DEVELOPING ENGLISH TEACHING KNOWLEDGE TEST FOR STUDENT TEACHERS

Min Paing Moe[1], Nu Nu Khaing[2]

Abstract

Despite an increasing research interest in different areas of subjects, the scientific understanding regarding teachers' knowledge for teaching English is very limited. This study therefore aimed at developing a standardized test to assess English teaching knowledge of student teachers during their initial teacher education. The sample was composed of 120 ELT specialised students from final year, first semester in Yangon University of Education. In this study, the content area was assigned based on The TKT (Teaching Knowledge Test) Course by University of Cambridge and Cambridge ESOL Examination. Both pilot testing and field testing were conducted in February, 2019. The first draft of the test was developed with 60 multiple-choice items which were analysed by item analysis technique. The data were processed by Test Analysis Program software (TAP version 14.7.4) and then analysed. Results showed that the items of 15% were very good, 20% were reasonably good, 22% need improvement and 43% were very poor. Final form of the test was constructed with 45 items in which 55.56% of item were good, 20% of them were fair and 24.44% of them were modified. The test which has medium difficulty level, high discrimination power and high reliability was finally developed.

Keywords: Item Analysis, Difficulty Level, Discrimination Power, Reliability, Student Teachers, English Teaching Knowledge Test

Introduction

Importance of the Study

English is the Comprehensive and World Wide Language to connect itself to others for carrying out their harmonious relationships and is used as the medium of teaching across the globe. Helping people learn English means helping them to have many new opportunities and doors open to them. In education it is used to communicate knowledge, and it is used as the instrument to find information. In English Language Teaching (ELT), when English is used to connect Classroom Teaching, one has to be skillful in listening, speaking, reading and writing in order to excel in communication skills. Teaching English as a Foreign Language (TEFL) is distinct from the teaching of other subjects for various reasons (Borg, 2006; Burns, Freeman, & Edwards, 2015) and, therefore, requires both a specific teacher knowledge base and specific learning opportunities during teacher education.

According to the analysis of teacher knowledge by Shulman (1986, 1987), teacher knowledge can be identified into content knowledge (CK), pedagogical content knowledge (PCK), and general pedagogical knowledge (GPK), and such knowledge contributes to the effective teaching of students and their learning outcomes. CK is the knowledge of the specific subject and related to the content teachers are required to teach. CK is shaped by academic disciplines underlying the subject. GPK is the knowledge which is not subject-matter related. According to Shulman (1987), GPK involves "those broad principles and strategies of classroom management and organization that appear to transcend subject matter" as well as knowledge about learners and learning, assessment, and educational contexts and purposes. PCK includes subject-specific knowledge for the purpose of teaching. According to Bukova-Guzel (2010),

---

[1] Assistant Lecturer, Department of English Language Teaching, Pyay Education College
[2] Dr, Lecturer, Department of Educational Psychology, Yangon University of Education

PCK comprises teacher knowledge of curriculum, knowledge of learners, and the knowledge of teaching strategies and multiple representations.

Debates on the definition of what pre-service teachers during and at the end of their training have to know and be able to do highlight the need for clarifying what we mean by teachers' professional knowledge (Darling-Hammond & Bransford, 2007; Gitomer & Zisk, 2015). Initial teacher education programmes aim at preparing students to become well-qualified teachers. Among other goals that might be pursued, such programs intend to support pre-service teachers' acquisition of professional knowledge for teaching. Thus, subject-related and pedagogical learning opportunities are provided by teacher education institutions (Cochran-Smith & Zeichner, 2005; Grossman, 1990). Tests assessing teacher knowledge for TEFL directly have been developed for purposes of teacher licensure and certification (e.g., Cambridge Teaching Language Assessment, 2015; Educational Testing Service [ETS], 2014). As they were not available for basic research on teacher knowledge, the researcher started to develop a specific test to measure the three major teacher knowledge categories of CK, PCK, and GPK.

Based on the above reasons, teaching knowledge test for student teachers is very crucial, specifically in Teaching English. Teaching Knowledge Test (TKT) is a test of the skills that need to be successful in teaching English to speakers of other languages. It is suitable for teachers of all age groups and abilities (British Council). Currently in Myanmar, at the various stages of teacher preparation, certification, and evaluation, there is insufficient information on what teachers should know about teaching English. Moreover, teaching knowledge tests in English Language Teaching field for student teachers are necessary but very limited. Therefore, the researcher decided to construct an English Teaching Knowledge Test (ETKT) for student teachers in Universities of Education. ETKT is developed based on TKT Course by University of Cambridge, Sample TKT Tests and Teaching English Courses in Universities of Education.

Purposes of the Study

The main purpose of this study is to develop English Teaching Knowledge Test for student teachers in Universities of Education. The specific purposes of this study are as follows:

1. To study the process of constructing a test, specifically English Teaching Knowledge Test for student teachers.
2. To point out the importance of Teaching Knowledge Test, specifically content knowledge (CK), pedagogical content knowledge (PCK) and general pedagogical knowledge (GPK) of pre-service teachers for TEFL in Myanmar during initial teacher education.

Methodology

Sample of the Study

The sample size consisted of 120 final year ELT specialised students out of 150 in total selected from Yangon University of Education during first semester of 2019. Five ELT specialised students from final year, first semester in Yangon University of Education were invited for pilot testing and examinees' review. For field testing, 120 participants were selected from final year, first semester ELT major students in Yangon University of Education. The selected subjects for the tests are shown in details as the Table 1.

Table 1 Selected Participants in the Study

Test	School	Major	Class	Male	Female	Total
Pilot Test	Yangon University of Education	English Language Teaching	Final Year, First Semester	3	2	5
Field Test	Yangon University of Education	English Language Teaching	Final Year, First Semester	32	88	120

Procedure

The following steps were taken by the researcher during construction and standardization of English Teaching Knowledge Test:

(1) Planning the test

(2) Preparation of the test

(3) Administration of the test

(4) Item analysis

(5) Standardization of the test

Planning the Test

Identifying the Content Area

In developing English Teaching Knowledge Test for student teachers, the sample papers, TKT modules, TKT handbook and guidelines by University of Cambridge, and Teaching English Courses in Universities of Education were studied thoroughly. The content area of English Teaching Knowledge Test was then assigned based on The TKT (Teaching Knowledge Test) Course by University of Cambridge and Cambridge ESOL Examination. The weightage to content is shown in the Table 2.

Table 2 Distribution of Weightage to Content

No.	Content	Weightage	Percent
1.	Language and Background to Language Learning and Teaching	20	33.33%
2.	Lesson Planning and Use of Resources for Language Teaching	20	33.33%
3.	Managing the Teaching and Learning Process	20	33.33%
	Total	60	100%

Size and Type of Test

The size of the test refers to a number of items in the test. It is difficult to prepare good items at first attempt. More items, therefore, are prepared than the desired items in the final draft. As reliability of the test depends on the size of test, the first version of this test is included 60 items in multiple choice type.

Preparation of Table of Specifications (TOS)

Table of specifications is the last level of the planning of the test which acts as a guide for writing items for preliminary draft. The researcher wrote down his decision in the form of a table of specifications. TOS consists of 60 multiple choice questions which are shown in the Table 3.

Table 3 Table of Specifications for English Teaching Knowledge Test (First Draft)

No.	Name of the group	No.	Content	Item numbers		No. of items	Total	weight
				Lower Level (Remem-ber, Underst-and)	Higher Level (Apply, analyse, evaluate, create)			
1.	**Part I:** Language and background to language learning and teaching	1.	Grammatical terms	1	-	1	20	33.33 %
		2.	Lexical terms	2	-	1		
		3.	The uses of adverbs	3, 4	-	2		
		4.	Functions	5	-	1		
		5.	The phonemic symbols	6, 7	-	2		
		6.	Speaking skill	8	-	1		
		7.	Reading skill	-	9	1		
		8.	Learning styles	10	-	1		
		9.	Learner needs	11	-	1		
		10.	Learning strategies	-	12, 13	2		
		11.	Techniques for presenting new language	14	15	2		
		12.	Task types	16, 17	-	2		
		13.	Teaching approaches	18	19	2		
		14.	Assessment task	-	20	1		
2.	**Part II:** Lesson planning and use of resources for language teaching	1.	Main teaching focuses	21, 22	-	2	20	33.33 %
		2.	Main stage aims	-	23, 24	2		
		3.	Lesson plan headings	25	-	1		
		4.	Main focuses of assessment	-	26, 27	2		
		5.	The dictionary tasks	29	28	2		
		6.	Reference resources	30	-	1		

No.	Name of the group	No.	Content	Item numbers		No. of items	Total	weight
				Lower Level (Remem-ber, Underst-and)	Higher Level (Apply, analyse, evaluate, create)			
2.	**Part II:** Lesson planning and use of resources for language teaching	7.	Ways of using supplementary material	-	31, 32, 33	3		
		8.	Teaching aids	34, 35	-	2		
		9.	Activity aims	-	36, 37	2		
		10.	Problems with course books and solutions	-	38, 39, 40	3		
3.	**Part III:** Managing the teaching and learning process	1.	The teaching activities	41, 42, 43	-	3	20	33.33 %
		2.	Teacher's language and trainer's comment	-	44, 45	2		
		3.	Interaction patterns	46, 47	-	2		
		4.	Giving instructions	-	48, 49, 50	3		
		5.	Classroom situations and possible teacher actions	-	51, 52	2		
		6.	Correction techniques	53	-	1		
		7.	Classroom management problems and possible planning solutions	-	54, 55	2		
		8.	Teacher's role as a language resource and trainer's comments	-	56	1		
		9.	Ways of grouping learners	-	57, 58	2		
		10.	The kinds of feedback and feedback focus	59, 60		2		
Total				**29**	**31**	**60**	**60**	**100%**

Preparation of the Test

The task of preparation of English Teaching Knowledge Test is full of hard work and intelligence. It includes three steps:

(1) Item Writing

(2) Checking by experts

(3) Item Editing

Item Writing

At the initial stage, preliminary draft was prepared corresponding to three main content areas of English Teaching Knowledge Test TOS. This draft consists 60 items covering the major objectives of the test: lower order thinking skill (remember, understand) and higher order thinking skill (apply, analyse, evaluate and create). Items having similar contents were grouped at one place. Items were multiple types (i.e., every item is fed with three options in which one option was the most appropriate answer).

Checking by Experts

All items were evaluated and validated by 10 experts, 8 experts from Department of Educational Psychology, Yangon University of Education, 1 expert from Department of Methodology, Yangon University of Education, and 1 expert from Department of English, Yangon University of Education respectively.

Item Editing

According to the suggestions by experts, item numbers 9, 19, 25, 28, 34, 44 and 58 were modified and item number 11 was substituted with a new item. Revision in wording was made according to supervision and editorial review of these experts. Moreover, some experts suspected the readability level of the items. Therefore, the researcher decided to conduct examinees' review.

Administration of the Test

Pilot Testing

Piloting the test items was conducted to 5 ELT major students from final year, first semester in Yangon University of Education in February, 2019. This attempt was made to check the difficulty level and any language problem occurring in the construction of the test. All the students were given separate answer sheet on which they were supposed to write down the right answer (A or B or C) after giving the required instruction about the test. The tentative time allocation was one hour and fifteen minutes and time taken by every student was noted down. After the testing session, the examinees were invited for debriefing in which they were interviewed, and asked for comments on each item and suggestions for possible improvements. According to their comments and suggestions, item number 34 was modified and finalized the test for field testing.

Field Testing

Sixty multiple choice items were selected for field testing after pilot test had been conducted. Full-fledged field test was administered to 120 ELT specilised students from final year, first semester in Yangon University of Education in February, 2019. The time was allowed for one hour for 60 items.

Data Analysis and Findings

Data Analysis

The data obtained from all 120 student teachers were processed by TAP (Version 14.7.4) and then analysed. Scores were listed in descending order and the data were analysed in the following ways. Descriptive statistics were used by the researcher such as mean, median, z-score, stanine, skewness, kurtosis, percentage. Item analysis was mainly established by difficulty value and discriminating powers. Test reliability was then assessed by Kuder-Richardson's KR-20 formula.

Findings

Findings of English Teaching Knowledge Test are presented in different ways such as standard score, bar graph, stem-and-leaf display, tables, histogram and pie charts.

Standard Scores of the Test

Table 4 provides a summary of various standard scores. By nature of the type of scores, 50% of scores are below the mean, and 50% are above the mean. According to Table 4, the z-scores are greater than -3 and less than +3 and the values, therefore, are not extreme and the scores are not outliners. The histogram of Standard Scores of English Teaching Knowledge Test (First Draft) is shown in Figure 4.

Table 4   Standard Scores of English Teaching Knowledge Test (First Draft)

Raw Score	Frequency	z-score	Stanine	PR
46	2	2.34	9	99.2
44	2	1.98	9	97.5
43	3	1.81	9	95.4
42	3	1.63	8	92.9
41	3	1.46	8	90.4
40	2	1.28	8	88.3
39	1	1.11	7	87.1
38	7	0.93	7	83.8
37	10	0.76	7	76.7
36	5	0.58	6	70.4
35	4	0.41	6	66.7
34	9	0.23	6	61.3
33	8	0.05	5	54.2
32	12	-0.12	5	45.8
31	5	-0.3	4	38.8
30	9	-0.47	4	32.9
29	4	-0.65	4	27.5
28	6	-0.82	4	23.3
27	10	-1	3	16.7
26	5	-1.17	3	10.4
25	3	-1.35	2	7.1
24	2	-1.53	2	5
23	2	-1.7	1	3.3
21	1	-2.05	1	2.1
20	1	-2.23	1	1.3
17	1	-2.75	1	0.4
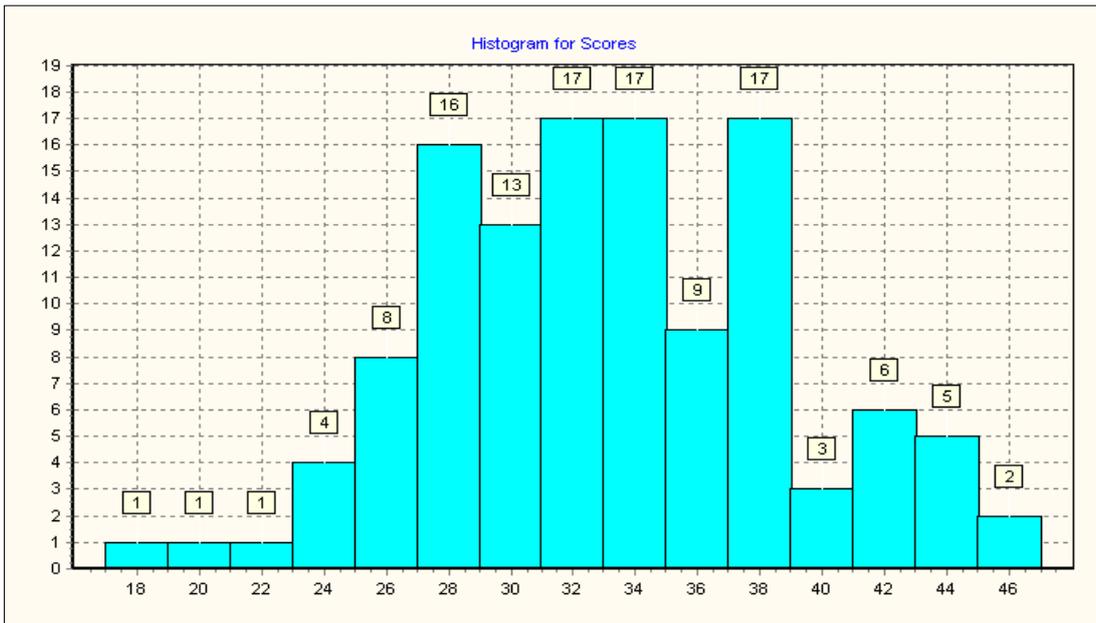
Figure 1 The Histogram of Standard Scores of English Teaching Knowledge Test (First Draft)

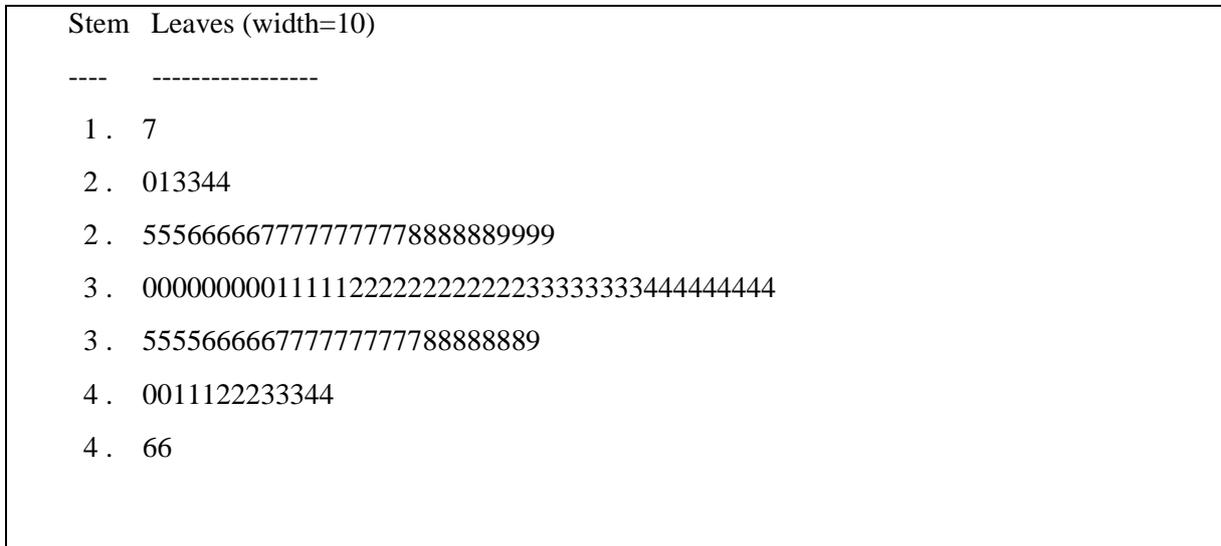**Bar Graph of Score Distribution of the Test**

The researcher has prepared the bar graph distribution of the score of English Teaching Knowledge Test of the total sample of 120 and the descriptive statistics were computed with the help of TAP software (version 14.7.4) and this is presented in Figure 2. According to test result, the highest score is 46, the score that most students answered correctly is 32, and the lowest score is 17. There is no one who got the score of 60 in the test.

```
Score  Count     Graph (each @ represents 1 case)
-------  -----     -------------------------------
17.00    1         @
18.00    0
19.00    0
20.00    1         @
21.00    1         @
22.00    0
23.00    2         @@
24.00    2         @@
25.00    3         @@@
26.00    5         @@@@@
27.00    10        @@@@@@@@@@
28.00    6         @@@@@@
29.00    4         @@@@
30.00    9         @@@@@@@@@
31.00    5         @@@@@
32.00    12        @@@@@@@@@@@@
33.00    8         @@@@@@@@
34.00    9         @@@@@@@@@
35.00    4         @@@@
36.00    5         @@@@@
37.00    10        @@@@@@@@@@
38.00    7         @@@@@@@
39.00    1         @
40.00    2         @@
41.00    3         @@@
42.00    3         @@@
43.00    3         @@@
44.00    2         @@
45.00    0
46.00    2         @@
```

Figure 2 Bar Graph of Score Distribution for the Test (First Draft)

Steam-and-Leaf Display of Score Distribution for the Test

A stem-and-leaf plot puts data into groups (called stems) so that the values within each group (the leaves) branch out to the right on each row. Figure 3 provides the score distribution of the steam-and-leaf plot for the test. In the graph, while the lowest score is 17 and the number of student who got this is only one, the number of students who got the highest score 46 out of 60 are 2. Therefore, having not many students who got lowest and highest score is one of the characteristics of a good test. To support this statement, the number of students who got score of 25 to 39 centred in the graph and it can be said that the test is suitable for all levels of students.

```
    Stem   Leaves (width=10)

    ----      ----------------

     1 .   7

     2 .   013344

     2 .   5556666677777777778888889999

     3 .   00000000011111222222222222233333333444444444

     3 .   55556666677777777777788888889

     4 .   0011122233344

     4 .   66
```

Figure 3 Steam-and-Leaf Display of Score Distribution for the Test (First Draft)

Examinee Score Summary of the Test

It is observed from Table 5 that mean score is 32.692 and median score is 32 and the data are, therefore, symmetric as the mean and median score are similar. Moreover, M. G. Bulmer., [*Principles of Statistics* (Dover, 1979)] stated that if the skewness is between -0.5 and +0.5, it is approximately symmetric. The skewness for the present test is 0.081 and it can be said that it is approximately symmetric. For the normal probability curve the value of kurtosis is 0.263. The obtained value of kurtosis is − 0.214. Therefore, it is concluded that the obtained distribution is slightly leptokurtic.

Table 5 Examinee Score Summary of the Test (First Draft)

Number of Examinees	**120**
Total Possible Score	60
Minimum Score	17
Maximum Score	46
Median Score	32
Mean Score	32.692
Standard Deviation	5.699
Variance	32.480
Skewness	0.081
Kurtosis	-0.214

Difficulty Value

Item difficulty is the percentage of students that correctly answered the item, also referred to as the P value. The range is from 0% to 100%, the higher the value, the easier the item. P values above 0.90 are very easy items and might be a concept not worth testing. P-values below 0.20 indicate difficult items and should be reviewed for possible confusing language or the contents needs re-instruction. Optimum difficulty level is 0.50 for maximum discrimination between high and low achievers. Generally, items of moderate difficulty are to be preferred to those which are much easier or much harder. The difficult indices were analysed using the Henning (1987) guidelines as shown in the Table 6.

**Table 6 Henning's Guidelines of Difficulty Value**

High Difficult	Medium	Low (Easy)
≤ 0.33	0.34 ~ 0.66	≥ 0.67

Based on the Henning's Guidelines in the above table, the 60 test items categorized in Table 7.

Table 7 Distribution of Difficulty Value of Items of the Test (First Draft)

Level of Difficulty	Items	Total
High (≤ 0.33)	13, 41, 54, 57	4
Medium (0.34 ~ 0.66)	1, 3, 4, 5, 7, 9, 10, 11, 12, 14, 15, 17, 18, 19, 20, 22, 23, 25, 26, 28, 29, 31, 32, 33, 34, 35, 37, 38, 42, 43, 44, 45, 47, 48, 49, 50, 51, 52, 55, 56, 58, 59, 60	43
Low (Easy) (≥ 0.67)	2, 6, 8, 16, 21, 24, 27, 30, 36, 39, 40, 46, 53	13
Total		60

In order to see more clearly, the distribution of difficulty value of first draft of the test is presented by pie chart in Figure 4.
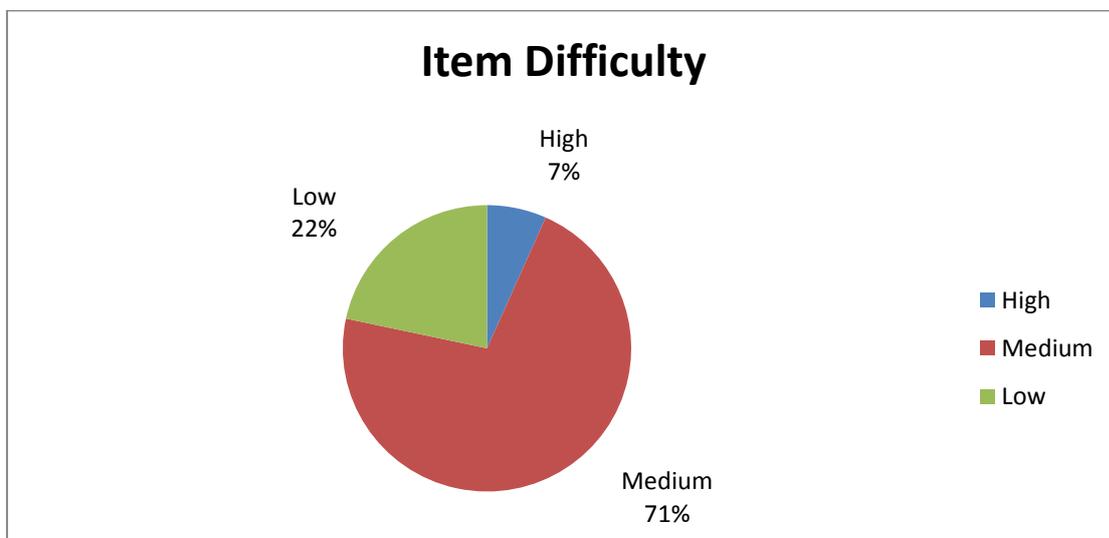
Figure 4   Pie Chart of the Distribution of Difficulty Value of the Test (First Draft)

Discrimination Power

Discrimination Power of an item may be defined as the extent to which success and failure on that item indicates the possession of the trait or achievement being measured (Marshall

and Hales, 1972). Ebel's (1979) criteria and guidelines for categorizing discriminating indices (see Table 8) is a widely quoted set of guidelines and, therefore, were used in this analysis.

**Table 8 Ebel's Guidelines (1979) of Discriminating Powers**

Discriminating Powers	Description
0.40 and above	The item is functioning quite satisfactorily
Between 0.30 ~ 0.39	Little or no revision is required
Between 0.20 ~ 0.29	The item is marginal and needs revision
≤ 0.19	The item should be eliminated or completely revised

Based on the Ebel's guidelines in the above Table, the 60 items categorized as in Table 9.

Table 9 Distribution of Discriminating Powers of Items of the Test (First Draft)

Discriminating Powers	Items	Total	Remarks
0.40 and above	3, 8, 15, 24, 26, 47, 50, 52, 59	9	Very good items
Between 0.30 ~ 0.39	1, 12, 19, 21, 29, 35, 39, 40, 42, 45, 49, 58,	12	Reasonably good items
Between 0.20 ~ 0.29	16, 23, 27, 28, 31, 33, 37, 43, 46, 51, 53, 57, 60	13	Need improvement
≤ 0.19	2, 4, 5, 6, 7, 9, 10, 11, 13, 14, 17, 18, 20, 22, 25, 30, 32, 34, 36, 38, 41, 44, 48, 54, 55, 56	26	Very poor items
Total		60	

The distribution of discriminating powers of first draft of the test is presented by pie chart to see more clearly in Figure 5.
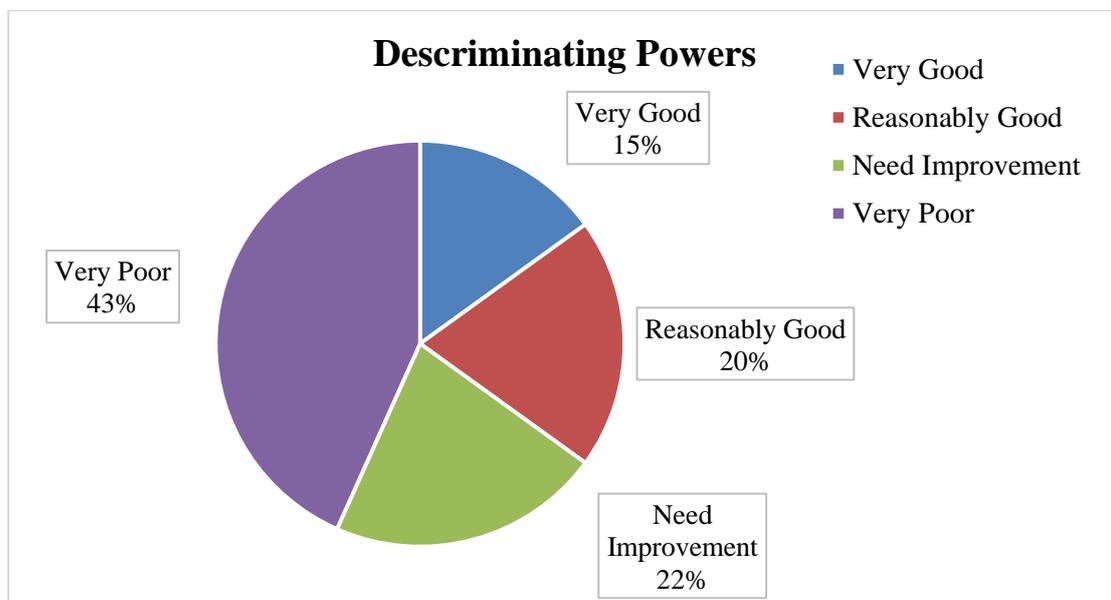
Figure 5   Pie Chart of the Distribution of Discriminating Powers of the Test (First Draft)

Table 10 Item Analysis of the Test (First Draft)

		Level of Difficulty			
		High (≤ 0.33)	Moderate (0.34~0.66)	Low (≥ 0.67)	Total
Discriminating Index	0.4 and above		3, 8, 15, 26, 47, 50, 52, 59	24	9
	Between 0.30 ~ 0.39		1, 12, 19, 29, 35, 42, 45, 49, 58	21, 39, 40	12
	Between 0.20 ~ 0.29	57	23, 28, 31, 33, 37, 43, 51, 60	16, 27, 46, 53	13
	≤ 0.19	13, 41, 54	4, 5, 7, 9, 10, 11, 14, 17, 18, 20, 22, 25, 32, 34, 38, 44, 48, 55, 56	2,6, 30, 36	26
Total		4	44	12	60

Final Draft of English Teaching Knowledge Test

　　　　Final drafting is prepared on the basis of item analysis. After careful considering which items were accepted and eliminated, the researcher selected the items for final test and re-arranged them in accordance with the principles laid down by experts. The final draft of English Teaching Knowledge Test consists of 45 items and presented in Table 11 and its Table of Specifications is shown in Table 13.

Table 11　Distribution of Discriminating Power and Difficulty Values of Items of the best (First Draft)

		Level of Difficulty			
		High (≤ 0.33)	Moderate (0.34~0.66)	Low (≥ 0.67)	Total
Discriminating Index	0.4 and above		3, 8, 15, 26, 47, 50, 52, 59	24	9
	Between 0.30 ~ 0.39		1, 12, 19, 29, 35, 42, 45, 49, 58	21, 39, 40	12
	Between 0.20 ~ 0.29	57	23, 28, 31, 33, 37, 43, 51, 60	16, 27, 46, 53	13
	≤ 0.19	54	4, 5, 11, 17, 18, 20, 32, 34	2, 6	11
Total		2	33	10	45

　　　　The above result can be summarized as Table 12, in which the percentage of good, fair and poor items can clearly be seen. From the test, 55.56% of items are good, 20% are fair and 24.44% are modified. 25 items out of 45 are good, 9 are fair and 11 are modified respectively. To have better understanding, percentage of difficulty value and discriminating index for 45 items is shown by pie chart in Figure 6.

Table 12 Percentage of Difficulty Value and Discriminating Index for 45 Items

Item Quality	Item Numbers	Total Number of Items	Percentage of Items
Good	3, 8, 15, 26, 47, 50, 52, 59, 1, 12, 19, 29, 35, 42, 45, 49, 58, 23, 28, 31, 33, 37, 43, 51, 60	25	55.56%
Fair	24, 21, 39, 40, 16, 27, 46, 53, 57	9	20%
Modified	54, 4, 5, 11, 17, 18, 20, 32, 34, 2, 6	11	24.44%
Total		45	100%
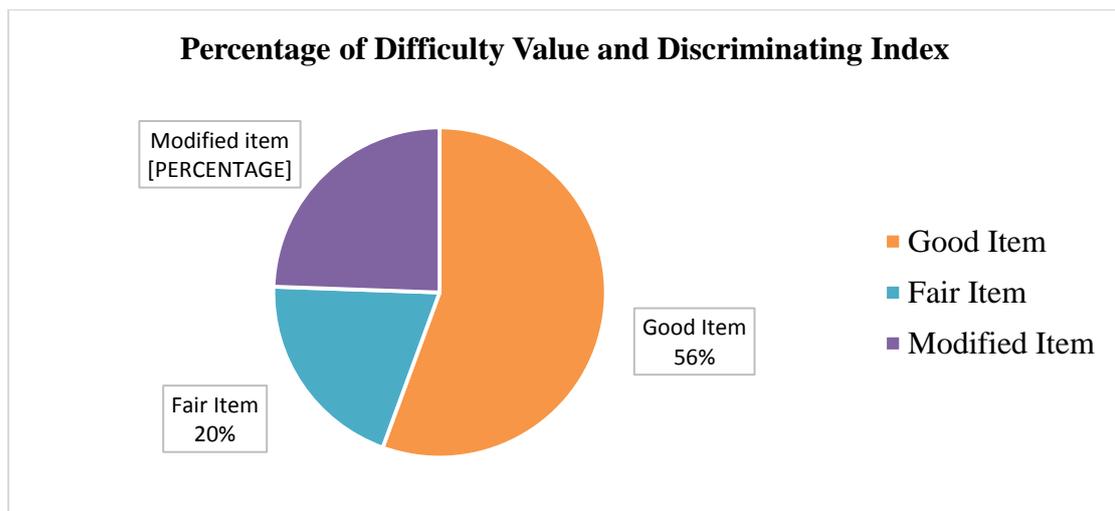
Figure 6   Percentage of Difficulty Value and Discriminating Index for 45 Items

Table 13   Table of Specifications for the Final Draft of English Teaching Knowledge Test

No.	Name of the group	No.	Content	Lower Level (Remem-ber, Underst-and)	Higher Level (Apply, analyse, evaluate, create)	No. of items	Total	weight
1.	**Part I:** Language and background to language learning and teaching	1.	Grammatical terms	1	-	1	15	33.33 %
		2.	Lexical terms	2	-	1		
		3.	The uses of adverbs	3, 4	-	2		
		4.	Functions	5	-	1		
		5.	The phonemic symbols	6	-	1		
		6.	Speaking skill	7	-	1		

No.	Name of the group	No.	Content	Item numbers		No. of items	Total	weight
				Lower Level (Remem-ber, Underst-and)	Higher Level (Apply, analyse, evaluate, create)			
		7.	Learner needs	8	-	1		
		8.	Learning strategies	-	9	1		
		9.	Techniques for presenting new language	-	10	1		
		10.	Task types	11, 12	-	2		
		11.	Teaching approaches	13	14	2		
		12.	Assessment task	-	15	1		
2.	**Part II:** Lesson planning and use of resources for language teaching	1.	Main teaching focuses	16	-	1	15	33.33 %
		2.	Main stage aims	-	17, 18	2		
		3.	Main focuses of assessment	-	19, 20	2		
		4.	The dictionary tasks	21	22	2		
		5.	Ways of using supplementary material	-	23, 24, 25	3		
		6.	Teaching aids	26, 27	-	2		
		7.	Activity aims	-	28	1		
		8.	Problems with course books and solutions	-	29, 30	2		
3.	**Part III:** Managing the teaching and learning process	1.	The teaching activities	31, 32	-	2	15	33.33 %
		2.	Teacher's language and trainer's comment	-	33	1		
		3.	Interaction patterns	34, 35	-	2		
		4.	Giving instructions	-	36, 37	2		
		5.	Classroom situations and possible teacher actions	-	38, 39	2		
		6.	Correction techniques	40	-	1		

Standardization of English Teaching Knowledge Test

Forty-five (45) items constituted the final form of English Teaching Knowledge Test. The test was further standardized by validation of the test that included establishing reliability and validity.

Reliability of the Test

Reliability of the present study was measured by KR-20 Method (Kuder-Richardson Method). General Guideline for interpreting reliability of the test are mentioned in Table 14.

Table 14   General Guidelines for Reliability Interpretation

Reliability coefficient value	Interpretation
0.90 and up	excellent
0.80 ~ 0.89	good
0.70 ~ 0.79	adequate
below 0.70	may have limited applicability

The reliability of the first draft test was 0.597 and it was limited to apply. After items were analysed by TAP (Test Analysis Program, version 14.7.4) and some poor items were discarded so the reliability of final draft was 0.7. This shows that English Teaching Knowledge Test has high reliability.

Validity of the Test

There are different methods of estimating validity such as face validity, content validity, construct validity, predictive validity and concurrent validity. The researcher opted for content validity in this study. The content validity is concerned with the relevance of the contents of the items, individually and as a whole. In which expert judgment was taken into consideration. To estimate content validity of English teaching knowledge test, test was given to 10 experts to compare test items with the content and objectives of content. The experts agreed with the researcher with the distribution of content and objective of the content as well as with the scoring scheme. In this way content validity of English Teaching Knowledge Test was established.

Conclusion and Suggestion

Conclusion

Teaching and learning pedagogy of TEFL in Myanmar's classroom are focused on lecturing for being teacher-centred. It is claimed in this study that such educational problem may explain a lack of English teaching knowledge in most teachers of English. For this reason, the researcher was interested in developing English Teaching Knowledge Test in order to promote student teachers' knowledge of teaching English and to evaluate their performance. This research aimed to develop and produce a reliable and valid English Teaching Knowledge Test for student teachers.

The test was standardized on the sample of 120 students studying in final year, first semester, Yangon University of Education. Theoretical and empirical literature related to the study was reviewed. The reliability of the test was determined through KR-20 method of reliability which was 0.7 and content validity of the test was estimated. Hence, the constructed English Teaching Knowledge Test has a high reliability and validity. The test can be used by the

teacher educators, teacher trainers and mentors to assess pre-service and in-service teachers' knowledge of teaching English. From this study, ETKT test will be beneficial for student teachers in developing their knowledge about teaching English. Nevertheless, the above results indicated that the test should have to be improved more for higher validity and reliability.

Suggestion

It is highly recommended that examining multiple choice items should employ the use of other effective statistics in test development validation processes. In this paper, the development of English Teaching Knowledge Test is restricted to student teachers from final year, first semester, Yangon University of Education. As a further research, it, therefore, should be developed the test with other universities of education and education colleges. As time is restricted in this study, small amount of items were used and could not have parallel forms or sub-test. Moreover, the content may not be covered enough to test knowledge of student teachers in teaching English because the test included only 60 items first draft and 45 items in final. Therefore, many items should be written and prepared for testing based on the content and students' language proficiency level.

For the teacher educators and teacher trainers, this test should be used to help them to evaluate the quality of Teaching English Courses in their universities. Additionally, it would help them to look into the areas that they are good at and that they need to improve not only for their teaching method but also for their students' future teaching practices. If they have a good command of developing tests, they are strongly recommended to construct Teaching Knowledge Test for other fields such as teaching mathematics, teaching science, etc.

In order to improve educational test and measurement in Myanmar, more modernized and systematic testing system and procedure should be applied. It is hoped that future researcher should reflect the present study and improve some items as necessary and then can apply for their future researches. Furthermore, a way of developing Teaching Knowledge Test and its trends are presented in this paper so that the new researchers or unexperienced researchers in developing tests can be used as their reference for upcoming researches.

Finally, policy makers in education should be advocated by this study that developing a standardized test for teachers plays a vital role in promoting teacher education and professional development of teachers. Likewise, teaching knowledge tests can even be used as a standardized norm for teacher certification and quality assurance.

References

Borg, S. (2006). The distinctive characteristics of foreign language teachers. *Language Teaching Research,* 10(1), 3-31.

Bukova-Guzel, E. (2010*).* An investigation of pre-service mathematics teachers' pedagogical content knowledge, using solid objects. *Scientific Research and Essays,* 5, 1872-1880.

Cochran-Smith, M., & Zeichner, K. M. (2005). *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah, NJ: Erlbaum.

Darling-Hammond, L., & Bransford, J. (2007). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass.

Ebel, R.L. (1979). *Essentials of educational measurement* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Freeman, D., Katz, A., Gomez, P. G., & Burns, A. (2015). English-for-teaching: rethinking teacher proficiency in the classroom. *ELT Journal*, 69(2), 129–139, doi: 10.1093/elt/ccu074

Grossman, P. (1990). *The making of a teacher. Teacher knowledge and teacher education*. Teachers College Press, Columbia University, New York.

Shulman, L.S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review,* 57(1), 1-22.