A TRIAL USE OF CLOZE TEST PROCEDURE IN THE ASSESSMENT OF READING COMPREHENSION[1]

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1. Purpose

Besides introducing Unit staff to cloze test procedure the project had two purposes. The first was specific, namely, to measure the performance of a group of non-native speakers (NNS) against that of a "matched" group of native speakers (NS). The second was more general, namely, to make a very tentative exploration of the problems involved in the creation and administration of a cloze type test and the possible uses which it might have in assessment procedures or as an instrument of operational research in our task of investigating reading comprehension instruction and learning.

2. Characteristics of non-native speakers (NNS)

The 22 NNS were self-selected in that they registered voluntarily for an "Examen de Traducción" (Reading Comprehension examination) in the *Facultad de Medicina Veterinaria y Zootecnia*, Faculty of Veterinary Science, UNAM (National Autonomous University of Mexico).[2] All were undergraduates in that Faculty.

No. of students	Semester
6	3
1	4
1	7
6	9
8	10 (Final)

[2] See Mackay, R. et al. (1975a).

Since they had all registered voluntarily we must assume that they regarded themselves as competent to take the reading comprehension examination.

3. Characteristics of native speakers (NS)

The 61 subjects were all undergraduates of veterinary science in the Royal (Dick) School of Veterinary Studies in either their 3rd or 4th year of undergraduate studies. All used English as their native language.

4. The examination used

The "Examen de Traducción" used consisted of 2 parts.[3]
Part I was a reading text followed by multiple-choice questions.
Part II was a cloze test.

4.1 The cloze test (see Appendix I)

The passage was selected from a British textbook on Ethology[4] written in particular for students taking agricultural, veterinary and animal science courses at undergraduate level. The author is a senior lecturer in the Royal (Dick) School of Veterinary Studies in the University of Edinburgh.

The passage contained one paragraph of 185 words. Every seventh word was omitted except in two instances where we felt that undue difficulty would be encountered by the students. Instead of 27 words omitted, therefore, only 25 words were omitted. These were made up of 7 nouns, 5 verbs, 4 articles, 3 adjectives, 3 prepositions, 2 connectors and 1 adverb.

5. Method of administration

5.1 Non-native speakers

The students were each supplied with a copy of the cloze test and told to read the instructions. They were then asked if they had any questions and the teacher made any obscure points clear. They were then given 20 minutes to complete the test.

5.2 Native speakers

The test was administered to the NS group in the same way as it had been to the NNS group.

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[3] This was virtually the same examination as described in Mackay, R. et al. (1975b).
[4] The textbook is Fraser, A. F. (1974).

6. Results

Table 1. *Results of cloze test*

Non-Native Speakers		Native Speakers	
Students n-22	Score Total Possible-24	Students n-61	Score Total Possible-24
1 (4.5%)	15 (62.5%)	30 (49.2%)	24 (100%)
1 (4.5%)	13 (54.2%)	21 (34.4%)	23 (95.8%)
1 (4.5%)	12 (50.0%)	8 (13.1%)	22 (91.7%)
1 (4.5%)	11 (45.8%)	2 (3.3%)	21 (87.5%)
2 (9.1%)	8 (33.3%)		
1 (4.5%)	7 (29.2%)		
2 (9.1%)	5 (20.8%)		
5 (22.7%)	4 (16.7%)		
3 (13.6%)	3 (12.5%)		
2 (9.1%)	1 (4.1%)		
3 (13.6%)	0 (0)		

7. Discussion

There was a general tendency among the NNS to leave progressively more blanks unattempted:

Table 2.

Sequence of blanks in text	Average No. of non-attempts to fill blanks
1—5	2
6—10	6.8
11—15	11
16—20	12.4
21—25	15.6

Altogether 61.2% of the blanks were left unattempted by the NNS group. The reason for this may be the increasing difficulty of selecting an appropriate word to fill a blank as the number of non-attempts increases. The student in this kind of situation has fewer and fewer cues upon which to rely as the test proceeds. No doubt morale drops and interest is reduced.

An analysis was carried out to determine whether any particular word class caused more difficulty than any other (Appendix II) and also whether any particular item within a class caused more or less difficulty than any other.

Despite the facts that the number of items in each word class varied and that we are dealing with small numbers both of items and students we may make some general observations on the results.

The NNS group appear to have more difficulty with adverbs, prepositions, connectors and verbs and less difficulty with articles, nouns and adjectives. On the other hand, the NS group offered the greatest number of unacceptable answers in verbs and nouns.

Before any conclusions can be drawn from these results or the trends confirmed, further research involving the careful control of word classes using larger student samples would have to be carried out.

An analysis of the function in the sentence of each omitted word was done and thereby an attempt made to relate difficulty to function (Appendix III). Too little data is available for any conclusion to be drawn from the analysis. Both these types of analysis, i.e. those shown in Appendices II and III, if carried out systematically on larger samples of NNS than we were dealing with, might provide useful information on specific areas of difficulty encountered by students. This information could be used to determine the areas of the language which should be focused upon with any group of learners and hence be used to shape the syllabus content of the course.

8. Recommendations

8.1 The following are recommendations to be observed in the preparation and administration of future cloze tests.

    i) Avoid difficulties due to inadequate instructions.

        The instructions to the NNS group did not explicitly state that only one word was to be inserted in each blank. Hence 0.03% of all the insertions consisted of more than one word. However, in spite of the fact that instructions to the NS group did specify one-word insertions, a number of attempts did include groups of words.

    ii) Avoid difficulties due to format.

        Blanks should all be of the same number of spaces and should appear as dotted or continuous lines.

    iii) The first two sentences of the text should be left entire in order to provide a comprehensible introduction to the text for the students.

8.2 Future research might usefully be carried out by using the cloze procedure to determine the relative difficulty presented by the omission of specific word classes and word classes performing specific functions. The results obtained might indicate what word classes and what functions (sentential or inter-sentential) should receive more attention in the reading classroom.

Appendix I

The Cloze Tests administered to NNS and NS

NON-NATIVE SPEAKERS

    Apellidos (Surnames)   Nombre (Name)

(FOREIGN LANGUAGE CENTRE)
CENTRO DE ENSEÑANZA DE LENGUAS EXTRANJERAS
REF ID/VET/TEST 75/A

Every seventh word in the following paragraph has been omitted. Read the paragraph carefully and put an appropriate word in each space so that the paragraph makes complete sense.

BEHAVIOUR AS A DIAGNOSTIC AID
TO CLINICAL VETERINARY ETHOLOGY

While the behaviour of a normal _____ healthy farm animal is clearly the _____ _____ of many people, it is primarily _____ veterinarian who is required to understand _____ behavioural activity. Increasingly the veterinary profession _____ its attention directed towards conditions of _____, discomfort, probable pain and deprivation in farm animals. These conditions are stressors, and stress is a disease the manifestations _____ which are many. Appreciation of this _____ makes the veterinarian better able to _____ animal users and producers in the _____ and acceptable conditions of maintenance for animals in modern husbandry. This newer _____ for the veterinarian depends largely on _____ _____ development of veterinary ethology and _____ use of abnormal behaviour as an _____ to diagnosis. At the present stage _____ the development of veterinary ethology it _____ impossible to deal with this topic _____ . All that can be done is _____ consider a number of clinical circumstances _____ diagnosis can be established on the _____ of an animal's behaviour. Even this _____ a full and accurate knowledge of normal behavour of that type of _____ animal on the part of the _____

NATIVE SPEAKERS

(FOREIGN LANGUAGE CENTRE)
CENTRO DE ENSEÑANZA DE LENGUAS EXTRANJERAS
REF ID/VET/TEST 75/A

A number of words in the following paragraph have been omitted.
Read the paragraph carefully and put not more than ONE appropriate word into each
space so that the paragraph makes complete sense.
Please write in CAPITAL letters.

BEHAVIOUR AS A DIAGNOSTIC AID
TO CLINICAL VETERINARY ETHOLOGY

While the behaviour of a normal _____ healthy farm animal is clearly the

_____ of many people, it is primarily _____ veterinarian who is

required to understand _____ behavioural activity. Increasingly the veterinary

profession _____ its attention directed towards conditions of _____ ,

discomfort, probable pain and deprivation in farm animals. These conditions are stressors,

and stress is a disease the manifestations _____ which are many. Appreciation

of this _____ makes the veterinarian better able to _____ animal

on users and producers in the _____ and acceptable conditions of maintenance

for animals in modern husbandry. This newer_____for the veterinarian depends largely

on_____ development of veterinary ethology and _____ use of abnormal .

behaviour as an _____ to diagnosis. At the present stage _____ the

development of veterinary ethology it _____ impossible to deal with this topic

_____. All that can be done is_____consider a number of clinical circumstances

_____ diagnosis can be established on the _____ of an animal's

behaviour. Even this _____ a full and accurate knowledge of _____

normal behaviour of that type of_____ animal on the part of the _____ .

Word class analysis for NNS and NS.
Classes are listed from more to less difficult. The position of word within the test is indicated by the number preceding each word.

NON-NATIVE SPEAKERS

		Word Class	Given Answers	Other Acceptable Answers	Unacceptable Answers
1st		*Adverbs*	0	0	31.8%
18		comprehensively			68.1% B[5]
2nd		*Prepositions*			22.7%
16		in	4.5%	13.6%	59.0% B
7		of	18.1%	0	50.0%
					31.8% B
3rd		*Connectors*	0		45.4%
20		where		4.5%	50.0% B
1		and	36.3%	4.5%	54.5%
					4.5% B
4th		*Verbs*			81.8%
5		has	0	0	18.1% B
22		assumes	0	0	31.8%
					68.1% B
9		guide	0	9.09%	54.4%
					36.3% B
17		is	27.2%	0	13.6%
					59.0% B
19		to (infinitive)	31.8%	0	22.7%
					45.4% B
5th		*Articles*			13.0%
13		the	6.0%	4.5%	54.4% B
14		the	18.1%	4.5%	9.0%
					63.6% B
23		the	22.7%	0	18.1%
					59.0% B
3		the	50.0%	0	40.0%
					9.09% B
6th		*Nouns*			81.8%
2		concern	0	4.5%	13.6% B
25		observer	0	4.5%	9.09%
					86.3% B
15		aid	9.09%	4.5%	22.7%
					63.6% B

[5] B = unattempted blanks.

cntd.

	Word Class	Given Answers	Other Acceptable Answers	Unacceptable Answers
21	basis	0	9.09%	36.3% / 54.5% B
12	rolo	0	31.8%	31.8% / 36.3% B
6	distress	0	50.0%	27.2% / 22.7% B
8	fact	0	54.5%	27.2% / 18.1% B
7th 24	Adjectives farm	0	13.6%	18.1% / 68.1% B
10	optimum	0	36.3%	18.1% / 45.4% B
4	abnormal	0	54.4%	45.4%

NATIVE SPEAKERS

	Word Class	Given Answers	Other Acceptable Answers	Unacceptable Answers
1st (22)	Verbs assumes	0	85.2%	13.1% / 1.6% B
(5)	has	75.4%	13.1%	11.3%
(9)	guide	3.2%	93.4%	1.6% / 1.6% B
(17)	is	91.5%	8.1%	1.6% B
(19)	to (infinitive)	100.0%	0	0
2nd (6)	Nouns distress	1.6%	94.9%	1.6% / 1.6% B
(21)	basis	39.3%	57.3%	1.6%
(2)	concern	62.2%	36.6%	1.6% B
(12)	rolo	29.5%	74.8%	0
(8)	fact	55.7%	44.2%	0
(15)	aid	96.7%	3.2%	0
(25)	observer	0	100%	0
3rd (18)	Adverbs comprehensively	3.2%	80.3%	1.6% / 14.7% B
4th (16)	Prepositions in	60.6%	36.0%	3.2%
(7)	of	100%	0	0

	Word Class	Given Answers	Other Acceptable Answers	Unacceptable Answers
5th (20)	Connectors where	59.0%	39.3%	1.6%
(1)	and	68.8%	29.5%	1.6% B
6th (10)	Adjectives optimum	0	96.7%	1.6% / 1.6% B
(24)	farm	59.0%	39.3%	1.6% B
(4)	abnormal	3.2%	96.7%	0
7th (23)	Articles the	93.4%	4.9%	1.6% B
(14)	the	72.1%	27.8%	0
(13)	the	823.2%	19.6%	0
(3)	the	100%	0	0

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Appendix III

Analysis of function and relation to difficulty for NNS and the type of mistake made by NS

Sequence of appearance in test	Words	Function	Possible difficulty for NNS	Type of mistake made by NS
	ADVERBS			
(18)	*comprehensively*	Adjunct		Wrong lexical choice
	PREPOSITIONS			
(16)	*in*	Prepositional phrase modifying a prepositional phrase	Sequence of prepositional phrases	Syntactic
(7)	*of*	Prepositional phrase post-modifying subject complement	Uncommon position, followed by wh-clause acting as prepositional complement	No mistakes
	CONNECTORS			
(20)	*where*	Subordinating conjunction		,,
(1)	*and*	Conjoining adjectives modifying subject	First word omitted in paragraph	,,
	VERBS			
(5)	*has*	Passive auxiliary separated from past participle by direct object	Separation of auxiliary from participle	Syntactic
(22)	*assumes*	Finite verb phrase preceded by demonstrative pro-form subject	Locating past information relating to pro-form	Syntactic
(9)	*guide*	Infinitive in non-finite verb phrase	Semantic	Syntactic
(17)	*is*	Finite verb phrase		No mistakes
(19)	*to*	Infinitive in non-finite verb phrase		,,
	ARTICLES			
(13)	*the*	Determiner in prepositional phrase functioning as complementation of verb		,,
(14)	*the*	Determiner in prepositional phrase following (13) with ellipsis of preposition	Ellipsis of preposition	,,
(23)	*the*	Determiner in prepositional phrase post-modifying direct object		,,
(3)	*the*	Determiner of subject complement		,,
	NOUNS			
(2)	*concern*	Direct object of independent clause	Semantic	,,