



From Need Analysis to Model Development: Using Process-Genre Approach in Teaching Article Writing to EFL Students

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Abstract

A good learning model is the one developed based on the analysis of learning needs and feasibility. There are many models materials for teaching article writing proposed by the instructional designers but it is not a guarantee that those models are suitable with the characteristics of the students. This article discusses the process-genre model for teaching article writing based students' needs. This was a research and development study conducted at State University of Padang, Indonesia. The data of the study were obtained from students' responses on the questionnaires regarding the students' needs on learning article writing. The results of the study show that (1) there are some explanation and examples that should be considered as the input in teaching and learning process, (2) students need to be able to have deep understanding of every part of the article, and (3) students need the appropriate tasks/activities that directly help improve their knowledge and skills in developing the article. The appropriate model for teaching RA writing based on the result of need analysis consists of syllabus, stages in teaching and learning process, and learning materials. Thus the appropriate need analysis can be used effectively in developing a process-genre model for teaching article writing.

Keywords: Article Writing, Model Development, Need analysis, Process-Genre Approach

1. Introduction

Research article (RA) as an example of academic genres can be identified by its communicative purpose and by the characteristic features that make it different from other academic genres. It is important to emphasize that a research article should report on research findings that are not only sound (valid) and previously unpublished (original), but also add some new understanding, observation, proofs, i.e. potentially important information, Swales [1]. A RA has a required structure and style, which is by international consensus known as "Introduction Methods Results and Discussion" or IMRaD, Swales [1]. However, a RA is not only a technically rigid document, but also a subjective intellectual product that reflects personal opinions and beliefs, Hengl and Gould [2]. Therefore, it requires good skills in both structuring and phrasing the discoveries and thoughts.

Many studies have been done on the rhetorical structure of research article, especially introductions. In her their study, Ahamad and Yusof [3] employed Swales [1] CARS model to analyze the Islamic academic research article introductions. The finding reveals that the move-structure of Islamic RA introductions does not closely resemble the move structure proposed by the CARS model. Chahal [4] studied RA introductions in cultural studies and found that while the examined RAIs can be considered to generally conform to the CARS model, they display noteworthy variation in relation to the obligatory status of moves. Doro [5] conducted a study on the rhetoric structure of RA abstracts in English Studies Journals. The finding shows that only a few of the abstract follow the full suggested structure.

Many Authors have discussed guidelines and rules to help both students and scientists write RAs. Kats [6] discussed the strategies to change research report to become a manuscript. Olson [7], Lichtfouse [8] and Silva [9] wrote the strategies for writing RA to be published in journals. Some writers write quite detailed strategies to help researchers with English as a foreign/second language,

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such as books written by Yang [10], Englander [11], and Wallwork [12]. However, writing a RA is still a most difficult task for students of non-native English speakers. What is the most effective model of learning for these students is a very crucial question to answer?

Though researchers set out to investigate the rhetorical organization of RA in different academic fields and different languages and writers publish books for writing research articles, to the best of my knowledge, no study has been done with regard to the model of teaching RAs based on the result of need analysis. The present study, therefore, develops the model for teaching RA writing to students by using process-genre approach. Through need analysis, we aim to identify students' need on each RA component, and based on the analysis we develop the steps (syntax) for teaching RA writing to EFL students.

2. Method

This research and Development used survey to collect the data related to students' needs. The data were the answers to questionnaire distributed to 50 undergraduate students of English Language Education Program of Universitas Negeri Padang, Indonesia. They were randomly selected from 156 students enrolled in Article Writing course. Four options such as *Not Important*, *Less Important*, *Important*, and *Very Important* were used to get the data of the level of students' needs. Each option in the questionnaire was scored 1 for *Not Important*, 2 for *Less Important*, 3 for *Important*, and 4 for *Very Important*. The score of each participant was counted and the score of each item in the questionnaire was also counted. The average score of each item was categorized into *Very Low*, *Low*, *Mid*, *High*, or *Very High*. Based on the result of the need analysis, the model of teaching RA writing using process-genre based model developed by Refnaldi [13] was developed.

3. Results and Discussion

The questionnaire given to the students consists of 12 items derived from the basic structure of a research article. The following table describe students' need on each of the research article component.

Table 1: Students' Need on Research Article (RA) Components

No	Research Article Components	NI	LI	I	VI	Ttl	AV	LN
1	Presenting background information	0	8	45	124	177	3.54	VH
2	Reviewing related research	0	14	57	96	167	3.34	H
3	Presenting new research conducted by the author	0	30	42	84	156	3.12	H
4	Identifying source of data and data collection method	0	56	48	24	128	2.56	M
5	Describing experimental procedure	0	40	54	48	142	2.84	H
6	Describing data analysis	3	50	39	36	128	2.56	M
7	Reporting result	0	20	81	52	153	3.06	H
8	Commenting on result	0	0	57	124	181	3.62	VH
9	Highlighting overall results and significance	0	10	51	112	173	3.46	VH
10	Explaining specific research outcomes	0	4	96	64	164	3.28	H
11	Stating research conclusion	0	16	84	56	156	3.12	H
12	Writing the abstract	0	0	54	128	182	3.64	VH

Note: NI = Not Important, LI = Less Important, I = Important, VI = Very Important
Ttl = Total, AV = Average, LN = Level of Need

Table 1 above reveals that there 10 components of RA that are really needed by students. Four of them are in the category of Very High (VH) and 6 items are in the category of High (H). The four RA components that should get serious attention when developing the model for teaching Research



Article are writing the abstract (3.64), presenting background information (3.54), Commenting result (3.62), and highlighting overall result and their significance (3.46).

Furthermore, there are three basic schemes becoming the model characteristics; the syllabus, the learning strategies, and the learning materials. It is these three things that make this model differ from the other models. The syllabus is a very important component in developing a systematic learning model. The syllabus developed here is a mixed syllabus because it is developed from combining the basic principles from four different syllabus models, such as content-based, text-based, topic-based, and grammar-based syllabus. Thus this syllabus contains the types of text required by students, the topics or themes suitable for each text, the lexicogrammar elements, and the processes through which the texts are developed, Refnaldi [13]. Relationships that exist among the elements can be described as follows:

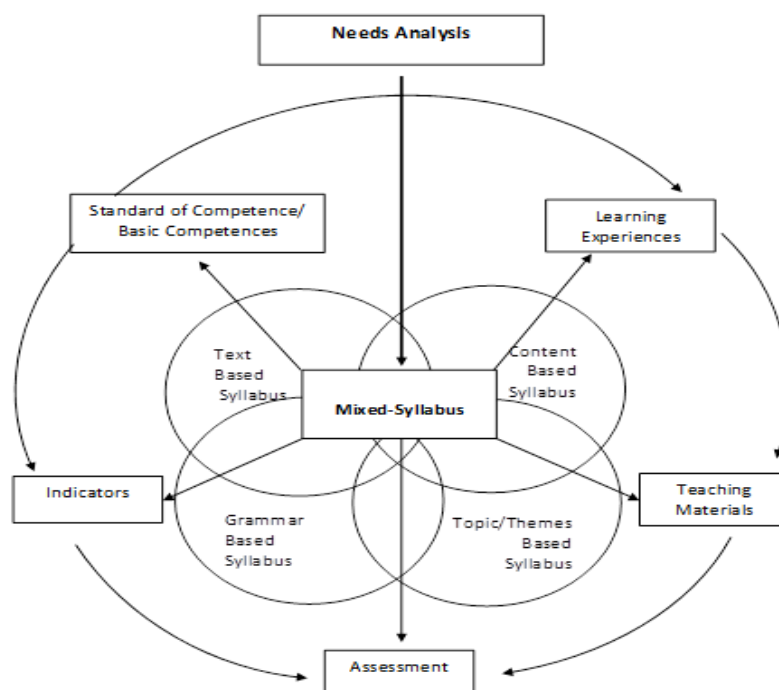
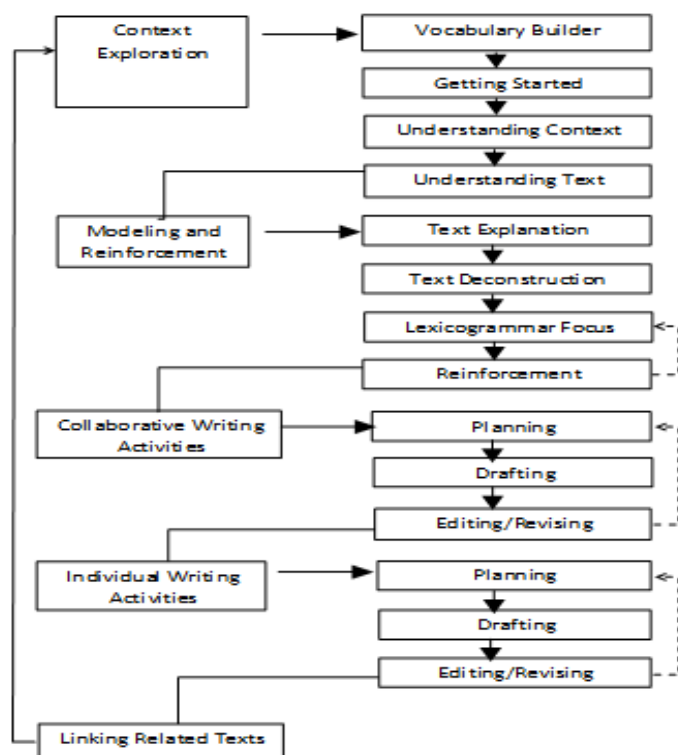


Figure 1: The relationship among the syllabus component

The core component of the syllabus itself is the basic course outline for one semester. The outline consists of several important elements, namely a number of basic competences that are developed from the standard of competence, performance indicators for each basic competence, students' learning experiences, a general overview of teaching materials, and forms of assessment. Based on the results of the needs analysis, the basic competences that should be possessed by students with respect to the basic structure of a research article are the ability to write the introduction section, the methodology section, result section, discussion section, conclusion section, and abstract section, Swales [1].

The Learning strategies for RA writing are developed based on the results of the needs analysis and the syllabus. Each learning unit is developed into several stages which are more or less similar. The stages are context exploration, modeling and reinforcement, collaborative writing activities, and individual writing activities, and linking related texts. This step is based on the teaching model developed by Refnaldi [13]. The physical structure of the learning strategies is as follows.



The materials for teaching RA writing are developed based on the results of the needs analysis and the syllabus that has been developed. Teaching materials are developed based on the four components of language learning materials which include input, language components, content, and task. Each learning unit contains at least one example of RA section that is directly related to the components of a RA being discussed. For example, Unit One discusses the introduction section of RA and it contains the explanation and examples related to (a) presenting background information, (b) reviewing related research, and (c) presenting new research conducted by the author(s). The second element in the teaching material developed is the theme or

topic. Each learning unit has a theme. The themes.

The third element is the presentation of the dominant lexicogrammar components appropriate for each section of RA. This element is very important because the vocabulary and grammar are basic components for the creation of a text. In this element, students are introduced technical terms and effective sentences for each section of RA. Furthermore, the fourth element is the skills that should be taught to students. The sub skills of writing include many aspects, especially the aspects that are directly related to the development of skills such as quoting and paraphrasing, analyzing and synthesizing, summarizing, and drawing conclusion. The last element is the various forms of activities and exercises. The types of activities that are presented in the teaching materials are based on the process approach that consists of planning, drafting, editing, and rewriting.

4. Conclusion

A good model for teaching RA writing is a model that is based on the results of in-depth analysis of the data related to the students' needs on the appropriate teaching and learning process. The appropriate input enables students to enrich their knowledge and skills in the process of learning to write essays. The appropriate analysis of each RA section helps students develop their academic and thinking skills in writing. The appropriate tasks/activities help students improve their skills in writing good RAs. Thus, the process-genre based model that is appropriate for teaching writing is designed based on the result of students' need analysis.

The current findings may have noteworthy implications on English language teaching practice. They highlight that the three components of the introduction section, two components in method section, two component in discussion section, and all components in the abstract need to be introduced to students. It may also be noted that some of the rhetorical strategies observed in RA may show similarities with other related academic genres such as the undergraduate thesis or master's dissertations. Clearly, further research is needed to prove whether this hypothetical model significantly and effectively improve students' ability in writing a research article. Such research may



be used to further inform teaching practice and elucidate the links that occur between the hypothetical model and the real practice in helping EFL students improve their ability in writing RAs.

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