Evaluating the Reading Capability of Visually Impaired Students: The Need to go beyond Mere Administrative Accommodations

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Introduction
Reading is a skill that in most contexts, may be tested by using one or more text types (narrative, descriptive, expository) and one or more question-response types. The test taker is expected to either select an answer from the given options, or supply the answer (Khalifa & Weir, 2009; Alderson, 2000 for a detailed list of question response formats). In a test/examination context, when texts are read and questions answered correctly, it is inferred that the student has a high reading ability. There are many models of reading abilities, ranging from the well-known Munby’s list of subskills (Munby, 1978) which covers the local and the global and including factual, inferential and extrapolative, to the most recent and often used model developed by Urquhart and Weir (1998).

In this matrix of reading, we may talk about two types of reading—careful and expeditious. Each of these are sub-divided into global and local, resulting in a range of reading processes including skimming, scanning, reading carefully and understanding syntactic and lexical cohesion, meaning, etc. Reading texts and questions are chosen to ensure that a range of these reading processes are tested. In testing contexts it is assumed that “all human beings are similarly configured” (Khalifa & Weir, 2009, p. 42), and therefore any test taker who has a low score on a test is judged as possessing low reading ability. This inference regarding the ability of the test taker is made on the basis of the responses and not the actual test itself, for as Messick (1989) pointed out, “tests do not have reliabilities and validities, only test responses do” (p. 14). However, he also stated that all inferences, in turn, are hypotheses and the validation of an inference is hypothesis testing (p. 13). As such, if it is discovered that there is a flaw in the hypothesis then one needs to critically examine or even question the construct from which it has been derived.

Reading and the Visually Impaired
Around the turn of the century, reading was defined as “the process of receiving and interpreting information encoded in language form via the medium of print” (Urquhart & Weir, 1998, p. 22). Fifteen years later, Weir and his co-authors refer to this seminal work and state: “Urquhart and Weir (1998) suggest that reading is now viewed as the silent and internal [italics added] process of receiving and interpreting information encoded in language form via the medium of print” (Weir, Vidakovic & Galaczi, 2013, p. 104). This implies that reading comprehension is now perceived as a “silent” activity. Currently, all tests of reading comprehension assume that reading is done silently, but this is not the case for all test takers. As a visually impaired (VI hereafter) English Language Teaching doctoral student stated while we were discussing reading tests in a class on language testing, “There is no silent reading for the VI.” When asked to explain what he meant, he put it very succinctly: “When I read Braille, I am reading silently. But if I use a scribe, I am listening to texts, not reading them.” He
then went on to state another big difference in the case of VI test takers: “I listen to a question, after the text is read, guess the para where the answer is, but can only ask the scribe to read the whole para again.” These statements were an eye-opener for me and made me question the nature of reading comprehension for the VI. To understand this “problem” better, I invited four VI doctoral students in my University for an informal discussion. I realized that unless we get VI students who are aware of the various subskills and processes of reading to articulate their perspective, we will never be able to get insights into their world of reading.

The students talked about the various problems they encountered while taking examinations; and then went on to talk in detail about two sections of the PhD ELE test at EFL University, Hyderabad. In one section, students were given an expository text and were expected to present the information in it in the form of a flow chart, followed by a written summary of that text. In the other section, they were given an academic article that was cognitively demanding and with reduced context (Cummins, 1979), and expected to answer both supply (short answer) and selection (multiple choice) questions based on the text. One of them said: “After the third paragraph, in Section D, I was finished.” Another said: “I sent up a prayer: Please help me finish this paper without a headache; very difficult tests to remember.” A third student said: “I was lucky: I got Nirmala as a scribe. She would state, “I think the answer is in para 3. Shall I re-read that para for you?” The first student added, “The summary was okay, but we could not do the flow chart. We just dictated points.” I realized that as an evaluator, without the awareness that the test taker was visually impaired, I have probably marked that person down for not producing a flow chart and given partial credit for the list of point. The first student then went on to state: “Those 8 multiple choice questions; finished, I didn’t know which para, I had to ask my scribe to re-read! I was not as lucky as him. I didn’t have a Nirmala.”

On the basis of these insightful reflections, I formulated the following research questions for my study:

- How does a VI test taker react or respond to test formats in reading comprehension?
- Are there certain formats that are more problematic than others for VI test takers?

**Methodology**

To get insightful answers to these questions, I asked a doctoral student to critically examine a variety of response formats and reflect on them. We finally decided to stay with a set of item types/response formats, from Alderson (2000).

**Response Types and Problems**

From the wide range of response types presented by Alderson (2000), three selection and three supply item types were chosen for analysis and critical examination. The following responses of the VI doctoral student are given in double quotes for easy identification.

Cloze and gap filling tests were not seen as problematic by the student, particularly “when the blanks are related to semantic or syntactic aspects, for the test taker might find the answer with the help of context”. But, as he stated very clearly, “if the test taker needs to go back and forth to find the answer, there is a problem, for we cannot go back and forth in a text and have to rely on memory.”

By contrast, multiple-choice questions (MCQs) were perceived as challenging for VI test takers for two different reasons. The first was owing to the nature of the questions, which according to the student, will be of factual and inferential type and this expects re-reading of the text.” The other issue was the number of questions and their placement. As MCQs are normally
given after the text, VI learners have to remember all the questions and the text to complete the task. If their memory is not good, they have to go back and forth quite a lot of times which would consume time and labour.

Matching paragraphs with titles, a very common response format in large scale testing was also perceived as problematic. As the VI learner succinctly stated: “for VI learners, item types where paragraphs have to be filled in is extremely difficult because learners have to remember the paragraph before and after the blank, gist of the text, and all the options. This can’t be done by memorizing. This can be done only by filling the blank and reading back and forth again and again which would make it very laborious.”

Sequencing tasks that involved putting phrases, sentences or paragraphs in order were seen as the most problematic, for they involved a significant load on memory.

Information transfer tasks were also perceived as challenging and difficult for the following reasons.

To create a table we need to have a pictorial form in our mind first. When that is not achieved it is difficult to complete these kind of tasks. In addition, tasks of this nature demand a lot of factual details which are usually gathered through scanning, which we cannot do.

Short answer questions were seen as problematic for two reasons—question placing and response demand. As already stated by my student, “going back and forth” in a text is difficult for a VI test taker: “For visually impaired learners, all short answer questions which come after the text are a problem. They need to be answered after reading the text. We then need to keep the whole text in our heads.” Raising a second problem, he added, “Moreover, writing with a scribe who doesn’t understand some words means that we visually impaired learners have to simplify that word or find an alternative word.” This was an echo of what my students had said during the informal discussion.

“When we answer papers and start dictating, we soon know that our scribe does not know certain words, for they ask us for the spelling. If we start spelling words, we will waste time. So furthermore, then, we use simpler words”.

The free recall test is perceived as one of the fair tests which can be given to the visually impaired learners because both the sighted and VI learners will be reading the text once and writing what all they can recall. This increases the predictive and face validity of the test.

Thus phrases such as “time consuming, laborious, have to go back and forth” stood out in my discussions with the VI test taker. It is probable, that either certain reading processes do not exist, or happen differently for a VI test taker. It was necessary therefore to closely examine the reading comprehension subskills as outlined by Munby (1978) from the following perspective:

- What are the processes of reading that a VI test taker uses with specific sub-skills?
- Are any of them problematic for VI test takers?

Munby’s Sub-Skills from a Different Perspective

Munby (1978) listed a wide range of reading sub-skills totalling nearly 18 in number (Urquhart and Weir, 1998, p. 90-91). Those perceived as problematic by VI students are discussed as follows:

“Recognising the script of a language” is the most basic reading comprehension sub-skill. All test takers, if it is assumed, will be able to identify the orthography of a language, but this “skill” is completely absent in visually impaired students. When a text is read out to a VI test taker, it is the sounds of the language that are recognized, not the script. If a test taker reads the text using Braille, then it is the shape of the Braille letters
that are recognized and those are universal for all languages, as they include permutations and combinations of 6 dots.

Deducing the meaning of unfamiliar lexical items is not problematic except for the ones with visual cues. Teachers who have to use visuals, if aware of this issue, use other aids to compensate and aid VI students, but this is not the case under examination conditions (Deepa, 2014).

Therefore, a test is based on recollection, going backwards and forwards in a text seems to be a very big problem for all VI test takers. Even if they are accessing a text in Braille, they can only access the space covered by their two forefingers at any point in time. If a scribe is to re-read the text, a whole paragraph will have to be re-read. If accessed through screen readers, the VI test taker has to give the voice command to the computer to go back to a particular page or paragraph.

Selective extraction of relevant points is often difficult for VI learners as simple short cuts are unavailable to them. For example: “If the answer to a question is a proper noun, sighted learners would just search for words beginning with capital letters.” This option, as we can understand, is not available to a VI test taker.

Basic reference skills are seen as particularly problematic because, “we can ask a scribe to read titles and sub-headings, but that person cannot identify topic sentences for us.” As my student succinctly put it, “we VI students cannot skim a text at will. We have to listen to the whole text as it is read by a scribe.”

**Interpretation and Findings**

The reflective statements of the VI test takers on response types brought into the limelight the problems of not being able to go back and forth at will in a text. It is clear when one looks at the subskills the two basic reading comprehension skills—skimming and scanning—are beyond the ken of a VI test taker. Although the data collected and analysed in this study, was of the

“soft” kind, i.e. butterfly data, (Muhlhauser, 1996), the reflections are genuine. The two skills therefore seem to be absent, both at the global and the local level. This implies that of the four aspects of reading comprehension outlined by Urquhart and Weir (1998), careful and expeditious reading, local and global, expeditious reading cannot be attempted by VI learners.

**Going beyond Accommodations**

For a VI test taker, a reading comprehension text is like a listening text. A VI test taker (if Braille enabled) may take notes while a text is being read, but cannot stop and cogitate, or move forward to skim or go back. Like listeners, VI reading comprehension test takers therefore “have to carry forward information in their minds” (Weir et al., 2013, p. 349). The questions therefore ought to be in the same order as the information in the reading passage being read aloud to them.

My doctoral VI student had pointed out that placing the questions at the end of a reading comprehension text caused a heavy load on memory. However, all reading comprehension questions in tests are placed only at the end of the text. In-text questions that are interspersed within the text itself are used only in teaching contexts. At the same time, a preview of questions before hearing a text is “normally deemed necessary in selected response comprehension tasks, such as multiple choice” (Weir et al., 2013, p. 396). If this is accepted practice, then it would be justifiable to present multiple-choice questions in a reading comprehension test prior to the text for a VI test taker.

With longer reading comprehension texts and a larger number of questions it would also be necessary to number the paragraphs and indicate the paragraph number before the question. In a small experimental study, five VI test takers (undergraduate students) were given one text with numbered paragraphs and an answer location indication, and another “normal”
text with no numbering of paragraphs or answer location indication. All five VI test takers preferred the numbered and question location indicated text and questions. One of them said: “It is wonderful to have marked paragraphs”. Another said, “I need not to read the whole text again [sic]” A third emphatically stated: “I could go directly to the paragraph and answer the questions” (Ramraj, 2014, p. 266).

Conclusion
Till now, it has been assumed that any modification of a test paper, for a particular group of test takers would change the construct itself. However, a bold step that is deemed necessary has been taken under the auspices of fairness and justice to present tests in different languages to ELL test takers (Abedi, 2014; Taylor & Khalifa, 2014). This “modified test paper” step, needs to be extended to VI test takers as well. The modifications need to take into account the nature and sequencing of questions/response types and also the special scaffolding that can be provided in terms of answer location indication. If this is not done, then, “construct irrelevant difficulty” (Messick, 1989, p. 35) will be the cause for such test takers getting low scores on reading comprehension tests, leading to invalid inferences being drawn on their abilities.

References


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