1. BACKGROUND

Motivation for the study

- Integrated tasks which require multiple language skills are employed in a number of international exams (e.g., IELTS, TOEFL, TEAP).
- Integrated writing is a fundamental skill in academic writing but difficult even for L1 learners (e.g., Cumming, 2005; Rudnitsky & Rudnitsky, 1999; Shi, 2004; Hyland, 2005; Delany, 2008).
- Integrated writing tasks give a better prediction of whether a learner will be a novice or an advanced writer in a real-life academic writing (Plakans, 2008).

Previous research on integrated writing

- The last few decades have seen an increasing number of publications on integrated writing tasks.
- Potential elements in source texts that may influence the quality of written products include: the use of the first language and target language for summarization (e.g., Yu, 2008).

3. THE CURRENT STUDY

This study attempts to identify some of the cognitive patterns which are involved in integrated writing when test-takers use information from multiple source texts and graphs as prompts. Using the Test of English for Academic Purposes (TEAP) and eye-tracking software, the research is an attempt to identify the cognitive processes involved in integrated writing tasks.

2. Familiarity of the discourse types of the test (e.g., Delaney, 2000; Yu, 2009).

3. Effects of source text borrowing (e.g., Cumming et al., 2005; Weigle & Parker, 2012).

Previous research on language assessment by Eye-tracking and keystroke analysis

- Eye-tracking technology is increasingly becoming available to linguistic professionals.
- Revised & Lee (2015) studied underlying L2 pausing and revisions behavior using IELTS Writing Task 2.
- Brunfaut & McCray (2015) used Eye-tracker to find text processing according to test-takers’ characteristics using APTs Reading.
- Yu, Rua-Dickeys & Kiley (2015) investigated the cognitive processes involved for summative writing with graphic information in the case of IELTS Writing Task 1.

The research gap

- Previous studies suggest complexity of the reading into writing construct, which is quite different from that of reading and writing as separate skills (Delaney, 2008; Bachman, 2002).
- Little research has been conducted on the use of graphic information for integrated writing tasks (e.g., Yu, 2008; Rua, Dickeys, & Kiley, 2012, 2014).
- Most of the studies for integrated writing use a think-aloud method, but the current study uses eye-tracking technology.
- Empirical research on the cognitive processes of integrated writing in L2 context are still at stage (Revés, 2014).

2. THE CURRENT STUDY

This study attempts to identify some of the cognitive patterns which are involved in integrated writing when test-takers use information from multiple source texts and graphs as prompts, using the Test of English for Academic Purposes (TEAP) and eye-tracking software. The research is an attempt to identify the cognitive processes involved in integrated writing tasks.

A Mixed-Methods Approach (Explanatory Research Method)

Quantitative data assess the trends and relationships

Qualitative data explain the mechanisms or reasons behind the results and trends

Participants

42 Japanese high school students from Kanazawa, Japan. Male=10, Female=32

Instruments

1. APTs (Reading, Writing, Grammar & Vocabulary)
2. APTs Writing Mock Test by eye-tracker (Tobii TX300 from Tobii Technology) n=42
3. A Survey (Test-taking strategies) n=40

IV. Procedures (DATA COLLECTION)

Introduction Procedures

Collecting a consent form

Explaining the procedure

Getting Started

Calibration

5 minutes

5 minutes

5 minutes

Collecting Data

TEAP Task B (Test 1) 40 min

TEAP Task B (Test 2) 40 min

TEAP Task B (Test 1) 40 min

Conducting surveys

Collecting a survey form after completion

5 minutes

5 minutes

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