

Cultural and Cognitive Factors in English Assessment Bias for Visual / Hearing Impaired Examinees

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Abstract— This study aims to identify biased items or tasks for examinees with visual and hearing disabilities in English certificate examinations and to propose possible revision and elimination of these to promote bias-free English examinations. Studies on cultural and cognitive factors began in the 1970s, including disadvantages of specific groups such as Arabic and Black children. However, the cultural factors of disabilities have not been considered as bias, in spite that persons with disabilities should be entitled to recognition and support of their specific cultural identity as stated in CRPD. This article analyzes passages, using sensitive review and DIF, in Japanese EIKEN and those of the sham examinations of TOEIC in the ETS official guide books, since TOEIC itself is not made public. It presents the biases and proposes that customizations rather than accommodations can be more effective.

Index Terms— English certificates, cultural bias, hearing impaired examinees, visual impaired examinees.

I. INTRODUCTION

This study aims to identify biased items or tasks for examinees with visual/hearing disabilities in English certificate examinations and to propose possible modification and removal of these to realize bias-free examinations. Assessments function differently, as A.J. Kunnan (2018) points out, “for different native-language, cultural, racial, ethnic, gender, or other test-taking groups.” [1] Studies on cultural and cognitive factors began in the 1970s, including disadvantages of specific groups such as Arabic-American children and African-American children (T. A. Cleary, L. G. Humphreys, S. A. Kendrick & A. Wesman 1975; Baratz 1972) [2][3]. “Persons with disabilities,” as CRPD claims, “shall be entitled, on an equal basis with others, to recognition and support of their specific cultural and linguistic identity, including sign languages and deaf culture” (Art. 30-4). However, the cultural factors of disabilities have not been considered in the field of English education, especially English tests. The major certificates have neither modified nor removed bias. Most testing agents do not consider examinees with disabilities as cultural groups but as subjects of “accommodations” such as partial exemptions and time extension.

This article analyzes, with monitors with hearing and visual disabilities, 100 passages of EIKEN (the most popular English certificate in Japan) and 100 passages of sham examinations of TOEIC in official guidebook approved by ETS, since TOEIC itself is not available in public. In addition, 24 TOEIC “Speaking & Writing” questions are analyzed.

This article articulates that examinees with visual/hearing disabilities have had disadvantage and that accommodation has limitation. It argues that customization rather than accommodation is more effective solution to eradicate

ongoing discriminatory practices in the field of English Test for examinees with visual/hearing.

This article differentiates Deaf and deaf, as Deaf people always do; while “deaf” is an individual who cannot hear including those who speak, “Deaf” refers to sign language users who cannot hear.

II. LITERATURE REVIEW

A. Absence of Bias

Research on cultural and cognitive disadvantages in English assessment started in the 1970s including those of Arabic-American children and African-American children.

One of the perspectives aiming at absence of bias is “sensitive review.” Educational Testing Service (ETS) published the ETS Test Sensitivity Review Process in 1980 and the ETS Standards for Quality and Fairness in 1987. Now all ETS documents and tests are implementing the following rules.

- (a) Should be balanced
- (b) Should not foster stereotypes
- (c) Should not contain ethnocentric or gender-based underlying assumption
- (d) Should not be offensive when viewed from an examinee’s perspective
- (e) Should not contain controversial material that the subjected matter does not demand
- (f) Should not be elitist or ethnocentric (Ramsey 1993) [4]

This standard, according to A. J. Kunnan, has resulted in “assessment agencies forming review members who are from minority groups of the test-taking population” (p.169)[1]. The minority groups include, according to Ramsey [4], different mother tongue, cultural, racial, ethnic, gender or other minority groups.

Another perspective is DIF (Differential Item or Task Functioning). DIF examines whether an item or task favors a test-taking group as an analytical procedure. The following description by Kunnan [1], who conducted long-term and wide-ranging research on DIF of language testing, indicates the groups and items that are noteworthy.

When there is a statistically significant difference on an item or task, such an item is said to have differential item or task functioning. When an item is classified as having DIF, then such items are flagged for a thorough content analysis in order to determine whether such items are biased or not. ... DIF analyses can be used to examine bias in items when test-taking groups are from different *gender, race, ethnicity, age, dialect, academic major, or any other group membership*. ... test performance data analysis with group membership variables for different dialects, content or topics, or performance could be used to examine performance for differential item or task functioning (pp.180-181). [Italicized by the author.] [1]

Both Ramsey's "sensitive review" and Kunnan's DIF mention examinees with persons with disabilities.[1][4] Ramsey includes persons with disabilities as an example of minority groups. Ramsey seems to regard persons with disabilities as a target group of (b) and (d) above; tests should not foster stereotypes of persons with disabilities and tests should not be offensive when viewed from persons with disabilities.[4] Kunnan, on the other hand, discusses disabilities as factors in DIF, pointing out that "the need to provide accommodations in assessments for examinees with disabilities has become an important component in assessment development in many countries (p.181)," and that research about such accommodations are insufficient to support, for example, "extended time" is appropriate [1].

Both researchers do not pay attention to the categorization of disabilities as part of culture in spite that persons with disabilities should be entitled to recognition and support from society as CRPD claims.

B. Deaf Culture and Blind Culture

Agencies and researchers of English certificate examinations do not regard persons with disabilities as cultural groups. There is no reason, however, not to think that it is culturally disadvantageous, if we follow CRPD and recognize and support of cultural and linguistic identity of persons with disabilities.

Deaf Culture is the most well-known, among cultures of disabilities, incorporating sign language of each country such as Japanese Sign Language and American Sign language.

It has led cultures of other disabilities, as shown in the phrase "recognition and support of their specific cultural and linguistic identity, including sign languages and deaf culture" (CRPD, Art. 30-4). There are numerous studies on Deaf culture in America and Europe. Japan is lagging behind in research in this field. Deaf culture has not been well recognized as a single culture in Japan. Since H. Kimura and

Y. Ichida published *Ro-bunka Sengen* (= Declaration of Deaf Culture) in 1996, it has been very slowly becoming recognized [5]. Popular interest on sign language is currently on the rise.

On the other hand, some blind people say, in Japan, America and Europe, that there is no Blind culture. But recently more and more blind people aware of their culture. As far as research on blind culture is concerned, Japan may be more advanced than other countries. Kojiro Hirose, a blind anthropologist claims *Shoku Bunka* (= culture of touch)[6]. *Shoku Bunka* usually refers to food culture because Chinese letter "shoku" means "eating". There is, however, another letter "shoku" with the same pronunciation meaning for "touch." As a result it attracted people both blind and sighted. Hirose's "Museum of Touch" is quite popular and it is spreading all over Japan.

In Italy, a tactile museum, *MUSEO OMERO*, was established in 1993 (<https://www.museoomero.it/>). *MUSEO OMERO*, is specifically designed to be accessible for everyone through touching objects, with descriptions in Braille. Akiko Okano who has been involved in museum management in Japan was inspired by the existence and activities of the Omero tactile museum, and she created, with an Italian co-director, the movie called "*Te de Furetemiru Sekai* (= *Le mani toccano il mondo*. "The Hands Touching the World" in English) in 2022 (<https://le-mani.com/>).

Culture of touch is not the only type of blind culture. Japan has a long history of *Biwahoshi* and *Goze* [7]. *Biwahoshi* were Buddhist monks who sang playing *biwa*, a traditional instrument like a guitar. It continued for more than 600 years. Approximately, there were 500 *Biwahoshi*'s in Kyoto in 15c. *Goze* were blind women who sang playing *shamisen*, a Japanese traditional instrument. It is also like a guitar, but smaller. They were travelling from town to town and village to village as performers. The last *Goze* died in 2005. Ukrainian traditional bards called *Kobzari* were also blind. The origins of *Kobzar* stemmed from *kobza*, the instrument like a lute (Kononenko, 1998)[8]. Thus, their culture is closely linked to their cognitive characteristics such as auditory sense and tactile sense.

It is apparent that disadvantages of visual/hearing impairment are more obvious than those of other disabilities during language assessment. Therefore, agencies offer accommodations by extreme measures such as "omit." Person with visual/hearing disabilities live in different cognitive world from sighted/hearing people. Language assessment inevitably requires passages which has "content and topics" based on cognitive world of those who make examinations (Kunnan 2018)[1]. With the explanations of how this affects the score of examinees with visual/hearing disabilities, the methodology of this research is presented in the next chapter.

III. RESEARCH METHODOLOGY

A. Premise and Standards of Analysis: Cultural Difference between Hearing/Sighted and Deaf/Blind

Visual/hearing disabilities can cause a decisive results in English assessment. Although the current certificate examinations are designed to assess reading, listening, speaking and writing abilities, this does not reflect necessarily the best framework to evaluate English skills (Abe 2017; Saito 2022)[9][10]. Most of agencies of English certificate examination have accommodations, such as “omit” or converting audio to text. However, limitation and unfairness still remains (Saito 2022)[10]. One of the critical issues regarding this is, no examination seems to consider cultural bias undermining visual/hearing disabilities. As seen in CRPD (Art. 30-4), persons with disabilities have their specific cultures which inevitably emerge from their physical or cognitive characteristics. Despite their cultures may vary from region to region, the main characteristics are the same.

Cultural difference between Deaf and non-Deaf persons is larger than that between Arabic and non-Arabic or that between Black and non-Black, due to the difference in their cognitions. Deaf/deaf people mainly feel or understand the world by visual and tactile senses. Blind people feel or understand it by auditory and tactile senses. Sighted/hearing agencies and educators have not paid enough attention to them, partly because they have not regarded the persons with visual/hearing disabilities as in the category of specific cultures. They have rather considered persons with visual/hearing disabilities as a type of deficiency. They have considered kind accommodations are enough. It is more difficult for persons with visual/hearing disabilities to learn to see/hear than for persons with Arabic culture to learn non-Arabic culture or for Black people to learn non-Black culture.

What do hearing people interpret the following sentences?

- (1) Everyone was raising the hands and rotating them.
- (2) He crumpled up a piece of paper and threw it on my back.
- (3) She turned the light on and off.

The first sentence means people applauded, (2) means “he was talking to me” and (3) means “she notified us that she was going to restart the meeting (the play)”. What do sighted people interpret the following sentences?

- (4) He cocked himself.
- (5) She raised the cane high.
- (6) The box of sweet spoke “mint”.

The first sentence, (4), indicates that he scanned books and converted them into data using PC software because he couldn’t find a supporter. (5) means “she was in trouble and asking if someone was near her”. Finally in (6) “spoke ‘mint’” implies that a blind person put a label with built-in IC recorder on the box because there are some sweet boxes of the same size and the same shape which have sweets with different flavors. Deaf culture and blind culture are to a large extent universal, reflecting cognitive characteristics,

although (4) may be expression of Japanese young blind persons.

Although persons with visual/hearing disabilities have such specific culture, they have been cared neither in terms of “sensitive review” nor “DIF”.

B. How to Analyze Disadvantageous questions for Persons with Hearing Disability

The following question is in TOEIC. This is problematic in terms of what Kunnan refer as “content or topics.” [1]

(7) TOEIC Speaking & Writing

Directions: Read the e-mail:

FROM: Audio Books on the Go

TO: List-serve

SUBJECT: Read while you’re on the road!

Catch up on the latest best selling books while you’re on your way to work! Audio Books on the Go has thousands of titles for every taste. E-mail us to find out more about our special offers.

Directions: Respond the e-mail. In your e-mail, ask TWO questions and make ONE request.

(p.250)[11]

Since Deaf/deaf examinees cannot really experience things like audio books, it is difficult to make two questions. They might think of titles of books. But if they ask the availability of two books, they cannot expect high scores. At the same time, it can be Ramsey’s “offensive from a test taker’s” [4] In Japanese Deaf culture, the term “*Koe-hara*” refers to “voice harassment”. Some Deaf people are annoyed at being forced voice. In the data analysis, (see the next chapter), I marked “sensitive review: NG” to such a passage because the topic is audio books” which clearly exclude deaf/Deaf people. I also marked “DIF: NG” because it is difficult for Deaf/deaf examinees to obtain good points.

The following passage is from Japanese EIKEN. It is “Fill in blanks” question.

(8) EIKEN of October 2022 [13]

Andrew Lloyd Webber is famous for writing musicals, and many of the songs he has written have become famous. ... One of Webber’s most successful musicals is *Cats*. This features the song “Memory,” the most popular one he has ever written. Like many of Webber’s other musicals, though, the characters in *Cats* were (Q1). As child, one of Webber’s favorite books was *Old Possum’s Book of Practical Cats* by T. S. Eliot. This is a collection of poems that describe (Q2). For example, one of the characters likes to be the focus of everyone’s attention....

(Q1) 1. not very important

2. not created by him

3. difficult to like

4. based on his friends

(Q2) 1. the history of cats as pets

2. how to take care of cats

3. the personalities of some cats

4. how cats’ bodies work

These questions are easy to answer if examinees watched this musical in a theatre or on screen. *Cats* has been performed in Japan for a long time by a Japanese theater company. People can also watch the two versions of movies in Netflix, You Tube and Disney plus. Despite most Japanese hearing people know *Cats* and “Memory,” Japanese Deaf/deaf people have little interest in musicals. Generally speaking, Japanese Deaf/deaf persons may like to read, but only a few Japanese people know Old Possum’s Book of Practical Cats. The sorts of entertainment the two cultural groups favor, Deaf/deaf and hearing, are completely different from each other. In the data analysis, I marked “sensitive review: NG” and “DIF: NG.”

The EIKEN examination of Grade 2 of October 2022 has another question which is obviously disadvantageous for persons with hearing disabilities.

(9) EIKEN of October 2022 [13]

From: Michael Green (mikeyg4000@friendlymail.com)

To: Television Depot Customer Service (service@televisiondepot.com)

Date: October 9

Subject: ZX950 LCD TV

Dear Customer Service Representative,

After reading several excellent reviews of the ZX950 LCD TV on the internet, I purchased one from your Television Depot online store. ... I was unable to adjust the volume of the TV with the remote control. I tried replacing the batteries in the remote control, but this did not fix the problem...

(Q1) What is one thing that Michael Green says about the TV that he bought?

(Q2) What problem does Michael Green say that TV has?

(Q3) Michael Green hopes the customer service representative will --- (answer options omitted)

The word “volume” is confusing for persons living without sound. The hearing persons do have plenty of experience in changing the volume using a remote control, but persons with hearing disabilities do not. In the data analysis, I marked “sensitive review: NG” because the topic is about sound. I marked “DIF: NG” because it is easier for hearing examinees to answer the question.

In this EIKEN of 2nd Grade of October 2022, two passages out of five are specifically designed for auditory activity.

C. How to Analyze Disadvantageous questions for Persons with Visual Disability

Next example is part of listening questions in TOEIC. Since listening part is omitted for examinees with hearing disabilities, it cannot be a problem for them. But for examinees with visual disabilities, it is problematic.

(10) “Answers and Explanation” in TOEIC TEST (p.22)[11]

W: Excuse me, I need to replace the color ink in my printer, but I see only black ink cartridges on the shelf. Do you have color cartridges?

M: Oh, we just reorganized that part of the store. You’ll find the color ink on the other side of the aisle. I’ll show you.

W: OK, great. And I brought this discount coupon with me. It’s valid for Hinton printer cartridges too, right?

M: Yes, we accept those coupons. Just make sure you give it to the cashier when you get to the checkout counter.

Question: Look at the graphic. What discount will the woman most likely receive?

(A) \$2 (B) \$5 (C) \$7 (D) \$10

There is a graphic of discount coupon. Sighted people understand discount value of each item at a glance. While “Picture Description Part” is omitted for blind examinees, this question is not omitted because it is in Listening Part. TOEIC does not announce what kind of accommodation they give in such a case. Even if the coupon picture is replaced with text, blind or low vision examinees will never be able to match examinees who can see the graphic. Although this problem may be regarded not as cultural matter, but as a matter of accommodation, “coupon”, “printer” and “color cartridge” are all products of visual culture, which is outside of the cognitive world of blind people. In the data analysis I marked “sensitive review: LP” (a little problematic). I marked “DIF: NG” because it has clearly a disadvantageous factor in answering the question.

The following example does not have graphic, but “content or topics” is more problematic than (10) above.

(11) “Sample Question” in TOEIC Test (P.28)[12]

Noticeboard Space Available to Community Groups

Mooringtown Library is pleased to invite local community groups to use the free advertising space on its new noticeboard, located outside the front entrance of the library. The notice must be written or printed on standard-quality paper with dimensions of either 8.5 in. x 11 in. or 5.5 in. x 8.5 in. The desired start and end date for display should be written in the front bottom right corner.... Please have the actual notice, in the format in which you would like it to appear, with you when you arrive.

Q1 What is indicated about advertising space on the Mooringtown Library noticeboard?

1. It is available at no charge.
2. It can be used for any length of time.
3. It is open to all area businesses.
4. It is intended mainly for sporting events.

Q2 What is NOT a stated requirement for a notice to be placed on the board?

1. It must be of a particular size.
2. It must be marked with posting dates.
3. It must be reviewed beforehand.
4. It must be signed by a librarian.

Q3 What should an advertiser bring to the library when making a submission?

1. An outline of proposed content
2. A final version of the notice
3. A completed submission form
4. A letter from an organization

“Noticeboard” and “format” filling are impossible for blind people. The topic “library” itself irritates persons with visual disabilities. Libraries have huge amount of books which they can never read. Therefore I marked “sensitive review: NG.” But I marked “DIF: LP” because it is not very disadvantageous to answer the questions.

People tend to think that visual/hearing impairment are exceptional and mishap. They might say that visual and auditory description are inevitable, since world is full of visual and auditory information. But blind individuals and deaf individuals can live properly in this world with their own cultures and life styles. As seen from the opposite perspective, for example, if test passages include the sentence (1) - (6) of III-A above, sighted/hearing examinees have definitely disadvantage. They probably misunderstand the passages or they may be confused. At least they feel uncomfortable.

There is another type of questions disadvantageous for examinees with visual disabilities. In the following, visualization in mind helps the examinees answer correctly. These three passages are all in the same set of EIKEN Grade 2, June 2022.

(12) EIKEN, Grade 2, June 2022[13]

The order was for 500 medium-size black paper cups with your café’s name and logo printed on them.... If you really need black cups, then we have them in small and large sizes. ... We have medium-sized coffee cups in white, and we could print your logo on these instead. We also have medium-sized cups in brown.

(questions omitted)

(13) EIKEN, Grade 2, June 2022[13]

Long pieces of wool are dyed in different colors and then put together to make a cloth with a pattern. ... Hunters became interested in tweed because it is mainly brown, green, or gray, so wild animals find it difficult to see.... Men would wear blue or black suits when doing business in towns and cities.

(questions omitted)

(14) EIKEN, Grade 2, June 2022[13]

The other source of information we have from this period is paintings on the walls inside caves....The Shigir Idol is a tall wooden statue that has faces and symbols carved into it.

(questions omitted)

(12) is especially complicated to understand unless the examinees can imagine it visually. I marked “sensitive review: LP” and “DIF:NG” to (12) because topic is not offensive but a little annoying. (13) is very similar. “Sensitive review: LP” and “DIF:NG.” (14) is less complicated as to visual information, although it is a little difficult for examinees with visual disabilities to image. I marked “sensitive review: LP” and “DIF: no mark” because questions do not rely on visual information.

The passages (12), (13) and (14) were in the same set, that is Grade 2 on Jun 2022. There were only five passages for reading part. Three passages out of the five were disadvantageous or problematic for examinees with visual

disabilities.

In addition, grammar questions using short sentences which are not included in the data of this article are sometimes problematic. The following “fill in the blank question” does not make sense to examinees with visual disabilities. It is from EIKEN of October 2022 (EIKEN, 2022):

(15) EIKEN, Grade 2, June 2022[13]

Somebody had broken one of the windows in Michelle’s classroom. Michelle had not done it, but some of the other students looked at her (Q1) she had.

It is difficult to understand for those who have no experience to look at someone when they suspect him/her to have done something.

IV. FINDINGS AND DISCUSSION

A. The Result of Data Analysis (Findings)

100 passages of EIKEN Grade 2, Grade pre-2 and Grade 3 of 2021 to 2023 were analyzed. 100 TOEIC passages (2016)[12] with 24 TOEIC “Speaking & Writing” (2022)[11] in the newest official guidebooks approved by ETS were analyzed. Analysis was made from the first passage without skipping any passage.

As has already been mentioned in the previous chapter, each passage was marked in terms of “sensitive review” and “DIF”; no mark (no problem), LP (a little problematic) or NG (offensive/inappropriate/ disadvantageous).

As an overview, EIKEN has much variety of topics, probably because it is designed for only Japanese examinees. Also, most of examinees are young people. As for TOEIC, there is a wide range of examinees, including age groups and ethnic groups.

In Japan public junior high schools encourage students to take EIKEN. Examinees who are considering in taking TOEIC are mostly college students and adults. Some high schools and colleges require EIKEN scores for admission. EIKEN is not strictly bound by “sensitive review”. On the other hand, passages of TOEIC are not based on conversations at home or at school because the relationship between parents and children or between teachers and students depend on cultures. [2] TOEIC does not have arts or other conventions of ethnic groups either.

Yet, there is not much difference, between EIKEN and TOEIC, in terms of disadvantage for examinees with visual/hearing disabilities. Speaking of examinees with visual disabilities, there were four inappropriate passages in terms of “sensitive review” and 17 passages which were a little problematic in 100 EIKEN passages. In terms of “DIF”, there were six disadvantageous and three problematic passages in 100 EIKEN passages. There were one inappropriate passage and 18 minor problematic passages out of 100 passages in TOEIC in terms of “sensitive review.” There were 15 disadvantageous passages in terms of “DIF”, and seven problematic passages. In addition, there is only one passage which is a minor issue in terms of “DIF” in 24

passages “Speaking and Writing” passages.

As for examinees with hearing disabilities, there were two inappropriate passages in terms of “sensitive reviews”, and three a little problematic passages in 100 EIKEN passages. In terms of DIF, three were disadvantageous and two were problematic among EIKEN passages. In TOEIC, there were one inappropriate and eight problematic passages in terms of “sensitive review” out of 100. In terms of DIF, there were five rather problematic passages in TOEIC. In addition, there were two inappropriate passages and one problematic passage in terms of “sensitive review” in 24 passages of “Speaking & Writing.” There were two “DIF” disadvantageous passages in 24 passages of “Speaking & Writing”.

Table 1. Examinees with Visual Impairment

	SR NG	SR LP	DIF NG	DIF LP
EIKEN(100)	4	17	6	3
TOEIC(100)	1	18	15	7
TOEICS&W(24)	0	0	0	1

Table 2. Examinees with Hearing Impairment

	SR NG	SR LP	DIF NG	DIF LP
EIKEN(100)	2	3	3	2
TOEIC(100)	1	8	0	5
TOEICS&W(24)	2	1	2	0

B. From Accommodation to Customize (Discussion)

As has been discussed in the previous sections, examinees with visual/hearing disabilities have had quite a few disadvantages. If we respect persons with disabilities and their culture, and if we do not regard them as inferior to those who see and hear, we had better place more emphasis on their cultural and cognitive factors. English certificate examinations are in most case, made by individuals who do not hold disabilities. Therefore they tend to be designed for examinees without disabilities. Unfortunately, accommodations are complicated and nearly impossible. Kunnan points out that verification of accommodation such as “extended time” has not been sufficient because verification is nearly impossible.[1] Accommodation after examinations were made by persons without disabilities are not successful because cognitive world of persons with visual disabilities are very different from that of sighted persons and cognitive world of persons with hearing disabilities are very different from that of hearing persons.

It is one of the options that we make tests for examinees with visual/hearing disabilities, or at least creators should include educators with visual/hearing disabilities.

Creating tests for examinees with visual/hearing disabilities is not unrealistic. There are 253 million visually impaired persons and 466 million hearing impaired persons

in the world. Each culture is largely universal. Since English is a global language, certificate examinations are needed all over the world.

The following are the trial production of test passages for examinees with visual/ hearing disabilities.

(16) For examinees with visual disabilities;

My dog, Zoe always walks with me. She can help me find a seat on the train. Last week, Zoe found an empty seat and led me there. But the space was narrow, so we were crammed together. Everyone laughed. I was embarrassed. She is, however, usually very smart. Yesterday I went to see a doctor. We were waiting in the hall. When the doctor called my last name, she quickly walked into the doctor’s room. The only problem is, I was left behind.

(17) For examinees with hearing disabilities;

A hunter went hunting with his dog. There were sparrows perched on an electrical wire. When he tried to shoot them, the dog started barking. The sparrows were startled and ran away. But only one remained. The hunter thought that the sparrow was deaf. Therefore, he went home without shooting.

V. CONCLUSION AND FURTHER RESEARCH

Examinees with visual/hearing disabilities have had disadvantages and they have been sometimes offended by English certificate examinations. It is one option that creators with visual/hearing disabilities create certificate examinations separately for examinees with visual/hearing disabilities. Or at least creating groups should include educators with visual/hearing disabilities. The slogan “nothing about us without us” was a driving force toward CRPD, which should be reflected in language education, especially certificate examinations.

It will be necessary, at the next step, to customize tests for examinees with visual/hearing disabilities including the same grammatical and vocabulary items as the existing EIKEN and TOEIC tests, and to prove that examinees with visual/hearing disabilities score better on the customized tests than the existing tests.

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