

Item Analysis Report

Date of Exam Administration: 2024.11.20

Date of Item Analysis Report: 2024.11.22

Test: TESOL Fall 2024 Final Examination

Instructor: C. Hurst

Scope: Objective Items (1-30)

Data:

Item Number	Correct	Incorrect	Other	p-value
Multiple Choice				
1	21	2	1 (multiple marks) 1(answer choice 1 of 2 correct)	.84
2	19	1	5(answer choice 1 of 2 correct)	.76
3	17	7	1(multiple marks)	.68
4	23	2	0	.92
5	22	3	0	.88
6	21	4	0	.84
7	18	7	All but 1 incorrect answer marked 'assessment'	.72
8	15	10	0	.60
9	23	1	1(marked choice half correct)	.92
10	5	19	1 unmarked	.20
11	20	5	0	.80
12	19	6	0	.76
13	3	14	7(marked choice half correct)	.12
14	21	4	0	.84
15	15	9	1(multiple marks)	.60
Matching				
1.1	21	2	2(marked a choice for a related word)	.84

1.2	15	1	9(marked a word with the same suffix)	.60
1.3	19	6	0	.76
1.4	3	4	2(marked choice for most closely related word) 16(marked choice for most closely related word and reversed these two choices phonics for phonology and vice versa)	.12
1.5	3	4	2(marked choice for most closely related word) 16(marked choice for most closely related word and reversed these two choices phonics for phonology and vice versa)	.12
2.1	20	5	0	.80
2.2	19	6	0	.76
2.3	20	5	0	.80
2.4	18	7	0	.72
2.5	19	6	0	.76
3.1	21	4	0	.84
3.2	16	9	0	.64
3.3	21	4	0	.84
3.4	20	5	0	.80
3.5	15	10	0	.60
Average p-value of test items				.63

Results of Item Analysis

Average p-value is 0.63, acceptable for norm-referenced testing as near the cut score of 60% here at Tianhua, however, 4 specific items have a p-value below .25 and therefore merit specific consideration with regard to validity.

Item 10:

Content of the item:

“IPA Stands for:

- a. International Phoneme Association
- b. Integrative Physical Argument

- c. International Phonology Association
- d. International Phonetic Alphabet”

Question rationale: Students were provided with instruction, advice, and materials to support phonics instruction preparation, including the IPA chart. PPTs, lectures, and handouts covered the use of the International Phonetic Alphabet as a tool to support phonemic analysis of target language for phonics instruction. Many students already know the phonetic symbols and can use their pre-existing knowledge to support accurate phonics instruction by checking their impressions of how to segment words through online phonetics websites and can streamline their instructional presentation and increase efficacy of instruction by grouping target language together according to shared phonemic patterns (one main rationale of phased phonics instruction). The rationale for the question was to recall and confirm existing knowledge of tools of teaching. This was intended to be an easy question and a confidence booster.

Question structure: Simple definitional stem, 2 similar distractors.

Analysis and Discussion: The question was unintentionally difficult due to the visual and linguistic similarity of the distractors and the correct answer. Given these are L2 students new to TESOL concepts, this question was not intended to force fine differentiation and the design was flawed in underestimating the confusability of the options for L2 speakers. That most had the general idea is confirmed by the fact that none chose the unrelated option. That the question was poorly designed to reward actual knowledge of the IPA and its use is confirmed anecdotally by the fact that specific students who have shown competence in using IPA for language analysis (e.g., Bevan), did not answer this item directly.

Assessment & Recommendations

It is recommended that this item be removed from scoring and discarded for future administrations of the test due to its low p-value as per best practices in scoring initial MCQ test administrations. (Kehoe, 1995)

Item 13

Content of item:

“Compared to learning to speak, learning to read and write in L1 (one’s native language) is:

- a. Much easier and develops without explicit instruction
- b. Much more complex and develops only with explicit instruction
- c. About the same and develops at the same time as children learn to speak, with or without explicit instruction
- d. Much more complex, but will develop without explicit instruction”

Question rationale:

An essential tenet of early years learning, supported by extensive research, is that explicit instruction is necessary for most readers to achieve literacy and that explicit phonics, decoding, and reading instruction benefits *all* learners. Lectures, PPTs, discussions, and materials all emphasized the idea that children speak before they learn to read and students were able, in class, to explain why explicit instruction would thus be needed for most to achieve literacy. Students showed understanding of the challenges involved in moving from speech to writing and reading and the order and concepts of instruction in this area. This question was meant to confirm students' expressed understanding and was not intended to be particularly challenging; instead it was meant to solidify understanding for practice.

Question structure: Stem is a comparative proposition with high grammatical complexity (fronted adverbial) followed by 2 like distractors, two opposite answers

Analysis and discussion:

Reviewing the item lexis and structure, several problems are apparent. The stem itself is grammatically complex and contains a parenthetical. Students may not have noticed the L1 caveat, or may have not clearly understood the L1/L2 differentiation as this was taught but not targeted as a focus term. Further, anecdotal discussion with L2 speakers reading the question confirm that 'explicit' may be an unfamiliar vocabulary item. 7 students with strong overall performance chose an incorrect option, but one with the correct "Much more complex. . ." initial language, highlighting the possibility that 'explicit instruction' was unclear.

Assessment & Recommendations:

The item was poorly designed to capture the target information from the test taker, requiring additional above-level grammatical competence and lexis and well as an unintentionally tested concept, "explicit instruction." Instruction should focus on the meaning of this term in the future to ensure it is clear. The item should be revised for future administrations and removed from scoring for current test.

Items II.1.4 & II.1.5

Content of item:

Part of a five-part matching question.

- | | |
|---------------|--|
| "4. Phonology | . . . E. Study of language sounds |
| 5. Phonics | . . . C. a method of teaching reading by systematically teaching grapheme-phoneme correspondences" |

Question rationale: Phonics instruction is a major focus of the course because most of the cohort stated in their Student Survey that they plan to work in the Early Years/Kindergarten setting. Almost every student successfully demonstrated phonics instruction techniques during their teaching demonstration, and they demonstrated content knowledge by asking and answering questions about phonics segmentation, blending, and decoding in our discussions and activities. This item was intended to reinforce terminology and the other two matching sections apparently did so, with high p-values for the five-part sets in Part 2(1-5) and Part 3(1-5).

However, there was an inconsistently low p-value of 0.12 for the items PII1.4 & PII1.5. In particular, chosen options were reversed, with 16 students reversing the two words, i.e., knowing that both relate to phonology but just being unclear which refers to the teaching method and which to language sounds and their study more generally. The focus of the item was intended to be conceptual and such fine lexical differentiation required of L2 learners in first-year was not the optimal structure. That more easily distinguishable terms were learned by the majority of students is reflected in the average to high p-values for the other items in the matching section. The results for these two items are outliers among the group of matching questions.

Assessment and recommendations:

These items could be awarded full or partial credit for reversed answers to reward students' ability to differentiate these terms from the others in the list that are unrelated to phonology. Alternatively, both PII1.4 and PII1.5 could be excluded from scoring. Future administrations should use a format in which such closely related terms are tested separately. Instruction should focus more on explicit explanations of endings such as 'ology' to help future students quickly identify and add many key words to their professional lexicon.

Conclusion

While the test as administered appears overall to be a valid measure of students' knowledge, there is room for improvement in item construction to bolster student performance and satisfaction, and to reflect and differentiate more precisely the specific content of students' knowledge. Likewise, adjusting pre-assessment instruction to address the specific linguistic needs demonstrated on this examination, and to ensure all key terminology is cyclically reviewed during the term would promote optimal outcomes.

