Student-centred cloze: A New Tool for Measuring EFL Reading Comprehension?

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ABSTRACT

Cloze procedure, originally intended for a totally different purpose, is one of the measurement tools widely used and experimented upon by testing scholars in the field of EFL/ESL. Based on correlational studies between cloze test results and those of others mainly including language proficiency and reading comprehension, and motivated by the simplicity with which cloze tests are constructed, administered and scored, such tests have so conveniently been proposed to replace reading or proficiency tests. The history of cloze testing has also seen various versions from Taylor's (1953) original version (often termed standard, regular or classical) to numerous sorts of rational cloze. This study introduces a new cloze version, termed student-centred cloze and reports the findings of a quantitative study on such a cloze as a measure of EFL reading comprehension as measured by FCE and CAE Reading Papers with 53 Iranian EFL learners. While correlational validation confirms student-centred cloze as a valid measure of reading comprehension, arguments are made against such correlational validation at the end of the paper.

Keywords: cloze procedure; student-centred cloze; reading tests; Iranian EFL learners; correlational validation

INTRODUCTION

Taylor (1953, p. 415) introduced cloze procedure as 'a new psychological tool for measuring the effectiveness of communication' and defined it as follows:

A method of intercepting a message from a 'transmitter' (writer or speaker), mutilating its language patterns by deleting parts, and so administering it to 'receivers' (readers or listeners) that their attempts to make the patterns whole again potentially yield a considerable number of cloze units. (p. 416)

Carroll, Carton and Wilds (1959, p. 5) attribute cloze to a German psychologist called Ebbinghaus (1897). According to Klein-Braley and Raatz (1984, p. 134), cloze procedure emerged from 'Spolsky's "postmodern" trend in language testing' and 'the inclusion of a close [sic.] test in a study was viewed as a guarantee of quality since these tests had acquired the reputation of being automatically reliable and generally valid' (p. 135). Spolsky (2000, p. 545) believes that cloze was first introduced by Raymond (1951).

Whatever the exact origin of cloze, much has been said and written on what it is that cloze does. Cloze has been used for various purposes like measuring text readability, language proficiency and reading comprehension, but the fact is that nobody knows what cloze tests measure (Lee 1985; Sadeghi 2003). Apart from being used in high-stakes tests as CAE (Certificate in Advanced English), cloze tests are currently used mainly as research tools for testing listening comprehension (Huang, Liu & Gao 2005), reading comprehension (Cunha & dos Santos 2007; Friedman & Hoffman-Goetz 2007; Miller, DeWitt, McCleeary & O'Keefe 2009; Schmitt & Sha 2009; Sharp 2009; Ulusoy 2008),

proficiency (Keshavarz & Salimi 2007), collocational knowledge (Keshavarz & Salimi 2007; Stuart & Eve 2009), math kills (Pony, Duhon, Lee & Key 2010), plagiarism (Torres & Roig 2005), translation (Ito 2004) as well as a pedagogical tool (Dastjerdi & Talebinezhad 2006; Lee 2008).

For the ease with which cloze tests are constructed and administered and because of relatively strong correlations cloze test results have shown with other language measures, a good number of scholars have opted for cloze-related experimentation and indeed more has been done and reported than needed on trying to understand what cloze procedure is or what it measures. Research on cloze has moved beyond the classical standard cloze and many versions or modifications to cloze have been offered and experimented upon. The last terminology added to cloze literature is phrase cloze, in which rather than deleting single words from the passage, whole phrases are removed -- the findings of the relevant research study by the author appears somewhere else (Sadeghi, forthcoming). This paper is an extension to that publication and intends to add still one more terminology to the long list of cloze types. Namely, it is the purpose of this piece of research to formally introduce student-centred cloze, explain how it is constructed and scored, and report the findings of an experiment on this type of cloze. More specifically, the present work seeks answers to the following two research questions:

- 1. Is there any relationship between student-centred cloze and EFL reading comprehension as measured by FCE (First Certificate in English) reading paper?
- 2. Is there any relationship between student-centred cloze and EFL reading comprehension as measured by CAE (Certificate in Advanced English) reading paper?

The above questions were answered in the form of null-hypotheses, and the related null-hypotheses were tested at the probability levels of 0.01 and 0.05:

- 1. There is no relationship between student-centred cloze and EFL reading comprehension as measured by FCE (First Certificate in English) reading paper.
- 2. There is no relationship between student-centred cloze and EFL reading comprehension as measured by CAE (Certificate in Advanced English) reading paper?

TYPES OF CLOZE TESTS

The original version of cloze in which deletions are made on a random basis or on an every *n*th order has been termed standard cloze, any-word cloze (Rankin 1970; Weaver and Bickley 1977), natural cloze (Ramanauskas 1972), pseudo-random cloze (Alderson 1979), fixed-ratio cloze (Bachman 1982), classical cloze (Klein-Braley 1983; Klein-Braley & Raatz 1984), traditional cloze, regular cloze (Levenston et al. 1984), random cloze, mechanical deletion cloze (Markham 1987), completion cloze (Hale et al., 1989), and fixed-interval cloze (Spolsky 2000).

Rational cloze is a name attributed to any kind of cloze test in which deletions are based on a non-mechanical criterion. The first researcher to experiment with rational cloze test may have been Greene (1965) who used the term modified cloze. Greene (1965) found that modified cloze produced more variance, and thus was a more reliable test with better item characteristics whereby very easy or very difficult items were fewer. According to Markham (1987), in rational cloze tests, only content words (such as substantives, verbs, and modifiers) are deleted. Rational cloze tests as 'professionally developed' tests are in general intended to measure high-order reading processing by fine-tuning the items (Storey 1997). More recently, rational cloze procedure has been used not for the purpose of assessment but for integrated instruction of reading, writing and vocabulary as well as teacher-student

interaction in ESL (Lee 2008).

In Ozete's (1977) two-choice cloze or modified cloze, an attempt is made to reduce the interruption in the reading process by removing the writing factor. In the three-choice cloze or maze used by Pikulski and Pikulski (1977), two wrong choices are selected such that one is syntactically correct but semantically inappropriate and the other one is both semantically and syntactically incorrect. A cloze type called Sel Del Gap test or selected deletion gap-filling test was suggested by Bensoussan and Mauranen (1988) in which particular cohesive elements in the text are deleted to measure the reader's sensitivity to cohesive links and his/her understanding of macro-level text structures (cited in Bensoussan 1990: 26). To test whether context before a cloze item affects performance, Brown (1983) conducted an experiment with EFL students in which he designed a cloze test with 50 items and administered it to two groups of subjects. One group sat for the test in the normal way; while with the other group, after each subject gave his/her answer to an item, the correct answer was revealed. Brown (1983, p. 247) called the first cloze type independent-item cloze and the second type dependentitem cloze. Another type of rational cloze, developed by Deves (1984) and Levenston et al. (1984), is discourse cloze. In discourse cloze, deletions are based on elements that mark the relationships between ideas and propositions in the text, such as cohesive ties and discourse markers (Coniam 1993; Levenston et al. 1984).

Brown (1988a) piloted a text of 399 words with 50 deletions to a group of 89 EFL learners. Initially, all students received a 7th deletion rate cloze and after 6 weeks, four other versions of the same text with the same deletion rate but different starting points were administered to the same subjects in groups of 22 to 23. Finally, 50 'best' items out of a total of 250 items were selected, based on item facility and item discrimination indices. The cloze test was reconstructed deleting these 50 items and was called tailored cloze. The student-centred cloze introduced here can be compared to tailored cloze in that the choice of blanks is affected by text-reader's choice. There are, however, important differences between the two as will be clarified later.

Semantic cloze is a multiple choice version of cloze developed by Mauranen (1989) to avoid productive skills and make scoring as objective and as quick as possible (p. 337). In semantic cloze, the focus is on 'direct measurement of the comprehension of meaning and higher range (macro level) items' (p. 341). Aimed at testing non-native English speakers' understanding of text redundancy and cohesion, cohesion cloze was introduced by Bensoussan (1990). In cohesion cloze, subjects are required to fill in the blanks using the words in the text, and blanks appear wherever redundancy allows, which means that there can be a single word or a whole paragraph between two blanks (p. 26).

Summary cloze is another version of rational-deletion cloze widely used in Hong Kong (Coniam 1993; Storey 1997). Summary cloze, which was once a part of the IELTS, is based on a text which students read in full before doing the cloze. The cloze test itself is supposed to be a summary of the original text, and its completion is expected to show the degree of comprehension of the original text. Summary cloze, also called paraphrasing cloze, is intended to test comprehension indirectly, objectively, and at discourse level (Coniam 1993, p. 2-3).

Oral cloze is the name for the spoken version of cloze procedure. In oral cloze, the subject listens either to a tape in which a passage is read out in cloze format with pauses when actual blanks occur, or to a person reading the text live. Oral cloze tests have also been called auditory cloze tests. Ulusoy (2010) used such ACT's (auditory cloze tests) to determine the listening ability level of students from Ankara while listening to the Internet Radio programs.

Considering cloze an invalid measure of EFL language proficiency, Klein-Braley and Raatz introduced a similar method in 1981 called C-test based on 'the rule of 2'. In these kinds of tests, the second part of every second word is deleted. Pino and Eksenazi (2009) experimented with a similar sentence-level open cloze in which they provided the candidates with blanked sentences where the first few letters were given as a hint to help candidates restore the missing word.

Cloze-elide, a strange form of cloze, is constructed not by deleting words from the text but by inserting extraneous words at random positions in the text and asking the subjects to detect them (Manning, 1987). Sentence-completion tasks are similar to cloze in that there are blanks to be completed as there are in cloze tests. While the former tests are constructed to measure one's discretepoint knowledge of certain items, and the sentences may be in no way connected to each other, in cloze tests, whole sequence of sentences forms a coherent piece of discourse.

The fact is that since a cloze test is based on a reading passage, all varieties of cloze test designed and experimented upon by different researcher so far have regarded cloze tests primarily as measures of reading comprehension (as well as other language-related abilities). This study sought to discover whether a new form of cloze test, labelled student-centred cloze here, can function as a test of reading comprehension or not, and if such a test does not measure reading comprehension, what other constructs it may be measuring. Accordingly, the validity of student-centred cloze as a measure of reading comprehension was investigated in this study from the perspective of both criterion-referenced validation and text analysis, i.e., the nature of the words deleted in such a cloze test.

METHODOLOGY

PARTICIPANTS

Fifty three candidates participated in this study. They were all university students majoring in English Language and Literature at Urmia University, Iran. 34 students took the FCE Reading Paper as well as the FCE-related student-centred cloze and 19 candidates sat CAE Reading Paper along with the relevant student-centred cloze. FCE takers were all freshmen and a few sophomores (as relatively lower proficient group) and most CAE takers were juniors and seniors (as relatively higher proficient group). All participants spoke Farsi as L2, English as the foreign language, and apart from 8 in FCE group and 3 in CAE group who spoke Kurdish as L1, all others had Azeri as their first language. Table 1 below shows the characteristics of the participants in the study.

Characteristics		Gender			Age	
Tests	Ν	М	F	Unknown	Mean	range
FCE Reading Paper/FCE-based student-centred cloze	34	10	22	2	20.32	22
CAE Reading Paper/CAE-based student-centred cloze	19	6	13	0	22.94	8

TABLE 1. Characteristics of the participants in the study

FCE: First Certificate in English

CAE: Certificate in Advanced English

INSTRUMENTS

Two student-centred cloze-tests were constructed as explained below and used along with Reading Papers of FCE and CAE. The reason why FCE and CAE reading papers were used as criterion measures in this study rather than reading sections of IELTS or TOEFL was based on a pilot study which proved IELTS to be too difficult for our candidates and TOEFL to be less valid than Cambridge ESOL exams such as FCE and CAE for our purposes (Sadeghi, 2003). Because FCE is relatively easier than CAE, it

was used for the first year and low-level university students, and since CAE is relatively more difficult, it was administered to more advanced candidates (juniors and seniors).

In order to make a cloze test which would be comparable in difficulty to the reading comprehension texts of FCE and CAE, several options were tested. The researcher was certain that whatever method was going to be used, no text could be found with the same real difficulty level as the one in the criterion test. It was decided therefore that the best solution was to use the same passages used for the criterion reading tests (the passages used for FCE and CAE Reading Papers) for student-centred cloze tests. In such a case, the cloze passages were exactly the same as those used in the reading tests and the results were conveniently comparable. Of course, if the reading tests were to be taken before the cloze tests, there would have been a strong carry-over from the reading tests to the cloze tests. However, this potential danger was avoided by administering the cloze tests prior to the reading tests.

Student-centred cloze, on which no study has been done before as far as we are aware of, refers to a cloze test in which words are deleted based on what test-takers themselves think they can restore correctly if those words are left out. To construct this kind of cloze test, the passages from which cloze tests were to be made were given to 15 Iranian students doing their PhD at the University of East Anglia, Norwich, UK. These students were asked to circle about 50 words in each passage which they thought they could restore correctly if left out. Based on the words these students had circled, words chosen by almost half of them were selected as items for omission in the original passages. The resulting cloze tests were called 'student-centred' cloze tests. Both FCE and CAE student-centred cloze tests had 45 items. (Refer to the Appendix for a sample cloze test as well as the relevant Reading Paper.)

PROCEDURE

The purpose of the research was explained orally to students in each class and was also on the cover letter given to each student with the test materials. Each candidate was also required to provide demographic information on their age, gender, and languages spoken. The relevant test materials were administered to each group in different sessions and during their normal class hours. In each session, the covering letter and the answer sheet were given first, and the candidates were given time to read and write the relevant information. Then student-centred cloze tests were administered first. After 25 minutes, the cloze papers and answer sheets were collected and the FCE/CAE reading test was administered, which took another 20 minutes. The cloze tests were scored using both exact- and acceptable-scoring methods. While in the exact-scoring method only the word appearing in the original text was given credit (received one point), in acceptable-scoring method any word that was a synonym to the original word or made sense in the text was accounted acceptable and given credit. Regarding the Reading Papers, each correct answer received one point. Descriptive statistics and Pearson correlation were used to analyze the data.

RESULTS

Tables 2 and 3 represent the test sets of FCE and CAE respectively in terms of the number of participants who took each test, mean, range, and standard deviation (SD). For ease of comparison, all means have been converted to percentages.

С	haracteristics				
	Tests	nn	mean (%)	range	SD
	Exact	34	29.09	25	7.65
FFCE	Acceptable	34	43.53	35	10.74
	TRC	34	32.38	6	1.64

TABLE 2. Descriptive characteristics for FCE test set with both exact- and acceptable-scoring for student-centred cloze test

TRC: Test of Reading Comprehension

TABLE 3. Descriptive characteristics for CAE test set with both exact- and acceptable-scoring for student-centred cloze test

Characteristics Tests		- N	mean (%)	range	SD
		- IN	illeall (70)		5D
	Exact	19	16.84	23	5.98
CAE	Acceptable	19	33.44	31	8.98
	TRC	19	34.4	8	2.39

Tables 4 and 5 indicate that in both exact-scoring and acceptable-scoring of student-centred cloze, there are statistically significant relationships between related cloze and reading comprehension tests. This evidence suggests that both related null-hypotheses be rejected, and therefore, the questions are answered as below:

- 1) There is a statistically significant positive relationship between student-centred cloze and EFL reading comprehension as measured by FCE reading test.
- 2) There is a statistically significant positive relationship between student-centred cloze and EFL reading comprehension as measured by CAE reading test.

TABLE 4. Correlation coefficients between the FCE student-centred cloze and TRC

FCE student-centred cloze exact-scoring	FCE student-centred cloze acceptable-scoring	FCE TRC
1.00	0.952 **	0.609 **
	1.00	0.525 **
		1.00
	cloze exact-scoring	cloze exact-scoringacceptable-scoring1.000.952 **

Significant at 0.05= *; Significant at 0.01= **

Tests	CAE student-centred cloze exact-scoring	CAE student-centred cloze acceptable-scoring	CAE TRC
CAE student-centred cloze exact-scoring	1.00	0.897 **	0.589 **
CAE student-centred cloze acceptable-scoring		1.00	0.601 **
CAE2 TRC			1.00
Significant at 0.05- * : Significant at 0.01- **			1.0

TABLE 5. Correlation coefficients between the CAE student-centred cloze test and TRC

Significant at 0.05= *; Significant at 0.01= **

DISCUSSION

Statistically significant positive relationships were observed between student-centred cloze and tests of reading comprehension in both FCE and CAE. Student-centred cloze tests were found to be highly and significantly correlated with the parallel reading tests. As far as correlational validation is concerned, such a high degree of correlation is usually interpreted in language testing research as a test being a valid measure of the other. Applied to the context of this study, it means that student-centred cloze tests are valid measures of EFL reading comprehension (as measured by CAE and FCE Reading Papers). It has however been argued by the researcher and others that correlational validation may be an inappropriate tool for proposing a measurement instrument to replace another (Sadeghi 2002; Brown & Rodgers 2002).

Mapping the correlation coefficients in Tables 4 and 5 which were used to answer questions under investigation in this study positively, we notice that although the correlations between related cloze tests and reading tests are statistically significant, they are only moderate and no more than 0.6. This evidence alone shows that the amount of shared variance between student-centred cloze tests and relevant tests of reading comprehension is not more than 36 per cent. Taking the difference between significance and meaningfulness into consideration, such an observation leads us to the conclusion that the relevant cloze tests and reading tests may not be able to replace each other properly (Brown 1988b). In other words, it means that student-centred cloze tests as meant and studied here may not be valid measures of EFL reading comprehension as measured by corresponding reading tests. It is also important to remember that the cloze tests and the reading tests used are not of the same nature or character. This is because, reading a full text (and then answering the questions) will yield a different type and degree of text comprehension than reading a distorted text in the first place, which makes the nature of the tasks incomparable to begin with.

It can be concluded from the preceding argument that it may not be justified to claim that cloze tests are valid measures of reading comprehension simply because there are statistically significant relationships between cloze tests and reading comprehension tests. As far as this study is concerned, this means that although there are statistically significant relationships between student-centred cloze tests and FCE and CAE reading tests, we may not be able to conclude, *based on this 'relationship' only*, that student-centred cloze tests are valid measures of reading comprehension as measured by FCE and CAE TRC's.

CONCLUSION

This paper introduced and investigated for the first time the problem of whether student-centred cloze is a valid measure of EFL reading comprehension in quantitative terms. The statistical tests used showed that the student-centred cloze tests used here were statistically significantly related to the reading comprehension tests based on FCE and CAE Reading Papers. Accepting that different cloze tests make different demands on the reader mainly because of the nature of the texts used and the type of deletions made, it was argued that concluding that cloze tests are valid measures of EFL reading comprehension simply because of a correlation figure may not be justifiable. Since this is the first experiment on student-centred cloze, the issue of what such cloze tests measure and their validity as a measure of EFL reading comprehension still remain open for further research; and it is proposed here that the problem at hand may not be well addressed using quantitative tools only and that a mixed method approach using quantitative and qualitative research procedures may reveal a better picture of the reality. *Researcher-research* has for example been proposed as an alternative validation tool for cloze testing (Sadeghi 2004). In this research method, rather than eliciting research data from participants, the researcher becomes his own participant and reflects on the test-taking or reading processes he was involved while completing the cloze test. In this method of research, through taking cloze (or other) tests himself, the researcher acts both as the participant and the researcher, and this enables him to closely investigate his own mental test-taking processes, which can only be indirectly observed when researching other test-takers' mental processes.

REFERENCES

- Alderson, J.C. (1979). The cloze procedure and proficiency in English as a foreign language. *TESOL Quarterly. Vol. 13*, 219-228.
- Bachman, L. F. (1982). The trait structure of cloze test scores. TESOL Quarterly. Vol. 16, 61-70.
- Bensoussan, M. (1990). Redundancy and the cohesion cloze. Journal of Research in Reading. Vol. 13, 18-37.
- Brown, J.D., (1988a). Tailored cloze: improved with classical item analysis techniques. *Language Testing. Vol.* 5, 19-31.
- Brown, J. D. (1988b). Understanding research in second language learning. Cambridge: CUP.
- Brown, J. D. (1983). A closer look at cloze: validity and reliability. In J. W. Oller (Ed.), *Issues in language testing research* (pp. 237-250). Rowley, MA: Newbury House Publishers.
- Brown, J. D., & T. S Rodgers (2002). Doing second language research. Oxford: Oxford university Press.
- Carroll, J. B., A. S. Carton, & C. Wilds (1959). An investigation of 'cloze' items in the measurement of achievement in foreign language. Cambridge, MA: Graduate School of Education.
- Coniam, D. (1993). Co-text or no text? A study of an adapted cloze technique for testing comprehension/summary skills. Hong Kong Papers in Linguistics and Language Teaching. Vol. 16, 1-10.
- Cunha, N. de B., & dos Satntos, A. A. (2007). Reading comprehension and writing production among undergraduates. *Psicologia: Reflexao e Critica. Vol. 19*, 237-245.
- Dastjerdi, H. V., & M. R. Talebinezhad (2006). Chain-processing deletion procedure in cloze: A discourse perspective. *Language Testing. Vol. 23*, 58-72.
- Deyes, T. (1984). Towards an authentic 'Discourse Cloze'. Applied Linguistics. Vol. 5, 128-137.
- Friedman, D. B., & L. Hoffman-Goetz (2007). An exploratory study of older adults' comprehension of printed cancer information: Is readability a key factor? *Journal of Health Communication. Vol.* 12, 423-437.
- Greene, F. P. (1965). Modifications of the cloze procedure and changes in reading tests performance. Journal of Educational Measurement. Vol. 2, 213-217.
- Hale, G. A., C. W. Stansfield, D. A. Rock, M. M. Hicks, F. A. Butter, & J. W. Oller (1989). The relation of multiple-choice cloze items to the Test of English as a Foreign Language. *Language Testing. Vol.* 6, 47-76.
- Huang, S., L. Liu, & Z. Gao (2005). Computer-assisted item generation for listening cloze tests and dictation practice in English. In R. W. H. Lau, Q. Li, W. Liu and R. Cheung (Eds.), *Lecture notes in computer science: Advances in web-based learning - ICWL* (pp. 197-208). Berlin: Springer-Verlag.

Ito, A. (2004). Two types of translation tests: Their reliability and validity. System. Vol. 32, 395-405.

- Keshavarz, M. H., & H. Salimi (2007). Collocational competence and cloze test performance: A study of Iranian EFL learners. *International Journal of Applied Linguistics. Vol.* 17, 81-92.
- Klein-Braley, C. (1983). A cloze is a cloze is a question. In J. W. Oller (Ed.). *Issues in language testing research* (pp. 218-228). Rowley, MA: Newbury House Publishers.
- Klein-Braley, C., and U. Raatz (1984). A survey of research on the C-test. Language Testing. Vol. 1, 134-146.
- Lee, S. H. (2008). Beyond reading and proficiency assessment: The rational cloze procedure as stimulus for integrated reading, writing, and vocabulary instruction and teacher-student interaction in ESL. *System. Vol.* 36, 642-660.
- Lee, Y. P. (1985). Investigating the validity of the cloze score. In Y. P. Lee, A. C. Y. Y. Fok, R. Lado, & G. Low (Eds.). *New directions in language testing* (pp. 137-147). Oxford: Pergamon Press.
- Levenston, E. A., R. Nir, & S. Blum-Kulka. (1984). Discourse analysis and the testing of reading comprehension by cloze techniques. In A. K. Pugh, & J. M. Ulijn (Eds.). *Reading for professional purposes* (pp. 202-212). London: Heinemann Educational Books.
- Manning, W. H. (1987). *Development of cloze-elide tests of English as a second language* (TOEFL Research Report 23). Princeton, NJ: Educational Testing Service.
- Markham, P. L. (1987). Rational deletion cloze processing strategies: ESL and native English. System. Vol. 15, 303-11.
- Mauranen, A. (1989). Can gaps measure comprehension? Modifications of cloze as tests of reading. In C. Lauren & M. Nordman (Eds.). *Special language: from humans thinking to thinking machines* (pp. 337-346). Clevedon and Philadephia: Multilingual Matters.
- Miller, M. J., J. E. DeWitt, E. M. McCleeary, & K. J. O'Keefe (2009). Application of the cloze procedure to evaluate comprehension and demonstrate rewriting of pharmacy educational materials. *Annals of Pharmacotherapy. Vol.* 43, 650-657.
- Ozete, O. (1977). The cloze procedure: a modification. Foreign Language Annals. Vol. 10, 565-568.
- Pikulski, J. J. & E. C. Pikulski (1977). Cloze, maze, and teacher judgement. The Reading Teacher. Vol. 30, 766-770.
- Pino, J., & M. Eskenazi (2009). Measuring hint level in open cloze questions. Proceedings of the 22nd International Florida Artificial Intelligence Research Society Conference, FLAIRS-22, pp. 460-465.
- Pony, B. C., G. J. Duhon, S. B. Lee & A. Key (2010). Evaluation of techniques to promote generalization with basic math fact skills. *Journal of Behavioral Sciences. Vol.* 19, 76-92.
- Ramanauskas, S. (1972). The responsiveness of cloze readability measures to linguistic. Variables operating over segments of text longer than a sentence. *Reading Research Quarterly. Vol.* 8, 72-91.
- Rankin, E. F. (1970). The cloze procedure its validity and utility. In R. Farr (Ed.). Measurement and evaluation of reading (pp. 237-253). New York: Harcourt, Brace and World.
- Sadeghi, (in press). Phrase cloze: What difference does it make? Paper submitted for publication in Journal of Language Teaching and Learning.
- Sadeghi, (2004). Researcher research: An alternative in language testing research. The Reading Matrix: An International Online Journal. Vol. 4, 85-95.
- Sadeghi (2003). An investigation of cloze procedure as a measure of EFL reading comprehension with reference to educational context in Iran. Unpublished PhD Dissertation, University of East Anglia, UK.
- Sadeghi (2002, September). Is correlation a valid statistical tool in second language research? Paper presented at the 12th European Second Language Association (EUROSLA12) Conference, University of Basel, Basel, Switzerland.
- Schmitt, M.C., & S. Sha (2009). The developmental nature of meta-cognition and the relationship between knowledge and control over time. *Journal of Research in Reading. Vol.*, *32*, 254-271.
- Sharp, A. (2009). Reading comprehension in two cultures. International Journal of Learning. Vol. 16, 281-292.
- Spolsky, B. (2000). Language testing in the Modern Language Journal. Modern Language Journal. Vol. 84, 536-552.
- Storey, P. (1997). Examining the test-taking process: A cognitive perspective on the discourse cloze test. *Language Testing*. *Vol.* 14, 214-231.
- Stuart, W., & K. Eve (2009). The effects of vocabulary learning on collocation and meaning. *TESOL Quarterly. Vol.* 43, 55-77.
- Taylor, W. L. (1953). Cloze procedure A new tool for measuring readability. Journalism Quarterly. Vol. 30, 415-433.
- Torres, M., & M. Roig (2005). The cloze procedure as a test of plagiarism: The influence of text readability. Journal of Psychology: Interdisciplinary and Applied. Vol. 139, 221-231.
- Ulusoy, M. (2010). Assessing the listening ability levels of internet radio programs. *New Education Review. Vol.* 20, 306-324.
- Ulusoy, M. (2008). Evaluating sixth graders' reading levels with different cloze test formats. *Egitim Arastirmalari Eurasian Journal of Educational Research. Vol.* 31, 119-127.

Weaver, W. W. & A. C. Bickley (1977). An empirical examination of cloze scores derived from 'natural' and 'mutilated' language segments. In A. J. Kingston (ed.) *Toward a psychology of reading and language: Selected writings of Wendell W. Weaver* (pp. 140-149). Athens: University of Georgia Press.

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FCE student-centred cloze

On Saturday mornings I worked in the family shop. I started cycling down to the ...1... with Dad on Saturdays as ...2... as I was big enough. I thought of it as giving him a ...3... and so I didn't mind what I did, although it was mostly just fetching and carrying at a run all morning. I managed not to think of it as work and I looked forward to the ...4... of chocolate my grandmother passed me unsmilingly as I left. I tried not to look at her; I had reason to feel guilty ...5... I'd generally already ...6... some dried fruits or a silver of cheese when no ...7... was looking. As soon as I was fifteen, though, Dad said, 'That's it, our Janet. You're of working age now and you are not coming to work unless your grandmother ...8... you properly.' He did his ...9... to make his chin look determined. 'I shall speak to her.'

The next ...10..., Gran called me into her little office behind the shop. I always hated ...11... in there. She had an electric heater on full blast, and the windows were always kept tightly ...12... whatever the weather. 'You're wanting to get ...13..., I hear,' she ...14.... 'Yes, please,'I ...15.... I was rather like visiting the headmistress at school, so I was very quiet and respectful. ...16... searched through the mess of papers on her crowded ...17..., sighing and clicking her tongue. Eventually she produced an official-looking leaflet and ran her fingers ...18... the columns of figures. 'How ...19... are you?' 'Fifteen ... Gran,'I added for extra politeness, but she ...20... at me as if I had been cheeky. 'Full-timers at your age ...21... forty pounds for a thirty-five-hour ...22...,' she announced in such a way as to leave no doubt that she wasn't in favour of this. 'No wonder there's no profit in shopkeeping! So, Janet, what's that per ...23...?' Questions like that always flustered me. Instead of trying to work them out in my head, I would just stand there, unable to think straight. 'I'll get a pencil and ...24...,'I offered. 'Don't bother,' snapped Gran angrily, 'I'll do it myself. I'll give you a ...25... an hour; take it or leave it.' 'I'll ...26... it, please.' 'And I expect real work for it, mind. No standing about, and if I catch you eating any of the stock, there will be trouble. That's ...27...and it's a crime.'

From then on, my job at the ...28... was filling the shelves. This was dull, but I hardly expected to be trusted with handling the money. ...29... or twice, however, when Dad was extra busy, I'd tried to ...30... him by serving ...31... the counter. I hated it. It was very ...32... to remember the ...33... of everything and I was particularly hopeless at using the till. Certain customers made unkind remarks about this, increasing my confusion and the chances of my making a fool of ...34....

It was an old-established village shop, going back 150 ...35... at least and it was really behind the times even then. Dad longed to be able to make the shop more attractive to ...36..., but Gran wouldn't hear of it. I overheard them once arguing about whether to buy a freezer cabinet. 'Our ...37... want frozen food,' Dad said. 'They see things advertised and if they can't get them from us, they will go ...38....' 'Your father always sold fresh ...39...,' Gran replied. 'People come here for quality; they don't want all that frozen stuff.'

Actually, she gave way in the end over the ...40.... Mr Timson, her great rival, installed one in his ...41... at the other end of the village and customers started making loud comments about how handy it was, being able to get frozen ...42... in the village, and how good Mr ...43... sausages were. That really upset her because she was proud of her ...44... and she ungraciously gave Dad the money to buy the freezer. Within a couple of weeks, she was eating ...45... food like the rest of us.

FCE Reading Comprehension Test

On Saturday mornings I worked in the family shop. I started cycling down to the shop with Dad on Saturdays as soon as I was big enough. I thought of it as giving him a hand and so I didn't mind what I did, although it was mostly just fetching and carrying at a run all morning. I managed not to think of it as work and I looked forward to the bar of chocolate my grandmother passed me unsmilingly as I left. I tried not to look at her; I had reason to feel guilty because I'd generally already eaten some dried fruits or a silver of cheese when no one was looking. As soon as I was fifteen, though, Dad said, 'That's it, our Janet. You're of working age now and you are not coming to work unless your grandmother pays you properly.' He did his best to make his chin look determined. 'I shall speak to her.'

The next Saturday, Gran called me into her little office behind the shop. I always hated going in there. She had an electric heater on full blast, and the windows were always kept tightly closed whatever the weather. 'You're wanting to get paid, I hear,' she said. 'Yes, please,' I replied. I was rather like visiting the headmistress at school, so I was very quiet and respectful. Gran searched through the mess of papers on her crowded desk, sighing and clicking her tongue. Eventually she produced an official-looking leaflet and ran her fingers along the columns of figures. 'How old are you?' 'Fifteen ... Gran,' I added for extra politeness, but she looked at me as if I had been cheeky. 'Full-timers at your age get forty pounds for a thirty-five-hour week,' she announced in such a way as to leave no doubt that she wasn't in favour of <u>this</u>. 'No wonder there's no profit in shopkeeping! So, Janet, what's that per hour?' Questions like that always <u>flustered</u> me. Instead of trying to work them out in my head, I would just stand there, unable to think straight. 'I'll get a pencil and paper,' I offered. 'Don't bother,' snapped Gran angrily, 'I'll do it myself. I'll give you a pound an hour; take it or leave it.' 'I'll take it, please.' 'And I expect real work for it, mind. No standing about, and if I catch you eating any of the stock, there will be trouble. That's theft, and it's a crime.'

From then on, my job at the shop was filling the shelves. This was dull, but I hardly expected to be trusted with handling the money. Once or twice, however, when Dad was extra busy, I'd tried to help him by serving behind the counter. I hated it. It was very difficult to remember the prices of every-thing and I was particularly hopeless at using the till. Certain customers made unkind remarks about this, increasing my confusion and the chances of my making a fool of myself.

It was an old-established village shop, going back 150 years at least and it was really behind the times even then. Dad longed to be able to make the shop more attractive to customers, but Gran wouldn't hear of it. I overheard them once arguing about whether to buy a freezer cabinet. 'Our customers want frozen food,' Dad said. 'They see things advertised and if they can't get them from us, they will go elsewhere.' 'Your father always sold fresh food,' Gran replied. 'People come here for quality; they don't want all that frozen stuff.'

Actually, she gave way in the end over the freezer. Mr Timson, her great rival, installed one in his shop at the other end of the village and customers started making loud comments about how handy it was, being able to get frozen food in the village, and how good Mr Timson's sausages were. That really upset her because she was proud of her sausages and she ungraciously gave Dad the money to buy the freezer. Within a couple of weeks, she was eating frozen food like the rest of us.

- 1) How did Janet feel when she first started her Saturday morning job?
 - A. She enjoyed the work that she was given.
 - 1) She was pleased to be helping her father.
 - 2) She worried that she was not doing it well.
 - 3) She was only really interested in the reward.
- 2) What do we learn about her grandmother's office in paragraph two?
 - 1) It needed decorating.
 - 2) It was untidy.
 - 3) It had too much furniture in it.
 - 4) It was dark.
- 3) 'This' (line 25, underlined) refers to
 - 2. shopkeepers' profits.
 - 3. a thirty-five-hour week.
 - 4. Janet's request.
 - 5. the recommended wage.
- 4) 'Flustered' (line 26, underlined) means
 - 1. bored.
 - 2. angered.
 - 3. confused.
 - 4. depressed.
- 5) Why did Janet's grandmother react angrily to her offer to fetch a pencil and paper?
 - a) Janet was unable to answer her question.
 - b) Janet had been unwilling to help her.
 - c) Janet had made an unhelpful suggestion.
 - d) Janet had answered her rudely.
- 6) What did Janet's father and grandmother disagree about?
 - A. how to keep their customers loyal to the shop.
 - B. the type of advertising needed to attract customers.
 - C. the type of customers they needed to attract.
 - D. how to get new customers to come to the shop.
- 7. What eventually persuaded Janet's grandmother to buy a freezer?
 - A. She found that she liked frozen food after all.
 - B. A new shop opening in the village had one.
 - C. It was suggested that her products weren't fresh.
 - D. She responded to pressure from her customers.
- 8. What impression do we get of Janet's feelings towards her grandmother?
 - A. She respected her fairness.
 - B. She doubted her judgement.
 - C. She disliked her manner.
 - D. She admired her determination.