

In Search of the Method to Assess Japanese Students' Readiness for Global Citizenship

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 A grand-in-aid project of Japan Society for the Promotion of Science: 21K18529
 Our Website: <https://intercultural-education.net/>

< Background >

1. Japanese Ministry of Education's new initiative to produce "future global human resources" with grants (2013-)

Universities are creating new programs with a stronger focus on English, critical thinking and problem-solving skills → Increasing CLIL- and EMI-type courses

2. More and more companies in Japan have either adopted or been promoting an "English-only" policy in the workplace ("**Englishnization**").

Sending a wrong message to students and parents, making them invest more money and effort only to improve English proficiency?

Some educators worry about our tertiary education coming to serve industrial needs, plus a tendency toward linguistic or cultural imperialism.

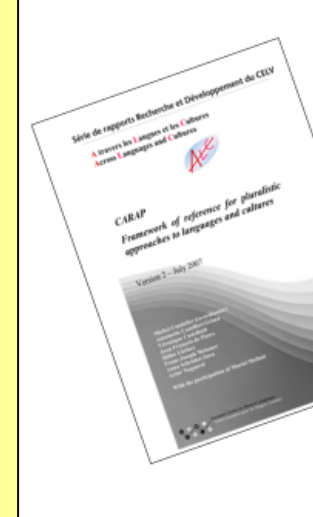
< Past Grand-in-Aid Projects >

<Purpose>

To create clear objectives and criteria for intercultural competence (incl. critical thinking) to be incorporated into foreign language (esp. English) learning in Japan.

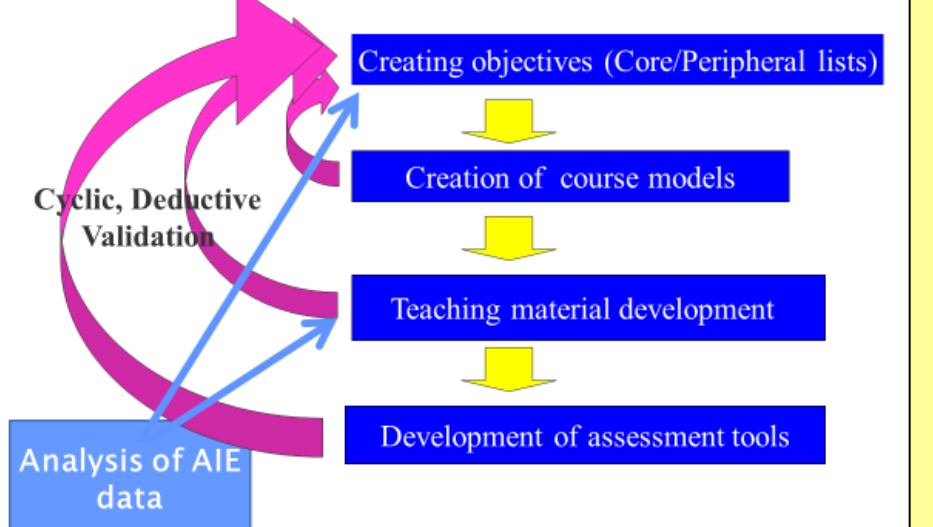
Learning English as a foreign language (EFL) has been too language-skill oriented to produce a young generation who can function in the globalizing, multicultural world.

<Descriptors Used>



Based on ECML's FREPA (Framework of Reference for Pluralistic Approaches to Languages and Cultures) influenced by M. Byram's ICC Model + Existing Critical Thinking measures in North America

<Project Overview>



(Necessity to add intercultural competencies)

What are the components of global citizenship?

Changing environment: Increasing attention to logical/critical thinking skills together with generic competencies required for workers as global citizens

< Procedure >

1. An online questionnaire survey with more than 400 workers employed in the international arena (plus selective interviews) to finalize the 40-item reality-based requirements for Global Citizenship.
2. Creation of the assessment tool (essay-test battery combined with a self-evaluation checklist).
3. Validation of the assessment tool with 221 university students with 8 teachers and 32 company workers with 5 superiors.
4. Creation of a simplified assessment tool for young adults and its validation (on-going study).

<Finalized 40 descriptors as Can-do Statements>

Four sections: Knowledge, Attitudes, Critical Thinking Skills & Generic Competencies

Knowledge

<Knowledge>

- 1. (A person) knows the basic rules of English being studied incl. prosodic, lexical, syntactic aspects.
- 2. Has high scores of proficiency tests (such as TOEIC and STEP)
- 3. Has sufficient background knowledge (historical, social and cultural background) of English.
- 4. Has a high communicative competence of English and can use it flexibly based on various situations and contexts.
- 5. Has the awareness of the fact that there are a variety of Englishes used in the world, and knows their characteristics.
- 6. Has experience learning a foreign language from a native-speaker (native).
- 7. Has some knowledge of a foreign language other than English and can do basic communication by it.
- 8. Can carry out work by a foreign language other than English to some extent.

- 9. Knows that each language has its own rules and systems with complex relationships among them, thus literal translation doesn't always yield the same meaning.
- 10. Knows that language deeply relates to culture and one's identity, so being communicative doesn't only consist of linguistic skills.
- 11. Knows that many cultures as well as languages co-exist in the world, which often causes tension and conflicts.
- 12. Knows that each culture has complex values and norms, which influence and reflect on people's world view and way of thinking.
- 13. Knows that misunderstandings may happen in intercultural communication because the interpretations of an action or phenomenon can vary between people with different cultural backgrounds.
- 14. Knows that culture is not static and is constantly changing by frequent contacts, especially under the present globalization.
- 15. Knows that there is no superiority or inferiority among cultures though some may have more power and expansion.

Attitudes

<Attitudes>

- 16. Intends to understand different languages and cultures, accepting the differences naturally as they are.
- 17. Can accept different values and ways of thinking without resistance and prejudice, including ambiguities and intermediaries deriving from different languages and cultures.
- 18. Can find value and significance in contacts with various languages and cultures, even outside one's work, giving equal respects to all of them.
- 19. Can build a close relationship with people having different cultures, embracing their identities as equal to one's own.
- 20. Can make objective and fair judgments on the issues related to quality of cultural values.
- 21. Can view and discuss both one's own and other cultures critically, avoiding preconceptions and overgeneralizations.
- 22. Can try to solve problems encountered in intercultural communication with participants, arguing with them in order to explain one's opinion while understanding different ways of thinking.
- 23. Can deal with new and unfamiliar intercultural situations with confidence and flexibility, having learned from the sufficient "trial and error" experience in the past.
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Critical Thinking Skills

<Critical Thinking Skills>

- 25. Can observe, understand and analyze the components of different languages and cultures objectively.
- 26. Can systematically classify the components of different languages and cultures based on categories and genres.
- 27. Can compare the similarities and differences of various languages and cultures by consistent, objective procedures.
- 28. Can explain one's own language and culture fully and objectively, and also express opinions and views on other cultures appropriately and objectively.
- 29. Can build constructive intercultural communication by constantly turning into and considering the possible linguistic and cultural differences.
- 30. Can choose the ways of communication most appropriate to the given situation, making use of one's accumulated knowledge and experience with learning a new language and culture.
- 31. Can learn effective ways of communication by creating hypotheses based on either the first language or other languages acquired, and comparing and verifying the rules and characteristics in light of them.
- 32. Can continue to improve one's ways of learning about different languages and cultures throughout lifetime by constantly reflecting upon their effectiveness in real-life practice.

Generic Competencies

<Generic Competencies>

- 33. Can understand complicated problems objectively by grasping the relationships between the overall picture and discrete points/elements.
- 34. Can analyze complicated problems logically by identifying discrete points/elements involved in them.
- 35. Can make a proper judgement based on the objective understanding and analysis of the problem.
- 36. Can propose the best possible solution based on logical grounds, after evaluating different people's opinions critically.
- 37. Can decide a preferable solution after drawing different opinions from one's peers democratically.
- 38. Can try out various ways based on one's past experience and resources without fear of failure, when facing complicated problem-solving situations.
- 39. Can achieve a common objective by involving and persuading people with opposite opinions in a situation where collective efforts towards a shared goal are required.
- 40. Can lead discussion and take an action strategically in order to consider various ways to accomplish a goal.

<Development of Assessment Tools>

1. For measurable 20 descriptors, the essay test battery was created. Also, for all the 40 descriptors, self-evaluation checklist (with 5-point Likert scale) was created, which can be used for objective evaluation by teachers and supervisors. The checklist was mainly used for the items not conducive to one-time measurement.
2. The essay tests were validated by IRT software, and good inter-rater reliabilities (around 0.9) and fairly good correlations between the test's scores and self-evaluation (over 0.6) and teacher evaluation (over 0.7) were obtained for 20 items used for test specification.

Essay Item Sample

"Each essay test has 3 test items like this.
 One international student often comes late for club meetings. When the leader told him to be more responsible, he said, "I do all the work with responsibility just like all the other Japanese members. On top of that, why do we have to have so many meetings? Once we create a clear plan with assignment of roles, I don't see much meaning in these meetings. Your meetings are just for chatting and relationship-building. I propose to reduce them."

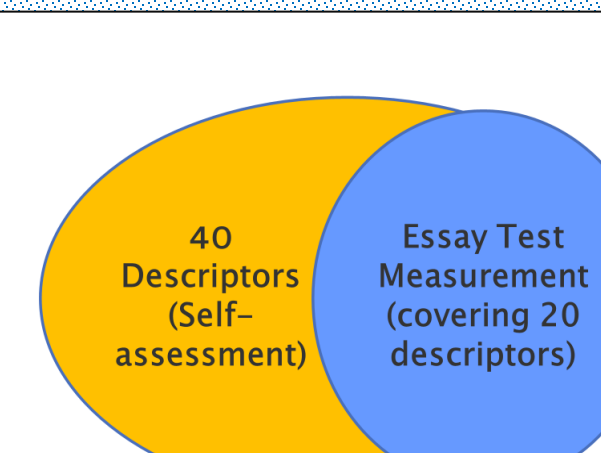
* State with your own words where the sources of misunderstanding or conflict are. (#21, 22, 25)
 * What would you do if you were the leader? (#23, 24, 29)
 * Propose a solution, explaining why it is an appropriate way to handle this problem? (#20, 28, 30)

Evaluation Criteria

1. Comprehension
 - Understanding of the situation
 - Knowledge of the culture(s) or socio-pragmatic factors involved
2. Attitude
 - impartiality/objectivity
 - acceptance/tolerance of difference
 - willingness to communicate/cooperate
 - patience and flexibility in finding a solution
3. Thinking Skill
 - categorization/factoring
 - objective comparison
 - quality of analysis
 - integration and synthesis

Correlations bet. Checklist Evaluation and Test Scores

Category	Correlation
Knowledge of Language (Items 1-10)	0.43
Knowledge of Culture (Items 11-15)	0.38
Intercultural Attitude (Items 16-24)	0.57
Critical Thinking Skills (Items 25-32)	0.69
Generic Competencies (Items 33-40)	0.67



With various kinds of statistical investigation, plus newly added AI-based text analysis, we are trying to produce a valid predictive diagnosis for global citizenship.

Modifications/adjustments were made to the descriptors.

Creation of the Simplified Version for Younger Adults

New (On-going) Experiment

Purpose: An attempt to create a measurement tool for younger students.
 Subjects: 42 junior high school and 31 5th- and 6th-grade elementary school students and their teachers
 Material: The number of descriptors was reduced to a half (20 items) while both the essay test (reduced to 2 items per test) and the Can-do checklist were simplified.

Simplification of the Descriptors

Ex. #13 (→#6)
 Knows (=Can be aware) that misunderstandings may happen in Intercultural communication because the interpretations of an action or phenomenon can vary between people with different cultural backgrounds.
 ↓
 Can be aware that people from different cultures sometimes misunderstand each other because the same actions and events have different meaning in different cultures.

Simplification of Test Items

Situations used for essay tests were also modified using those that can happen in younger students' lives described in simple words.
 1. The question about the importance of meetings and concepts of time and work assignment was changed by using some extra-curricular activity situation.
 2. The situation where an Islamic girl wants to wear a hijab in the dance competition was changed to that of the girl who has to bring a lunch box when non-halal ingredients are used for school lunch.

Tentative Results

1. Though the average inter-rater reliability (among 3 raters) was 0.79, as to 10 evaluation points, it varied from 0.56 (for categorization/ factoring) to 0.91 (for understanding the situation). Most reliability indices were lower than the previous study for university students, which seems to be attributable to the lack of linguistic expressive ability of young learners. The average scores (out of 20 points) were lower than those of university students (overall score: 8.9 for elementary school students, 11.3 for junior high students vs. 14.2 for university students), and there were cases in which raters couldn't determine the scores due to lack of evidence.

2. Overall, students' evaluation and teacher evaluation by the checklist exhibited sufficient correlations (around 0.7) with little difference between junior high school and elementary school students. Compared to the results of university students and adults in the previous study, the correlation patterns were similar, but more agreement was seen so far. Quite often, Asian students report their abilities lower than the reality, but such tendency was not so apparent among younger students.

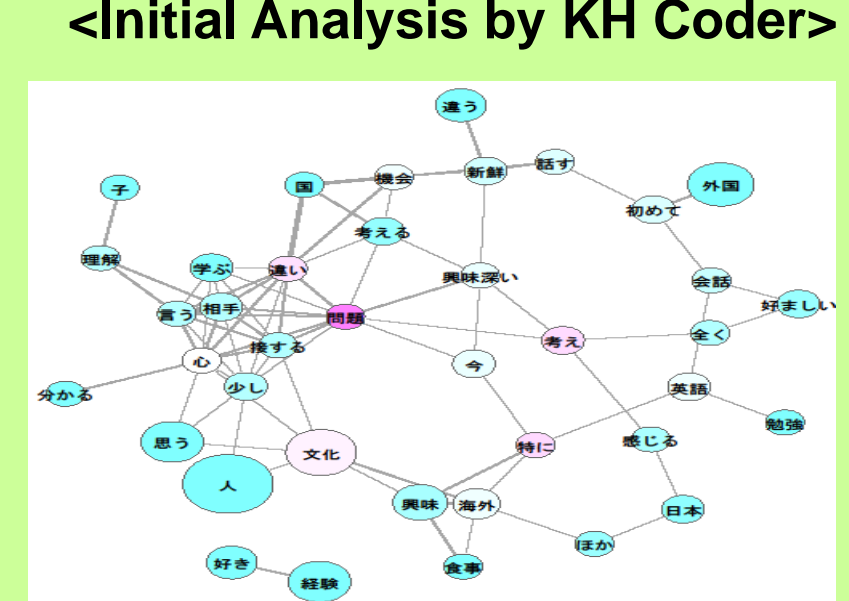
Problems with predictive validity of essay tests

Category	Correlation
Knowledge of Language (Items 1-3)	0.42
Knowledge of Culture (Items 4-8)	0.45
Intercultural Attitude (Items 9-13)	0.57
Critical Thinking Skills (Items 14-16)	0.69
Generic Competencies (Items 17-20)	0.65

<Qualitative Analysis>

1. Further qualitative analysis was done to student responses to improve essay test items.
2. Additional interviews were conducted to tease out more detailed thinking processes of some representative students.

<Initial Analysis by KH Coder>



<Students taking the test>



Trying out AI application to produce a better summative diagnosis, combining quantitative & qualitative data