Tohoku English Language Teaching Expo

What Factors Influence the Assessment of Speaking Interactions in Elementary School Foreign Language Education?

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Introduction

- ☐ Implementation of foreign language education in elementary schools under the revised Couse of Study.
- ☐ Focus on listening and speaking skills in elementary school English classes
- ☐ Assessment through performance tests
- ☐ Needs for objective and transparent evaluation using numerical measures

Introduction

- ❑ Teachers' language and instructional perspectives
  - ✓ verbal aspects→ grammar, fluency, and pronunciation
  - ✓ non-verbal elements →eye contact, gestures, and facial expressions
- ❑ Significant variability in the criteria
  - ✓ Discrepancies in evaluation criteria between the ESAT-J test and STEP test

Introduction

- ☐ Appropriateness of considering non-verbal factors (e.g., eye contact, gestures, smiles) as valid criteria for assessing English speaking skills in elementary schools

- ☐ Lack of consensus on whether non-verbal factors are relevant to evaluating English speaking proficiency

Previous Studies

Inagai et al. (2006):

- Aimed to analyze potential differences in evaluations among Japanese English teachers (JTE) and native English-speaking teachers (NTE), as well as among JTEs based on their teaching levels and experience.

- Emphasized the need for careful evaluation to minimize individual differences in assessments, which significantly influences the objectivity of evaluations.

Previous Studies

Tamura (2022):

- ☐ Surveyed 96 elementary school teachers on their awareness of English evaluation.

- ☐ Identified challenges in evaluating speaking skills, with a significant percentage finding assessment of interactive speaking challenging.

- ☐ Advocated for teacher training to enhance assessment validity and reliability.

Previous Studies

Okazaki et al. (2021):

❑ Conducted a practical study on speaking performance evaluations in an elementary school

❑ Five evaluation criteria: (1) attitudes (eye-contact & vocal volume), (2) fluency, (3) accuracy, (4) response, and (5) questions

❑ Highlighting the test's validity, reliability, practicality, and positive effects on students' learning and motivation

Previous Studies

☐ **Challenges and inconsistencies in speaking skills evaluation from previous studies**

☐ **Appropriateness of including non-verbal factors (e.g., eye contact, gestures, smiles) as valid criteria for assessing English speaking skills in elementary schools**

Research Questions

Purpose of the study is to uncover the evaluation criteria in performance tests of speaking (interaction) in elementary school foreign language classes.

RQ 1: What criteria do raters emphasize in performance tests of speaking (interaction)?

RQ 2: What factors do raters use as the basis for giving high or low evaluations in performance tests of speaking (interaction)?

Method

Participants

- ❏ 71 second-year university students of the Elementary School Course of the Education Faculty.

- ❏ Majority aspiring to become elementary school

- ❏ Background knowledge in teaching methods for elementary school English education

Method

Materials

☐ Seven distinct performance test videos for the evaluation

☐ Hypothetical performances in English language tests between elementary school students and teachers, acted out by university students

Method

Seven types of performances emphasizing different aspects:

- ☐ perfect performance (*PF*)
- ☐ grammar errors (*GA*)
- ☐ *katakana* pronunciation (*PA*)
- ☐ pauses (*FL*)
- ☐ no gestures (*GT*)
- ☐ no eye-contact (*EY*)
- ☐ insufficient voice volume (*VL*)

Method

Seven types of performances emphasizing different aspects:

- ❑ Shared script for the interactions to eliminate the influence of factors other than the six criteria

- ❑ Holistic and analytic evatuation

- ❑ four-point scale evaluation (4 = Very High, 3 = High, 2 = Low, 1 = Very Low)

- ❑ Free-response section for reasons for the evaluations

Method

Procedure

1. Teams have the files for the seven self-introduction videos.
2. Assuming they are recordings of elementary school students' performance tests for "Unit 1: Self-introduction"
3. Providing a four-point scale holistic assessment with the reason
4. Providing a four-point scale analytic assessment based on six criteria (grammar accuracy, pronunciation accuracy, fluency, gestures, eye contact, and voice volume)

Method

Data Analysis

❑ Multiple regression analysis

    ✓ Dependent variable: holistic evaluation

    ✓ Independent variables: analytic evaluation for six criteria

❑ Highlighting criteria prioritized in participants' evaluations

❑ Text mining (correspondence analysis)

    ✓ External variables: four-scale holistic evaluations

Results and Discussion

Descriptive Statistics

	M	SD	Min	Max	95% CI
perfect performance	4.00	0.00	4.00	4.00	[4.00, 4.00]
grammar errors	2.24	0.73	1.00	4.00	[2.39, 2.08]
katakana pronunciation	2.76	0.57	2.00	4.00	[2.87, 2.63]
pauses	2.47	0.55	1.00	4.00	[2.58, 2.35]
no gestures	2.97	0.54	1.00	4.00	[3.07, 2.85]
no eye-contact	2.39	0.64	1.00	4.00	[2.52, 2.25]
insufficient voice volume	3.16	0.65	1.00	4.00	[3.29, 3.02]

Results and Discussion

Results of Multiple Regression Analysis ($R^2 = .53$)

| Independent Variables	B	SEB	β
grammar accuracy	0.34	0.02	0.43**
pronunciation accuracy	0.14	0.03	0.16**
fluency	0.17	0.03	0.23**
gesture	0.13	0.02	1.18**
eye-contact	0.28	0.02	0.38**
voice volume	0.13	0.03	0.15**
intercept	- 1.07	0.02	

Results and Discussion

❑ All six independent variables (grammar accuracy, pronunciation accuracy, fluency, gestures, eye contact, and voice volume) are statistically significant.

❑ grammar accuracy ($\beta = 0.43$)→ eye contact ($\beta = 0.38$) → fluency ($\beta = 0.23$) → gestures ($\beta = 0.18$) → pronunciation accuracy ($\beta = 0.16$) → voice volume ($\beta = 0.15$).

❑ The participants base their speaking evaluations on grammar accuracy → eye contact → fluency.

Results and Discussion

☐ The coefficient of determination (R^2) = 0.53,

☐ 53% of the variance in the overall evaluation can be explained by the six independent variables.

☐ What are the other factors besides the six criteria?

Results and Discussion
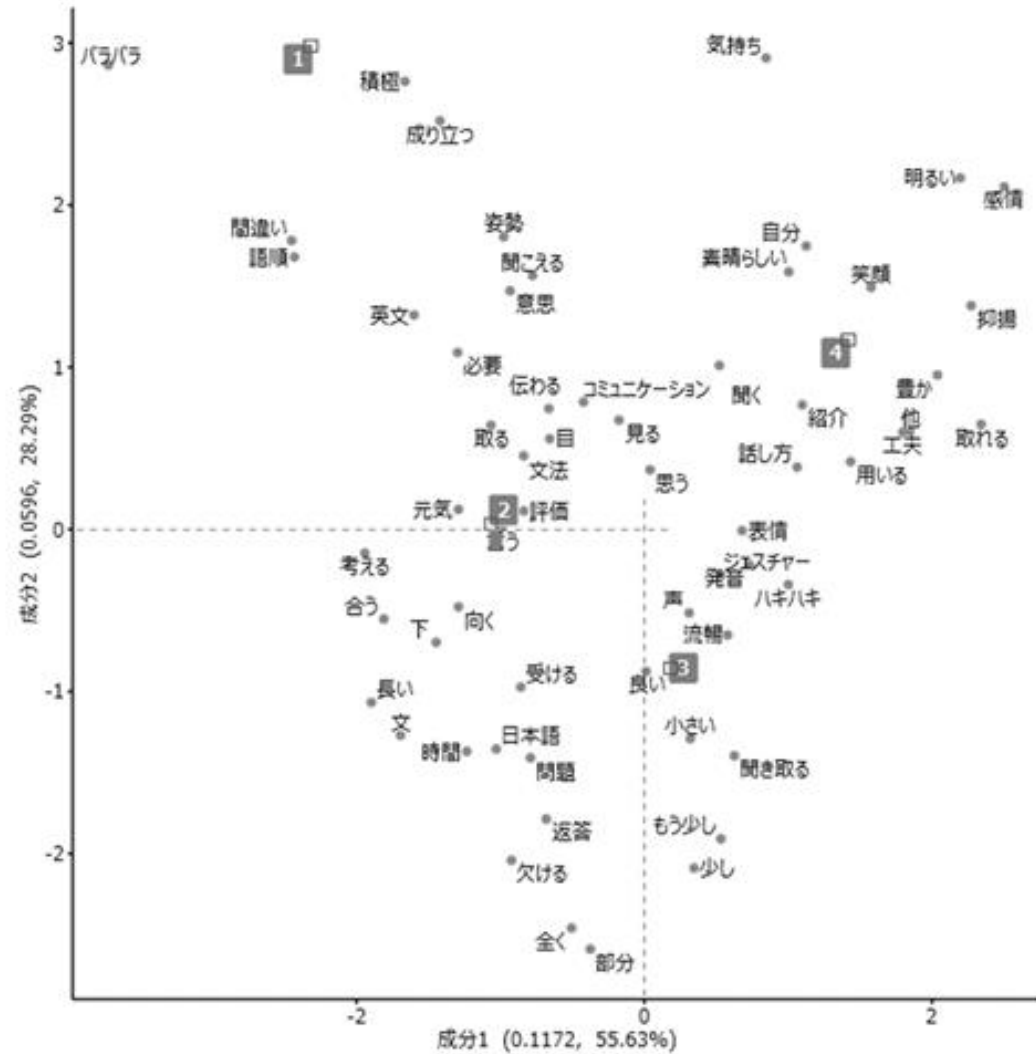
Results and Discussion

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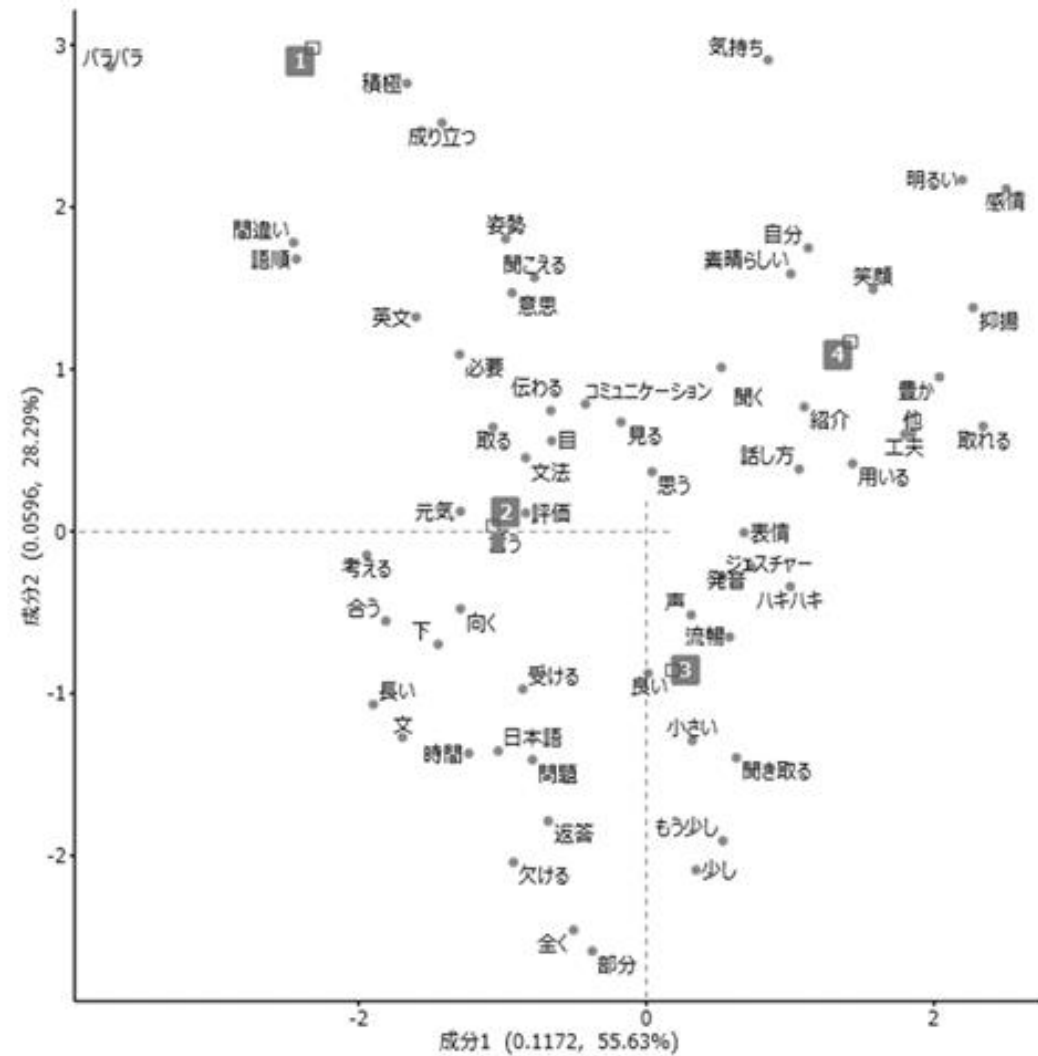
Results and Discussion

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Results and Discussion

Conclusion

- ☐ Factors influencing assessments

  grammar accuracy → eye contact → fluency

  53% of overall evaluation is explained
- ☐ Non-Verbal Factors

Pedagogical Imprecations

- ❑ necessity of rubric?

- ❑ validity of including non-verbal elements as a criteria of speaking evaluation

- ❑ speaking tests gain prominence in high school and university admissions

- ❑ a potential risk that raters can be influenced by non-verbal factors