school and college teachers' attitude towards using online library scale the investigator have decided to construct and standardize a scale to measure the teachers' attitude towards using online library scale. This Likert type scale is a five- point scale of „Strongly Agree", „Agree", „Undecided", „Disagree" and „Strongly Disagree". 55 items have been collected from the various sources like Experts in Educational technology, Teacher Educators, Books, Journals, Internet and so on.

PILOT STUDY

This scale with 55 items has been administered to the sample of as many as 200 teachers (100 Higher secondary school teachers and 100 College teachers) working in different higher secondary schools and different colleges of Madurai 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 teachers 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 an attitude towards using online library 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 "Strongly Agree", to "Strongly Disagree". The individual score for all the 200 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 50 students (Edward. L. Allen, 1957).

It may be recalled that each item is followed by five different responses of "SA", "A", "UD", "DA" and "SDA" in the attitude towards using online library scale. Then each item was taken individually and the number of teachers who responded "SA", "A", "UD", "DA" and "SDA" was found out both the high and low groups separately. Thus for all the 55 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 55 items have been calculated with the formula suggested by Allen Edwards(1957). As many as 45 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 200 teachers working in different higher secondary schools and different colleges of Madurai District, Tamil Nadu, India, in order to establish the scoring procedure, validity and reliability of this scale.

TABLE – I
ITEM SELECTED FOR ITTTS

Item Number	't' Value	Item selected
1	2.26	S
2	2.84	S
3	3.26	S
4	3.42	S
5	1.95	S
6	2.56	S
7	2.75	S
8	0.74	NS
9	3.42	S
10	2.46	S
11	1.68	NS
12	2.58	S
13	3.42	S
14	3.53	S
15	1.82	S
16	1.85	S
17	3.24	S
18	1.08	NS
19	2.95	S

20	3.64	S
21	1.26	NS
22	4.42	S
23	3.92	S
24	1.08	NS
25	4.22	S
26	2.42	S
27	3.52	S
28	0.94	NS
29	2.66	S
30	2.68	S
31	1.94	S
32	0.84	NS
33	2.85	S
34	1.92	S
35	3.26	S
36	3.16	S
37	3.84	S
38	1.98	S
39	1.82	S
40	2.48	S
41	1.22	NS
42	3.06	S
43	3.62	S
44	1.02	NS
45	3.26	S
46	3.62	S
47	4.52	S
48	2.96	S
49	2.42	S

50	3.30	S
51	0.92	NS
52	2.56	S
53	3.28	S
54	2.26	S
55	1.84	S

S – Selected   NS – Not selected

SCORING PROCEDURE

The interest towards technology in teaching scale has 45 items, out of which 22 items are positively worded and the remaining 23 items are negatively worded. An individual score is the sum of the scores of all the 45 items. The scores range from 45 to 225. Higher score indicates the positive attitude towards using online library scale 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
SA	5	1
A	4	2
UD	3	3
DA	2	4
SDA	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-EFFICIENTS
Correlation between forms	0.687
Equal-length Spearman-Brown	0.739
Guttman Split-half	0.736
Unequal-length Spearman-Brown	0.709

VALIDITY:

Validity reveals the merits of our measurement. This attitude 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 attitude scale also has construct validity.

PERCENTILE NORM:

The following table represents the percentile norm for this attitude scale.

PERCENTILE	SCORE RANGE	NORM
Below P_{25} (Q1)	Below 102	Low level
P_{25} To P_{75} (Q1 to Q3)	Between 102 and 180	Average level
Above P_{75} (Q3)	Above 180	High level

CONCLUSION

The investigator believe that this scale would be a contribution to the field of online library in Education and those who want to measure the attitude of teachers towards the use of online library anywhere in this country will find this scale very useful.

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