USING DRAMA FOR ESL TEACHING

Approved by Wonim Son Date: May 4, 2011

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A Seminar Paper Research

Presented to

the Graduate Faculty

University of Wisconsin-Platteville

In Partial Fulfillment of the

Requirement for the Degree

Master of Science

in

Education

by

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2011

Abstract

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Drama is a powerful tool that can engage students actively with the English learning process. Using drama techniques also fosters their integrated linguistic competence by setting meaningful contexts. Through an extensive literature review, it is apparent that drama is valuable in improving students' confidence, creativity, and motivation in learning. Furthermore, some researchers think drama can teach young people how to manage interpersonal relationships. For students in English as a second language classes, drama offers chances for students to use language effectively. The research on drama also shows that drama plays a significant role in language teaching. Some researchers claim that drama techniques in teaching process become more and more useful. Researchers have explored a variety of drama activities in language teaching. Drama has great benefit for increasing students' enthusiasm for learning. However, organizing the activities and designing the activities meaningfully are important for the teachers. Researchers find that some English teachers have difficulty controlling the class and some students complain that drama activities only bring them fun instead of knowledge. As a result, teaching techniques are critical for using drama. This literature review explores how drama affects self-esteem, student motivation, and success. Conducting drama activities is skillful technique for teaching English Teachers should be aware of the appropriate methods and techniques for using drama. It is the responsibility of the teacher to guide the language learning process effectively.

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CHAPTER 1

INTRODUCTION

"Up until now, drama had been used as a tool to convey feeling and emotions" (Gomez, 2010, p. 30). But some researchers argue that drama can be an effective strategy using in the English as a Second Language class. Drama is becoming more and more popular in the English as a second language classroom. One aspect of educational drama is that "students are given a stimulus by the teacher and the students produce ideas and decide how to put them together and create a scene with its own characters and situations, which is meaningful to them and sometimes to others" (Gaudart, 1990, p. 231). Drama as an effective application is based on Howard Gardner's multiple intelligence theory. There are eight independent intelligences presenting naturally as a part of all people. Multiple intelligence theory as a framework helps the teachers to realize students' nature and distinguish their diversity. It also helps teachers to set up different contexts which can engage every student to be involved (Arnold & Fonsec, 2004). Many inherent human intelligences can't be explored or neglected by the traditional pedagogy while drama activities develop all of the Gardner's intelligences which can stimulate student's potentials (Armstrong, 1994). A review of the work by Schiller (2008) also gave further insight into the relationship between drama activities and multiple intelligences: "Drama activities and productions develop all of Gardner's intelligence, while other methods might neglect one or more of the different modes of learning" (p. 4). Sam (1990) told us drama activity doesn't just mean theater; theater focuses on performance in front of audiences, while drama gives the chance to the participant to portray himself or another person in the imaginary situation. Drama is necessary for developing students' variety of abilities: communication skills, physical development, and emotional intelligence. We find drama activities can penetrate into all of the

subjects which is an effective way for teaching and learning (Gaudart, 1990). Guida (1995) preferred drama activity. He claimed that it had great power to develop the students' sensory and observational ability. It offered a chance for students to exercise the power of problem-solving, improve their storytelling skills, and explore their body language to express their ideas. The trend of teaching English as a second language classes is relevant to using authentic language. Drama provides some communicative opportunities for students to experience. Although drama as methodology becomes popular in English as a Second Language class, some teachers feel anxious and reluctant to use drama. If teachers can have a good command of drama techniques, they will implement drama activities more effectively and efficiently (Royka, 2002). Drama techniques help teachers to organize the class well as well as to engage all the students more actively in the English learning process (Gaudart, 1990).

Statement of the Problem

The problem expressed as a question is, "what is the relationship between drama techniques and English as a Second Language teaching?"

Definition of Terms

Drama: a composition in verse or prose intended to portray life or character or to tell a story usually involving conflicts and emotions through action and dialogue and typically designed for theatrical performance (Merriam-Webster).

Technique: A way of achieving a purpose, e.g. drilling is an example of a teaching technique, which is used to help learners to pronounce particular language (Teaching Knowledge Test Glossary).

ESL: English as a second language (Merriam-Webster).

Drama Technique: it is the everyday tool of the drama teacher. They help to develop enquiry skills, to encourage negotiation, understanding and creativity. They can enhance performance skills such as character development and storytelling and be used across the curriculum actively involve students in their own learning (Farmer, 2007).

Delimitations of Research

The research will be conducted in and through the Karrmann Library at the University of Wisconsin-Platteville, over ninety (90) days. Primary searches will be conducted via the Internet through EBSCO host with ERIC, Academic Search Elite and Google/Google Scholar as the primary sources. Key search topics included "drama technique," "English as a second language teaching."

Method of Approach

A brief review of literature on the studies of the importance of using drama in English as a Second Language classes was conducted. A second review of literature relating factors, including the concerns and drama techniques for English teaching, was conducted. The findings are summarized and recommendations made.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Values of Drama

Language does not exist independently. Through language, people can share their opinions, cultures and worldviews. Bas (2008) claimed that drama activities can help students to learn language well. It offers great opportunities for students to communicate with others even when they have limited vocabulary. They can use their body languages and gestures to express their purposes. In a study by Schiller (2008) about the function of using drama for at-risk students, he claims that some at-risk students are low level learners. How to motivate them to be engaged in learning? Drama games or activities encourage them to communicate with others and express themselves bravely. Although audiotapes and computers are practical tools to help students learn some routine phrases and common words, students need to experience a real language environment. Gaudart (1990) found that drama is also used for introducing or concluding the class, and it stimulates students' interests and creates their enthusiasm for English learning. Through the dramatic work, one purpose of drama is developing student's imagination. It can make our learning process meaningful (Guida, 1995). Drama also helps students to process new words or expressions in an appropriate context. Wagner (2002) gave us an example: a teacher asked students to write about the way to remedy a cough. One of his students wrote, "a spoonful of tequila," but one of other students didn't know the meaning of tequila. It is a good example to prove that drama gives students a good chance to realize how to use a word according to different culture. Chauhan (2004) claimed that using drama in English as Second Language classes reverse our conventional English education, and it explores students' potential to learn and also improves their linguistic performance. According to Schiller (2008), most

drama leads young people to learn about social life actively, and it also fosters their conflictresolution abilities and improves human relations. Drama facilitates students to deeply
understand themselves and others. They will compare the characters in the drama and their own
life in reality, thus drama has the potential to change students' thinking to deal with interpersonal
relationships. Gaudard (1990) claimed drama makes students inevitably immersed in a social
milieu and create more experience for students learning how to get along with other people.

Drama stimulates students to come up with ideas and put them together. They work together to
create the scenario with new characters. Thus, the value of drama lies in the creative process and
its effective opportunity for working with others.

The Importance of Using Drama in English as a Second language classes

Ting (2005) found that children enjoyed learning language through drama activities.

Drama can inspire students' creation, motivation, and English learning skills. Children can develop their multiple intelligences to learn language through drama. Another benefit of drama is providing a context to practice listening and speaking for learners and it makes language practice more meaningful than mechanical drills. It is also an effective pedagogy for literacy in English as a Second language classes (Chauhan, 2004). Gomez (2010) showed that students will feel bored if the English class is tedious and monotonous. Drama activity combines action and entertainment for students while achieving the teaching goals. Students don't only have fun but also learn a variety of components from acting the story, like how to make an English accent or imitate voices and intonations. Drama helps the teachers to elicit target content and attract students' attention or conclude the new lesson (Gaudart, 1990). "The use of drama as a teaching tool is based on the premise that an involved child is an interested child, an interested child will learn, and drama directly involves the child" (Gomez, 2010, p.31). In drama activity, students

use their prior experience to understand the roles and give their response, just as the reader and writer of the novel conceives of the image or response. It is an effective way to master language in the English as a Second Language classes (Wagner, 2002). The conventional teaching system always focuses on the teachers and textbook. With drama, the roles have changed. The studentcentered class has been advocated widely. "All activities gravitate around them and what they find meaningful" (Gomez, 2010, p.31). Students apply English in the genuine situation so that they can find the reason to use it. Drama should be a useful tool to help students understand new language from grammar structures to syntactic knowledge. It also gives them a platform to exercise their imagination and creativity (Sun, 1998). Drama is an instructional and powerful strategy. It provides an opportunity for students to undergo an imaginary experience and it affects students' thinking and their way of looking at the world (Wagner, 2002). Some students are amazed by their performance in drama activities and that they have the courage to stand in front of the class and express themselves. Students become more confident when they using English by experiencing the language in operation (Guida, 1995). Sam (1990) argued group work is an effective form in drama activities, which takes every student's initiative to process the learning. Students who have strong linguistic aptitude can take important roles while the low level students also can be engaged in by taking the subsidiary role. Drama allows students to integrate their competences of speaking, listening, reading, and writing in English as a Second Language classes. First, students learn English emotionally through the drama strategy to learn syntax and fundamentals. Then they will accept the sounds and idioms, until at last they can speak language with great accuracy and fluency (Gomez, 2010).

Drama Activities

Sun (2003) found the nature of drama is flexible, plastic, and continuous, so there are no fixed and constant models for drama activities. Students can be actors to perform the story that they like or they can compose a song for the story by themselves. Drama gives them chances to create a new plot and characters for the story. It is an enjoyable experience for them (Bas, 2008). In English as a Second Language classes, role play is very common with teachers but it also encourages teachers to explore the different types of role play, such as dramatic plays, storytelling and interviews. However, with the variety of forms there are many challenges for teachers. It is worthwhile to apply different types of role play according to different levels and demands for students (Gaudart, 1990). Role play and simulation are popular activities in class. A realistic setting is the key concept in simulation while role-play is defined as "an activity which requires a person to take on a role that is real or imaginary" (Sam, 1990). Gaudart (1990) considered simulation as another effective device to incorporate students' lived experiences with language learning. It gives them a good chance to express their own opinions and practice how to use languages. Miming is also appropriate to use for warming-up. "Its strength lies in that although no language is used during the mime, the mime itself can act as a catalyst to generate and elicit language before, during, and after the activity" (Gaudart, 1990, p. 235). For example, students like charade games in English as a Second Language classes. Miming makes charade games more effective. Teachers divide students into teams; one member of the team shows the picture of the word or expressions, and the volunteer of the team has to mime without saying any words for his own team members. The members of the team have to guess the words by the actor's miming. The atmosphere of your class will become relaxed and also facilitate learning activities with dramatic techniques (Chauhan, 2004). In English as a Second Language classes

for older students, teachers can ask them to create a skit to deeply comprehend the vocabulary term or encourage them to make a story by using a list of new vocabulary items. Teachers help students to extend and reinforce the new vocabulary through the relevant literature pieces (Sun, 2003). Improvisational drama activities are also powerful in English as a Second Language classes. It requires students to produce appropriate words emotionally by using gestures and facial expressions. Students can be free to act and create the character that they want to be (Wagner, 2002). From Guida's (1995) theater workshop, he found that theater games and improvisation were also two important types which helped students to reduce anxiety and become fluent in language speaking. O'Gara (2008) argues that drama motivates students to be involved in the language class emotionally and cognitively. It is essential for students to work together and interact with others. It offers a good opportunity to carry out task-based learning.

Drama activity contributes to improving students' integrated linguistic competence. As for reading practice, a group of students are encouraged to read the story, and act it out, and draw the pictures about the story. In the process, it can help them to understand the images and plots deeply (Wagner, 2002). The effectiveness of drama activities facilitated learning language in English as a Second Language classes. Ratliff (2001) gave us a good example of dramatizing literature. He said it gives the chance for students to explore the meaning and the purpose of the writer and act out the role of literature. It enhances students' reading, writing and listening skills. Guida (1995) found with drama, even some students who don't have confidence to speak up in public are willing to join in the drama activities. They have a lot of fun and become creative, and often able to speak naturally. Sun (2003) illustrate how drama activities also work in writing classes. Teachers ask students to study a topic about immigrants. They ask students to read some literature about this topic, and then encourage them to create the scenario to perform immigrants'

experiences. As a result, students can use their experience to describe and write the topic from various perspectives. Through this drama activity, students develop a firmer understanding of the role and the relevance which writing can have in their lives. It is recommended for students to go beyond the original script. Some communicative students, that is, students who are more talkative and engaged, are encouraged to extend the content for the activity. They can put their real life experience in it, such as the places they have visited. It is a stimulus to encourage students to improve their communication skills (Davies & Pearse, 2002).

However, there are still some disadvantages for these activities, he advocates that it's difficult to control the class; activities may not be appropriate for all levels; some low level students don't have enough ability to use language proficiently; correct language forms and structures may be neglected through these activities (Sam, 1990). Although drama activities can bring a lot of fun for students, at the end of class, some parents may complain that their children learned nothing from the drama activity (Gaudart, 1990).

Drama techniques for teachers

Some teachers are afraid of using drama activity and they don't feel confident using the techniques in the class. It is difficult to persuade them to reverse the traditional style. Teachers are worried about how to build authority and how to organize the class when carrying on the drama game (Gaudart, 1990). If the teachers can better understand the effectiveness of drama activities, it may become easier for them to accept this methodology. Drama is an efficient way to make students communicative and sociable (Royka, 2002). Drama techniques aim to stimulate learners' imaginations and practice their abilities of communication and listening in an enjoyable process. Thus learners should be the leader of activities. The teacher is just like a guide who directs students' action and helps them not to deviate from the authors' intents. Teachers should

avoid detailed instruction for students (Guardert, 1990). Royka (2002) added, as soon as teachers have a command of drama techniques, they will find it easy to prepare the actual lesson. Class materials which are often tedious will become alive with drama activities. However, The teachers are like guides who give clear and simple instructions to their students and then should make sure that every student understands how to do activities clearly (Marie & Bernadette, 1994). Gaudart (1990) told us some constraints for teacher: the proper drama activity does not encourage teacher to be the major role in the class. Teacher should not control students' thoughts and their behaviors. Teachers should be clear about his or her role and what the relationship is between the teachers and the students. Good relationships can make the whole class vigorous.

Minimum instructions are necessary for teachers in the class, as the teachers are just directors. It is essential for teachers to give students freedom to make their choices concerning character, situation, and body language. Guida (1995) gave us some specific examples representing how teachers use drama activities in English as a Second Language classes. They make a model of pronunciation, stress, rhythm, and oral expression in order to help students to understand vocabulary, idioms and cultural aspects. We also cannot neglect the significance of the assessment. Drama activities are not only for fun but also for learning. Giving evaluations about language accuracy and fluency becomes necessary after the activities. If students easily tend to be distracted, then an effective assessment makes students not only concentrate on others' performances but also improves their abilities of self-learning. It becomes easy for teachers to manage the class. Through the drama activity, some teachers intend to ignore the student's grammatical mistakes, because students often feel frustrated when they make errors. But the purpose of the drama activity is to help students to use the language accurately and appropriately. Davies and Pearse (2002) strengthened opinion that evaluation is an essential process of the

drama activity. Evaluation builds up student's confidence to use language effectively rather than to critique the students' confidence. Teachers should not make students feel they are taking tests all the time. Otherwise, they will never develop fluency.

There are some considerable issues for teachers while using drama to teach English as a Second Language. "In teacher training, there is a need to show teachers how these techniques will fit into an overall plan into their curriculum and even more than that, show how these techniques can answer students' needs effectively" (Gaudart, 1990, p. 231). First, selecting teaching materials which suit students' interest is vital preparation for drama activities. There are some considerations: are the students familiar enough with the material well enough? Will the material satisfy their interests? Can the teacher explore the useful drama material from the material? It encourages the teachers to select meaningful teaching materials which students like and creating freely environment which makes students to be comfortable. It can motivate students' interests to learn language (Davies & Pearse, 2002).

There are some problems with using drama activities. Some students like acting, but some are reluctant to be involved in the activities (Guardart, 1990). Second, the teachers should pay attention to students' age, different language levels and different personalities. Students' interests are more important for the teachers to know about (Marie& Bernadette, 1994). Teachers should choose materials or design activities which can express students' real experiences. Students like to create the stories and plays on the basis of their real life. Cultural bias can disturb carrying on the drama activities. It is effective for teachers to give students more cultural knowledge as well as to choose some materials which are similar to students' real life (Marie& Bernadette, 1994). Video drama is widely used in the English class, which helps students comprehend new language and its cultural experience. Students can directly experience target language speech through

video drama (Hwang, 2005). Group work or task-based learning is encouraged in drama activity. It can increase the individual practice and develop students' autonomy (Davies & Pearse, 2002). Students will become more engaged in communication and interaction through group work. Teachers also have enough time in observation rather than directing teaching (Royka, 2002). Gaudart (1990) also found that although the power of drama is limitless, many teachers don't expect drama techniques to be effective in teaching English. It is hard to persuade some teachers to change their traditional teaching style into creative one. So besides teaching strategy, teachers need more courage to accept and implement drama techniques in teaching English.

CHAPTER 3

CONCLUSIONS AND RECOMMENDATIONS

Drama which is used to convey feelings and emotions has become a popular tool for learning language, especially in the teaching of English as a Second Language classes. There are a variety of activities using drama, including: miming, role play, simulation, and improvisation. Drama is a valid technique which fosters students' interest and motivation by providing a relaxed and vivid environment and it also engages students' feelings and attention through experiencing the connection between action and thoughts. Drama encourages students to develop their creativity, strengthen their confidences, as well as improve the ability to cooperate with others. Teaching English as a second language involves balancing input and output, drama is an effective tool to deal with this issue. Students have their own stage to express their thoughts and show their initiative. In drama class, the students' role becomes the center of the class. The teaching curriculum and all the activities are planned to satisfy the students' needs and interests. Drama is considered a student centered and meaning based strategy. Some teachers confuse how to organize the activities, some teachers are afraid of losing in control the class, and some teachers worry about how to design the activities. Drama techniques offer innovative approaches to teachers and help them to be successful. How to use drama technique in English as a Second Language classes becomes a considerable problem for teachers. Some research shows that it is meaningful for teachers to have command of drama techniques. Good techniques help students to be involved in the class actively and make the learning process vivid. There are at least three techniques to be followed:

How to organize drama activities in English as a Second Language classes? Teachers' responsibilities should be clear. Students can be the center of class instead of teachers. The

teacher is just like a guide who directs students' action not far from authors' intents and can also create comfortable and welcoming atmosphere for students. Avoid detailed instruction for students. Take a specific example of a drama activity for teaching English as a Second Language: teachers divide students in pairs or groups and give them the planning time which can make the process efficient. Then students can choose their characters and create the situation and setting by themselves in the limited time. This kind of active cooperation makes every student feel responsible for the task; even some low-level student will become confident and engaged when they take some role in the activity. Students' initiative will be explored through drama. They will concentrate more on their work instead of being distracted. The teachers' role is just a timer or conductor who is responsible for giving some directions. Student- centered classes will be well organized as soon as every student can be involved and motivated in the learning process.

There are also some concerns for designing drama activity in English as a Second Language classes. In some cases, students can be reluctant to be engaged in drama activities, as it may cause students and teachers to be in embarrassing situations. Thus, there are some concerns for teachers to think about: students' age, different language level, different personalities, and cultural bias. These factors may affect whether the drama activity design is effective or not. For example, when reading literature or a story, although students can have a good command of the meaning and sentence structures, they still feel frustrated about understanding, because of the cultural differences. Drama activity should link with students' interests and experiences. Drama is an effective device for students to act out their real experiences. The real experience can make students understand the target content deeply. For an instance, if the teacher wants to teach children past tense, fairy tales will be a good selection for children. Children will be excited to

choose the plots and teachers can help them to select props and scenery. Thus selected materials as well as comfortable, free environments can arouse students' interest and motivation.

Teachers can assess the effectiveness of drama activities by giving some comments on grammar and pronunciation at the end of activities. Some teachers resist on using drama, because they think drama is only a fun activity rather than learning. The linguistic competence need not be neglected. Evaluation is necessary through the activity. When students carrying on the role-play or simulation, it is not appropriate to interrupt their performances, the teacher is a facilitator to make comments on their advantages and some inappropriate language use. At end of the class, students are encouraged to do self-assessment or do peer assessment. Then the teacher should conclude what students should pay attention. Furthermore, it may be useful to produce an examination system which emphasizes improving their writing, speaking and reading skills. Examination can take various forms such as analyzing the plot or making up the story.

To summarize, drama techniques play a significant role in teaching English as a Second Language. It is an appealing device to enrich teachers and students' experience to process English acquisition together. For students, drama improves their fluency, creativeness as well as communicative competence. For teachers, it is a challenging but effective strategy which facilitates every student to become more initiative learner in English as a Second Language classes.

References

- Armstrong, T. (2002). Multiple intelligence in the classroom. Alexandria: Association for Supervision & Curriculum.
- Bas, G. (2008, May). Integrating multiple intelligences in ESL/EFL classroom. *The Internet TESL Journal*, 5. Retrieved from http://iteslj.org/Techniques/Bas-IntegratingMultipleIntelligences.html
- Chauhan, V. (2004, October). Drama techniques for teaching English. *The Internet TESL Journal*, 8, Retrieved from http://iteslj.org/Techniques/Chauhan-Drama.html
- Drama. (2009, October). In *Merriam-Webster's online dictionary*. Retrieved from http://www.m-w.com/dictionary/drama
- Davies, P., & Pearse, E. (2002). Success in English teaching. Shanghai: Shanghai Foreign Language Education Press.
- Farmer, D. (2007). *101 drama games and activities*. Retrieved from http://dramaresource.com/strategies
- Fonseca, C. M., & Arnold, J. (2004). Multiple intelligence theory and foreign language learning: a brain-based perspective. *IJES*, *volume4*, 119-136.
- Guida, M. (1995). Creating theater in the ESL classroom. *The Journal of the Imagination In Language Learning*, Vol. 3. Retrieved from http://www.njcu.edu/cill/vol3/ratliff.html
- Gaudart, H. (1990). *Using drama techniques in language teaching*. Retrieved from ERIC database. (ED366197).
- Gomez, I. D. (2010). Using drama to improve oral skills in the ESL classroom. *International* school Journal, volume 30, 29-37.

- Hwang, C. C. (2005). Learning Sociolinguistically Appropriate Language Through the Video Drama Connect with English. Retrieved from ERIC database. (ED490750).
- Marie ,G., & Bernadette, F. (1994, April). *Creating Drama with Poetry: Teaching English as a Second Language through dramatization and improvisation*. Retrieved from ERIC database. (ED368214).
- Multiple Intelligence. (2010, January). In *Merriam-Webster's online dictionary*. Retrieved from http://www.m-w.com/dictionary/multiple intelligence
- O'Gara, P. (2008). *To be or have not been: learning language tenses through drama*. Retrieved from ERIC database. (EJ833928).
- Royka, J. G. (2002) Overcoming the fear of using drama in English language teaching. *TESL Journal*. Retrieve from http://iteslj.org/Articles/Royka-Drama.html
- Ratliff, G. F. (2001). Reader's theatre: an introduction to classroom performance. The *Journal of the Imagination in Language Learning*, Vol 6. Retrieved from http://www.njcu.edu/cill/journal-index.html
- Sam, W. Y. (1990, July). Drama in teaching English as a second language a communicative approach. Retrieve from http://www.melta.org.my/ET/1990/main8.html
- Schiller, J. (2008). Drama for at-risk students: a strategy for improving academic and social skills among public middle students. Retrieve from ERIC database. (ED502068)
- Sun, P. Y. (2003). Using Drama and Theatre to Promote Literacy Development: Some Basic Classroom. Retrived from ERIC database. (ED477613).
- Technique. (n.d.). In *Teaching Knowledge Test Glossary*. Retrieved from http://www.cambridgeesol.org/exams/teaching-awards/tkt.html

Ting, S. (2005). *Drama-assisted high school English's listening and speaking instruction*. Retrived from http://nccuir.lib.nccu.edu.tw/handle/140.119/31818

Wagner, B. J. (2002). Understanding drama- based education. London: Ablex Publishing.