Action Research for Exploring Genre Approaches to Writing in Real-World ESP Classrooms

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Abstract

This paper investigates how action research can be used to develop genre-approaches to teaching using a case study of teaching research article (RA) abstract writing on a course in Japan for science and technology students. This study involved two pedagogies placed within genre-awareness approaches, with moves being taught at different stages for each classroom. In addition to the teacher's observations and a questionnaire to evaluate students' perceptions, written drafts from both groups were analysed at two stages. Our analysis reveals that earlier intervention in teaching moves helped students to better construct their abstracts and that language-based activities played a role in improving students' abstract writing without moves-based instruction. Moreover, the exercise of conducting this study in an action research framework highlighted the advantages of using a cyclic framework which allows for timely intervention based on teacher observation and critical evaluation of the teaching and learning context as the task progresses.

Keywords: teaching genre, action research, research abstracts, genre moves, ESP contexts

1. Introduction

This paper reports on research which was motivated by a desire to further understand the learning process in a specific context: the difficulties practitioners encounter when teaching the basics of writing a research abstract to a novice, mixed group of university students. We report on the challenges that one author, Rajagopalan (referred to as "the teacher" in this paper) had to take into consideration when planning and carrying out a particular task with her class. The teacher also engaged in a process of critical examination and evaluation of the task in the context of relevant literature, student responses, and her own observations. We argue that this commitment to change and to understanding the social content within which it takes place, positions this research within the framework of action research. In brief, this type of research involves a series of cycles, composed of planning, acting, observing, reflecting and back again to planning, each stage feeding into and informing the next. A key component of action research therefore is *intervention*, the planned change to the process.

Action research is understood as a type of practitioner-based research which is self-reflective and undertaken to improve researchers' own practices (Kemmis, 2007). As an insider, the researcher is well situated to study an issue or practice in depth and with insider knowledge. The insider-researcher can take action and make changes to a practice situation (Costley et al, 2010). This central feature of action research, however, is the basis of one main criticism of action research.

With the researcher-practitioner being an insider, action research has been criticised in the ways interpretivism is often questioned. This insider position has been seen as being potentially too close to the data (McAteer, 2013; Fongkaew and Nilvarangkul, 2018). Moreover, when conducting action research, where full objectivity is the aim, it can be difficult to achieve when the focus is on "my practice" (McAteer, 2013). While subjective interpretations and opinions of the situation and the data are likely to appear, two of the researcher/authors involved were not teaching these students and were able to evaluate aspects of the teaching and interpret the data from outside the classroom.

This investigation has also arisen out of the need to evaluate genre approaches that are not aimed at native English speakers working in their first language (as with Martin, 2009; Martin & Rose, 2008; Kelly-Laubscher et al, 2017) or at foreign language students with a high level of proficiency in the target language (as found in Cheng, 2007; Wang, 2017). Moreover, unlike other studies in the area of genre-based pedagogies, our students are not a homogenous group from the same field of study, but instead come from a range of science and technology backgrounds. We believe that this reflects real-world teaching situations for many in ESP education.

For conducting research in science and technology and for establishing research careers, there is a need for international students to have enough fluency in English to produce writings of their own research. In order to address this need, at a Japanese national university, third-year undergraduate science and technology students were taught a skills-based one-year technical English course. The aim of this course was to give students the tools to acquire different literacy skills of common academic and professional research genres. These include

summarizing research articles, making oral and poster presentations and writing up a research article (RA) abstract. In this context the teachers are required to teach abstract writing to science and technology students for whom English is a foreign language. Such students are faced with language challenges along with the added difficulty of not having any prior experience in research, nor do they have any experience of reading RAs.

1.1 Genre Approaches in the Context of This Study

Genres can be described broadly as "social practices" (Bhatia, 2012; Rajagopalan and Jie, 2016) and more specifically as "staged, goal-oriented social processes" (Coffin, 2013, p. 502). To accomplish certain social goals, "genres involve a number of predictable functional stages" (Martin, 2000: 117) with the meaning created in each stage being realized through the lexical and grammatical choices made. At the same time, genres are complex and dynamic. According to Bhatia (2012, p. 242), there may be similar situations or rhetorical contexts that recur but not in exactly the same way. Under such situations, a person negotiates his/her response that is different from the established conventions, although such manipulation is invariably subtle.

Genre approaches have already made significant contributions to research in ESP and have been adapted to teaching and learning in the different fields of the specialized domain of scientific, technological, business, legal and research contexts (Bhatia and Gotti, 2006). Like the present study, some of these genre approaches for the classroom (such as Henry and Roseberry, 1998; Cheng, 2007; Stoller & Robinson, 2013) have included the use of the concept of "moves." First introduced in Swales (1990), moves are segments of texts "designed to achieve one main communicative objective" (Swales and Feak, 2000, p.35). In this study, the authors draw more specifically on Swales and Feak's (2009) development of the concept of "moves" which was applied to the genre of abstracts.

In the present study, focus is placed on how to effectively improve the students' writing of abstracts using genre-based pedagogical tools. As early as the 1990s, the importance of abstracts for students in the sciences was recognized. Ventola (1994) described abstracts as having "become a tool of mastering and managing the ever increasing information flow in the scientific community" (p. 333). Despite this, although there are studies that deal with the teaching of report writing (Brett 1994, Dudley-Evans 1994; Holmes 1997; Peacock, 2002; Muangsamai, 2018) and studies on the features of abstracts (Salager-Meyer 1990, 1992; Van Bonn and Swales, 2007; Viera, 2019) scant attention has been given to the actual teaching of abstract writing.

In the case of Japanese students writing in English, problems occur in writing that mainly arises out of the way the writing is done. In general, most of the students engage in direct translation of their initially constructed Japanese drafts. This method tends to make students more focused on micro-level linguistic items, such as vocabulary and subject-verb agreement. The texts that students produce in English are usually weak in terms of the textual properties of coherence and cohesion. Yasuda (2011), working with Japanese students, makes similar observations, noting student focus on small linguistic units as opposed to whole texts, adding that student writers "are likely to approach writing tasks with the belief that such texts are

autonomous and context free. This belief … may prevent them from seeing writing as a social action that is performed through interactions of purpose, audience, and linguistic choice" (p. 112).

Following Yasuda (2011), who uses a genre approach to email writing, the current study also employs features from systemic functional linguistics (SFL). This approach sees the functional aspects of language as a resource for making meaning in particular social contexts (Halliday & Matthiessen, 1999; Martin, 2009; Martin & Rose, 2008; Yasuda, 2011) which can work in tandem with genre approaches. Like Yasuda (2011), we use SFL input on lexico-grammatical features with genre-based writing tasks for Japanese undergraduate students similar to ours, possessing limited L2 writing experience. The role of SFL and the analysis of SFL components of our study are discussed with the preliminary findings in Rajagopalan and Jie (2016). Here we wish to focus on the moves of a genre approach within a larger study using two groups of students.

The current study also follows the classroom methods of Kelly-Laubscher et al (2017), who use a moves-based genre approach for teaching laboratory report writing to biology students, by facilitating the writing of several drafts with structured peer-review tasks along the way. Common with all of these studies is the idea that "the combination of genre and task can create a crucial pedagogical link between socially situated writing performance and choices of language use" (Yasuda, 2011, p.127).

Using an action research framework, we considered whether, and at what stage, explicit teaching of genre moves can contribute to effective learning. This study therefore seeks to address the limitations in current research, and through its findings, offers a strategy that can be adopted by English language practitioners, and particularly those who are teaching English for Specific Purposes.

This study asked two research questions: 1) In what ways does the teaching of explicit genre moves improve student writing of RA abstracts? 2) At what stage in the teaching and learning cycle is teacher intervention effective?

In order to answer these questions, we note the ways in which the teacher adapted the teaching, feeding her observations into the next cycle of planning and acting. We have also analysed students" drafts at different stages of pedagogy as the stages were in a different order for each group. This has allowed us to compare the elements of genre teaching, namely the use of lexico-grammatical activities and moves-based activities. As a methodology, this use of two groups responds to a common criticism of classroom-based research, i.e., that it tends not to use control groups (Hermansson et al, 2019). While we could not have a true control group that had no teaching input (the students had to be taught), putting different genre elements in at different stages made each group a "control" group for one element of the teaching at the initial stages. To better understand the effectiveness of this type of teaching approach, students were also asked questions informally in class following their taking an anonymous survey about the genre approach used.

1.2 Moves Analysis

One genre approach is the "moves analysis" proposed by Swales (1990) to explore the discursive patterns found in particular written genres. Swales & Feak (2009), in an extended definition of Swales (1990) define a move as "a stretch of text that does a particular job. It is a functional, not a grammatical term. A move can vary in length from a phrase to a paragraph" (p.5). Moves analysis has been used to investigate the organization of published RAs in sciences as well as humanities fields. Swales proposed a well-known model, CARS (create a research space), for research article (RA) structure (1981, 1990) on the moves in RA introductions. The variations across different fields for moves in different sections of published RA have been studied with a focus on Abstracts (Swales & Feak, 2009), Introductions (Swales 1981, 2004), Methods (Lim, 2006), Results (Brett, 1994) and Discussions (Dudley-Evans, 1994; Holmes, 1997; Peacock, 2002; Swales, 1990).

Swales and Feak (2009) looked into a range of analyses of rhetorical moves found in RA abstracts across fields and in different languages and noted that most researchers identified six moves. Within the six rhetorical moves the first five moves are obligatory: the first one describes the background, the second one establishes the purpose, the third move gives the details of the method and procedures, the fourth move presents the results and the fifth move describes the implications. These obligatory moves are necessary to achieve the communicative purpose of the genre, while the sixth move, which covers recommendations and further implications of the conclusions is optional, chosen only to add to the effectiveness of the communication without altering the purpose of the text.

While Stoller & Robinson (2013) provide students with the move structures that are supposed to be a *safe* starting point on which skills for complex patterns can be built later, Samar et al. (2014) discuss raising awareness of variations. They highlight the lack of research on the structure of conference abstracts and argue for more studies from an analysis based on abstracts collected from linguistic conferences. The authors indicate the need for sensitizing students to the *universal features* across different genres as well as disciplines. We were conscious therefore that, whilst students should be taught knowledge of structure and content, they also needed to understand that these are not rigid patterns, and that there can be disciplinary variations. This was particularly important, given that ours was not a homogenous group of learners. The challenge when teaching was to negotiate a path between a too strict "recipe" approach to teaching genre and one which might confuse novice students by presenting too many options.

Actually identifying moves can be difficult not just for students but sometimes even for expert readers. Difficulties in identifying moves can occur as the move boundaries may not always be clear cut and they could occur in a different order. Swales 's move analysis of RA texts created moves by looking for lexical and grammatical forms which characterized each move. This can also be found in Ayers (2008, p.25), who noted that in addition to communicative purpose, the moves of RA abstracts are distinguished by the use of tense, voice and lexis. Moves identification may involve not just distinguishing lexico-grammatical patterning, but also employing thematic criteria along the lines of thematic progression and

thematic development with each move (Lores, 2004). Furthermore, decisions about the classification of moves and the validity of the moves may need questioning (Dudley-Evans 1994, p. 226). Nevertheless, this study has shown that Swales's moves could provide a useful framework for building students' awareness of this genre. Most of the students could not only easily identify moves during the deconstruction stage of abstracts but could also discriminate abstracts that were well written from those that lacked clear move structure.

2. Participants and Methods

Table 1 provides background details of the two groups of students and the nature of research tasks they engaged in. The abstracts that students wrote for their ESP class pertained to their individual reports in their own fields of study.

Table 1. Profile of Students in Groups A and B

Characteristics	Group A (n=20)	Group B (n=19)
Field of students	Science Management, Internet Security & Media Communications	Mechanical Engineering
Students' nationalities	Japanese except for two Chinese	Japanese except for one Indian
English Education	Eight years of English learning through Japanese	Eight years of English learning through Japanese
English assessment score (TOEIC)	400-600	400-600 (two over 800)
Students' classroom activities	Programming tasks of creating games, analysing images, data mining, designing web pages	Image processing, logic circuit, stress-strain relation, flow analysis, heat convection, robot control, stress analysis

The students were third year science and technology students, on a programme which provided specific training in English as required for their disciplinary specialisations. The students undertake this course before carrying out laboratory-based work in the fourth year. As can be seen from table 1, they were a diverse group in terms of disciplinary fields, and the kinds of research they undertake in year 4, though there was more consistency across others aspects, such as nationality and experience in learning English. With reference to group B, English Education, this consisted of a Japanese teacher speaking Japanese as a language of instruction even though the subject is English. There is more focus on grammar and reading and limited use of spoken English.

2.1 Procedure: Classroom Stages and Data Collection

In this section, we describe how the study was conducted and at which points the data was collected. The sequence of teaching which differentiates the two groups, Group A and Group B, is shown in Figure 1.
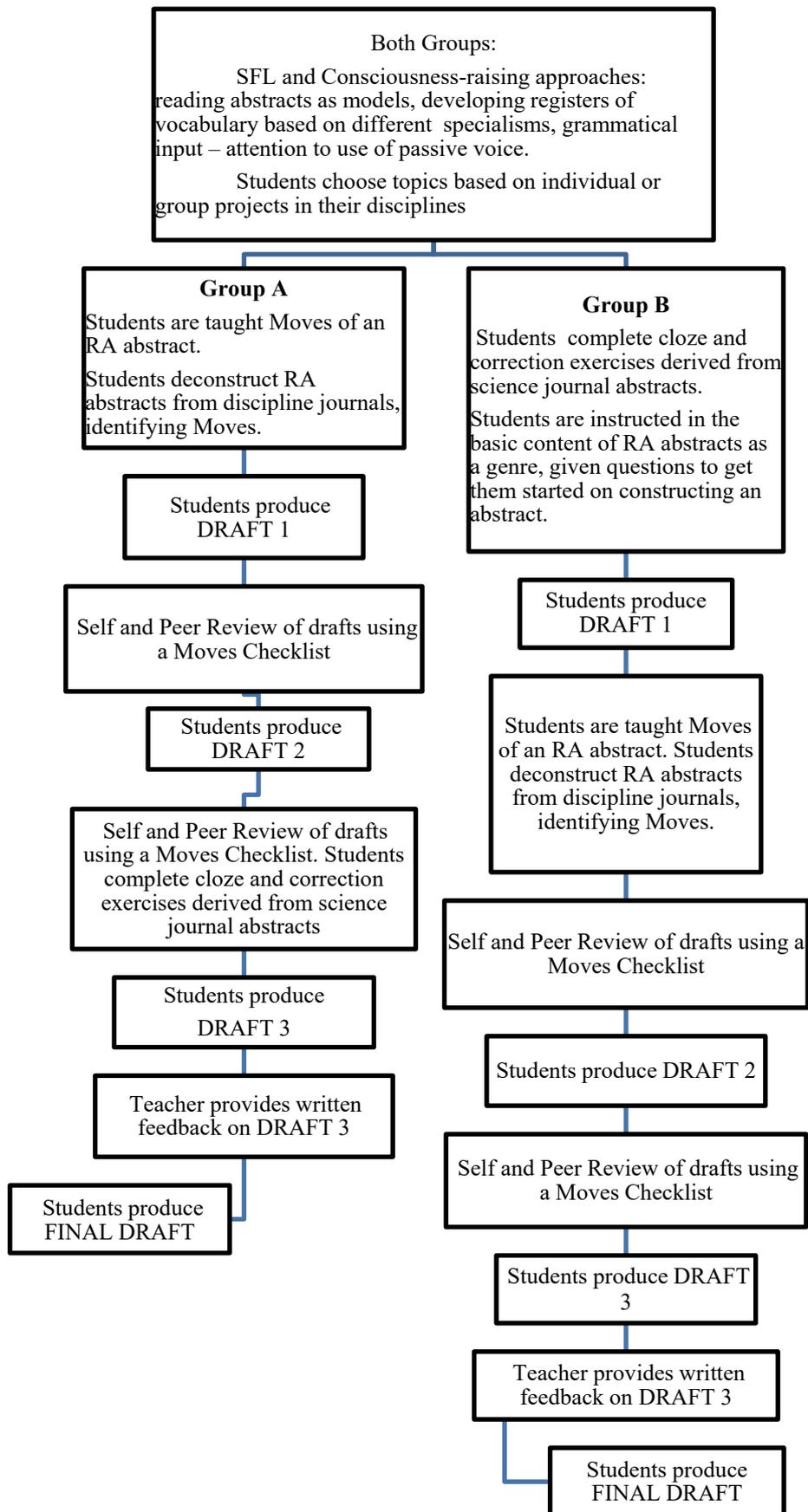
Figure 1. Flow Chart Describing the Procedure of Teaching the Two Groups A and B

Both groups of students were taught how to write abstracts using moves, but at different stages of learning, and with each stage involving the production of a draft abstract, used later in our analysis. Initially, Group B was intended to be a non-genre group. However, asking students to do only lexico-grammar exercises for training could not make them confident enough to engage in writing. At this point, our action research framework had to be flexible in order to respond to students' questions and concerns, and they had to be given some outline of the structure of an abstract. That is, working within an Action Research cycle, the teacher was able to critically evaluate the procedure at this point and modify the task accordingly. Specifically, these students were asked to construct an abstract as a paragraph as answers to general questions. As a result, both groups had some sort of genre-based pedagogy from the start, but with Group A having explicit instruction in moves and Group B starting with a more implicit form of teaching the RA abstract genre.

When students were taught moves, they deconstructed authentic published abstracts to understand the moves, using a table from Swales and Feak (2009, p.5), similar to that in the students' checklist in the second part of Table 2. Students later deconstructed their own and their peers' abstracts and provided feedback. This procedure was intended to help the students not only to understand the moves but also to become conscious of the moves while constructing an abstract in the joint reconstruction phase of the teaching/learning cycle. Using peer feedback at stages of writing drafts follows pedagogies in writing across disciplines and internationally (such as Gao, 2007 and Kelly-Laubscher, 2017)

This deconstruction was later applied to their own abstracts with the aid of a checklist shown in Table 2.

Table 2. Self or Peer Checklist for Abstract Draft 1 (Group A) and Draft 2 (Group B)

No.	Description	o/x
	General details	
1	Does the abstract have a move structure?	
2	Can you identify the all moves?	
3	Are all the moves present?	
4	Are the moves in order?	
5	Are there any missing moves?	
6	Missing moves are	
7	Do you think you can imagine of what is given in the abstract?	
8	Are there any personal pronouns, I, you..?	

Extra comments:

Moves explanation (for reference)

Move #	Description	Typical questions
Move 1	Background/ Introduction	Is there a description about the background of the topic? Why is the topic important?
Move 2	Present research/purpose	Is the problem or the purpose given? Is there a clear statement about what the study is about?
Move 3	Methods/materials/ procedure/subjects	How was the research done? What materials were used?
Move 4	Results/findings	What were the findings?
Move 5	Discussion/conclusion	What do the findings mean?
(Move 6) Optional	Implication/ Recommendations/ Future perspectives	What are the implications of the findings in future?

2.2 Teaching of the Two Groups

Group A spent a total of six weeks in a series of approximately 45-minute sessions on the tasks related to reading examples of abstracts, being introduced to the concept of moves, bringing their own examples, analysing examples and writing their own, drafting, and taking part in peer review tasks and lexico-grammatical exercises. Group B spent the same amount of time writing their abstract, participating in lexico-grammatical exercises, peer review and drafting, and later, being introduced to the concept of moves.

For both groups, teaching began by facilitating a brainstorming session for abstract content based on individual or group projects that the students had carried out in their major study program and they were asked to select one topic area that they had participated in. Many of Group A students wrote abstracts for their management and communications projects which involved creating web pages or conducting survey-based work, with just a few choosing to write about scientific experiments. For Group B, the topics followed the Mechanical Engineering curriculum, which included experiments and reports, all of which were familiar to all of the students of that group.

Before introducing the moves, students of the Group A were given a few abstract examples selected from different science journals from their areas of study and presented with some general rules that are followed, such as writing as a single paragraph with no indenting, and having a word limit depending on the journal. When students were explicitly taught the moves of an abstract, a PowerPoint presentation provided an explanation about RAs and the sections of a RA. This was followed by a detailed introduction to abstracts, explaining to students their communicative purpose and stressing the need to acquire skills in writing RAs as this is a genre they will encounter at all stages of their course. This abstract teaching part of the class session was audio recorded and transcribed to check if any detail of informing the student was missed during the actual class session.

In the classroom, students of Group A deconstructed a total of four published RA abstracts into different moves. Students were first asked to number the clauses and then to indicate the clauses with a move number. The students' move analyses were checked by the teacher so that by the end of the class session they were expected to understand each move as well the move order in constructing abstracts. After deconstruction, within the same session, students were also reminded of their knowledge on passive voice and other linguistic features of academic writing. They were given a period of two weeks to construct abstracts independently, creating DRAFT 1.

With DRAFT 1, students were first asked to check for the presence of the moves and the order of the moves in their own drafts with a checklist given in Table2. Students then exchanged their abstracts with their peers to do the same checking. They were asked to look again for the presence of moves and the order of moves. Following the self and peer feedback, students were asked to construct DRAFT 2 which was again checked for the tense usage in each move with a checklist in Table 2. Before working on the next draft, students completed cloze and correction exercises derived from science journal abstracts; the tasks included error correction of subject verb-agreement, voice conversion, changing to passive forms, and

filling the gap with appropriate scientific or technical terms and linking words. While such activities and instruction may appear to follow traditional grammar teaching, both in teaching and in the analytical approach this research used a SFL perspective, in that the focus was upon how language works in communicating meaning in particular contexts of use. Following the second peer evaluation, students submitted DRAFT 3 and received feedback from the teacher. The teacher's feedback was mainly to address successful meaning making and the focus was mainly on lexico-grammatical features, especially the usage of register, lexical choices and cohesion. Students were asked to submit a FINAL DRAFT based on the teacher's feedback.

Like Group A, Group B was taught using PowerPoint slides that gave explanations about RAs and the sections of a RA. The abstract teaching part of the class session was audio recorded and transcribed to check if any detail was missed during the actual class session. A detailed introduction was given to the abstract, explaining its importance and the requirement to acquire skills in writing in this genre. Unlike Group A, the concept of moves was not included at this stage. They were, however, introduced to a few examples selected from different disciplinary journals and presented with the general rules that are followed, such as, writing as a single paragraph with no indenting, and having a word limit depending on the journal. Next, students completed tasks of error correction of subject verb-agreement, voice conversion and filling the gap with appropriate scientific or technical terms and linking words; these were the same tasks as those used with Group A between DRAFTS 2 and 3, but with some differences in vocabulary as these activities came from subject-specific abstracts.

A time period of two weeks was given for Group B students to produce abstract DRAFT 1. Just prior to starting on these first drafts, these students were given some information about the content of a typical RA abstract, along with its communicative function (that is, what questions an abstract needs to answer) without explicit instruction of moves. This particular mini-stage of instruction arose during the initial cycle of teaching, when it became clear that a control-group style *no intervention* left students unclear about the assignment or how to get started. The creation of this mini-stage added a variable to our initial research design, but one that we felt contributed to our understanding of learning and teaching using genre approaches.

After submitting DRAFT 1 (which was done in order to provide photocopies for this study), students were taught the generic stages or moves of an abstract, the same as in Group A and using the same teaching materials, discussed above. Using a checklist, students were asked to check for the presence of moves in their own drafts. Following that, the students exchanged their abstracts with their peers to do the same checking. Students were asked to check whether the draft contained all the required moves and also to identify the missing moves.

In this stage, based on self and peer feedback, students were asked to construct DRAFT 2 which was again checked for the tense usage in each move with a checklist. Following the second peer evaluation, students submitted DRAFT 3 and received feedback from the teacher. The teacher's feedback mainly focused on lexico-grammatical features and also questions to clarify the contents of the abstract. As with Group A, students from Group B were asked to

submit a FINAL DRAFT.

2.3 Methods of Analysis of Student Writing

Student writing (DRAFTS 1 and 3 for groups A and B) was initially analysed using the framework taught to students (Swales and Feak, 2009, p.5), in order to establish the extent to which they had communicated moves through their writing and the order in which they did this. A SFL framework was also used to help identify the extent to which students deployed lexico- grammatical features to indicate the purpose of their writing. DRAFTS 1 and 3 were compared in order to identify changes, if any. Given the primary focus of this paper is on the teaching of moves analysis within an action research framework, findings from the SFL analysis are illustrative only, and for an account of the SFL approach taken see Rajagopalan and Jie (2016).

The analysis of students' drafts was carried out first by the teacher, identifying and labelling the moves (1 through 6) in each draft, a total of 73 drafts (as a few students did not submit DRAFT 3). This procedure was carried out independently by the other two researchers and the results checked against those of the teacher. These findings were placed in a long table from which the analysis below is drawn.

3. Results

As the teacher observations are reflected in the procedures and stages of teaching discussed above, this section summarises the analysis of DRAFTS 1 and 3 for both groups in order to discuss the findings in terms of the teaching methods being explored. This is followed by input from students on their views of these methods. DRAFT 1 results for Group A are approached with a view to analysing drafts following an initial invention of teaching the genre writing through moves, while for Group B DRAFT 1 follows teaching without moves, but with more emphasis on lexico-grammatical input. For both groups, DRAFT 3 showed writing after moves and lexico-grammatical input of roughly equal measure, however, Group A had moves instruction first and therefore more familiarity with the concept, more time and peer feedback.

3.1 Analysis of Student Output

For the genre group or Group A, an analysis of DRAFT 1 revealed that initially not all the students could construct abstracts that adhere completely to the move structure even after intervention. Of twenty students, fifteen constructed abstracts that adhered to some degree of abstract moves structure. According to Swales and Feak (2009), moves 2 and 4 are the most common moves in abstracts. With intervention on moves before DRAFT 1, this proved to be the case our Group A, with nearly all of the drafts including moves 2 and 4. Swales and Feak (2009) also found that move 5 was the least common move to appear. In this group, however, only two of the students left out move 5, but more significantly, these same students included the other moves of introducing the work and describing their methods. Moreover, three of these students in this group included an extra move, the optional move 6, which covers

further observations and implications and is absent from the drafts (1 and 3) produced by Group B.

In contrast, for Group B, there was a clear difference in the construction of abstracts. Out of nineteen abstracts considered in the study, only three had something resembling a move structure prior to teaching the moves. Teaching the moves at the beginning to Group A before writing seemed to help to raise the students' awareness and the students could organize the abstracts well. Overall, with intervention after teaching the moves, the students from B group were more likely to include moves in the structure of the RA abstract and also in constructing them based on experiments done for their major subject curriculum. However, our analysis of DRAFT 1 indicates that just exposing students to RA abstracts and engaging in grammatical exercises may not be enough to enable the students to understand the rhetorical organization, function and communicative purpose of RA abstracts.

3.2 Student Perspectives of Teaching Methods

To gain some insight on the students' views on the use of these teaching approaches, a questionnaire on the abstract writing sessions was given to students of both groups A and B. This questionnaire consisted of three questions related to the genre-based teaching approach:

1. Do you think the abstract writing about your experiments would be helpful to you? Circle one: NO   CAN"T SAY   YES
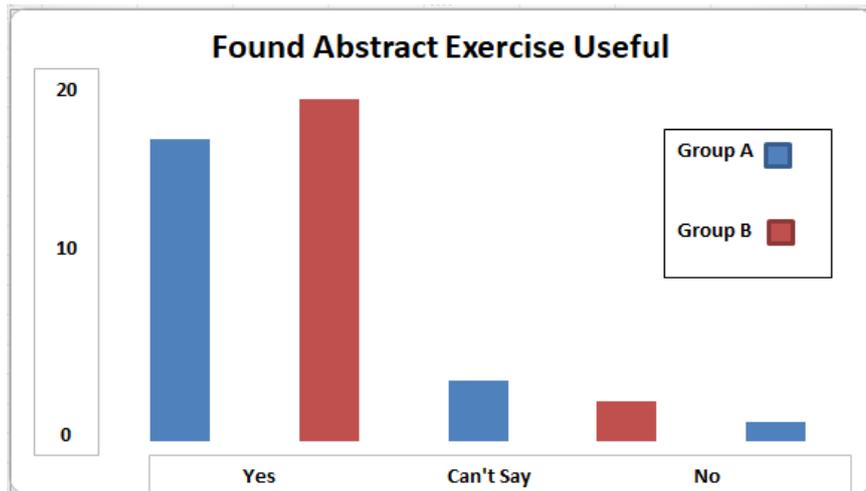
2. How did you find the abstract writing exercise?

Circle one: DIFFICULT   CAN"T SAY   EASY

3. Do you think your understanding of abstract is better now?

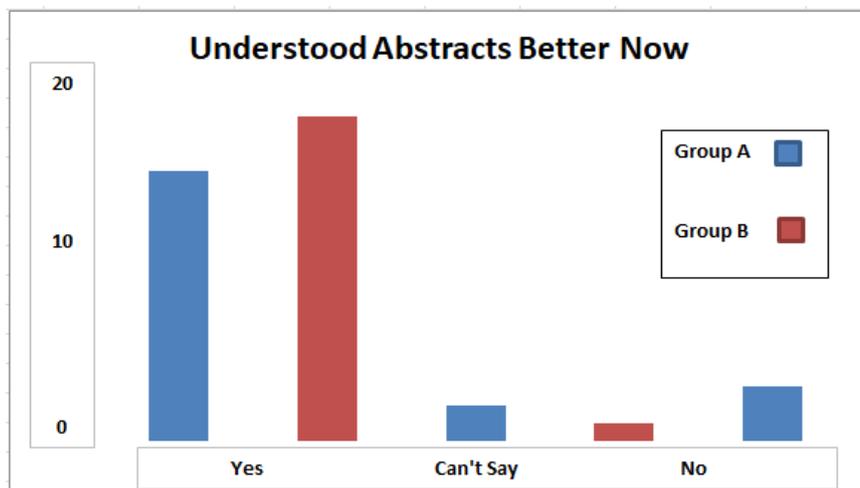Circle one: NO   CAN"T SAY   YES

Students were also given a box to write "free comments" on what they thought of the entire approach to teaching abstracts, including the SFL component (discussed in Rajagopalan and Jie, 2016).
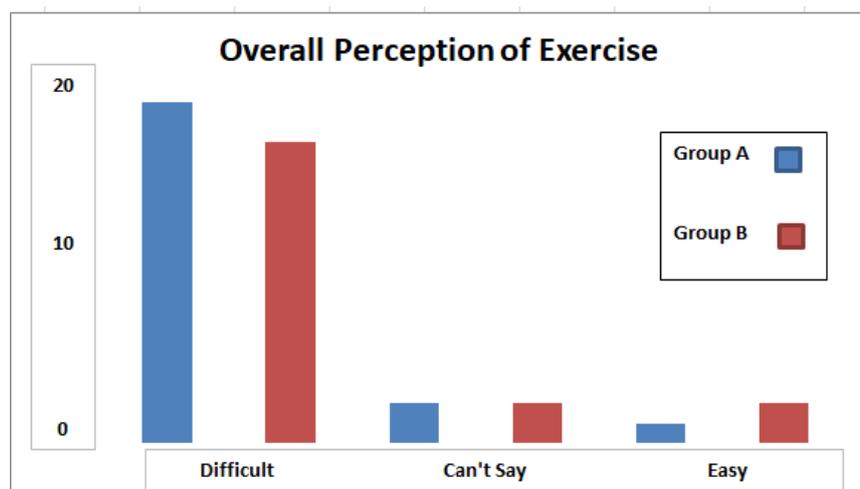
The results of students' answers are given as histograms in Figure 2. For both groups, around eighty percent of the students found the abstract writing exercise was helpful to them as they could understand the structure of the abstract through moves (this clarification was obtained through post-survey questions to the groups). A similar percentage also said they found the writing task to be difficult as they had difficulty in creating content for each of the moves. More students from Group B than from Group A said they found the exercise made them better at understanding abstracts.

Group A = 20, Group B =19

Group A = 20, Group B =19

Group A = 20, Group B =19

Figure 2. Results of Questionnaire on Students' Perceptions at the End of the Study

Based on questions directed to the students after completing the survey, few of the students expressed an appreciation of the "real-world" use of these genres, seeing course achievement as the goal. That is to say, while the teacher's motive was preparing the students for the "real world", according to our interviews, most of the students seemed to be motivated only to finish the assignment and obtain grades. This raises questions of how far a practitioner needs to "trade off" the following: the desires of the institution in imparting skills to students: the complexities of the skills; students' motivational levels in acquiring skills and the pedagogical approach of the practitioner in imparting those "real-world skills". Nevertheless, the flexibility exercised in the approaches to genre teaching illustrated by this research show that even when there is a mismatch between the goals of the students and those of the teacher, a process-orientated approach can evolve.

4. Discussion

In this section, we bring together the order of the teaching elements (in response to the teacher's observations), the analysis of the drafts and the students' perceptions based on the questionnaires. In addition, we present some of the students" comments gained from the teacher's questions raised in the classrooms following the questionnaire.

For both groups, there was an overall improvement in abstract writing from DRAFT 1 to DRAFT 3 as would be expected in re-writes and with instruction between drafts. However, there was considerable improvement in the use of moves for Group B following move intervention. Given that 16 students submitted DRAFT 3 and six of those had already produced abstracts that had moves 1 to 5 at DRAFT 1, five of the remaining ten DRAFT 3 abstracts included moves missing from DRAFT 1. Interestingly, none of the Group B drafts included the optional move 6 (Implication/Recommendations/Future perspectives), which appeared in two of the Group A drafts.

Another significant finding is that Group B, without instruction on moves, was able to produce DRAFT 1 abstracts which contained identifiable moves, with all the moves present in six out of 19 abstracts. This suggests that other input from reading abstracts and lexico-grammatical exercises could have contributed to developing students' abstract writing skills.

Introducing moves to students earlier in the programme, as was the case with Group A, may have been a factor in DRAFT 1 abstracts containing all of the moves in the taught sequence. Moreover, as noted above, only students in Group A used the optional move 6 in their abstracts, suggesting that the extra couple of weeks and the extra assignment after instruction on moves might have encouraged students to employ more moves.

Common to both groups were abstracts that remained unchanged from DRAFT 1 to DRAFT 3. The reasons for this, even after peer review, may be several. Weak language skills may have led to a reluctance to revise the drafts, a lack of difference between DRAFT 1 and DRAFT 3, or non-submission of DRAFT 3. A second factor could be that the students had difficulty in reading others' abstracts as they were from different fields and could have

encountered unknown lexical items. This might have made students reluctant to give sufficient advice to their peers. Another possible factor that could influence no change in the students' abstracts is that some of the questions in the Self or Peer Checklist (Table 2) may not have been clear to the students. If so, then the contents of this checklist need to be reconsidered and improved.

Not revising drafts might also be linked to student motivation. Though student motivation lies outside the scope of this study, classroom observations by the teacher during the Action Research cycle suggested a higher level of attention to the task,and a more positive attitude towards learning in Group B than in Group A. This is despite the fact that Group B had a more difficult task than the Group A as they had to write an abstract at the beginning (DRAFT 1) without any explicit instructions on moves.

5. Conclusions

This small-scale case study on the teaching of abstracts to undergraduate students of a Japanese university made a comparison between an initial move-based genre approach to writing abstracts (for Group A) and a genre approach that started with grammar and vocabulary exercises and introduced moves for writing at a later draft (Group B).

The focus in this study was on the interventions of the teacher, and thus asked two research questions: 1) In what ways does the teaching of explicit genre moves improve student writing of RA abstracts? 2) At what stage in the teaching and learning cycle is teacher intervention effective?

While both groups were participating in pedagogies within the broader genre-based approaches, in general, earlier intervention using moves is more helpful to students than introducing moves at a later stage of draft writing. Furthermore, students who had move-based intervention earlier in the teaching and learning were more likely to add optional moves to their abstracts. Both of these points fill gaps in the current literature on using genre-based approaches generally and specifically in the case of ESP students developing skills for abstract writing.

While our interest has been in this paper to focus more on the teaching *process*, and less so on the student *product*, we have nevertheless added to the current literature on moves-based approaches to the genre of abstract writing. For the most part, the common use of specific abstract moves agreed with Swales and Feak (2009). This was not the case, however, with Move 5 (discussion/conclusion), which appeared in nearly all of our students' drafts, but is considered the least used abstract move according to Swales and Feak (2009).

The use of lexico-grammatical activities related to the RA genre has also yielded interesting results. Even though these students were new to abstract writing and had not been explicitly taught moves in the initial stages of teaching, they were still able to produce abstracts with identifiable moves. This point highlights the connection between lexico-grammatical features and the genres in which they are more likely to occur.

This study has also looked at other factors that can impact teaching abstracts using genre-based approaches, namely task difficulty. In spite of the fact that more than half the students from both groups demonstrated an understanding of the moves of an abstract, students may have struggled because of the difficulty level of the task. Therefore, genre-based pedagogies which respond sensitively and take a situated approach will need to present students with explicit and systematic explanations. Further research could be carried out with tasks at lower difficulty levels or with students with higher language proficiency.

Classroom pedagogy in this study involved students writing in a second language with limited experience of the writing genre and was shaped by the context within which the teaching and learning took place. We believe that this study has addressed real-life teaching contexts with their less-than-ideal situations. By conducting this study in an action research framework, we have shown that this cyclic framework allows for timely intervention based on teacher observation and critical evaluation of the specific teaching and learning context.

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