

# Designing Multimedia-based Presentation in Academic Speaking Classroom: Students' Strategies

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## Abstract

Educational technology is substantially aimed at assisting the teaching and learning process especially in material delivery that can be done using PowerPoint Presentation. Particularly, the integration of text-based material and a variety of media promote the likelihood that the audience experiences the effective information processing. Therefore, multimedia-based presentation that is accompanied by verbal explanation must be designed as effective as possible in order to foster the audience's understanding. The current research was aimed at investigating the strategies employed by the students in designing multimedia-based presentation in Academic Speaking classroom. This qualitative research was carried out using case study approach to obtain the in-depth information. The data were collected through observation, document analysis, and interview. The results show that the students' strategies in designing multimedia-based presentation are mainly to foster the audience's thinking process. Those strategies are using heading to lead to thesis, using bullet list to create sequential delivery, and using the additional element to engage the audience. To make the slide gets into the logical manner, a transitional device is also required. This research will contribute to the teaching and learning process that uses presentation as the method of material delivery. The teacher and the student are expected to know the strategies to design an effective presentation that can promote the audience's way to process the information.

## Subject Areas

Academic Speaking

## Keywords

Academic Speaking, Educational Technology, Information Processing, Material Delivery, Multimedia-Based Presentation

## 1. Introduction

Educational technology has been widely used in this century since it offers various ways of development to attain the academic objectives (Shoffner, 2013). It is believed that the technology will greatly influence how the education goes. In the developed world, the range of technology tools has been exploited; therefore, it is now commonly found in the classroom (Mercer, Hennesy, & Warwick,

2017). The practice of technology also becomes the integral aspects of those disciplines (Pasternak, Hallman, & Rush, 2016). Ploetzner, Fillisch, Gewalt, & Ruf (2016), in their discussion of media and technology, agree that the age of information digitalization greatly combines the static and dynamic learning to become interactive. It indicates that more researches regarding to the implementation of technology in the learning process is also required as the benchmark and guideline for the stakeholders in education to apply technology in their teaching.

Moreover, being a student in tertiary level also requires the skills that need to be practiced and mastered particularly in language learning areas. One of those skills is in the area of speaking skill in which the students are required to present their works in the classroom. Educational technology contribute to the implementation of academic presentation since it is mostly done using the technology especially Powerpoint presentation. In this case, presentation in academic context refers to the terms of information and knowledge transfer in which the presenter plays the role as the primary source. The role of the presenter is also assisted by the use of educational technology to enhance the quality of the presentation. Notably, the individual presentation in Academic Speaking classroom is an attempt to prepare the students to present their researches in international conference, seminar, or workshop. The teaching and learning concerning on academic speaking is required to be carried out since English is the foreign language for the students. Hence, other than the speaking skill concerning on the presentation delivery, the idea of preparing the presentation slides is also important. Therefore, the students are in effort to prepare the presentation which is well-designed, effective, and understandable.

In the practice, Mayer (2003) believes that the students will learn better when the presentation is available in two forms: words and picture which is later called as multimedia learning. The presentation that consists of the text-based material that is accompanied by a variety of media e.g. picture, animation, graphic, etc promote to the audience's well-structured way of thinking. Moreover, the presentation that is full of words may hinder the information processing (Mayer, 2009). Thus, multimedia-based presentation is used in Academic Speaking classroom in order to enhance the audience's understanding by arousing their attention toward the presentation. To investigate this phenomenon, the current study attempts to investigate the students' strategies in designing multimedia-based presentation.

Multimedia-based presentation used by the students in tertiary level is required since the heavy text-based presentation seems problematic in two ways (Hertz, Kerkhof, & Woerkum, 2016). First, the presentation which is full of text will turn to be the presenter's speaking notes; therefore, the presenter tend to read the whole text appear on-screen than making an eye-contact with the audi-

ence. It will lead the presentation to be less interactive. Notably, eye contact becomes the most important component of effective physical delivery in order to build rapport and reduce the speaker's feeling of isolation (Dulzan & Yalcin, 2015). Second, the heavy text-based material can also interfere the presenter's spoken words. It may distract the audience's information process. Therefore, multimedia-based presentation is now commonly used by the presenter in the international conference or the teacher in the classroom since it can employ different kinds of media other than text.

However, only a few of the researches discuss about how the presenter designs the presentation and how the audience understand it since the previous studies concern more on the outcome (Dubois & Vial, 2000; Garcia-Rodicio, 2014; Scielzo, Fiore, Cuevas, & Klein, 2003). This research will primarily concern on the process of making presentation than the final result that may be attained by the audience. The previous researches have not investigated the process of designing multimedia-based presentation. Hence, this issue is indeed needed to be explored in order to get the insight of the importance of the process in designing multimedia-based presentation before it is presented to the audience. Therefore, the present study is nested within the more specific scope to fill the gap. As this research focuses on the use of technology in higher education, the way how the students have the strategies in making effective presentation and how they attempt to solve the common problems that might be encountered by the audience are considered important to be investigated.

## **2. Literature Review**

In regard to the importance of academic speaking in tertiary level, some experts have agreed that the students need to function it effectively since the colleges mostly focus on the writing and reading skill (Ferris & Tag, 1996). The current study has limited the scope of research by concerning on the academic speaking presentation using English in the university level. In case of that, the recent studies were conducted in order to disseminate the information about the significant function of academic speaking in tertiary level. The research conducted by Simona (2015, p. 69) shows that knowing the rules of giving an effective academic presentation and gaining experience in preparing and delivering such presentations within the English language course represent the prerequisites for successful communication for career purposes in the society. Internet and technology also contribute to the preparation of an interesting and attractive presentation by having the technological support such as Powerpoint (Simona, 2015). Hadfield-Law (2001) defines presentations making as a way to get a message across effectively in order to make a difference. It conceptually refers to the ability in making yourself understood by others. The theories that have been mentioned indicate that the preparation of a presentation is important

even though several presenters consider it as the simple thing. Nevertheless, it becomes the basic step that must be done successfully in order to perform a successful presentation.

In terms of language learning, the integration of words and pictures is considered to support the instructional materials when mixing the modality and replacing the text with narration (Zolna, 2007, p. 142). Many educators have agreed the statement saying that multimedia improve learning. The combination of audio and pictorial information eases the brain to process and integrate the information. In attempt to simplify the knowledge or information in the classroom, instructional media are considerably used to foster the learning as it contains words and pictures (Mayer, 2004). However, combining words and picture can not guarantee that an effective presentation can be created. The structure of the words and additional elements, the number of words and lines, the use of transition, the use of phrase and full sentence will possibly affect the effectiveness of a presentation.

Preparing the presentation covers how the students design the slides and how they do the rehearsal before performing the presentation. As what the experts concern on the preparation, several aspects must be considered. First, the control of the length of a presentation that becomes the focus of a presentation (Hertz & Kerkhof, 2016; Garner, Gaudelli, Zappe, & Alley, 2009). Hertz and Kerkhof (2016) believe that the length of the presentation can influence the presenter's performance as it has the indirect relationship with the speaking anxiety that might be encountered by the presenter. Second, the slide structure covering the form of heading and body that become the primary focus in an academic presentation (Garner et al., 2009). They concern on the slide that consists of the topic phrase headline supported by a bullet-list. It also deals with the idea of dividing the larger scope of materials into several sub-chapters in order to simplify the slide. It is also related to the tactic in making the audience knows what is presented easily without being distracted by the large amount of information put on the slides. Third, the use of table, picture, graph, sound effect, visual effect, video clips, and so on to present the complex material (Bartsch & Cobern, 2003). However, it must be noted that those additional elements must be related to the material so that the extraneous material can be minimized (Moreno & Mayer, 2009). The integration of those additional elements inserted on the slide that is also delivered by using on-screen text and the narration or verbal explanation are later called as multimedia-based presentation.

This research is part of the researcher's larger research concerning on the implementation of multimedia-based presentation in academic speaking classroom covering the preparation, the performance, and its effect on the audience's cognitive engagement. This current research specified the students' strategies in the preparation stage in order to explore how those strategies can

help the presenter in delivering the effective and attractive presentation.

### **3. Method**

A case study approach was used in this research as an attempt to investigate the students' strategies in designing multimedia-based presentation. Woodside (2010) believes that case study acts as an emic view for an occurrence of the event including the deep understanding of the processes or other concept variables. It leads the researcher to thoroughly describe and understand the context to be presented as a comprehensible finding in qualitative study. The current study was carried out in Master Degree of English Education Department in one of the state universities in Surakarta, Indonesia. There were 3 students attending Academic Speaking course in Master Degree of English Education Department who become the informants in this study. The three students were those that have presented using Powerpoint in Academic Speaking Classroom. This study employs purposive sampling in which the informants were chosen based on the certain criteria. The criteria of choosing the informants were the students attending Academic Speaking classroom, presenting their research, and using multimedia in their presentation. The data were collected through survey questionnaire, observation and interview. It was to know the result of their presentation design and how they deal with it. The document analysis is also carried out in order to analyze the structure and the characteristics of their slides that were confirmed through in-depth interview with the informants. To validate the data, the researchers employed member checking confirming the data which is done by the participants of the study to check the accuracy of the data (Creswell, 2012) and source triangulation by finding the supporting data from the informants and observational field notes. The researchers analyzed the data by using several stages according to Yin (2002) in which the stages consisted of preparation of data analysis, exploration of the data through coding, interpretation of the meaning, and validation of the data analysis.

### **4. Result and Discussion**

#### **4.1 Results**

Based on the data that have been obtained, several findings were revealed to answer the problem statements. The coverage of the research is in the scope of presenters' strategies in designing multimedia-based presentation in academic speaking classroom that are analyzed by using document analysis based on the presenters' presentation documents, the observation based on the presenters' performance, and the in-depth interview based on the result of document analysis and observation. Furthermore, the implementation of the students' strategies can be observed from the classroom presentation. Below are the

findings of the current research that later be justified to other relevant theories.

### **Using heading to lead to the thesis**

Based on the interview, RZ states that “Heading is important to let the audience know what we are going to deliver in a presentation and to help us in delivering each slide by order.” Moreover, the observation shows that the texts of each slide were not mentioned as a whole since RZ only mentioned the heading that is followed by verbal explanation. It indicates that the heading becomes the guideline for RZ to explain the topic of each slide. Afterwards, she developed the material using her own words. It corresponds to the TY’s statement that says “Heading is functioned to be the reminder for me about the content of the slide and it also leads the audience to understand the content.” TY performed the presentation by showing not only the text or heading of her slide, but also the visual elements describing the content such as graphic, chart, and so on. She used those elements to show the theories of her research. She stated that inserting the heading which is followed by the visual elements will be efficient to make the audience know two key points of “what and how”. “What” is represented by the heading and “how” is represented by the visual element that follows. Therefore, the thesis of the slide can be recognized by the audience easily. HR also agrees that the main idea is put on the heading so the audience will recognize the context of the slide from the first time. She stated that “The audience tends to catch the information which is brief and clear so that is why I put the main idea of each slide in a heading to introduce the context.” In sum up, the heading employed by the presenter is aimed at assisting the audiences to guide them in comprehending each slide at a glance. It is also functioned as the “reminder” for the presenters about the main idea of each slide.

### **Using bullet list to create sequential delivery**

In terms of the slide density and the bullet list in a presentation, HR states that “I avoid to put too many words in my slide. I tend to use the bullet list to divide the materials into some points.” She believes that the large number of full sentences will distract the audience’s attention. HR used the bullet list to trigger her in explain the material sequentially. Additionally, she prefers to put the brief information on the slide, while the explanation is put on the presentation slides which can be in a ‘hidden format’. The notes that can only be read by the presenter is aimed at making the presenter to read the notes without being noticed by the audience. Moreover, HR believes that the bullet is aimed at avoiding the full text to be shown on the slide. “The more information we put, the denser the slide we make. The denser the slide, the harder the audience to understand the material.”

Moreover, the result of the observation shows that there are also the presenters that replace the bullet or numbering with the icons. As what can be seen in the presentation shown by TY that she put the icons to make the material sequential instead of putting the bullets or numbering. She states that “The icon will work better because it will also decorate the slides and make them more attractive.” Therefore, she believes that the icon followed by the key phrases will create the good combination for presentation. In another case, TY used bullet list as the summary of the whole slides. “I summarize the whole presentation into one slide in the opening by using bullet list or numbering and is followed by confirming the audience’s understanding.” It is reflected on her presentation when she closed the presentation by summarizing the materials and asked the audience whether or not they catch the information well.

### **Additional elements to engage the audience**

The visual elements that they used are in the form of picture, chart, icon, graphic, and animation. After confirmed to the presenters, they state that the visual elements has more than the decorative function. It has the broader function to the presentation since the visual elements can make the audience back on track. TY mentions that “visual talks more” to describe the importance of visual elements. RZ agrees with the statement by saying that “Visual elements are used to clarify the material and to attract the audience. The usage is not merely as decorative element yet it also represents the context of the material.”

Furthermore, based on the observation, TY also used the visual element which is in the form of photo to interact with the audience. When she shows the picture of herself and her friends, she then asked the audience to spot the picture of herself. The audience’s responses were vary, some of them tried to point the slides and the rest answered the questions orally. Therefore, TY finds that the visual elements are also used as a means to create interactive presentation. It is in line with the opinion stated by RZ in which she also used the picture of Korean menu on her slide. She said that the picture is used to engage the students and make them back on track. It is shown in the observation that she asked one of the audience to name the menu she shown on the slide. After confirmed in the interview, she stated that it was done to make the audience focus on her slide. “I saw that one of my friends was sleepy during my presentation, then I called him and asked him to name the Korean food that appear on the screen. That is how the picture works”. The result reveals that the additional elements are used to make the presentation interactive and also to engage the audience to participate in the presentation.

### **Transitional Device to intertwine each slide**

Transitional device is one of the aspect in the presentation which is mostly ignored by the presenters. The importance of transitional devices is also stated by HR by saying that “One slide to another slide must be linked altogether, we need to state the relation between the current slide with the next one before continuing the presentation.” It is represented in the presentation performed by HR in which she avoids to stop explaining while she moves to the next slide. She relates the previous slide to the next slide using oral transition so that the audience does not realize that the slide has been changed. Another strategy is employed by TY that prefers to use the animation as the transitional device. “I prefer use the animation since it is more attractive, I also used to put the hyperlink and action as the transitional devices. Those two work well for me.” She believes that the interesting transition will enhance the audience’s interest to get to know more about the next slide.

#### **4.1 Discussion**

Based on the above-mentioned results, the discussion was done to relate to other theories. The use of heading corresponds to the theory proposed by Hosseini (2013) in which she emphasizes the importance of organizing the concept. She suggests to put the main concept in each slide to create the logical manner of presentation. It indicates that the heading is able to show what to offer in each slide. Shepherd (2006) also agrees that the heading as well as the sub-heading is used to keep the audience ‘on track’. The use of heading in the form of phrase as what has been practiced by the presenters represents the coherence effect that enables the audience to learn more deeply when the extraneous material is excluded (Mayer, 2003). Hence, the text-based slide is avoided to reduce the cognitive load that might be encountered by the audience. Sukma, Nurkamto, & Drajadi (2018) also conclude that one of the effective strategies to help the audience process the information is by providing keywords or phrases in a presentation.

The strategy in using the bullet list to create the sequential delivery corresponds to the preparation stages proposed by Hosseini (2013). Hosseini (2013) suggests to use the bullet points to show some subcategories. This idea is also stated by Shwom and Keller (2003) by suggesting to keep only one idea for each bullet. It also becomes the strategy to plan the structure of the presentation which is presented through bullet list (Simona, 2015). The principle of 6x6 stated by Hosseini (2013) is also performed by the students in which most of the slides

containing the bullet list have less than 6 bulleted items. However, some of the slides also ignore the 6 x 6 principle since they consist of more than 6 words in each bullet. The strategies employed by the presenters to divide the material into some sub-categories are in line with the statement that text on Powerpoint slides interferes with the spoken words of the presenters (Hertz, Kerkhof, & Woerkum, 2016). In order to make the information processing run well, Mayer (2009) also stresses his finding about information transfer that may be disrupted if the words are used excessively on each slide. Henceforth, the multimedia effect will take place when the points projected on the slide is combined with icons that replace the bullet and numbering. The multimedia effect proposed by Mayer (2003) enables the audience to learn more deeply from words and pictures (icon).

The additional elements in multimedia-based presentation becomes the basis to design the presentation. The importance of those elements are also shown in the theory stated by Hosseini (2013) in which the multimedia presentation is successful if it includes good use of audio-visual characteristics, e.g. design, color, animation, sound, and so on. The visual element is used to dramatically enhance the effectiveness of a presentation and the auditory element is used to attract the audience in illustrating certain principles (Shepherd, 2006). Bartsch and Cobern (2003) also agree that the picture as one of the visual elements makes the audience find the fact that the information is interesting so that they will always pay attention to the presentation later on.

The use of hyperlink as one of the transitional devices is in line with the theory proposed by Stacy (2017) in which she believes that hyperlink is used to electronically "connect" the word or picture to a slide in a completely different presentation. Moreover, this problem is also addressed by Goto and Kashihara (2016) that concern on consideration of the connection between slides. They believe that it is the first step for the audience to grasp the structure of a presentation as what already mentioned by Shepherd (2006) who believes in the idea of knowing the structure of a presentation through the corresponding transitional device. Below is the model that can be drawn to describe the strategy employed by the students in designing multimedia-based presentation.

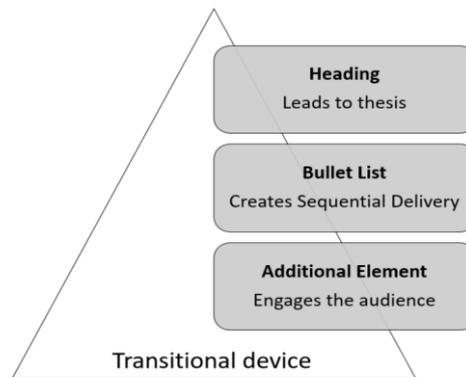


Figure 1. Strategy Model Employed by the Students in Multimedia-Based Presentation

## 5. Conclusion

Substantially, multimedia-based presentation is used to assist the presenter in delivering an effective presentation as well as to assist the audience to comprehend the material more easily. Therefore, there must be specific strategies employed by the presenters in designing multimedia-based presentation. The result shows that there are three basic strategies that are used by the presenters: using heading to lead to the thesis, using bullet list to create the sequential delivery, and using additional element to engage the audience. Those three strategies must be executed in some conditions, one of them is by putting the effective transitional device to keep the audience 'on track'. The use of transitional devices is intertwined with the effectiveness of those strategies since they affect each other.

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