

EVALUATION OF HEARING IMPAIRED STUDENT'S READING COMPREHENSION WITH THE CLOZE PROCEDURE

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ABSTRACT

Different evaluation methods are applied in order to determine and develop the skills used for reading comprehension. Cloze is a informal evaluation method which is used to determine students' current reading knowledge, to develop their focusing skills on contextual cues and to enhance critical reading. Cloze involve evaluating readers' prior knowledge on the subject matter, their comprehension of information provided in the text, linguistic knowledge, and thinking skills. Through this method, students try to determine systematically omitted words in a passage by either guessing or inferring. Evaluations demonstrate to what extent students grasped the passage or followed the text. Besides, they encourage students to think about the words to include in a sentence or passage for a better meaning construction. It has two important aims: To determine the levels of reading passages given to students and to determine the strategies of using contextual cues to infer meaning.

Cloze method could be used in both individual and group works. As a result of evaluations conducted after the application, teachers can determine the activities to improve reading comprehension

Hearing impaired children, who are less proficient than their peers in terms of language because of this impairment, follow the same reading processes and use the same reading skills and strategies. In order to improve and evaluate these skills in reading instruction of hearing impaired children, cloze method is used. This study investigates hearing impaired children's reading comprehension through cloze method, states the advantages and limitations of the method and provides examples of cloze evaluation examples conducted with hearing impaired children.

Keywords: Deaf, Hearing-Impaired Education, Reading Comprehension, Cloze Procedure

INTRODUCTION

While determining and improving skills used in reading comprehension, both formal and informal evaluation methods are used. Standardized dependent tests are classified as formal reading evaluation method. On the other hand, informal evaluation methods involve question-and-answer, reading aloud, retelling, and cloze (McKenna & Stahl, 2003). Informal reading evaluation methods are used in special education by instructors to assess reading comprehension of hearing impaired children, and to improve hearing impaired children's reading skills and strategies (Lasasso, 1980). Studies suggest that hearing impaired children experience important problems during reading in terms of word recognition, comprehension and syntax. However, their reading levels can improve as long as they are diagnosed early, given proper hearing device, and exposed to systematic evaluation in appropriate instructional context through focusing on speech and language development (Geers & Moog, 1991; Girgin, 1999; 2006; Lewis, 1986; Robertson & Flexer, 1993; Simpson, Harrison & Stuart, 1992; Tüfekçioğlu, 1992). Thus, systematic evaluation carries utmost importance.

Among informal evaluation methods, question-and-answer is the most used one which is conducted through answering evaluation questions. It may not always be easy to develop questions that are appropriate with the text, that have equal item difficulty and that assess reading comprehension accurately. In reading aloud method, students are asked to read a text within a specific span of time. Then, words that are read correctly and incorrectly are counted. It is emphasized that if this method is used on its own, it might lead to incorrect or insufficient results in evaluating reading comprehension. Retelling involves students' recalling what is read and evaluation of what is retold. Students are asked to retell or rewrite the text they read without looking at the text. Retelling gives readers the opportunity to think about the text, remember and reconstruct the text, and create a genuine expression. Cloze procedure involves evaluating students' language and thinking skills through examining their ability to understand missing information in the text by employing their background knowledge. These assessment methods can be used on their own; however, it is also suggested that they are used together as well, since they have some unique advantages and limitations (Davenport, 2002; Shanker & Ekwil, 2000). In the current study, cloze procedure is defined along with its purposes. Then important steps to bear in mind while comparing and applying cloze procedures, types of cloze activities, advantages and limitations of the procedure are mentioned. Finally, samples drawn from cloze activities conducted with hearing impaired children are provided.

Definition of Cloze and Its Purpose

Cloze procedure involves systematically and purposefully omitting words within a text selected for developing and evaluating reading comprehension, and asking readers to fill-in-the blanks. Its purposes could be listed as follows (Gillet & Temple, 1990; Walker, 2005):

1. Determining children's knowledge regarding reading,
2. Determine the level of a specific text and clarify its independence, instruction and frustration level (placement focus),

3. Evaluate children's critical reading strategies along with their ability to use context (diagnosis focus), and encourage children to think critically and analytically about the text,
4. Encourage children to control the meaning of what they read, and
5. Evaluate children's lexicon and subject-matter knowledge.

Preparation of Cloze Texts

While preparing cloze texts which are used to evaluate reading comprehension of both hearing and hearing impaired children, following features should be born in mind (LaSasso, 1980; McKenna & Stahl, 2003; Walker, 2005):

1. A text involving 200 to 400 words which was not read by the children beforehand is chosen. Shorter texts can be used, but this might not be reliable.
2. Teachers systematically delete some words from the text and put blanks instead. In order not to provide children with visual clues, all blanks should be at the same length.
3. In order for children to get the gist and begin reading, no blanks are used in the first sentence.
4. If the evaluation has a placement focus, every 5th word is deleted after the first sentence. If the activity is used for young learners, every 7th or 10th word can be deleted as well. Proper names are not deleted since they cannot be worked out from the context easily like common names. If the cloze activity has a diagnosis focus, words can be deleted systematically; however, this is not necessary. Instead, keywords carrying information can be selected and deleted (e.g. verbs, adjectives, adverbs).
5. No words are deleted from the last sentence. Punctuation is not deleted.
6. If the activity is applied to young learners, more space can be allotted for the blanks so that they can write comfortably. If the activity is conducted with older children, the blanks can be numbered so that they can write their answers to another piece of paper.

Application of Cloze Procedure

Cloze procedure with hearing and hearing impaired children can be applied within a group or individually with each child. The followings should be given importance while applying the activity (LaSasso, 1980; McKenna & Stahl, 2003; Walker, 2005).

1. Children are provided with instructions along with examples on how to fill in the blanks given in a text. The sentence is read with children and the ways to use contextual clues are discussed. These procedures carry utmost importance, since even good readers may have trouble in filling in the blanks just because they are not familiar with the procedures.
2. Children are asked to find the word that could be used by the author, and write a single word in each blank.
3. Children are told that they might not find the exact word used by the author. It is mentioned that the activity is just like a guessing game rather than an exam. It is also emphasized that even very proficient readers might not guess all words correctly. If such explanations are not made, children's frustration might increase.
4. In order for children to employ meaning of the text, they are asked read the whole passage and they are encouraged to fill in all blanks within the text.
5. No time restriction is applied.

Evaluation of Cloze Procedure

Cloze procedure helps in determining the difficulty level of texts that are used in reading comprehension activities. It provides teachers with information on all children's reading skills at the beginning of the semester.

During the evaluation, exactly written words are accepted as correct. Studies reveal that cloze procedures following this evaluation criterion has the highest validity when the activity is conducted to determine the level of the text. However, if the aim of the evaluation is to teach how to use contextual clues or to improve word repertory, synonyms or meaningful guesses can also be accepted as correct (Gillet & Temple, 1990). In such situations, grading changes a bit and interpreting the results becomes more difficult. If the spelling mistakes are few, they are accepted as correct. However, the rater should be cautious since some spelling mistakes imply that children are thinking of some other words than the target ones. Because of four reasons, children are asked to write the exact same word for the blanks (McKenna & Stahl, 2003; Walker, 2005):

1. Grading through considering exact same words as correct is more objective than grading conducted by considering synonyms as correct. Different grading rubrics lead to different grades for the same evaluation material.
2. Grading conducted through accepting exact same words as correct makes it easier to evaluate the exams. Deciding on each different answer's grade and acceptability can take a lot of time.
3. Studies conducted reveal that accepting synonyms or meaningful guesses lead to higher grades for the same children whose level in the classroom does not change actually.
4. Grading criteria take exactly written words into consideration. If synonyms or meaningful guesses are considered correct, it is harder to interpret the results.

Synonyms or words that do not deteriorate the meaning of the text can be accepted as correct answers as well while evaluating hearing impaired children's cloze examinations. Ewoldt (1984) provided a psycho-linguistic point of view stating that grading can be changed in cloze procedures with hearing impaired children. The view suggests that it is not always possible or necessary for readers to perceive every single detail of the message presented by the author (in Thackwell, 1992). Thus, grades are examined under three titles, namely correct responses, different response with no meaning change, and incorrect responses with meaning change (Thackwell, 1992):

- a) Correct response: When the students wrote the very same word in the story, this is accepted as a correct response.
- b) Different response with no meaning change: If children do not write the very same word while filling in the blanks, but write something that does not change the meaning of the statement, this is accepted as correct.
- c) Incorrect response with meaning change: Words that change the meaning and words that are wrong.

After numbers of words in each part are determined, proportions are calculated. While calculating the proportions, number of correct responses is divided by the number of blanks in the text and multiplied by 100. The percentages of different response with no meaning change and incorrect response with meaning change are calculated through this method as well (Thackwell, 1992). While determining children's cloze grade, correct response grade and the grade of different responses with meaning change are combined, a single grade is calculated and the proportion is found. For instance, if the number of blanks is 45, the number of correct responses is 26, the number of different response with no meaning change is 14, and the number of incorrect responses is 5; the proportions are calculated, the percentage of correct responses and the percentage of different responses with meaning change are added, and 90 % is found (Thackwell, 1992).

While evaluating the grades, if 60 % or more responses provided by children are correct, the material is considered easy for children and it is used for the reading level of independence. If the grades are between 40 and 60 %, this suggests that children can read the text easily and the material is considered at the reading level of instruction. If the grades are less than 40 %, the material is difficult and it is considered that the material is the reading level of frustration (Gillet & Temple, 1990; McKenna & Stahl, 2003). If 45 to 50 % of responses provided by hearing impaired children are correct, they are considered that they understood the material (Thackwell, 1992).

Cloze Activities

If the cloze procedure is used after reading and reading comprehension studies are completed, the activity provides teachers with information on the notions acquired by children along with children's word repertory. If the procedure is used before reading-comprehension studies, it provides teachers with information regarding the words and notions that should be acquired by children (Gillet & Temple, 1990). For instance, in order for hearing impaired children to understand information regarding grammatical rules; a cloze procedure could be conducted on a previously read passage by deleting verbs, pronouns, adverbs, and adjectives. If a systematic cloze procedure is applied, instructional opportunities for children to focus on grammatical rules, notice and understand the contextual clues, and work out the meanings of new words are created.

In *simple cloze activities*, stories written by children or stories written by teachers regarding children's experiences are used. Words in newly-developed stories are written on cards. Word cards are located next to each other to construct sentences. Some word cards in these sentences are removed and blanks are created. Then, children are asked to find the appropriate words and fill in the blanks. Two children can work together during this application to decide on the appropriate word to fill in the blanks. Such a procedure creates opportunities for children to discuss on the reasons to choose specific words. This activity helps 1st and 2nd grader children to recognize and understand specific words.

Oral cloze involves teachers in skipping some words while reading a passage or story and asking children to find and tell the missing words. This activity empowers listening comprehension and critical listening. Oral cloze is particularly important in improving listening comprehension for children who can analyze words but have problems in comprehension

Maze is used as an alternative to cloze procedure. Words that are deleted from a specific passage are written beneath the text as a clue for children. Children, then, are asked to select the appropriate word from this list while filling in the blanks. Maze

is easier than cloze procedure. It is particularly suitable for young children and for readers who are frustrated or intimidated when they see blanks. The teacher provides three options for blanks in mazes: 1) Correct words, 2) incorrect words that are in the same grammatical category with the correct response (e.g. another noun or adjective), and 3) incorrect words that belong to another grammatical category (e.g. providing an adjective when a noun is deleted). Correct word is not always located on the same place. While preparing mazes, no blank is located in the first sentence and every 5th word is deleted (Gillet & Temple, 1990).

Advantages and Limitations of Cloze Procedure as an Evaluation Method

Advantages and limitations of the cloze procedure as an evaluation method for hearing and hearing impaired children are provided below (Marlow, 2000; LaSasso, 1980; McKenna & Stahl, 2003).

Advantages

1. Preparation, application, grading, and interpretations of the grades are easy and fast. After instructing children on how to use the activity, it can be applied in groups as well.
2. There remains no need to prepare questions to assess reading comprehension.
3. Issues that influence the readability of a text such as content, writing style and syntactic complexity can be taken into consideration while selecting texts.
4. As a result of analyzing words written into the blanks, information on syntax and meaning clues employed by children during reading can be obtained

Limitations

1. The format is not familiar to some children which could surprise them.
2. It might prevent children with weak spelling skills from demonstrating what they understand from the passage. Thus, it is suggested that the procedure not used for children below the 4th grade.
3. The selected passage should be read beforehand.
4. The procedure should be used together with other informal reading comprehension evaluation methods.

Samples Drawn from Cloze Activities Conducted with Hearing Impaired Children

Below, samples drawn from cloze activities conducted with hearing impaired children are provided. These samples are taken from a research study conducted at the Education and Research Center for Hearing Impairment Children (İÇEM) of Anadolu University (Girgin, 2006). In the study, the reading comprehensions of hearing impaired 8th graders who are being trained through an auditory-oral approach are evaluated through miscue analysis inventory. Students read a story at their instructional level, and their miscues during oral reading were evaluated through miscue analysis. Besides, retelling, question-and-answer and cloze evaluations were conducted.

The hearing impaired student who read the story named *The Heron* filled in the blanks with the following words:

9th sentence: They all *gone* mad

3rd sentence: As he understands he will *not live* out of starving, he made *a net* to facilitate hunting.

5th sentence: They said that they would locate their nets in the lake, and hunt *and catch* them.

8th sentence: The crab, understanding that he will be caught *near* the fish, threw the danger to fish *suddenly*.

The student used the word *gone* correctly in the 9th sentence. However, he used 'not live' rather than 'die' and 'net' rather than 'plan' in the 3rd sentence. He used 'and catch (them)' instead of 'all of (them)' in the 5th sentence; 'near (the fish)' instead of 'with (the fish)' and 'suddenly' rather than 'hastily' in the 8th sentence. 'Not live', 'near (the fish)' and 'suddenly' were accepted as different responses with no meaning change. However the word 'net' used instead of 'plan' was considered wrong since it changed the meaning of the sentence.

Another student filled in the blanks as follows:

9th sentence: They all *gone* mad

11th sentence: His enemies came to the heron and asked him to save them from *bad* calamity.

14th sentence: However, they were hesitated how they will *save* there.

The student used the word 'gone' correctly in the 9th sentence. However he used 'bad' rather than 'this' in the 11th sentence, 'save' instead of 'go' in the 14th sentence. The word 'bad' did not change the meaning and was accepted as a different word with no meaning change. However, the word 'save' used instead of 'go' was accepted as incorrect response.

CONCLUSION

Cloze procedure is an important tool and evaluation method used in assessing and improving reading comprehension. The procedure is used to determine hearing and hearing impaired children's knowledge on syntax and semantics, which are language cue systems used during meaning construction. Cloze procedure helps children to read critically and guide themselves during reading. Cloze applications conducted with stories along with expository texts play an important role in grasping words that are used in social studies, social science and science lessons.

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