FORGING BONDS BETWEEN ACADEMIC WRITING RESEARCH FINDINGS AND THE PRACTICE OF TEACHING ACADEMIC WRITING¹

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Abstract: The last four decades have witnessed the birth of numerous studies dealing with the research paper (RP), its rhetorical structure and contents, linguistic features, reporting verbs, review procedures, evaluative language, peer editing, transfer of academic writing skills, and many other features. In spite of the countless researches detailing academic writing features, not a small amount of textbooks on academic writing seem to ignore the results vielded by research conducted on this vital and crucial skill. A great number of academic writing textbooks seem to be unaware of the findings of research on academic writing practices. Thus, it is the purpose of this paper to briefly survey a number of academic writing textbooks claiming to be designed for teaching and developing university students' academic writing skills and introduce the present author's attempt in utilizing Swales' IMRD and CARS patterns in teaching the overall rhetorical structure of academic research papers to tertiary students. The current author strongly believes that academic writing is an apprenticeship process. That is, the students should be shown samples of what they are expected to produce before they actually do it. Therefore, students were, individually, requested to find a journal RP. of 15 pages maximum, in the area they would choose for their research from any peer reviewed journal that uses APA style, print it, highlight only all the section headings, copy them on a separate sheet of paper and bring to the following class. In the second class session, students were divided into teams of 4. and were asked to share and discuss the research design patterns they identified. Then, they selected a representative team member to write the sections and subsections headings they found common in the research design on the whiteboard for all students to see. After this, a whole class discussion of the similarities and differences began. Then, Swales' models were introduced for comparison with what they found. Using Swales' models made it easy for students to think in an organized way and assign the information that they had gathered to their relevant sections/move(s). The students' feedback was encouraging and the research papers they produced corroborated their positive responses.

Keywords: Features of academic writing; research paper schema; rhetorical structure of research papers; tertiary level writing; transfer of writing skills; academic research papers.

1. Introduction

Swales' (1981; 1990) seminal works on the academic research paper (RP), have attracted many researchers' interest. Consequently, the past four decades have

witnessed the birth of numerous studies dealing with the RP's rhetorical structure and contents (Nwogu, 1997; Budsaba, 2005), linguistic features (Chen, 2006), reporting verbs (Reimerink, 2007), review procedures (Mungra & Webber, 2010), evaluative language (Thompson & Yiyun, 1991), peer editing (El-Sakran, in progress), transfer of academic writing skills (El-Sakran, Ahmed and El-Sakran, 2017) and many other countless academic writing features (see Brett, 1994; Anthony, 1999; Samraj, 2002;2005 and 2008; Kwan, 2006; Ozturk, 2007; El-Sakran, 2009; El-Sakran and Saba, 2014, El-Sakran and Nada, 2014, El-Sakran and Zeynabi, 2014; etc.). Nevertheless, the findings of those studies have not fully found their way into the textbooks compiled for the teaching of academic writing to university students. That is, the number of scholarly papers investigating Swales' models far outnumbers, if any, those using the models in introducing and teaching the rhetorical structure of the RP (Chan 2009; 2017; 2018).

2. A Review of some Selected Academic Writing Textbooks

Upon careful examination of the below listed titles, a total disconnect was found between their contents and the results of academic writing research. They, albeit being extremely useful in teaching academic writing and all the related skills, treat an academic writing piece as consisting of 3 parts: Introduction, Main Body and Conclusion, which does not truly reflect the findings of researches on the rhetorical structure of academic RPs as shown in Swales' research models IMRD and CARS. Furthermore, while these textbooks deal with the writing process from a purely theoretical perspective, the current author used samples of published RPs to introduce and guide tertiary level students in writing their own RPs by imitating well established authors' publications in peer-reviewd academic journals. This method was employed to complement these textbooks.

Six titles surveyed are:

- 1. Arkin, M and Macheski, C. (2nd Edition) (2006). Research papers: A guide and workbook. New York: Houghton Miffin Company.
- 2. Behrens, L. and Rosen, L. (3rd Edition) (2007). A sequence for academic writing. New York: Longman.
- 3. Busecmi, S., Nicolai, A. and Strugala, R. (4th Edition) (2004). The basics: A rhetoric and handbook. New York: McGraw Hill.
- 4. Lewis, D., Storseth, T. L., Dahan, L., Abusalim, A. and Gandhi (2010). Majlis of the 'others': A reader for writers in the Gulf. Pearson Education Limited: United Arab Emirates.
- 5. Muller, G. (2nd Edition) (2008). The new world reader: Thinking and writing about the global community. New York: Houghton Miffin Company.
- 6. VaderMey, R., Meyer, V., Rys, J. V.and Sebranek, P. (3rd Edition) (2009). The college writer: A guide to thinking, writing, and researching. United Kingdom: Cengage Learning.

3. Purpose of the Research

Therefore, this paper aims to introduce and share with the interested readers a topdown academic writing approach that the researcher found practical and fruitful in making students aware of academic writing conventions. In other words, it offers the researcher's guidelines as regards the utilization of Swales' IMRD and CARS research designs in teaching academic writing skills to students and discusses the students' responses to the methodology employed. Specifically, this study aims to find answers to the following questions:

- 1. Does a top-down analysis of some peer-reviewed RPs result in students acquiring a generic schematic structure of RPs?
- 2. Will the results of such an analysis inform students in writing and structuring their own RPs?

4. Participants

This experimental top-down approach was conducted with more than 500 students over the past 8 years. The participants' academic disciplines were as follows: engineering, architecture, business, mass communication, English, international studies, environmental sciences and maths. Those students have already met all university entry requirements and have scored 530 or above in Paper-based TOEFL (PBT) test, 71 or above in Internet based TOEFL (IBT) test or 6.5 in IELTS. All undergraduate students at the researcher's university have to successfully complete several academic writing courses regardless of their major. They are placed in these courses according to the score they obtain in a writing placement test, i.e., a test "to determine what class a student should take; to separate students into appropriate levels" (Crusan, 2010, p. 32), that all students have to take when applying for the university. According to their score, they will be assigned either to a non-credit course with the label 'Fundamentals of Academic Discourse', for which the big majority of students are channelled because of their weaknesses in writing. After passing this course, they move to a second threecredit-hour course, i.e., 'Academic Writing'. Upon successful completion of this course, they proceed to a third three-credit-hour course (i.e., Reading and Writing across the Curriculum). Successful completion of this course allows students to register for another compulsory writing course titled Advanced Academic Writing, which is the subject of this research. This course is based on common core needs; that is, it is designed to satisfy the different academic writing needs of students from different disciplines.

5. Swales' Models

Swales' IMRD (Introduction, Methods, Results and Discussion) and CARS (Create a Research Space) models for RPs (Swales, 1980;1990) were used in the present study to introduce the RPs design(s), "the schematic structure of information" (Nwogu, 1997:120) to students. Swales' IMRD is a mnemonic for a common format used for academic RPs. While used primarily in the hard sciences, like physics and biology, it is also widely used in the social and behavioural sciences. On the other hand, the CARS model is also found to be common in RPs with some slight variations; some moves may be presented via different alternatives as shown below.

■ Move 1: Establishing a territory

Step 1 Claiming centrality and/or

Step 2 Making topic generalizations and/or

Step 3 Reviewing items of previous research

■ Move 2: Establishing a niche

Step 1a* Counter-claiming or Step 1b Indicating a gap or

Step 1c Question-raising or

Step 1d Continuing a tradition

Move 3: Occupying the niche

Step 1a Outlining purposes or

Step 1b Announcing present research

Step 2 Announcing principle findings

Step 3 Indicating research article structure

*Letters indicate alternatives

Although Swales' IMRD and CARS models were generated to account for the rhetorical structure of article introductions, many researchers found them applicable to the whole of the RP (Samraj, 2002; 2005 and 2008; Budsaba, 2005; Kwan, 2006; Ozturk, 2007).

6. A Brief Review of Related Literature

Flowerdew (2000) and Cheng (2011) suggest that problems with features of academic writing may be solved by developing awareness through different means, for example, by analyzing the function of a particular item in authentic texts or using concordances.

There is evidence (Huang, 2008) to suggest that non-exposure to academic writing represents a complex that may hinder embarking on any academic writing in the future. Huang suggests that non-native speakers of English graduates may not be able to write/produce Ph.D. theses just because they did not study academic writing courses. In the same vein, Dudley-Evans (1994) argues that genre analysis is particularly useful for the students with relatively little experience of writing.

This will usually be in three stages, the first being the reading stage that precedes the writing stage. An awareness of the generic structure of the texts read will have a positive effect on future writing. The second is the immediate planning stage where the findings of genre analysis will help writers grasp what is expected in the genre they are proposing to write. The third stage is the draft stage in which an awareness of genre conventions will help in the ordering and re-ordering of text. Indeed, genre analysis provides a way of introducing and discussing the expectations of the academic community in general and the discourse community that the students aspire to join in ways that are comprehensible to both the language teacher and the student.

Therefore, the English for Academic Purposes (EAP) teacher should be able to identify and analyse academic genres and the functional and rhetorical features of academic texts and train students to do the same.

The basic philosophy of a genre approach is entirely consistent with an English for Specific Purpose (ESP) approach. It assumes that the focus on imparting certain genre knowledge is part of a short-cut method of raising students' proficiency in a relatively limited period of time to the level required of them by their departments and supervisors. The imparting of genre knowledge involves increasing awareness of the conventions of writing, and teaching students to produce texts that, by

following the conventions, appear well-formed and suitably structured to nativespeaker readers.

Another relevant observation is that when students perceive course contents as relevant, this makes them "become motivated to think about the material and may retain the information for longer periods" (Muddiman and Frymier 2009:132). Along the same lines, Keller and Suzuki (2004) argue that relevance was effective when course materials were related to students' intrinsic goals and needs.

Hence, this study used authentic research papers to introduce the learners to the rhetorical structure of RPs, its layout and the overall process of academic writing.

7. Teaching Context

When students join the university from schools, all the writing assignments they were exposed to take the form of extended essays of not more than 2 or 3 A4 sheets. In the university, this same focus in writing is fostered, but with different orientations: persuasive, descriptive, argumentative genres of writing. The shift from this type of writing represents a big hurdle for the students as they are expected to produce a fully-fledged research in which they choose a topic of their own, use library and internet resources, use APA style, and, above all, demonstrate maturity in terms of academic language used, reviewing of previous research, reporting verbs and their connotations, critiquing skills, etc. Inculcating such skills in the students requires a smooth transition from traditional essay writing to writing RPs. Thanks to Swales' models, the transition is made easy.

8. Teaching Method

This study adopted an active learning approach in which the learners got fully engaged in highlighting all the below listed academic writing features under the course instructor's direct supervision. The teaching followed a top-down (i.e. linear) approach to the research paper, moving from the macro-structure to micro-structure. In other words, it adopted an inverted pyramid approach.

8.1. Teaching Procedures

The process of teaching the schematic structure and some features of the RP followed the linear progression of the RP as delineated below, the only exception was the abstract which was dealt with last, since, in most, if not all, it is the last piece of text to be written.

8.1.1. Highlight Titles of Sections and Subsections

The researcher strongly believes in showing students samples of what they are expected to produce before they actually do it. Therefore, he started the first day of the course by reading the syllabus and going over the course contents. At the end of this first class session, students (20) were, individually, requested to find a short RP, of 15 pages maximum, in the area they would choose for their research from any peer reviewed journal that uses APA style, print it, highlight only all the sections and sub-sections headings, copy them on a separate sheet of A4 paper and bring to the following class. In the second class session, students were divided into teams of 4, and were asked to share and discuss the research design patterns they identified. Then, they selected a representative team member to write

the sections and subsections headings they found common in the research design on the whiteboard (see Appendix 1) for all students to see. After this, a whole class discussion of the similarities and differences began. Immediately after this discussion, Swales' (1981; 1990) IMRD and CARS research designs were introduced and students were able to notice the differences between the research designs they generated and the ones proposed by Swales. Most importantly, they realized that other sections and subsections can be added to the basic IMRD pattern, see Appendix 1. As the academic writing course is compulsory for all students and a prerequisite for many of their major courses, this activity proved extremely useful in drawing the students' attention to the fact that there might be variability in the rhetorical structure across disciplines and within the same discipline, a point that has been confirmed by research carried out by many a researcher (e.g., Ozturk, 2007). These variations were also used to stress that sections in RPs may be, to some extent, determined by the nature of the research topic covered.

8.1.2. Examine Papers' Titles

The second step was to examine the papers' titles. Students were instructed to do the following:

- a. Count number of words per title and share the details in an open class discussion
- b. Find and highlight keywords that reflect the focus of the research article
- c. Say if title could be shortened, if too long
- d. Say if title could be elaborated on, if too short

This activity helped students narrow down the focus of their research papers and write good titles for their RPs. This also proved useful in creating excellent keywords for their RPs.

8.1.2.1. The Next Steps

The subsequent step was to read the introduction section and do the following:

- Highlight all persons' names that were followed by dates in the introduction section
- Highlight the verbs used in the sentences that contained these names and dates
- Find out and report on the location of the personal names they highlighted: sentence-initial position, sentence-medial position, or sentence-final position
- Decide type of information quoted: verbatim, paraphrase, or summary
- Find out reason(s) for using the source: support, counterargument, further reading, etc.
- Find the sentence(s) expressing the objective of the research paper In this phase, students were asked to locate personal names in the introduction text, publication dates, verbatim quotes accompanied with page numbers, and reporting verbs accompanying persons' names being followed by years. Several colour codes were used for singling out the different issues listed above. Such an exercise sensitized the students to common features of the RP and had drawn their attention to its broader picture. For instance, students realized that in-text citations can be executed in multiple ways- in sentence initial position, sentence medial position and sentence final position. This helped them use a variety of citation

styles that added spice to their writing competence. In addition, students had come to realize that some article introductions included a review of previous studies, although several papers contained an independent section with the titles 'Review of Literature', 'Review of Previous Studies', or 'Related Studies'. Doing this resulted in students learning a good variety of reporting verbs that they later used in their own RPs. Examples of these verbs are:

report; study; develop; aim (to + verb); describe; explore; introduce; focus; present; examine; show; discuss; urge; argue; claim; believe; think; adduce; address; analyze; contribute; define; critique; establish; evaluate; examine; identify; question; recommend; suggest.

This exercise opened the students' eyes to the functional load of verbs used. That is, students were sensitized to the importance of careful choices of verbs that clearly and unambiguously reflect the author's stance. For instance, students had come to realize the semantic and pragmatic differences between *state* and *claim* as reporting verbs, as shown below:

• X claim/s ... means no evidence (unsubstantiated arguments) is given/presented.

Also, students' attention was drawn to authors' attitudinal aspects in the case of using attitudinal adverbs to strengthen the assertions or the arguments made. Here is an example:

- X rightly argue/s ...
- X aptly state/s ...

Another important aspect related to the use of reporting verbs was the verb tense used, that is, should the reporting be in the past or present? Although the RPs the students brought to class showed several discrepancies in the use of tense, for example; some papers adhered solely to past tense whereas others used a mix of both past and present. Yet, it was found that the past tense was mainly used in reporting on the methodology/ies other writers employed in their research. This was a useful point for students to learn concerning how to report on the research steps used in their research RPs. Added to this, students learned how to use linking adverbials to give a sense of direction to the academic work (see Ab Manan and Pandian, 2014; El-Sakran, 2018a; El-Sakran, 2018b; EL-Sakran and Zeynabi, 2014). Asking students to find the sentence(s) expressing the objective of the research paper helped them produce precise aims of their RPs, such as the following:

- This study investigates/examines/explores/probes into/studies/looks into/studies in depth/delves into, etc.
- The purpose of this {research, study....} is....
- The aim of this {research, study...} was...

As regards the use of quotations, paraphrase and summary in the RP, it is a well known feature of academic writing that the RP includes viewpoints of others' on a particular topic which requires the use of quotations, paraphrase and summary. Through such an exercise students realized that it is not professional to use too many quotations that may result in "losing ownership" of their own work (Behrens and Rosen, 2010:44). Hence, writers need to resort to paraphrasing and summarizing. Students also learned that paraphrasing is a restatement of another person's words in their own words. Another important observation was that paraphrasing was more common in the discussion section whereas summaries

were mainly used in the literature review (LR) section. This, I believe, is the case because the LR section requires more details on studies reported on so that readers can fully understand the context of the study under review. Furthermore, they came to know that authors quote if the original text is extremely difficult to be put in other words or that its wordings are important in themselves. Such an activity brought to the students' focus the issue of plagiarism. This particular area may prove difficult for those Arab students whose English competence is limited and; therefore, may resort to frequent quoting or what Howard (1995, cited in Pecorari, 2008:225) refers to as "patchwriting". Patchwriting is "copying from a source text and then deleting some words, altering grammatical structures, or plugging in one synonym for another" (Howard, 1995, cited in Pecorari, 2008:225). Inexperienced students may also unintentionally plagiarize by including others' ideas in their writing as if they were their own.

8.1.3. Shuffling exercises of some selected RPs In these activities, 5 research papers were used as follows:

- Title of research paper was removed
- Titles of sections and subsections were removed
- Page numbers were hidden

Students, in groups of 4, were presented with all the individual sections of a shuffled RP and were asked to put them in their correct order. This exercise aimed at checking students' ability to identify the paper's rhetorical structure through the clues given in the sections (i.e., communicative function, cohesion and coherence).

9. Results

Careful examination of the various stages of the students' RP writing process, that is, the research plan, the proposal, the working draft, the first full draft and the students' final RPs, showed that students used same or similar sections and subsections headings to those used in the published research papers that they examined. In addition to the testimonies in Appendix 2, the following were also signs of improvements in the students' produced RPs:

- Use of varied in-text-citation styles
- Authors' names were placed in several locations of the sentence, which resulted in a non-boring writing style and a sense of achievement on the students' parts.
- Transition from one section to another
- Students used a great variety of cohesion and coherence devices and sentence linking adverbials to mark transitions from one sentence into another, and to signal shifts from one section to the other.
- Maturity in the use of reporting verbs
- The research papers the students produced exhibited strong maturity in the use of a great collection of reporting verbs.
- Maturity in the use of evaluative language
- Evaluative expressions, such as failed to show, did not consider, has overlooked, etc., were carefully employed to critique previous studies on the issue under study, and create a research gap.
- Maturity in the use of substantiated arguments

- A good variety of citations were provided for support of students' arguments.
- Maturity in the use of APA style
- This was clearly manifested in the formats of the in-text citations the students utilized in their research papers.
- Maturity in the use and development of higher order critical appraisal skills as shown in the review of literature sections that the students produced for their own papers
- Students reflected good use of critical appraisal skills through the reasons given for critiquing a previous study and the language signals provided to mark their own stance from the study being reported on.

10. Discussion, Conclusion and Final Thought on the Flexibility of Swales' Models

In spite of the findings of research that there are steps in the research article that are not accounted for in Swales' models, the big majority of these studies have conceded that Swales' models accounted for 60% or more of the research article introductions they used. Despite this, the researcher stresses here that the model is used to account for the entirety of the whole of the RP and not one single move within it. The claim that Swales' models do not account for all RPs in terms of moves and steps should be taken as an indication of the flexibility (i.e. non-rigidity) of the models and that they leave space for manoeuvre for the writer to shape his/her research according to the conventions of the writer's specific discipline and the nature of the topic covered by the research; some research topics may call for a background knowledge section, for example. This may justify our use of the models to introduce the generic rhetorical structure for the RP. In addition, the flexibility Swales' models enjoy makes them a perfect fit for a class with students from varied academic disciplines. As stated earlier, students are trained in the use of this generic research article/paper model, and later on they may fine tune it; either by adding steps or moves to it to make it interface with their disciplines' requirements. In view of the students' responses (see Appendix 2), it can be said that using these models has engraved in the students' mind a clear mental representation (schema) of the RP, its moves, steps, and the linguistic features peculiar to every move/step.

Furthermore, using Swales' models made it easy for students to think in an organized way and assign the information that they have gathered to their relevant move(s). In other words, the models could best be described as a 'Pigeon Hole', with each hole carrying a label of one of the moves and the students acting like a postman inserting the proper letter (information/data) into the proper mail box (move). In support of this, the students' feedback was encouraging and the RPs they produced looked professional and corroborated their reported positive responses. Worth mentioning here that the writing up of the RP followed a process approach (Macarthur, Graham, Fitzgerald, 2006)), starting with a research plan and ending up with the final research paper.

I have tried this model with more than 25 cohorts of students and I still receive positive feedback from those who finished the course. They report that they have transferred the skills they have acquired to their other major courses' assignments (El-Sakran, Ahmed and EL-Sakran, 2017). Thus, academic writing textbook

designers should forge a stronger link between the findings of academic writing research and the teaching materials included in their textbooks.

References

Ab Manan, N. A. & Pandian, A. (2014) "The effects of formula instruction on knowledge and use of the target formulas", *Journal of English Language and Literature*, Vol.1, No. 3, pp. 71-78.

Anthony, L. (1999) "Writing research article introductions in software engineering how accurate is a standard model?", IEEE Transactions on Professional Communication, Vol. 42, pp. 38-46.

Behrens, L., & Rosen, L. J. (2010) *A sequence for academic writing* (4th ed.). New York: Pearson Publishing.

Brett, P. (1994) "A genre analysis of the results section of sociology articles", *English for Specific Purposes*, Vol. 13, pp. 47-59.

Budsaba, K. (2005). "Rhetorical structure of biochemistry research articles", *English for Specific Purposes*, Vol. 24, pp. 269-292.

Chan C. S. C. (2018) "Proposing and illustrating a research-informed approach to curriculum development for specific topics in business English", *English for Specific Purposes*, Vol. 52, pp. 27–46.

Chan C. S. C. (2017) "Investigating a research-informed teaching idea: The use of transcripts of authentic workplace talk in the teaching of spoken business English", *English for Specific Purposes* Vol. 46, pp. 72–89.

Chan, C. S. C. (2009) "Forging a link between research and pedagogy: A holistic framework for evaluating business English materials", *English for Specific Purposes, Vol.* 28, pp. 125-136.

Chen, C. W. Y. (2006) "The use of adverbials in the academic papers of advanced Taiwanese EFL learners", *International Journal of Corpus Linguistics*, Vol.11, No.1, pp. 113-130.

Cheng, A. (2011) "Language features as the pathways to genre: Students' attention to non-prototypical features and its implications", *Journal of Second Language Writing*, Vol. 20, pp. 69–82

Crusan, D. (2010) Assessment in the second language writing classroom. Ann Arbor: University of Michigan Press.

Dudley -Evans, T. (1994) "Genre Analysis: An approach to text analysis for ESP" in Coulthard, M. (ed.) *Advances in written text analysis* (pp. 219-228). New York: Routledge,.

El-Sakran, T. M. (2018a) "Engineering internship ads informing the teaching of writing of internship application letters (IALs)", *Journal of Teaching and Teacher Education*, Vol.6, No.2, pp.135-147.

El-Sakran, T. M. (2018b) "Understanding our audience: messages from concept to completion, *Journal of Languages for Specific Purposes*, Vol.5, pp. 19-30.

EL-Sakran, T. M. (2009) "Mind what you say: Modulation in business communication", Paper presented at the Sixth TESOL Arabia Conference held on Feb. 21 at the University of Sharjah, Sharjah, United Arab Emirates.

El-Sakran, T. M., Ahmed, K. & El-Sakran, A. T. (2017) "University students' perceptions of transfer of academic writing skills across time", *Journal of Languages for Specific Purposes*, Vol.4, pp. 7-23.

- EL-Sakran, T. M. & Nada, F. (2014) "Genre effects on writers' grammatical choices: The case of passive and active voices in online news leads", *Journal of Teaching and Education*, Vol.3, No.1, pp. 347-447.
- EL-Sakran, T. M., Nunn, R. & Adamson, J. (In progress) "A genre analysis of the schematic structure and linguistic features of reviewers' reports on research manuscripts",
- EL-Sakran, T. M. & Saba, N. N. (2014) "The rhetorical function of 'IF-clauses' in finance academic papers", *English for Specific Purposes World*, Vol. 42, No.15. EL-Sakran, T. M. & Zeynabi, A. J. (2014) "Engineering master theses and logical persuasion: An investigation of the functions of logical and grammatical structures", *International Journal on Studies in English Language and Literature*, Vol.2, No.2, pp. 5-10.
- Flowerdew, J. (2000) "Discourse community, legitimate peripheral participation, and the nonnative-English speaking scholar", *TESOL quarterly Vol.*34, No.1, pp. 127–150.
- Huang, J. (2008) "How accurate are ESL students' holistic writing scores on large-scale assessments? A generalizability theory approach", *Assessing Writing*, Vol. 13, No.3, pp. 201-218.
- Keller, J. M. & Suzuki, K. (2004) "Learner motivation and E-learning design: A multinationally validated process", *Journal of Educational Media*, Vol. 29, pp. 229-239.
- Kwan, B. S. C. (2006) "The schematic structure of literature reviews in doctoral theses of applied linguistics", *English for Specific Purposes, Vol.* 25, pp. 30-55. Macarthur, C. A. Graham, S. & Fitzgerald, J. (2006) *Handbook of writing research*. New York, Guilford Press.
- Martin, P. M. (2003) "A genre analysis of English and Spanish paper abstracts in experimental social sciences", *English for Specific Purposes*, Vol.22, pp. 25-43. Muddiman, A. & Frymier, A. (2009) "What is relevant? Student perceptions of relevance strategies in college classroom", *Communication Studies*, Vol. 6, No. 2, pp. 130-146.
- Mungra, P. & Weber, P. (2010) "Peer review process in medical research publications: Language and content comments", *English for Specific Purposes*, Vol.29, pp. 43-53.
- Nwogu, K. N. (1997) "The medical research paper: Structure and functions, *English for Specific Purposes, Vol.*16, No.2, pp. 119-138.
- Ozturk, I. (2007) "The textual organization of research article introductions in applied linguistics: Variability within a single discipline", *English for Specific Purposes*, *Vol.* 26, pp. 25-38.
- Pecorari, D. (2008) "Plagiarism, patchwriting and source use: best practice in the composition classroom, in Friedrich, P. (ed.), *Teaching academic writing* (pp. 222-241). London: Continuum.
- Reimerink, A. (2007) "The use of verbs in research articles: A corpus analysis", Terminology, Vol. 13, No.2, pp. 177-200.
- Samraj, B. (2008) "A discourse analysis of master"s theses across disciplines with a focus on introductions", *Journal of English for Academic Purposes*, Vol.7, No.1, pp. 55-67.
- Samraj, B. (2005) "An exploration of genre set: Research article abstracts and introductions in two disciplines", *English for Specific Purposes*, Vol.24, pp.141-156.

Samraj, B. (2002) "Introductions in research articles: Variations across disciplines", *English for Specific Purposes*, Vol.21, No.1, pp. 1-17.

Swales, J. M. (1990) *Genre analysis: English in academic and research settings*. Cambridge University Press. Cambridge.

Swales, J. M. (1981) *Aspects of article introduction*. Language Studies Unit. University of Aston. Birmingham, UK.

Thompson, G. & Yiyun, Y. (1991) "Evaluation in the reporting verbs used in academic papers", *Applied Linguistics*, Vol.12, No. 4, pp. 364-382.

Appendix 1

Table 1: Rehetorical Stuructures of Examined RPs

	Table 1: Renetorical Stuructures of Examined RPS				
<u>Team # 1</u>	<u>Team # 2</u>	<u>Team # 3</u>	<u>Team # 4</u>	<u>Team # 5</u>	
-Title -Author's name - Introduction -Objective of the study -Motivation for the study -Study approach and procedures -Results and discussion - Conclusions and implications -Appendix 1 -Appendix 2 -References	-Title -Author's name - Introduction -Research variables - Instruments Scoring. Procedures -Results -Implication - Suggestion -Notes - References	-Title -Author's name -Introduction -Problems -Assumptions -Methodology -The major findings -Conclusion -Recommendations for:	-Title -Authors' name -Abstract - Introduction -Reflecting concept -The study -Methods -Results -AnalysisDiscussion - Conclusion -Appendix - References	-Title -Authors' names -Introduction -Literature -Sources of data -Results -More analysis -Overall observations -Pedagogical implications -Conclusions -References -Appendix	

Appendix 2

Testimony 1

I have personally found it extremely beneficial that you made us print out a sample research paper at the beginning of the semester as this gave me on overview of what was expected from me. This technique was new to me as we did not do this

in WRI101 or 102. Hence, I strongly suggest that you continue with this method as it makes the process of writing our assignments more clear and straightforward.

Testimony 2

I feel the constant emphasis on the format/schema was the most beneficial aspect of this course because it helped me with the format for my major-business courses. I used the layout that we learnt in class, eg: Sub-headings and including a mini introduction for each section, for my management report as I was not aware that this was the professional format for any report/assignment. Additionally, I strongly recommend that, at the beginning of the course, professors should ask students to print an academic published article in order for students to gain an overview of what is expected from them at the end of the course. This was extremely beneficial for me as this technique helped provide insight of the schema for an academic article.

Testimony 3

The course was really helpful, especially because we are required to write s research paper for many other courses. With the help of the material learned in ENG204, students can definitely use the materials learned to write a better research paper.

Testimony 4

The most beneficial aspect of the course for me was going through each section of the paper (IMRD) by analyzing previous papers and learning the different ways in which one can choose to write and layout their research. This was not only beneficial for this research paper but has also given me insight and knowledge that would help me in my writing in other courses in the future.

Testimony 5

The most beneficial aspect of the course was printing out a related scholarly source and bringing it with us to class every day, which helped guide us and give us an outlook on what the final product should look like. And showed us the different methods that different journals use to conduct research. I wouldn't say that anything we did in the course was not beneficial, but I do think that if we looked at a bad example of a research paper and compared the components against a good research paper, it would have been a nice idea.

Testimony 6

Most beneficial aspect was the improvement of my organizational skills in writing a research paper and improvement in identifying academic sources. I liked the idea of referring to a printed research paper, observing it and studying the process of research writing. I can't think of anything that was not beneficial.

The author would like to thank the two anonymous reviewers of the Journal of Languages for Specific Purposes (JLSP) for their constructive feedback on an earlier version of this research.