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Safnil Arsyad^a

^a English Education Study Program of Languages and Arts Department, Bengkulu University Published online: 05 Nov 2013.

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A genre-based analysis of Indonesian research articles in the social sciences and humanities written by Indonesian speakers

Safnil Arsyad*

English Education Study Program of Languages and Arts Department, Bengkulu University (Received 5 February 2013; accepted 25 September 2013)

This study examines the discursive structures and linguistic features of research articles (RAs) written in Indonesian by Indonesian writers with the aim of exploring how Indonesian writers rhetorically describe their research methods in their RAs. The corpus for this study consists of 51 selected RAs published mainly in university-based social science and humanity journals in Indonesia. The seven-move structure (SMS) model for RA method sections was employed. The results showed that, first, the SMS model can capture broad communicative units or moves in the Indonesian RA method section but not smaller communicative units or steps. Second, in terms of the occurrence of moves and steps, the Indonesian RA method section is generally similar to the ones in English. Third, the use of discourse and linguistic markers is quite frequent in the Indonesian RA method sections. It is believed that Indonesian writers will not find it rhetorically difficult to write the method section of RAs in English as far as they are well informed of common linguistic features of English academic texts.

Keywords: research articles; method section; communicative purpose; move and step; genre-based study; academic discourse

Introduction

Research articles (RAs) usually have a macrostructure of introduction, method, results, and discussion in which methods is one of the main sections in the structure. Although not as important and complex as other sections of RAs, such as introduction and discussion, the method section of the RAs also plays an important role because if this section is not spelled out clearly and convincingly, it will negatively affect the reliability and the validity of the research results reported in the article. Lim (2006, 283) claims that '[w]ithout a sound Method section, writer will not be able to convince the readership of the validity of the means employed to obtain findings'. In addition, according to Adnan and Zifirdaus (2005), the method section is the place where writers demonstrate that they have properly conducted the research project reported in the RA, and therefore, that the results of their study are valid and reliable. Thus, in order for readers to rely on the results of a particular research project reported in a RA, the method section must be rhetorically and linguistically appropriate and therefore RA writers must treat this section as equally important as other sections of the RA.

Swales and Feak (1994) stated that the method section is commonly the easiest section of a RA to write and therefore, they suggest that this section should be the first one written. However, according to Belcher (2009), although the method section looks

*Email: safnil@yahoo.com

easy to write, there are also potential problems in it, especially when written in English, such as the wrong choice of tenses, the wrong choice of sentence types (active or passive voice), insufficient information about the research processes, and non-compliance with journal guidelines. In addition, as Branson (2004) suggested, the method section must be written in a clear, well-organized manner so that the study can be replicated. In other words, the method section has the communicative function of convincing readers that the research was conducted well, the participants represented the groups they were intended to represent and the experimental method avoided possible distortions.

Investigation of the method section of RAs in a language other than English such as Indonesian is important for at least three purposes: (1) to see how Indonesian writers rhetorically justify the choice of a particular set of research methods in relation to previous relevant studies, (2) to see how Indonesian writers rhetorically attempt to convince their potential readers that the choice of the research method was the most appropriate one considering particularly the research objectives, and (3) to compare and contrast these rhetorical or discourse structures of Indonesian RAs and those in English for pedagogical purposes. This is because if the discourse similarities and differences between the method sections of Indonesian and English RAs are known, it will be much easier and simpler to train or advise Indonesian writers to successfully write RAs in English in order to publish in international journals.

The Indonesian government strongly encourages Indonesian researchers to write RAs in English and to publish them in international journals because there are still very few international publications by Indonesian writers especially in research journals published in the English language. These are much fewer compared to those by researchers of neighboring countries, such as Singapore, Malaysia, the Philippines, and Thailand (Ambarini 2008; Ariwibowo 2008; Wahid 2011). It is expected that if Indonesian writers are able to translate their Indonesian RAs into English and adapt them into linguistic and rhetorical styles acceptable by international journals, the chance for them to publish in international journals will surely become much bigger. By doing so, the rate of international publication of Indonesian academics, especially in terms of journal publication as expected by the Indonesian government, can be significantly improved.

Genre-based research on academic texts has been very much focused on the analysis of move structure of RAs; while the investigation of RAs has emphasized move structures of the introduction and discussion sections. These studies usually compare RAs published in English from two or more different disciplines or in one or more different languages from the same discipline. The majority of these studies use move structure, such as from Swales (1990) for the RA introduction section or move structure of the RA discussion section from Swales (1990) and Dudley-Evans (1994) as models to investigate RAs in the corpus of the studies. The results of these studies have shown similarities and differences.

Unlike his work on introduction and results sections of RAs, Swales (1990) did not suggest investigating the move structure of the method section of RAs; instead he investigated several discourse structures and linguistic features of this section in English RAs, such as the use of passive sentences, past tense, given-new paradigm, and the use of frequent cohesive devises, and restricted predicated verbs. However, the move structure of the method section of RAs was explored by Brett (1994, in Lim 2006). According to Brett, the method section of a RA in Sociology has three moves: Move 1 (description of data collecting techniques), Move 2 (description of research process steps and stages), and Move 3 (description of data analysis processes including statistics calculation especially for quantitative research). Nwogu (1997) investigating RAs in the medical

discipline suggested a similar three move structure of RA method sections containing Move 1 (explanation of data obtaining processes), Move 2 (explanation of try-out processes), and Move 3 (explanation of data analysis processes).

Lim (2006) studied the method section in 20 RAs published in English in the discipline of management. He found that the method sections of RAs in the corpus of his study have three moves: Move 1 (describing data collection procedures); Move 2 (delineating procedures for measuring variables), and Move 3 (elucidating data analysis procedures), and also every move contains three sub-moves or steps. A complete structure of the method section as suggested by Lim is shown in Table 1.

As shown in Table 1, the rhetorical structure of RA method sections in English in the discipline of management, as found by Lim (2006), consists of not only moves but also steps and substeps or 'strategies'. Apart from identifying the move and step structure, Lim also identified the linguistic features of RA method sections in the corpus of his study; these are among other things, the use of 'noun phrases indicating occupations', 'locative adjuncts', 'procedural verbs denoting steps in collecting data', and 'Where, When, Why, Who and What interrogative clauses' (286–301). However, this discourse structure and linguistic features might not represent the structure of RA method sections in other languages and/or other disciplines, as Swales and Feak (1994) stated that the structure of RA method sections in social sciences and humanities seemed to be different from those in hard and life sciences. Swales further pointed out that

Table 1. An overview of move and step in the method section of 'Management' RAs (Quoted by permission from Lim 2006, 287).

Move 1	Describing dat	a collection procedure/s			
	Step 1	Describing the sample			
		(1) Describing the location of the sample			
		(2) Describing the size of the sample/population			
		(3) Describing the characteristics of the sample			
		(4) Describing the sampling technique or criterion			
	Step 2	Recounting steps in data collection			
	Step 3	Justifying the data-collection procedure/s			
		(1) Highlighting advantages of using the sample			
		(2) Showing representatives of the sample			
Move 2	Delineating procedurals for measuring variables				
	Step 1	Presenting an overview of the design			
	Step 2	Explaining methods of measuring variables			
		(1) Specifying items in questionnaire/databases			
		(2) Defining variables			
		(3) Describing methods of measuring variables			
	Step 3	Justifying the method/s of measuring variables			
		(1) Citing previous research method/s			
		(2) Highlighting acceptability of the method/s			
Move 3	Elucidating da	ta analysis procedurals			
	Step 1	Relating data analysis procedurals			
	Step 2	Justifying data analysis procedurals			
	Step 3	Previewing results			

[t]hese differences can presumably be related to a number of sociological and intellectual phenomena, such as the nature of the discourse community, the level of agreement about appropriate methodology, the extent to which a demonstrably adequate methodology is deemed necessary, and the role assigned to controlled experiment in the discipline. (170)

In other words, the move and/or step structure of RA method sections in one or a group of disciplines is different from that in another or another group of disciplines due to different research practices, the nature of the discipline and consensus among the member of active discourse community in a particular discipline or group of related disciplines.

Peacock (2011) compared the method section of English RAs across eight disciplines: physics, biology, chemistry, environmental science, business, language and linguistics, law, and public and social administration. He selected 288 RAs (36 RAs were taken from each of the eight disciplines) as the corpus of his study to examine their move structure in the method section. He found that the method section of English RAs has seven possible different moves: overview, research aim/question/hypotheses, subjects/materials, location, procedure, limitations, and data analyses (102). According to Peacock, these seven different moves mean that there are possibly seven different units or segments with different communicative function in the method section of RAs under investigation. The difference occurs among the eight different disciplines on the appearance of seven possible moves; only Move 5 (procedure) is found in all 288 RAs while two other moves (Move 3: subject/materials and Move 7: data analyses) are extremely common in three disciplines, biology, chemistry, and physics. In addition, RAs in the corpus of Peacock's study had more moves than the ones found in previous studies (i.e. Brett 1994; Nwogu 1997; Lim 2006, all are cited in Peacock 2011) and, according to Peacock, this is due to the different disciplines of RAs investigated in his study and those in previous studies.

Unlike RAs in English and other western-European languages, genre studies on RAs in Asian languages, such as Indonesian are rare although much needed particularly for the purpose of successful English education in English as a Foreign Language (EFL) environments and successful international communication in academic contexts. The differences and similarities between RA rhetorical structures and linguistic features in English and in Indonesian become the main consideration in designing effective and efficient teaching of English for specific purposes (i.e. in this case, the teaching of English for academic purposes); that is by focusing on the potential problematic areas which may be experienced by students when writing in English. This is because as Bathia (1993) states, so far discourse studies have been dominated by samples taken from languages of 'Western European and Anglo-Saxon' (37), while it is widely acknowledged that different languages and cultures may have significantly different discourse features. Therefore, cross-language and cross-discipline studies on authentic samples of discourse in other languages and/or cultures are necessary to promote international communication especially in an academic context using English.

Genre-based studies on Indonesian RAs written by Indonesian writers in Indonesian and English in several disciplines have also been conducted by several investigators, such as Mirahayuni (2002), Safnil (2003), Adnan (2005), Basthoni (2006), and Safnil (2013a, 2013b, in press). However, in these studies, only the move structure of abstract, introduction, and discussion sections of Indonesian RAs were investigated while studies on the method section of the Indonesian RAs, to this author's knowledge, have never been conducted. This is the main motivation for the present study; that is to investigate the rhetorical structure and linguistic features of the method section of Indonesian RAs

written by Indonesian speakers in the disciplines of social sciences and humanities. In particular, this study is an attempt to answer the following questions:

- (1) How is the method section of Indonesian RAs written by Indonesian speakers in social sciences and humanities rhetorically structured in terms of the appearance of their communicative units or moves?
- (2) How is the method section of Indonesian RAs written by Indonesian speakers in social sciences and humanities rhetorically structured in terms of the appearance of their sub-communicative unit or steps within each move? and
- (3) How do the move and step appearance in the method section of Indonesian RAs written by Indonesian speakers in social sciences and humanities differ from and/or resemble the ones in English RAs?

To answer these questions, a genre-based analysis was conducted on authentic discourse samples, RAs written in Indonesian by Indonesian writers published in mostly university-based Indonesian academic journals and targeted for the Indonesian academic discourse community in the same or related disciplines. The main aim of comparing the rhetorical structure of the method section of Indonesian RAs and English RAs is for pedagogical purposes. As mentioned above, Indonesian writers are strongly encouraged by the Indonesian government to publish in international journals in which the language is mainly English and if the rhetorical differences and similarities of the RAs in the two languages are known it will be much simpler and easier for Indonesian writers to translate and adjust their Indonesian RAs into ones rhetorically and linguistically acceptable in English. As a result, the chance for them to successfully publish their RAs in international journals will improve.

Methods

The corpus of the study

For this study, 51 Indonesian RAs were chosen from Indonesian research journals published mainly by university-based publication in six different disciplines: education, language and literature, social sciences, economy and management, religious studies and psychology. It is assumed that these six different disciplines could represent the field of social sciences and humanities. In addition, only one article was chosen from each journal because all articles published in the journals are believed to have gone through standard editing and reviewing processes following the submission guidelines enforced by the journal editorial boards and therefore all articles published in the journals have conformed

Table 2. The distribution of RAs in the Corpus of this study.

Number	Discipline	Code	Number of RAs	Percentage (%)
1.	Religious study	RS	4	7.8
2.	Education	EJ	15	29.4
3.	Economy and management	EM	12	23.5
4.	Language and literature	LL	7	13.7
5.	Psychology	PJ	6	11.8
6.	Social sciences	SS	7	13.7
Total			51	100

to the guidelines enforced by the journal editors. The distribution of the RAs in the corpus in this study is given in Table 2 while the list of journals from which the articles were obtained is given in Appendices 1 and 2.

The number of RAs in each discipline is not equal because the number of journals available in each discipline published in Indonesia is not equal either. The choice of the disciplines is motivated by the assumption that the discourse structure and styles of RAs in social sciences and humanities are more various and non-standard compared to those in natural and hard sciences.

Move analysis procedures

Analysis of the discussion section of the RAs was based on the seven-move structure (SMS) model outlined by Peacock (2011). As discussed above, Peacock suggests that the method section of RAs may contain up to seven moves or a segment of text which has a clear communicative purpose set by the writer for the readers; these moves are '... overview, location, research aim/question/hypotheses, subjects/materials, procedure, limitations, and data analyses' (102). The choice of this model to follow in this investigation is because the RA disciplines in the corpus of Peacock's study are almost as various as the ones in this study. Peacock elaborates further that the communicative purposes of each move are as follows: (Notes: some modification has been made to the description of the moves for practical purposes, while the examples of the moves are taken from the RAs in the corpus of this study with additional translation into English)

Move 1 (*Overview*) is the beginning segment of the method section in which RA writer/s provide a general introduction to research method. For example:

Penelitian ini termasuk jenis penelitian kualitatif fenomenologis (telling story). Dalam hal ini penelitian difokuskan pada pelaksanaan pembelajaran guru taman-taman kanak-kanak, seperti dikatakan Bogdan dan Taylor (dalam Moleong, 1991:3), penelitian kualitatif adalah prosedur penelitian yang menghasilkan data deskriptif berupa kata-kata tertulis atau tulisan dari subjek penelitian dan perilaku yang dapat diamati. Alasan penggunaan deskriptif kualitatif dalam penelitian ini karena akan memaparkan situasi atau peristiwa. (RS.3)

This research is a phenomenologic qualitative study, i.e., telling story. This research is focused on the teaching and learning of kindergarten teachers; Bogdan and Taylor (cited in Moleong, 1991:3) state that qualitative research is aimed at producing descriptive data as words or written sentences and observable behaviors. The reason for choosing a descriptive qualitative method in this research is because the aim of this study is to describe situations and events.

Move 2 (*Research aims/questions/hypothesis*) is the segment where the RA writer/s address the objectives of the research, the questions to be answered or the hypotheses to be tested through the research. For example:

Research aims

... maka secara operasional penelitian ini bertujuan untuk mengetahui atau mendapatkan secara empiris hubungan, bentuk serta keekuatan hubungan antara: (1) budaya organisasi dengan mutu layanan sekolah; (2) etos kerja guru dengan mutu layan sekolah; dan (3) budaya organisasi dan etos kerja guru secara bersama-sama dengan mutu layanan sekolah (EJ.9)

... therefore, operationally this research is aimed at knowing or finding the empirical correlation between: (1) organization culture and school service quality; (2) teachers' work ethic and school service quality; and (3) organization culture together with teacher's working ethic and school service quality.

Research hypothesis

Dalam penelitian ini penulis menggunakan uji dua pihak dengan hipotesis sebagai berikut:

 $Ho > \alpha = 0$: Tingkat kesulitan keuangan perusahaan tidak berpengaruh terhadap konsrvatisme akuntansi

 $Ha > \alpha \neq 0$: Tingkat kesulitan keuangan perusahaan berpengaruh terhadap konservatisme akuntansi (EM.3)

Ho $> \alpha = 0$: Monetary difficulty level of the company does not affect the accounting conservatism

 $Ha > \alpha \neq 0$: Monetary difficulty level of the company affect the accounting conservatism.

Move 3 (*Subjects/materials*) is the segment in which the RA writer/s explain the individuals or group of individuals involved in the research or the things or objects used in the research for the purpose of collecting the data. For example:

Subjek dalam penelitian ini adalah beberapa guru taman kanak-kanak di Kecamatan Sidoarjo Kabupaten Sidoarjo. ... (RS.3)

The subjects for this study were kindergarten teachers in Sidoarjo municipality of Sidoarjo regency. ...

Move 4 (*Location*) is the segment in which RA writer/s describe the area where the research project took place and probably the explanation of such a place was chosen for the research. For example:

Penelitian ini dilakukan pada bulan Mei sampai dengan Juli 2007 di Kabupaten Banyuwangi ... (EJ.7)

This research was conducted ... in Banyuwangi regency ...

Move 5 (*Procedure*) is the segment in which the RA writer/s spell out the ways of collecting the research data. For example:

Teknik pengumpulan data dalam penelitian kualitatif ini dapat dibagi ke dalam dua bagian, yaitu: 1) pengumpulan data utama berupa keterangan yang diperoleh oleh peneliti langsung dari gejalanya; 2) pengumpulan data suplemen (sekunder) berupa keterangan yang diperoleh peneliti melalui sumber lain baik lisan maupun tulisan.

Data utama dan data tambahan dikumpulkan melalui tiga cara, yaitu: wawancara, observasi dan studi dokumentasi. (RS.3)

Data collection techniques in this research were divided into two parts: (1) collecting the main data in the form of information from the researchers and (2) collecting supplementary or secondary data in the form of written or oral information from other sources.

The main and additional data were collected through three ways, that is, interview, observation, and documentation.

Move 6 (*Limitation*) is the segment in which the RA writer/s describe the conditions or situations to which the research results or findings are not applicable or generalizable. (There is no example of Move 6 in the method section of RAs in the corpus of this study.)

Move 7 (*Data analysis*) is the segment in which the RA writer/s explain the ways of analyzing the research data. For example:

Data yang diperoleh terlebih dahulu diolah dengan tahapan-tahapan mengedit data, tabulasi data, tabulasi dan perhitungan frekwensi dan persentase. Untuk proses tabulasi data, klasifikasi dan perhitungan statistik digunakan paket statistik untuk ilmu-ilmu sodial versi 15.00. Hal ini dimaksudkan demi terjaminnya akurasi perhitungan. (P.J.1)

The data were analyzed following the steps of data editing, data tabulating, and frequency and percentage tabulating. For data tabulating and classifying processes, statistic analysis package for social sciences version 15.00 is used in order to enhance the accuracy of data analysis.

According to Peacock, the above seven moves are maximum moves that a method section of a RA can have and each move may be characterized by particular linguistic and/or discourse clues. However, in this study, smaller communicative units or steps of each move in the method section of the Indonesian RAs were also analyzed, described, and exemplified in order to see the move structure in detail. This is because, as suggested by Safnil (2000, 85), 'In order to realise the communicative purpose of a particular Move ... RA authors normally need one or more constituent elements or steps'. For this study, a communicative unit or move using Safnil's (2000, 82) definition is as follows:

A communicative unit of a text is a clause or a set of clauses or a paragraph which shows a clear indication of a specific identifiable communicative purpose, signalled by linguistic clues or inferred from specific information in the text. The communicative units or moves in a particular text together develop a set of communicative purposes relevant to the genre of the text.

The decision on whether or not a segment in the text, such as a clause(s) or a paragraph(s) can be classified as a Move and/or a Step depends on whether or not the segment has a distinct and identifiable communicative purpose or function.

In this study, following Safnil (2003), a clause or a simple sentence was used as a smallest unit of analysis because it is almost impossible that two or more communicative purposes (moves and/or steps) are expressed in a clause because a clause should have only one topic or subject and one comment or predicate. In addition, the identification of moves in the discussion section of RAs was done using linguistic and discourse clues; these are formulaic expressions, particular lexical items, cohesive markers, by inferencing from the information contained in the text, and other kinds of discourse clues, such as subtitles or subsection titles, paragraph as a unit of ideas, and other possible linguistic and discourse clues available in the Indonesian language which may help segment the text into moves and identify the move boundaries.

Identifying moves and steps in the method section of RAs

The processes of identifying communicative units in the discussion section of RAs followed the procedures suggested by Dudley-Evans (1994). These are (1) search for move structure by identifying move borders, (2) consider a clause as a smallest analysis

unit, (3) validate the analysis using an independent rater. In detail, the analysis processes went through the following steps; first, reading the title and subtitles, the abstract and the key terms to get a rough understanding of the research project reported in the RAs; second, reading the entire text to identify the main sections of the RAs; third, reading the method section of the RAs to identify the linguistic and discourse clues; fourth, identifying the communicative units in the discussion of the RAs using the linguistic and discourse clues; fifth, identifying the common discourse patterns of the method section of the RAs; and finally, developing an acceptable model of discourse pattern of moves (if possible) which characterizes the method section of RAs written in Indonesian by Indonesian writers. Then, an independent rater was asked to do the same processes on samples of RA method sections in order to see the validity of the analysis processes.

Results and discussion

Results

The independent rater involved in this study is a lecturer at the Indonesian Department of the Teacher Training and Education Faculty of Bengkulu University who has a PhD in Indonesian Language Education. The reason for using an Indonesian department lecturer rather than an English department lecturer as an independent rater is because the RAs are written and published in Indonesian. After an independent rater was chosen, she was taught how to identify the possible moves and steps in the texts with examples following the procedures described above. Then, she was given two weeks to do the processes of moves and steps analyses of 12 of the 51 RA method sections (23.5%) from the corpus of this study.

Inter-rater correlation analysis results show 80% agreement; the inter-rater disagreement appeared only on whether or not the method section of the Indonesian RAs has a Move 1 (overview) while no disagreement occurred on the other moves. This is because they are clearly marked by subheadings or specific lexical items, such as *tujuan penelitian* (research aims), *masalah penelitian* (research questions), *hipotesis penelitian* (research hypothesis), *subjek penelitian* (research subject), *populasi, sampel dan objek penelitian* (research population, sample, and object), *lokasi penelitian* (research location), *validasi instrumen penelitian* (research instrument validation), *prosedur penelitian* (research procedure), *analisis data* (data analysis), *validasi data* (data validation), and *uji statistik* (statistical testing).

The appearance of moves in Indonesian RA method sections

The analysis results for the move structure in the discussion section of Indonesian RAs are given in Table 3.

Table 3 shows that some important information can be highlighted from the analysis results. First, the dominant moves found in the texts are Move 1 (*overview*), Move 3 (*subjects and materials*), Move 5 (*procedure*), and Move 7 (*data analyses*). It can be claimed that these four moves are the major moves in the method section of Indonesian RAs in social sciences and humanities; while the other moves (Move 2: *research aims, questions and/or hypothesis* and Move 4: *research location*) are only peripheral moves.

Second, unlike in Peacock (2011), no Move 6 (limitation) was found in the corpus of this study; the communicative unit describing 'limitation of the study' reported in the

Moves				Discip	lines			
Wioves	$RS \\ N = 4$	EJ $N = 15$	EM $N = 12$	LL N = 7	PJ $N = 6$	$SS \\ N = 7$	Tot $N = 51$	%
M1 (Overview)	4	11	4	8	6	5	38	74.5
M2 (Research aims/ questions/hypotheses)	_	4	2	-	1	1	8	15.7
M3 (Subject/materials)	2	12	5	7	8	4	38	74.5
M4 (Location)	_	10	2	_	2	3	17	33.3
M5 (Procedure)	3	9	3	6	7	6	34	66.7
M6 (Limitation)	_	_	_	_	_	_	_	_
M7 (Data analysis)	3	9	8	8	8	2	38	74.5

Table 3. Frequency appearance of moves in method sections of Indonesian RAs.

RS = Religous studies, EJ = Education, EM = Economy and management, LL = Language and literature, PJ = Psychology, SS = Social sciences.

RAs is found at the end of the discussion or conclusion section of the RAs. Below is an example:

Keterbatasan

Penelitian ini tidak mempertimbangkan variabel lain yang mungkin turut mempengaruhi kinerja manjerial seperti kejelasan sasaran anggaran, kesenjangan anggaran, budaya organisasi, keinginan sosial, struktur organisasi, motivasi kerja, dan lain-lain. Termasuk juga tidak mempertimbangkan penggunaan variabel kepuasan kerja sebagai variabel intervening yang mempengaruhi kinerja manajerial pada suatu organisasi. (EM.9)

Limitation

This research does not consider other variables which may also affect managerial performance, such as the target budget transparancy, budget gap, organization culture, working motivation, and so on. Also, the variable of work satisfaction as an intervening variable which may affect managerial performance in a particular organization is not considered in this study. (EM.9)

In the above example, the limitation of research is subheaded with *Keterbatasan* (Limitation) and addressed at the end of discussion and/or conclusion section.

Third, similar to Peacock (2011), the appearance of Move 2 (research aims/questions/hypotheses), as seen in Table 3 is also very rare in the corpus of this study; only 8 of the 51 RAs (15.7%) have this move. This is not surprising because research aims and research questions are commonly addressed at the end of the introduction section in Indonesian RAs rather than in the method section. However, some Indonesian RA writers may address their hypothesis in the method section especially the ones using quantitative research methods as in the following example:

Hipotesis Penelitian

Berdasarkan teori-teori dan penjelasan-penjelasan yang telah dikemukakan di atas, maka jawaban sementara terhadap penelitian ini adalah bahwa, "Ada hubungan antara konsep diri dengan motivasi belajar." Siswa yang memiliki konsep diri positif akan memiliki motivasi belajar yang tinggi, sebaliknya siswa yang memiliki konsep diri negatif akan memiliki motivasi belajar yang rendah. (PJ.4)

Research hypothesis

Based on the above theory and explanation, then the hypothesis of this research is that 'there is a correlation between self-concept and learning motivation'. This means that students with

positive self-concept will have high learning motivation and students with negative self-concept will have low learning motivation. (PJ.4)

Research hypothesis, as in the above example, is subheaded with *Hipotesis Penelitian* (Research Hypothesis); this subheading effectively functions as a discourse clue or marker to identify the move.

The appearance of steps in Indonesian RA method sections

It is found that the seven-move model of Peacock (2011) is unable to capture all possible communicative units found in the Indonesian RA method sections; therefore, an additional analysis was then conducted to search for subsequent communicative units or steps appearing in each move. The analysis results are summarized in Table 4.

Table 4 shows that almost every move in the method section of the RAs has one or more steps; these steps describe the sub-communicative units found in each move. However, the dominant step is only Step 1 of Move 5 (*type of data*); it is found in 24% or 47.1% of the RAs in all disciplines except in Economy and Management. Below is an example of Step 1 of Move 5 in the Indonesian RA method sections:

Bentuk **instrumen** yang digunakan berupa angket, tes keterbacaan buku teks melalui **uji rumpang** kepada siswa dan pedoman wawancara untuk guru dan siswa serta format panduan penilaian buku teks SMA. (EJ.1)

Research **instruments** used were **questionnaire**, a textbook readability **test** using **close test** format for students, **interview guidelines** for teachers and students and a **guideline** for evaluating senior highschool textbooks. (EJ.1)

Table 4. The appearance of steps in method section of Indonesian RAs.

Moves and stone	Disciplines						
Moves and steps	RS $N = 4$	EJ N = 15	EM N = 12	LL N = 7	PJ N = 6	SS N = 7	Tot $N = 51$
M1 (Overview)	4	11	4	8	6	5	38
Step 1 (Research model)	_	5	_	_	_	_	5
Step 2 (Research variable)	1	_	2	_	_	_	3
M2 (Research aims/question/ hypothesis)	-	4	2	_	1	1	8
M3 (Subject/materials)	2	12	5	7	8	4	38
Step 1 (Population)	1	3	3	_	1	_	8
Step 2 (Sample)	1	2	3	_	3	_	9
Step 3 (Research object)	_	_	_	1	_	_	1
M4 (Location)	_	10	2	_	2	3	17
Step 1 (time)	_	5	1	_	_	1	7
M5 (Procedure)	3	9	3	6	7	6	34
Step 1 (research instrument)	4	6	_	3	7	4	24
Step 2 (validation of research instrument)	_	_	2	1	1	4	8
M6 (Limitation)	_	_	_	_	_	_	_
M7 (Data analysis)	3	9	8	8	8	2	38
Step 1 (Validation of data analysis)	_	1	_	1	1	_	3
Step 2 (indication of research success)	1	3	_	_	1	_	5
Step 3 (Statistical testing)	1	_	5	_	5	_	11

RS = Religious studies, EJ = Education, EM = Economy and management, LL = Language and literature, PJ = Psychology, SS = Social sciences.

As indicated in the above example, the discourse clues used to identify the steps are *instrumen* (instrument), *angket* (questionnaire), *tes* (test), *pedoman wawancara* (interview guideline), and *uji rumpang* (close test). Thus, it is quite easy to identify the subcommunicative units (steps) in the method section of the Indonesian RAs because of the rich discourse clues used by the authors.

The second most dominant sub-communicative unit or step in Indonesian RA method sections is Step 3 (*statistical testing*) of Move 7 (*data analysis*) found in 11 RAs of the 51 RAs (21.6%) in the corpus of this study. Below is an example of Step 1 of Move 7 in the Indonesian RA method section.

Uji Model

Untuk menguji tingkat pengaruh dari model yang dihasilkan perlu dilakukan uji statistik dengan analisis regresi berganda: (1) koefisien regresi yang menyatakan tingkat pengaruh antara variabel bebas dan variabel tak bebasnya; (2) uji t (t-test) yaitu uji parameter secara individual; dan (3) uji F (F-test) yang merupakan uji parameter secara menyeluruh (overall test) (EM.10)

Model Test

To test the effect level of created models, it is necessary to do a statistical analysis using double regression analyses: i) regression coeficient explaining the effect level between independent variable and dependent variable; ii) t-test, ie., individual parameter test; and iii) F-test, i.e., overall parameter test. (EM.10)

The statistical testing or Step 3 of Move 7, as shown in Table 4, is mainly found in two disciplines: economy and management (EM) and psychology (PJ) and the studies reported in these RAs used a quantitative method.

Another important finding is that Step 1 (*research model*) of Move 1 (*overview*), as indicated in Table 4, appears only in five RAs (9.8%) and only in Education RAs (EJ) and these are only found in studies using classroom action research (CAR) method. Below is an example of Step 1 of Move 1 in the corpus of this study.

Penelitian tindakan kelas ini terdiri dari dua siklus dan mengacu pada desain Class Action Research Model dari Kurt Lewis bahwa dalam satu siklus terdiri dari empat langkah, yaitu: 1) perencanaan, 2) tindakan, 3) observasi, 4) refleksi (EJ.12)

This **classroom action research** consisted of two cycles referring to the **classroom action research model** of Kurt Lewis in which one cycle consists of four stages, namely: 1) **planning**, 2) **action**, 3) **observation**, and 4) **reflection (EJ.12)**.

The above text sample, in the method section of EJ 12, is followed by description of activities carried out in cycles 1 and 2 in four stages: planning, acting, observing, and reflecting. The reason to classify this communicative unit into a Step 1 of Move 1 is because it is a further description of research method overview; that is, CAR.

Yet another point worth discussing here, although not in the research question is that it is fairly easy to identify the moves and steps in the Indonesian RA method section because of sufficiently frequent use of discourse and linguistic markers in the Indonesian RAs. There are many subheadings and/or specific lexicons available for readers in identifying moves and steps in the text. The discourse and linguistic markers are given in Table 5.

As seen in Table 5, the discourse and linguistic markers found in the method section of the Indonesian RAs are very various and these reflect the types of the research method implemented in the research reported in the article. Thus by reading the subheading and/

Table 5. Discourse and linguistic markers/clues found in the method section of the Indonesian RAs.

Common subheadings in the method section	Common specific Lexicons
Tujuan Penelitian (Research objectives)	Kualitatif (Quantitative)
Masalah Penelitian (Research problems)	Kuantitatif (Qualitative)
Bentuk Penelitian (Type of research)	Tes (Test)
Pendekatan Penelitian (Research approach)	Angket (Questionnaire)
Jenis Penelitian (Kind of research)	Observasi (Observation)
Instrumen Penelitian (Research instrument)	Analisis (Analysis)
Sumber Data (Source of data)	Data (Data)
Hipotesis Penelitian (Research hypothesis)	Subjek (Subject)
Populasi dan Sampel (Population and sample)	Objek (Object)
Uji Model (Model testing)	Bahan (Materials)
Uji Statistik (Statistical testing)	Prosedur (Procedure)
Lokasi Penelitian (Research location)	Penelitian tindakan kelas (Classroom action research)
Waktu Penelitian (Research schedule)	Wawancara (Interview)
Teknik Analisis Data (Data analysis technique)	Studi kasus (Case study)
Subjek/Objek Penelitian (Research subject/object)	Model (Model)
Jenis Data Penelitian (Kind of research data)	Siklus (Cycles)
Teknik Pengumpulan Data (Data-collecting technique)	Signifikan (Significant)
Siklus Penelitian (Research cycles) Etc.	Etc.

or specific lexicons used in a particular RA, readers will understand the type of research approach and/or method used in the research reported in the RA and be able to identify the moves and steps forming the method section.

Discussion

The first question in this research was how the method section of Indonesian RAs written by Indonesian speakers in social sciences and humanities is structured in terms of its communicative units or moves. The results suggest that all seven moves as identified by Peacock (2011) are found in the Indonesian RA method section except Move 6 (limitation); in fact, this move appears outside the method section of Indonesian RAs. However, the order of the move appearance is not always consistent; this means a Move 1 (research method overview) does not always appear before a Move 2 (research aim/ question/hypothesis); a Move 4 (research location) does not always come after a Move 3 (subject/materials) and so on. This may imply that for the Indonesian writers, the appearance of necessary moves in the method section of their RAs is more important than the order of their appearance. As Ibnu (2003) and Adnan and Zifirdaus (2005) suggest, in the method section, RA writers should describe how the research was conducted, and the main purpose of this section according to Hunston (cited in Coulthard, 1994) is to convince potential readers that the research project has been conducted using an appropriate research method and therefore the results can be scientifically valid and reliable. Hence, it seems that for the Indonesian RA writers as far as the necessary moves are addressed in the method section, readers will find that the research project has been conducted through scientifically correct and appropriate ways and therefore the results or findings are valid and reliable.

The second question is how the method section in the Indonesian RAs is structured in terms of the appearance of sub-communicative units or steps in each move. The results show that all moves found in Indonesian RA method sections have at least one step or sub-communicative unit although they differ in the frequency of appearance between and within disciplines. Steps, as suggested by Safnil (2000), are aimed at realizing the communicative purpose of a move or breaking down the move into one or more smaller sub-communicative units in order to be more comprehensible. The different frequency of appearance of steps within the same discipline or between different disciplines is probably because of different research methodologies employed in the research. RAs with a qualitative research method, for example, do not need Step 1 (population) and Step 2 (sample) of Move 3 (subject/materials). Similarly, RAs with quantitative research method may not need Step 3 (statistical testing) of Move 7 (data analysis).

The last question put forward in this research is how move appearances in the method section of Indonesian RAs are similar to or different from those in English, particularly as identified by Peacock (2011). The results show that as a whole, the dominant moves in the Indonesian RA method sections are Move 1 (overview of research method), Move 3 (research subject/materials), Move 5 (research procedure), and Move 7 (data analysis technique) while in the English RAs, as suggested by Peacock, the dominant moves are Move 3 (research subject/materials), Move 5 (research procedure), and Move 7 (data analysis technique). Thus, in general, the move appearance in Indonesian RAs is similar to the one in English RAs; the only difference is a more frequent appearance of Move 1 (overview of research method) in the Indonesian RAs. This difference may not be due to the different languages of the RAs (Indonesian and English) but to the different disciplines of the RAs investigated in this study and the ones in Peacock's. A closer look at Peacock's data shows that Move 1 (overview of research method) is also rare in science RAs (i.e. biology, chemistry, and physics) but rather frequent in RAs in other disciplines (i.e. enviromental science, law, public and social sciences, and business).

In terms of step appearance, the Indonesian RA method section is different from the one in English, particularly as identified by Lim (2006) when looking at RAs of the same discipline, that is, economy and management. The first difference is that there is no Move 7-Step 3 (*statistical testing*) in Lim's findings, while in the Indonesian RAs in the corpus of this study, it is a common step especially in RAs reporting quantitative research. This may be because the Indonesian writers found it necessary to address the statistical testing used in their research project in order to convince readers, especially those from other disciplines, that the research results have been testified objectively and at the same time reducing subjective judgment from the writers, while in Lim's study, since the RAs were all in the same discipline (i.e. management), the use of statistical testing results have been a common practice and therefore it is no longer necessary to state in the research method of the RAs.

The second difference is that there is no Move3-Step3 (previewing research results) in the results of this study while in Lim's findings, it is one of the common steps. This seems to be due to different RA writing practices in English and in Indonesian rather than the difference of the language of the articles (Indonesian and English). According to Ibnu (2003), the method section of Indonesian RAs should contain four communicative units: (1) research design, (2) research target (population and sample), (3) data-collecting technique and instrument development procedure, and (4) data analysis technique. Hence, as suggested by Adnan and Zifirdaus (2005) it is not suggested that the Indonesian RA

writers introduce their research results in the method section of their RAs; this section is written only to tell readers how the research project reported in the RA has been conducted and to convince readers that it has been conducted properly.

The differences between rhetorical structure of the method sections in Indonesian RAs and in their English counterparts especially on several subsequent segments or steps of Move 7 and Step 3 as discussed above add to the previous findings of Mirahayuni (2002), Safnil (2000), and Adnan (2005). These researchers found that there are differences between the rhetorical structure of introduction sections in Indonesian RAs and those in English RAs especially in the ways the RA writers justify the importance of their research project reported in the RA. This implies that if the Indonesian writers are to write a RA in English they must adjust their RA rhetorical structures, especially on the potential problematic areas to comply with the ones acceptable in English RAs. By doing so, their chance of publishing their RA in an international journal can significantly improve.

As also indicated above, many discourse and linguistic markers found in the method section of the Indonesian RAs in the corpus of this study help readers identify the moves and steps. This is because the discourse and linguistic clues or markers are often used by writers to signal the communicative units in their RAs (Nwogu 1997). This may confirm Swales and Feak's (1994) comment that the method section of RAs is 'merely labeled rather than characterized' (167). In other words, the method section of RAs is written in a more straightforward way with little necessity for rhetorical styles or effort from the writers compared to other sections of the RAs, particularly introduction and discussion sections.

Conclusion and implications

Conclusion

From the research results and discussion above, several conclusions can be drawn from this study. First, the SMS model as suggested by Peacock (2011) was found to be effective enough to capture the communicative units or moves in the Indonesian RA method section. However, it was found incapable of capturing smaller communicative units or steps in the method section of the RAs. Therefore, a more detailed analysis or step analysis was necessary to identify smaller communicative units or steps in the method section of the Indonesian RAs. Second, in terms of the appearance of moves and steps, the Indonesian RA method section is generally similar to that in English, although there are a few minor differences in the appearance of moves or steps, particularly compared to the findings of Peacock (2011) and Lim (2006). Third, like in English RAs, the method section of Indonesian RAs is written in a more straightforward way with less rhetorical effort than other sections of RAs. In addition, the use of discourse and/or linguistic markers or clues is quite frequent in the Indonesian RA method section; these markers help readers identify the communicative and/or sub-communicative units in the text and help them comprehend the texts.

Implications and suggestions

The pedagogical implications of the findings of this study focus on Indonesian researchers who write or translate RAs into English in order to be published in international journals. As mentioned above, it is believed that the Indonesian writers will not find it rhetorically difficult to write an RA method section in English due to the

rhetorical similarities between these two groups of RAs. However, they have to be well informed of linguistic characteristics of English academic texts such as, the use of passive sentences, past tense, 'given-new paradigm', 'heavy cohesive devises', 'restricted predicated verbs', Noun Phrase 'staking' (Swales and Feak 1994, 167). In addition, as Lim (2006) suggests, second-language learners especially of English need to be taught how and what the connections between communicative functions and linguistic features are through showing them authentic examples of the academic texts. In other words, as Lim suggested, there must be a close link between the teaching of 'general English' and of 'English for specific purposes' or ESP (303), that is, between various linguistic forms or features of English used in a particular discourse and their communicative functions.

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Notes on contributor

Safnil is a lecturer at the English Education Study Program of Languages and Arts Department of Teacher Training and Education Faculty of Bengkulu University, Indonesia. He has published in several international journals, such as Guidelines, the Australian Review of Applied Linguistics, Asia-Pacific Education Researcher and Journal of English as a Foreign Language. His area of research interest includes discourse analysis of RAs and other academic discourses and English teaching and learning material design and use. He can be contacted at safnil@yahoo.com or safnilarsyad@gmail.com.

References

Adnan, Zifirdaus. 2005. Rethorical patterns and voice in selected Indonesian humanities research articles. PhD thesis, Curtin University of Perth Australia.

Adnan, Zifirduas, and Indrawati Zifirdaus. 2005. *Merebut Hati Audiens Internasional; Strategi Jitu Meraih Publikasi di Jurnal Internasional* [Winning International Audiences: Effective Strategies for Publishing in Academic Journals], Jakarta Indonesia: Gramedia.

Ambarini, Ratih. 2008. Sumbangsih Indonesia dalam Publikasi Internasional Hanya 0,0016 Persen [Indonesian Contribution in International Publication Only 0,0016 Percent], Berupa Unpad dalam. http://www.Unpad.ac.id

Ariwibowo, A.A. 2008. Publikasi Internasional Penelitian Indonesia Rendah [Poor Performance of Indonesian International Publication]. http://www.antaranews.com/berita/127823/publikasi-internasional-penelitian-indonesia-masih-rendah

Basthoni, Y. 2006. The rhetoric of research article introduction written in English by Indonesian. PhD thesis, Malang University of Malang Indonesia.

Bathia, Vijay K. 1993. Analysing genre: Language use in professional settings. New York: Longman.

Belcher, Wendy Laura. 2009. Writing your journal article in 12 weeks: A guide to academic publishing success. California: Sage.

Branson, Richard D. 2004. Anatomy of a research paper. *Respiratory Care* 49, no. 10: 1222–1228. Brett, Paul. 1994. A genre analysis of the results sections of sociology articles. *English for Specific Purposes* 13, no. 1: 47–59. doi:10.1016/0889-4906(94)90024-8

Coulthard, Malcolm (ed.). 1994. Advances in written text analysis. London: Routledge.

Dudley-Evans, Tony. 1994. Genre analysis: An approach to text analysis for ESP. In *Advances in written text analyses*, ed. Malcolm Coulthard, 219–228. London: Routledge.

- Ibnu, Suhadi. 2003. Isi dan Format Jurnal Ilmiah dalam Menerbitkan Jurnal Ilmiah [Content and Format of Scientific Journals in Scientific Journal Publications], ed. Mulyadi Guntur Waseso and Ali Saukah. Malang: Penerbit Universitas Negeri Malang (UM Press).
- Lim, Jason Miin Hwa 2006. Method sections of management research articles: A pedagogically motivated qualitative study. *English for Specific Purposes* 25, no. 3: 282–309. doi:10.1016/j. esp.2005.07.001
- Mirahayuni, N.K. 2002. Investigating textual structure in native and non-native English research articles: Strategy differences between Indonesian and English Writers. PhD thesis, University of New South Wales of Sydney Australia.
- Nwogu, Kevin Ngozi. 1997. The medical research paper: Structure and function. English for Specific Purposes 16, no. 2: 139–150. doi:10.1016/S0889-4906(97)85388-4
- Peacock, Mathew. 2011. The structure of the method section in research articles across eight disciplines. *The Asian ESP Journal* 7, no. 2: 99–123.
- Safnil, A. 2000. Rhetorical structure analysis of the Indonesian research articles. PhD thesis, Australian National University of Canberra, Australia.
- Safnil, A. 2003. The rhetorical style of Indonesian research article introductions: A genre-based analysis. *The Asian-Pacific Education Researcher* 12, no. 1: 27–62.
- Safnil, A. 2013a. A genre-based analysis on discussion section of research articles in Indonesian written by Indonesian speakers. *International Journal of Linguistics* 5, no. 4: 50–70. doi:10.5296/jil.y5i4.3773
- Safnil, A. 2013b. A genre-based analysis on the introductions of research article written by Indonesian academics. *TEFLIN Journal* 24, no. 2: 180–200.
- Safnil, A. in press. The discourse structure and linguistic features of research article abstracts in English by Indonesian academics. *Asian English for Specific Purposes (ESP) Journal*.
- Swales, John M. 1990. Genre analysis: English in academic and research settings. Cambridge: Cambridge University Press.
- Swales, John M., and Christine B. Feak. 1994. Academic writing for graduate students: Essential tasks and skills: A course for non-native speakers of English. Ann Arbor, MI: University of Michigan Press.
- Wahid, Fathul. 2011. Publikasi Internasional Akademisi Indonesia [Indonesian Academics International Publication], Kolom Analisis SKH Kedaulatan Rakyat, 9 September. http://fathulwahid.wordpress.com/2011/09/11/

Appendix 1. Journals from which the RAs were obtained.

Discipline	Journal titles	Number of RAs	Percentage
Social Sciences	Jurnal Publika	7	13.5
Journals (SS)	Reformasi	•	
(22)	Jurnal Penelitian dan Pengembangan		
	Kesejahteraan Sosial		
	Penelitian dan Pengembangan Sain dan		
	Humaniora		
	Jurnal Penelitian dan Pengembangan		
	Kesejahteraan Sosial		
	Kebijakan Pembangunan		
	Penelitian Sejarah dan Nilai Tradisional		
PJ	Psymphatic	6	11.5
	Psikobuana	Ü	11.0
	Psikovidya		
	Psibernetika		
	Jurnal Psikology UNDIP		
	Psikobahra		
Education Journals (EJ)	Forum Kependidikan	15	28.8
Eddedion souridis (Es)	Pendidikan Ekonomi	10	20.0
	Penelitian Inovasi dan Rekayasa		
	Pendidikan		
	Didaktika Dwija Indria		
	Agastya		
	Tekno-Pedagogi		
	Edukasi		
	Admathedu		
	Akademika		
	Bhakti Utama		
	Manajemen Pendidikan		
	Didaktikum		
	Cakrawala Pendidikan		
	Educationist		
	Jurnal Ilmu Pendidikan		
Religous Studies (RS)	Islam Empirik	4	7.8
Kengous Studies (KS)	Ukuwah	4	7.0
	Widya Sastra Inferensi		
EM Jayanala		12	22.1
EM Journals	Retemena	12	23.1
	Soca		
	Gema		
	Organisasi dan Manjemen		
	Pembanguan Ekonomi dan Kuangan		
	Daerah		
	Bisnis dan Manajemen		
	Jurnal Manajemen		
	Manajemen IKM		
	Mepa		

(Continued)

Discipline	Journal titles	Number of RAs	Percentage
	Tadulako		
Language and Literature Journals (LL)	Bahasa dan Sastra	7	13.7
,	Metalingua		
	Adabiyyat		
	Litera		
	Linguistik Indonesia		
	Bahasa dan Seni		
Total		51	100

Appendix 2. An example of Move and Step analysis on the Indonesian RA method section (ED.10) with free English translation.

Method section	Moves and steps
Setting dan Subjek Penelitian Penelitian ini dilakukan selama 5 bulan, yaitu bulan Januari sampai dengan bulan Mei 2011. Adapun tempat yang dipilih dalam penelitian ini adalah di kelas VII A SMP Negeri 1 Purwokerto, dimana peneliti mengajar di sekoleh tersebut. Subjek penelitian ini adalah seluruh siswa kelas VII A SMP Negeri 1 Purwokerto tahun pelajaran 2010–2011 sebanyak 30 orang terdiri dari 14 siswa putra dan 16 siswa putri.	Move 4 Move 4-Step 1 Move 3
Research Setting and Research Subject This research was conducted for 5 months, i.e. January to May 2011. The place selected in this research was at class VII A of SMP Negeri 1 Purwokerto, where the researcher taught at the school. The research subject were all students of class VII A of SMP 1 Purwokerto in the academic year of 2010-2011 of 30 students consisting of 14 male students and 16 female students.	
Teknik dan Alat Pengumpulan Data Untuk mendapatkan data yang akan ditindaklanjuti guna mendapatkan gambaran kegiatan pembelajaran siswa dan guru, yang meliputi kreatifitas siswa, keaktifan guru dalam problem osing, dan data pembelajaran lainnya digunakan lembar observasi. Sedangkan data hasil belajar siswa diambil melalui teknik tes, yaitu menggunakan butir soal. Pengambilan nilai ulangan harian diambil pada akhir pembelajaran tiap siklus, baik siklus pertama maupun siklus ke dua.	Move 5 Move 5-Step 1
Technique and Data Collection Tool To obtain data which would be followed-up in order to get the description on the learning activity of student and teacher, covering the student creativity, teacher activity in the problem solving, and other learning data the observation sheet was used. While the data on learning result of student were taken through test technique, i.e using the question items. The daily test school grade was taken in	
the end of learning each cycle in both first cycle and second cycles. Validasi dan Analisis data Agar diperoleh data yang valid perlu adanya validasi data. Data yang diperoleh dengan teknik observasi divalidasi dengan menggunakan trainggulasi sumber yaitu peneliti, kolaborator dan siswa, sedangkan data hasil belajar yang dikumpulkan melalui tes divalidasi butir soalnya dengan cara membuat kisi-kisi yang bertujuan supaya materi sesuai dengan kurikulum yang berlaku mencakup standar kompetensi, kompetensi dasar, indikator dan butir soal. Data dianalisis dengan menggunakan deskriptif komparatif, yaitu membandingkan nilai tes kondisi awal dengan siklus 1, hasil siklus 1 dengan hasil siklus 2, kondisi awal dengan hasil siklus 2 dilanjutkan dengan refleksi.	Move 7 Move 7-Step 1
Data Validation and Data Analysis In order to obtain valid data it was necessary to validate the data. Data obtained through observation technique were validated by using the source trianggulation i.e. researcher, collaborator and student, meanwhile the data on learning result collected through test was validated by the question item by making the latticework aimed in order that the material; this was in accord with the valid curriculum	

(Continued)

Method section	Moves and steps
covering the competence standard, basic competence, indicator and question item. Data were analyzed by using the comparative descriptive method, that is, comparing the test grade of beginning condition with cycle 1, cycle 1 result with the result of cycle 2, the beginning cycle with the result of cycle 2 was continued with reflection.	
Prosedur Tindakan	Move 1
Metode yang digunakan dalam penelitian ini yaitu penelitian tindakan kelas. Kegiatan penelitian tindakan kelas ini dilaksanakan dua siklus. Tiap siklus terdiri dari empat tahapan siklus, yaitu: (1) membuat perencanaan tindakan, (2) melaksanakan tindakan sesuai dengan yang direncanakan, (3) melakukan pengamatan terhadap tindakan yang dilakukan, (4) melakukan refleksi terhadap hasil pengamatan tindakan.	Move 1-Step 1
Action Procedure	
The method used in this research was classroom action research. The activities of classroom action research were implemented in two cycles. Each cycle consisted of four cycle phases, that is, (1) making the action plan, (2) conducting the action in accord with the plan, (3) conducting the observation toward the action done, (4) conducting the reflection toward the result of action observation.	