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Brainstorming as a Way to Approach Student-Centered Learning in the ESL Classroom

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Abstract

Student-Centred Learning (SCL) encourages students to take an active role in the learning process. Brainstorming is one of the ways to approach SCL because it is an open sharing activity, which is usually conducted in small groups to encourage participation. However, students are often reluctant to speak voluntarily in the English as a Second Language (ESL) classroom. This study explores the use of brainstorming activities to promote speaking engagement in the ESL classroom. 321 Form Four students from an urban secondary school in Kuching participated in the study. The purpose of the study was to explore the types of brainstorming activities used and how brainstorming was employed to promote SCL. The data were obtained through questionnaires completed by the students, interviews with three English teachers, as well as through classroom observations during the brainstorming sessions. The findings show that brainstorming activities using word lists, word mapping, and also pictures are commonly utilized in the speaking tasks. It was observed that brainstorming contributes to the increase in students' motivation, confidence, and participation as reflected by the positive students' behaviour during classroom observations. The findings are consistent with the studies by Slavin (1995) and Hamzah and Lu (2010), who found that students were more confident and motivated to express their ideas when brainstorming in small groups. Accordingly, the findings support Cullen's (1998) belief that brainstorming activities encourage students to become better learners, especially when low proficiency students can learn from the better ones. This study not only sheds light on the use of brainstorming to address students' reluctance to speak English more voluntarily, but also provides useful insights for teachers to deal with the reluctance to speak in the ESL classroom.

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1. Introduction

In the language classroom context, brainstorming is often used in teaching writing as part of the pre-writing phase (Richards, 1990, as cited in Cullen, 1998). Brainstorming is usually a small group activity which encourages students to focus on the free flow of ideas. The main purpose of brainstorming is to generate as many ideas as possible within the specified time frame given in the classroom. The ideas generated are not evaluated until the task is completed and often a wide range of ideas is produced. Although not all the ideas generated are useable, the initial ideas can be viewed as a starting point to more useful ideas. ESL teachers can use brainstorming activities to encourage students to share their ideas with one another on a particular topic or question. In Malaysian schools, English is taught as a second language and it is not the main medium of instruction. Speaking in English has always been a daunting experience for many students; thus, English teachers are confronted with the challenge of getting students to participate in the ESL classroom. In some situations, students are reluctant to use English for speaking activities. In fact, speaking in a second language has been viewed as the most challenging of the four language skills (Bailey, 2006, as cited in Soraya 2010). As such, student-centered learning (SCL) that requires active involvement and participation (Brandes & Ginnis, 1986) from the learners becomes a method to encourage speaking engagement in the ESL classroom.

1.1. Purpose of the study

The student-centered learning literature (Lea, et al., 2003) refers to SCL as a reflexive approach to the teaching and learning processes for both teacher and learners. Additionally, SCL is regarded as a process that pays attention to deep learning and understanding, as it encourages students to take an active role in the learning process. According to Blake and DeVries (2004), brainstorming activities that provide a meaningful learning environment in a relaxed atmosphere can be used as one of the strategies to promote speaking skills. In this study, brainstorming is employed as a way to approach SCL for speaking skills. In the context of this study, speaking skills refer to the ability and fluency to speak spontaneously, with no extensive pauses or repetition when speakers are responding reasonably within the turns of the conversation. This study explores the use of brainstorming for speaking engagement in the ESL classroom. The purpose of the study was to explore the types of brainstorming activities used and how brainstorming was employed to promote SCL among the students at an urban secondary school in Kuching. Finally, the study also gathers the students' and teachers' perceptions on the use of brainstorming activities to promote speaking skills.

1.2. Methodology

This study on brainstorming as a way to approach student-centered learning in the ESL classroom utilized a mixed-method approach using three instruments for data collection. For quantitative data, the survey technique was used to obtain numerical data from the 321 student participants. The survey was conducted to gather the types of brainstorming activities used and the students' perceptions on using brainstorming activities to promote speaking skills. For qualitative data, classroom observations were carried out on three different classes for 40 minutes each. Students' participation in the brainstorming sessions was observed to get a sense of their responses and interaction based on the tasks given by their teachers. The overall participation in each session was recorded and the involvements in the three different sessions were compared. Finally, three English teachers were also interviewed to obtain their views on the use of brainstorming strategies for speaking skills. For the interviews, a purposeful sampling technique (Merriam, 1998 & Patton, 2005) was used. All three teachers used brainstorming in small group discussions to encourage participation in the speaking tasks.

2. Theoretical perspective

Speaking activities in the classroom should not only be interesting to students, but must also create a real need for communication. As a kind of learning that provides the opportunity for students to bring real and authentic speaking experiences (Richards, 2008), SCL provides a non-threatening environment (Overby, 2011) to the learning process.

SCL becomes a useful theoretical framework for this study on brainstorming. Brainstorming as a way to approach SCL allows students to learn by sharing their thoughts and by asking questions that evoke their interest and natural curiosity. SCL also allows for open-ended learning environment (Nanney, 2004) to support brainstorming, which resembles a student-driven, teacher-facilitated approach (Bell, 2010) to student-centered learning. In this study, brainstorming serves as a tool to approach SCL. Cullen (1998) lists five types of brainstorming activities that include the use of a picture, poem, word-mapping, story-telling, and word lists. While brainstorming is known to be used in the pre-writing stage, this study explores the use of brainstorming to promote speaking skills, and it also draws conclusions based on the perceptions of the students as well as the teachers.

3. Research design

This study employed a mixed method approach (Creswell, 1999) that involves both collecting and analyzing quantitative and qualitative data. The population in this study constitutes 321 Form Four students from an urban secondary school in Kuching. The students were asked to complete a self-designed questionnaire consisting of three sections. Section A is for demographic details, such as gender, age, and the English grade for PMR (Penilaian Menengah Rendah), which is a public exam for Form Three students. Section B is for the types of brainstorming activities used in their speaking lessons. Section C consists of 20 items to state their perceptions on the brainstorming activities used in the classroom. The items are constructed based on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The above quantitative data were supplemented by qualitative data from classroom observations and semi-structured interviews. Classroom observations were carried out on three different classes to capture the behaviors of students during the brainstorming activities. An observation checklist was used for each of the three classes to record the students' participation at various stages of the brainstorming activities. Finally, three English teachers were subjected to semi-structured interviews soon after the lesson observations. Six open-ended questions were prepared as the interview guide. The interviews were conducted to gather additional information on the teacher's opinions about the brainstorming activities and the experiences involved.

4. Findings

The results are presented according to the three instruments of data collection, namely, the survey, observations, and interviews. This section concludes with a summary of the overall findings.

4.1 Survey

The survey section is reported according to the three components of the questionnaire. Section A presents the demographic details of the respondents in terms of gender, age, and the English grade for PMR. For gender, out of 321 respondents, 164 (51.09 %) are males and 157 (48.91.7%) are females. Most of the students 250 (77.88%) are 16 years old and the remaining 71 (22.12%) are 17 years old. Their English grades for PMR can be categorized as Advanced (Grade A), Intermediate (Grade B & C), and Low Proficiency Group (Grade D & E). The survey shows the following results for English grades: Grade A (N = 80, 25.00%); Grade B (N = 64, 10.94%); Grade C (N = 62, 19.31%); Grade D (N = 55, 17.13%); and Grade E (N = 60, 18.69%). Table 1 illustrates the demographic profiling of the survey respondents:

Section B presents the types of brainstorming activities commonly used in the classroom as reported by the students. The five types of activities which include using a picture, poem, word-mapping, story-telling, and word lists are based on the categories taken from Cullen (1998). The frequency and percentage of activities used by their English teachers to encourage participation in speaking tasks are shown in Table 2.

Table 1. Demographic data of the respondents.

Demographic	Frequency	Percentage
Gender		
Male	164	51.09
Female	157	48.91
Age		
16 years	250	77.88
17 years	71	22.12
PMR English Grade		
A	80	25.00
B	64	19.94
C	62	19.31
D	55	17.13
E	60	18.69

Table 2. Types of brainstorming.

Activities Using	Frequency	Percentage
Simple Word Lists	102	31.76
A Picture	87	27.10
Word Mapping	84	26.2
Story-telling	29	9.03
A Song	19	5.92

The results above show that the top three popular activities are brainstorming using simple word lists 31.76% (N = 102), using a picture 27.10% (N = 87), and using word mapping 26.20% (N = 84). Small percentages indicate the use of story-telling 9.03% (N = 29) and a song 5.92% (N = 19).

Finally, Section C presents the findings on the students' perceptions about the use of brainstorming to promote speaking skills. The overall results show a high percentage (above 70%) of agreement with many of the items listed. The top three scores are for items No. 6 (79.2%), No. 7 (81.1%), and No. 17 (78.8%). A high percentage for the three items indicates a positive opinion on the use of brainstorming activities. The overall results demonstrate an optimistic view for the use of brainstorming activities to promote speaking skills. However, item No.9 has the lowest percentage (59.5%), which implies that slightly more than half of the participants agreed that brainstorming enables them to enrich their vocabulary. Item No. 20 is constructed in the negative form to verify if the respondents favor this method. Only 15.9% are not in favor. It shows that a small percentage of the respondents do not like brainstorming. Table 3 shows the Likert scale rating based on the 20 items listed. The overall percentage for agreement with the 20 items is shown in Figure 1.

4.2 Observations and interviews

The findings from classroom observations and semi-structured interviews with English teachers are reported based on the three emerging themes of Motivation, Confidence, and Participation. The first theme on motivation emerged readily from the classroom observations. The students were more engaged and motivated when given the opportunity to speak in English during brainstorming sessions, for example, when the students were given a picture or asked to complete a story with the given opening line. The small group discussion helped to motivate the students to speak more frequently and the students were willing to participate actively in the discussion. The teachers' comments indicate that the use of brainstorming was very well received by the students. In a small group of four to five students, the students took turn to add to the story after the teacher gave them the first line of the story. The

students used the brainstorming technique to discuss ideas for the next line and to describe the story until its completion. It was observed that the students had the tendency to motivate each other to speak, particularly when one or two group members remained quiet and passive. According to Teacher C, “I like the idea of using brainstorming in small groups which I feel can motivate students to practise the language skills better than when we call them to respond individually in view of the whole class.” This opinion shows that the element of motivation was evident during the brainstorming sessions.

Table 3. Students’ perceptions on the use of brainstorming.

	Statements (n = 20)	SD		D		NS		A		SA	
		(f)	(%)	(f)	(%)	(f)	(%)	(f)	(%)	(f)	(%)
1	I like this method to promote my speaking skills.	21	6.5	38	11.8	30	9.3	148	46.1	84	26.1
2	This method motivates an interest in the subject.	17	5.3	32	10.0	41	12.8	152	47.4	79	25.0
3	I can work with anyone I like.	20	6.2	34	10.6	32	10.0	122	38.0	113	35.2
4	This method creates a positive environment for speaking skills.	18	5.6	23	7.2	37	11.5	133	41.4	110	34.3
5	I feel more relaxed using this method to practice my speaking English.	14	4.4	27	8.4	35	10.9	132	41.1	113	35.2
6	This method is fun and interesting.	17	5.3	13	4.1	37	11.5	153	47.7	101	31.5
7	Many interesting topics are given to us using this method.	13	4.1	32	10.0	16	5.0	128	40.0	132	41.1
8	My pronunciation is improved.	25	7.8	19	6.0	48	15.0	127	39.6	102	31.8
9	My vocabulary is enriched.	40	12.5	45	14.0	46	14.3	89	28.0	101	31.5
10	I am more active and not shy to speak.	23	7.2	31	9.7	19	6.0	145	45.2	103	32.1
11	I can give out more ideas faster and easily.	25	7.8	32	10.0	37	11.5	129	40.2	98	30.5
12	I am given more chances to speak with my classmates.	16	5.0	21	6.5	31	9.7	137	42.7	116	36.1
13	I can share my ideas with my group members.	28	8.72	47	14.6	21	6.5	115	36.0	110	34.3
14	I am motivated to speak out by my group members.	24	7.5	40	12.5	13	4.1	99	30.8	145	45.2
15	My mistakes are tolerated by my group members.	18	5.6	29	9.1	36	11.2	125	39.0	113	35.2
16	I am more confident when speaking in groups.	9	3.0	32	10.0	37	12.0	134	42.0	109	34.0
17	I can communicate better using this method.	17	5.3	23	7.2	37	11.5	129	40.2	115	35.8
18	I do not hesitate when speaking in groups.	12	3.7	27	8.4	45	14.0	123	38.3	114	36.0
19	I can work more independently from my teacher.	23	7.2	39	12.2	43	13.4	119	37.1	97	30.2
20	I do not like this method to promote speaking skills.	142	44.2	94	29.3	34	10.4	30	9.4	21	6.5

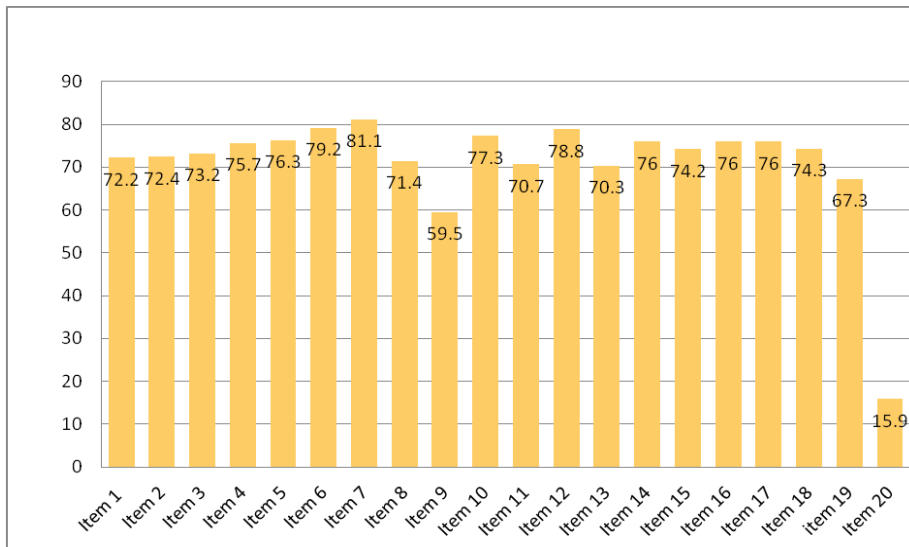


Fig. 1. Overall percentage for agreement with each statement.

4.3 Observations and interviews

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Confidence is the second theme that emerged from the observations and interviews. From the three classroom observations, it was noted that active participation also led to an increase in the students' level of self-esteem or self-confidence. This was clearly displayed by the group that was required to complete a story. Almost every member took the opportunity to contribute their ideas with little or no hesitation. They were eager to speak up and add to the story with their own version. They seemed to enjoy expressing their ideas in order to complete the story. Teacher B recalled, "For the advanced group, I have no problem in getting students to get involved. Sometimes, they encourage their friends to talk and add to the ideas." Therefore, it is noted that brainstorming using story-telling helps to increase the students' level of confidence.

Participation is the third emerging theme from the qualitative data. During the three separate classroom observations, the students appeared to be focused on the task and engaged in the group activities. Students from the advanced and intermediate groups used the spoken language readily to practise their speaking skills. However, it was observed that students from the low proficiency group appeared to remain quiet at the initial stage of the lesson. Teacher C did a great job in persuading these quiet students to participate by giving verbal positive remarks every time the students responded merely in words or phrases instead of in complete sentences. This observation shows

that participation in brainstorming can be nurtured accordingly. However, “they can only give a one-word answer or remain quiet or passive probably due to their lack of confidence to speak,” as reported by Teacher B when referring to the low proficiency students.

4.4 Summary of findings

The quantitative data show that brainstorming using simple word lists, a picture, and word mapping are three popular activities in the ESL classroom. However, the qualitative data reveal that story-telling has the potential to accentuate the learning experiences to resemble the processes for SCL. Story-telling provides the opportunity for students to use their own ideas and bring their own experiences to the conversation. Given that much of the learning is related to their daily experiences (Unin, 2014), story-telling can be used as a brainstorming strategy to address students’ reluctance to speak English more voluntarily. It was observed that story-telling, as a brainstorming strategy, can be used as a way to approach SCL that reflects active involvement and participation (Brandes & Ginnis, 1986). The findings on story-telling support the existing literature by Slavin (1995), as well as, Hamzah and Lu (2010), who found that students are more confident and motivated to express their ideas when brainstorming in small groups.

5. Implications for Student-Centered Learning

This study not only sheds light on the use of brainstorming to address students’ reluctance to speak in English more voluntarily, but also provides useful insights for teachers to deal with the reluctance to speak. While brainstorming in the classroom may include all five activities as listed by Cullen (1998), this study supports greater attention to the use of story-telling as a brainstorming activity for “learning from and through experiences” (Unin & Dirxx, 2011). In view of the useful insights, additional research into the use of story-telling may reveal more subtle ways in which brainstorming is manifested in the learning processes for SCL. As a conclusion, this study helps to create awareness for the use of brainstorming as a way to approach SCL in the ESL classroom. As such, brainstorming using concrete “everyday experiences as locations and contexts for learning” (Unin, 2014) can be intentionally planned as a two-way learning process involving both the students as learners and the teacher as facilitator.

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