WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Evaluation, Revision, and Validation of the Existing Rating System for Student Teachers Assessment

Dr. Gregg O. Siat

Biliran Province State University, Naval, Biliran
greggsiat@gmail.com

ABSTRACT

The primary purpose of this study is to determine the content validity index of the items in assessing the performance of the student teachers considering the seven domains of teaching practice namely: content knowledge and pedagogy; learning environment; diversity of learners; curriculum and planning; assessment and reporting; community linkages and professional engagement; and personal growth and professional development.

The study involved 6 content experts who rated in determining the relevance and clarity of the items stipulated in the instrument utilizing two stages. Stage I focuses on development and stage II emphasizes on judgement and quantification.

Through the results of the content validity index, findings reveal that all items are relevant to teaching practices but there are 8 items out of 47 considered as not clear which need to be eliminated.

Based on the overall observation and analysis, content validity is very vital in determining the relevance and clarity of instrument development. It ensure alignment of content to teaching practices in assessing performance.

Keywords: Evaluation, Rating System, Assessment

1.Introduction

Student teaching evaluation is a form of assessing the performance of student teachers during their stay in the real world of teaching. Since the very start state colleges and universities utilized different rating system to gather evidences on how student teachers play their role in the field. Universities and university colleges have developed relatively complex procedures and instruments for collecting, analysing, and interpreting these data as the dominant or, in some cases, the sole indicator of teaching quality. This wide spread use is largely due to the apparent ease to collecting the data and presenting and interpreting the results (Penny, 2003). More recently, student evaluation of teaching procedures have been included as a key mechanism in internal quality-assurance processes as a way of demonstrating an institution's performance in accounting and auditing practices (Johnson, 2000).

Student evaluation of teaching serves three purposes: improving teaching quality; providing input for appraisal exercises (e.g., tenure/promotion decisions; and providing evidence for institutional accountability (e.g., demonstrating the presence of adequate procedures for ensuring teaching quality (Kember, Leung, & Kwan, 2002).

Further,DepED Order No. 36, s. 2013 stressed out that teachers play a crucial role in nation building. Through quality teachers, the Philippines can develop holistic learners who are steeped in values, equipped with 21st century skills, and able to propel the country to development and progress. This is in consonance with the Department of Education vision of producing: "Filipinos who passionately love their country and whose values and competencies enable them to realize their full potential and contribute meaningfully to building the nation".

It is indeed, that in our end as the training ground of future teachers we need to keep abreast with the new trends and teaching practices that will answer the demands of the global teaching society to make our graduates promising and assets in their respective teaching career.

With this present study, this can greatly help the school administration to mention, the school deans, chairpersons, faculty members, cooperating teachers and other individuals who can benefit the output of this research endeavour.

Thus, the researcher was motivated to pursue this research endeavour to have an aligned and justifiable rating system to the student teachers.

2. Statement of the Problem

The study aims to determine the Content Validity index of the items in assessing the performance of student teachers.

3. Theoretical Framework/Model

The study is anchored on the theory-Based Item Analysis. Scale items are often developed on the basis of theoretical definitions of the construct, and sometimes they are even analyzed for content validity and item selection is usually purely empirical. A set of items is completed by a sample of participants, and response frequencies and indicators of reliability such as item-total correlations are used to select the best-functioning items. Rossiter (2008) criticized that at the end of such purely empirical item-selection processes, the remaining items often measure only one narrow aspect of the target construct. In such cases, it would perhaps be possible to retain the diversity of the original items by constructing subscales. Some authors, such as Gittler (1986) and Koller et al. (2012), have long highlighted the importance of theory-based analysis. For example, Koller and Lamm (2015) showed that a theory-based analysis of items measuring cognitive empathy yielded important information concerning scale dimensionality.

4. Methodology

A. Development Phase

Design

For the developmentof the new instrument, the approach described by Lynn (1986) was followed. This approach advocate stages. Stage I (development) results in the generation of the instrument's items which was lifted from the literature reviewed and from the existing instruments from other higher teacher education institutions.

Research Instrument

The research instrument were lifted from various authors concerning on student teachers appraisal and assessment with reference to the existing rating system of the school. Items were carefully examined to align the teaching practices stipulated in the Philippine Professional Standards for Teachers (PPST).

Data Gathering Procedure

The researcher made a literature review of the studies conducted relative to validation and development of instruments in evaluating the performance of student teachers. Items were identified through the PPST teaching practice to ensure alignment of teaching culture virtually or through formal setting. After such, the instrument were finalized for the evaluation of experts in determining its relevance and clarity which was identified during the computation of the items content validity index.

Data Analysis

The researcher consulted experts on the method of analysing the data gathered to arrive relevant and clear items in rating the performance of student teachers in their whole duration of student teaching. Thus, the approach of Lynn (1986) was considered.

B. Validation Phase

Design

For thecontent validity of the new instrument, the approach described by Lynn (1986) was followed. This approach advocates stage II which intend to evaluates the performance of the instrument's items (judgement and quantification) performed by the content experts which includes the school dean, university psychometrician, program chairperson, student teachers coordinator, Master teacher, and Faculty Federation President.

Research Instrument

The research instrument utilized was taken from the existing rating system for student teachers of the university and other items of the instrument were lifted from other SUCs to come up with a substantial content of the rating system in assessing the performance of student teachers.

Data Gathering Procedure

Prior to the final crafting of the instrument to be fielded, the researcher made constant consultation with the research professor and other experts from the university. After such, letters of permission were prepared to formally administer the instrument to the panel of experts. Finally, data were tabulated and interpreted to answer the objective of the study.

Data Analysis

After the retrieval of the instruments from the experts, computation of content validity index of each item were performed. After determining the CVIs, it was interpreted based on the standard as stipulated in table 2. Thus, the researcher made implications based on the results.

5. Results and Discussion

a. Development Phase

The researcher evaluated the existing rating system for student teachers assessment utilized for a long period of time. After such, literature review were made, benchmarking from other higher educational institutions and revisited the teachers' practices in the Philippine Professional Standards for Teachers (PPST). Further, finalization of the items following the domains of PPST were made.

b. Validation Phase

Experts is asked to rate the instrument items in terms of relevance and its clarity to the construct underlying study using its dimensions on a 4-point ordinal scale (1[not relevant], 2[item need some revision], 3[relevant but need minor revision], and 4[highly relevant]).

Table 1. The scoring method of experts

Relevance	Clarity
1 [not relevant]	1 [not clear]
2 [item need some revision]	2 [item need some revision]
3 [relevant but need minor revision]	3 [clear but need minor revision]
4 [very relevant]	4 [very clear]

To obtain content validity index for relevance and clarity of each item (I-CVIs, the number of those judging the item as relevant or clear (rating 3 or 4) was divided by the number of content experts.

Table 2. The number of experts and its implication on the acceptable cut-off score

Number of Experts	Acceptable CVI Values	Source of Recommendation
Two experts	At least 0.80	Davis (1992)
Three to five experts	Should be 1	Polit& Beck (2006), Polit et al., (2007)
At least six experts	At least 0.83	Polit& Beck (2006), Polit et al., (2007)
Six to eight experts	At least 0.83	Lynn (1986)
At least nine experts	At least 0.78	Lynn (1986)

Table 2 summarizes the recommended number of experts with its implication on the acceptable cut-off score of CVI. It can be concurred that for content validation, the minimum acceptable expert number is two, however most of recommendations propose a minimum of six experts. Considering the recommendations, the number of experts for content validation should be at least 6 and does not exceed 10.

Table 3 presents the results of the content validity index conducted to determine the validity of the instrument in assessing the performance

of the student teachers.

Table 3. Content Validity Index on Relevance of the Items

Item No.	I-CVI	Interpretation
1	1	Appropriate
2	1	Appropriate
3	1	Appropriate
4	1	Appropriate
5	1	Appropriate
6	1	Appropriate
7	1	Appropriate
8	1	Appropriate
9	1	Appropriate
10	0.83	Appropriate
11	1	Appropriate
12	0.83	Appropriate
13	0.83	Appropriate
14	1	Appropriate
15	1	Appropriate
16	0.83	Appropriate
17	1	Appropriate
18	1	Appropriate
19	1	Appropriate
20	1	Appropriate
21	1	Appropriate
22	1	Appropriate
23	1	Appropriate
24	1	Appropriate
25	0.83	Appropriate
26	0.83	Appropriate
27	1	Appropriate
28	1	Appropriate
29	1	Appropriate
30	1	Appropriate
31	1	Appropriate
32	1	Appropriate
33	1	Appropriate
34	1	Appropriate
35	1	Appropriate
36	1	Appropriate
37	1	Appropriate
38	1	Appropriate
39	1	Appropriate
40	1	Appropriate
41	1	Appropriate
41	1	Appropriate
42	1	Appropriate
43	1	Appropriate
44	1	Appropriate
45	1	Appropriate
46	1	Appropriate
47	1	Appropriate
	S-CVI=0.97829	

As shown in table 3, all items were rated ranging from 0.83 to 1 interpreted as appropriate. This indicates that items developed are relevant to the teaching practice expected from the student teachers.

Table 4. Content Validity Index on Clarity of the Items

Item No.	I-CVI	Interpretation
1	1	Appropriate
2	1	Appropriate
3	1	Appropriate
4	1	Appropriate
5	1	Appropriate
6	1	Appropriate
7	1	Appropriate
8	1	Appropriate
9	0.83	Appropriate
10	0.83	Appropriate
11	1	Appropriate
12	1	Appropriate
13	1	Appropriate
14	1	Appropriate
15	1	Appropriate
16	0.83	Appropriate
17	1	Appropriate
18	1	Appropriate
19	1	Appropriate
20	1	Appropriate
21	1	Appropriate
22	0.66	Eliminated
23	1	Appropriate
24	1	Appropriate
25	0.66	Eliminated
26	0.83	Appropriate
27	1	Appropriate
28	1	Appropriate
29	1	Appropriate
30	1	Appropriate
31	1	Appropriate
32	0.66	Eliminated
33	1	Appropriate
34	1	Appropriate
35	0.66	Eliminated
36	0.66	Eliminated
37	1	Appropriate
38	1	Appropriate
39	1	Appropriate
40	1	Appropriate
41	1	Appropriate
42	0.83	Appropriate
43	1	Appropriate
44	1	Appropriate
45	1	Appropriate
46	0.66	Eliminated
47	0.66	Eliminated
	S-CVI=0.95255	

As shown in table 4, items 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,23,24,27,28,29,30,31,33,34,37,38, 39, 40, 41,42,43,44, and 45 were rated ranging from 0.83 to 1 inferred as appropriate while items 22,25,26,32,35,36,46, and 47 were rated 0.66 which should be eliminated.

6. Conclusion and Recommendation

Content validity is very important to ensure the overall validity of the tool proposed in evaluating performances, therefore a systematic approach for content validation should be done based on the evidence and best practice. Thus, this research endeavor has provided a systematic and evidence-based approach to conduct a proper content validation.

References

Cook DA, Beckman TJ. Current concepts in validity and reliability for psychometric instruments: theory and application. The American Journal of Medicine. 2006;119(2):166.e7–16. https://doi. org/10.1016/j.amjmed.2005.10.036

Davis LL. Instrument review: getting the most from a panel of experts. Applied Nursing Research. 1992;5(4):194–7. https:// doi.org/10.1016/s0897-1897(05)80008-4

Hadie SNH, Hassan A, Ismail ZIM, Asari MA, Khan AA, Kasim F, et al. Anatomy education environment measurement inventory: a valid tool to measure the anatomy learning environment. Anatomical Sciences Education. 2017;10(5):423–32. https://doi.org/10.1002/ase.1683

Gittler, G. (1986). InhaltlicheAspektebei der Itemselektionnachdemmodell von Rasch [Content issues in the selection of items for the Rasch model]. *Z. Exp. Angew. Psychol.* 33, 386–412.

Koller, I., Alexandrowicz, R., and Hatzinger, R. (2012). *Das Rasch Modell in der Praxis: EineEinführungmiteRm [The Rasch Model in Practical Applications: An Introduction with eRm]*. Vienna: UTB.

Koller, I., and Lamm, C. (2015). Item response model investigation of the (German) interpersonal reactivity index empathy questionnaire. *Eur. J. Psychol. Assess.* 31, 211–221. doi: 10.1027/1015-5759/a000227

Lynn MR. Determination and quantification of content validity. Nursing Research. 1986;35(6):381–5.

Polit DF, Beck CT. The content validity index: are you sure you know what's being reported? Critique and recommendations. Research in Nursing & Health. 2006;29(5):489–97. https://doi.org/10.1002/ nur.20147

Rossiter, J. R. (2008). Content validity of measures of abstract constructs in management and organizational research. *Br. J. Manage.* 19, 380–388. doi: 10.1111/j.1467-8551.2008.00587.x