

Large-Scale Academic Ability Assessment Platform for Measuring Four Foreign Language Skills

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Challenge

In Japan, national academic ability survey has done every year, in one-million-student scale. There was no feasible method/process to carry out foreign language skill assessment, covering all following conditions, particularly speaking skill,

- Must be delivered simultaneously nation-wide, with the same set of question items.
- Network capacity of testing venues (public lower secondary schools) is usually very limited.
- Must be scored efficiently with unified rubrics.
- Scorers need to evaluate and classify each answer based on grammar accuracy, syllable stress and content, not only distinguishing the answer is correct or not.

Solution

We realized fast, yet accurate scoring of foreign language speaking skill assessment, using Speech Activity Detection technology to cut silent parts off from answer data and Speech-to-Text technology to convert answer data into text. With our Scoring Management System, scorers are able to classify each answer with various evaluation perspectives.

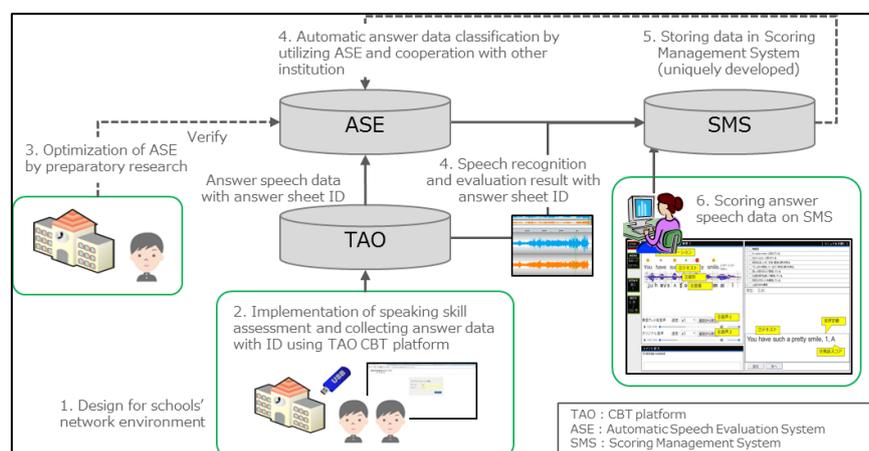
We also adopted “offline CBT” approach, embedding CBT server application into USB memory stick for the schools equipped with limited network capacity. With this approach, we realized the assessment delivery at the same day, the same time, with the same set of questions, for all 3rd-year students of lower secondary school in Japan,

Learning Impact

- Shorten the time needed for scoring with technologies.
- Enable scorers to evaluate learner’s skill with unified, multidimensional perspective
- Rapid and precise result feedbacks for not only learners but also the national government, districts (boards of education) and schools.

Return on Investment

- 94.2% of Japanese lower secondary schools are working on the improvement of education based on the result of this survey.
- 85.1% of Japanese lower secondary schools are using the result of this survey to show educational outcomes to parents and local community.
- 57.7% of Japanese lower secondary schools are using the result of this survey to gather the information about newly entering students.



(The figure of Assessment Platform for Measuring Four Foreign Language Skills)