
Poster Presentation

Genre-Based Analysis of Moves in Research Abstracts Written by Japanese University Students

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Introduction

A research abstract (RA) is a text of foremost importance to students of science and engineering at Japanese universities. However, explicit teaching of the form tends to be missing from general English education for students of the sciences. Students often resort to direct translation from Japanese to English, which leads to many problems with structure and cohesion. Treating the RA as a genre using a Systemic Functional Linguistics (SFL) approach (Halliday, 1994; Martin, 2000) divides RAs for academic conferences into six moves: 1) Background/Introduction/Problematization; 2) Present Research/Purpose; 3) Methods/Materials/Procedure; 4) Results/Findings; 5) Highlighting Results, and 6) Future Works (Swales & Feak, 2009). This presentation reports the findings of teaching RAs as a supporting genre of the expository genre to third-year students in an undergraduate English for Specific Purposes (ESP) course at a Japanese

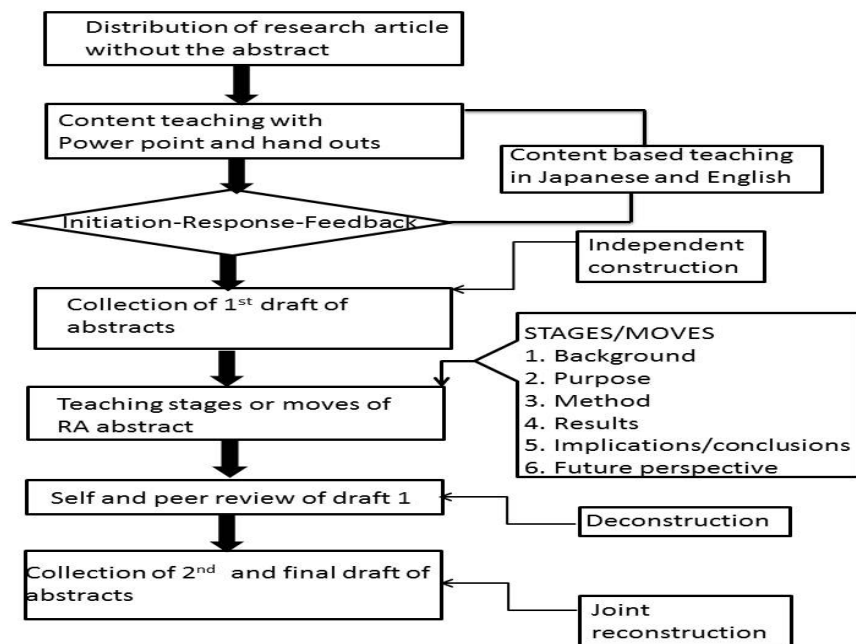


Figure 1. Flowchart describing the procedure of data collection

university of science and engineering. The teaching of the six moves of the RA was adapted from a model having three phases: independent construction, deconstruction, and joint reconstruction, as shown in Figure 1 (Rothery & Stenglin, 1994). The classroom procedure is also shown on the right of the figure.

At the first stage, the students were taught the content of a research article and asked to independently construct an abstract. Next, through deconstructing their own abstract drafts, they were taught the required moves of a research article abstract. In the final phase, students were asked to write a second draft of the abstract for the same research article with the moves that had been taught.

Abstract drafts from the pre- and post-intervention stages were collected from 20 students and analysed for the number of generic stages and the sequencing of generic moves. Figure 2 shows the results obtained as a histogram of generic stages for pre-intervention (left) and for post-intervention drafts (right). After teaching the moves, the number of students who used all six stages

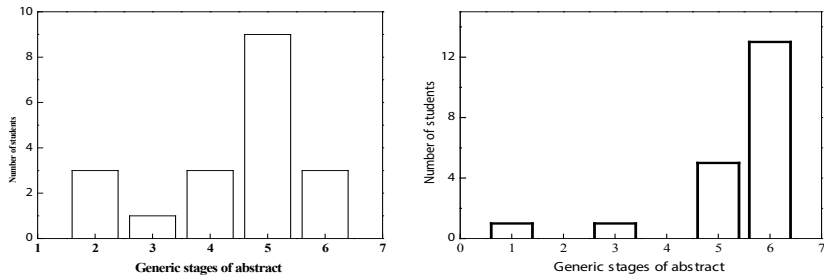


Figure 2. Improvement in the number of generic moves with intervention before (left) and after (right)

increased from 3 in the pre-intervention stage to 13.

Next, the correct sequence of generic stages in the pre- and post-intervention phases was analysed. After intervention, the stages that were jumbled in the pre-intervention phase followed the proper sequence in the post-intervention draft. Results of the analysis are shown as a histogram in Figure 3. The number of students who had correctly sequenced generic stages before teaching the moves was 11; this figure changed to 16 after teaching the moves. A statistical analysis using a paired t-test showed these changes were due to intervention with a significance value p of 0.05.

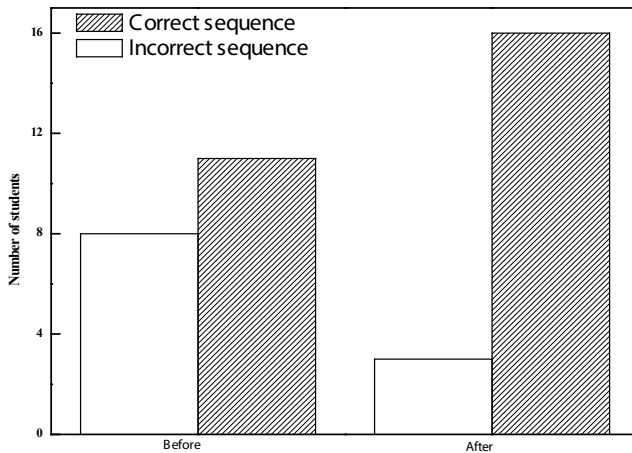


Figure 3. Improvement in the sequencing of stages with intervention

Transitivity and thematic analysis (Coffin et al., 2009) were done with pre- and post-intervention abstract drafts. Before intervention, there were almost an equal number of material and verbal processes. After intervention, both material and verbal processes decreased. With intervention, existential processes increased from zero to 16%. The mental processes were also found to increase in the post-intervention phase compared to pre-intervention. Patterning or flow of information in the abstracts was analysed to find zigzag patterning. In general, the patterning seems to have improved with intervention.

Genre-based teaching of moves of RA abstracts were found to be a very effective way of teaching students to produce an RA; there was improvement both in the number of stages and sequencing of stages, as well as some minimal improvement in zigzag patterning of the stages. In spite of the fact that it was the first time for students to write an RA, they were able to produce texts that contained features of a standard abstract. This study suggests that genre-based teaching can be a very useful approach and can be easily adapted to suit classroom teaching practices, even for students without any prior experience of abstract writing.

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Authors' bios

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