

Developing motion graphic video for English speaking practice in vocational higher education

Tian Havwini¹, Nurul Ulfah¹, ArtaUly Siahaan², Fadli Suandi², Ozi Krisna², Surya Handika²,
Maryani Septiana³

¹Department of Mechanical Engineering, PoliteknikNegeriBatam, Indonesia, ²Department of Multimedia and Network, PoliteknikNegeriBatam, Indonesia, ³Department of Logistic and International Trading, PoliteknikNegeriBatam, Indonesia,

*) correspondence: tianhavwini@polibatam.ac.id

ABSTRACT

English communication skill is an important asset for students to enter the industrial world, especially speaking skill. During the pandemic situation, teaching speaking is more challenging for both teacher and students, as the face-to-face interaction in speaking practices is likely hard to attain. This study aims to design and develop a motion graphic video to help students practice speaking English independently, as well as to provide alternative teaching material for the English teachers. This study used the ADDIE model as the development model. The results of the validity test based on experts' content judgment obtained 97.33% with excellent qualification and the experts' media judgment rated 87.62% with an excellent qualification. Feedback was collected from 477 students through an online questionnaire on their perceptions of the use of the motion graphic video. This paper shares the instructors' experience in designing and developing the motion graphic video as technology-based learning material, and the survey findings as well. The implications of findings and future research are also discussed.

Keywords: English Speaking Practice; Motion Graphic Video; Design and Development

INTRODUCTION

The rapid development of technology demands changes in various aspects, including in education. In recent years, there has been an increasing interest in developing technology-based teaching and learning materials as the use of technology in education is an integral part. The recent pandemic situation has also heightened the need for integrating the technology used in teaching and learning

activities. A considerable amount of literature has been published on developing technology-based teaching materials and how those materials may affect students' outcomes. Many researchers have argued that technology-based teaching materials have improved students' engagement and learning motivation as well as their comprehension in English class. The animated videos were used for elementary school English learning and it was found that students responded positively toward the use of the video as learning media (Dewi et al., 2020; Megawati & Utami, 2020). Moreover, some previous studies were also reported the use of Youtube videos in EFL classrooms has improved secondary students' writing skills (Alobaid, 2021), speaking skills (Stevani, et al., 2021), listening skills (Fakhruddin, 2020), and vocabulary mastery (Andrean, et al., 2019). This is consistent with the study by Kabooaha & Elyas (2015), which showed that the use of Youtube videos has also increased university students' vocabulary mastery level. In terms of speaking skills, Umaroh et al., (2019) mentioned that students' engagement and comprehension during speaking class has been improved when the teacher used animated video. Similarly, Wang (2015) provided an in-depth analysis of the use of video materials in college English teaching in China. The study reported that video materials have many advantages in English teaching such as enriching classroom activities, stimulating students' autonomy, and letting students learn the language with authentic materials.

It appears from the aforementioned studies that numerous investigations have been concerned about the use of technology-based materials for specific skills at specific students' levels. However, to the best of the authors' knowledge, there has been little discussion about designing and developing motion graphic videos to support speaking practice activities in vocational higher education settings. To fill the gap, authors were motivated to plan the current study, and preliminary research was conducted to gain introductory information about the needs of the research. Based on the findings of a preliminary survey gathered from 58 students, the topic of job interview in English is considered important and needed, as it is more common for many companies to require interviews in English nowadays. It also confirmed that students need some tips and tricks in preparing for their interview in English so they can use it as a speaking practice resource. Besides, it would be more fruitful if it is made in video form as it is easier to understand. The findings of this preliminary research then drove the authors to work on this research. Therefore, the objective of the present study is to design and develop a motion graphic video as speaking practice material for vocational students. Accordingly, the contribution of this study will certainly help to increase understanding and insight regarding the use of motion graphics as a medium for learning English, especially to facilitate speaking practice activities. Moreover, the product obtained from this study can be used as a self-guided learning material for students during online learning sessions.

METHODS

The present study was conducted in PoliteknikNegeriBatam, as a part of students' Project-based Learning in multimedia and Network study program. ADDIE model was used in this study as the research procedure since the nature of the research is design and development. In the ADDIE model, the process starts from Analysis, Design, Development, Implementation, and Evaluation. This paper is one part of a bigger study that has two main purposes; the first is to develop a motion graphic video and the second is to investigate the effectiveness of the implemented video in students' speaking performance. The present study discusses the development process of the motion graphic video, this article thus only focuses on the first three procedures of the ADDIE model that is Analysis, Design, and Development.

First, an analysis was conducted to specify the topic and the scope of the material in the syllabus. For this purpose, a preliminary questionnaire was administered to 58 students to see their needs for the topic given. As this research is a part of longitudinal students' project, therefore only one topic each team had to be worked on. Second, the design of the motion graphic video was started. This procedure included making the initial concept or story idea, writing the script, modeling the character, building the storyboard, and collecting the audio material. Last, the media was developed into a motion graphic video.

Once the motion graphic video was done, the experts' judgments for both media and content were conducted. There were three experts for each media and content judgment. The media experts are animation and multimedia lecturers, while the content experts are English lecturers. The rubric was administered online using a 5-point Likertscale, ranging from (1) totally disagree, (2) disagree, (3) neutral, (4) agree, and (5) totally agree. For media judgment, the rubric statement was about the visual and appearance combination of the video. As for the content judgment, the rubric statement was about whether the video content was already appropriate with the syllabus and language functions in material aspects. The result of expert judgment was then analyzed using the eligibility category based on criteria by Arikunto and Jabar (2009) as follows.

TABLE 1. Media Eligibility Criteria

Score (in percentage)	Eligibility Category
< 21%	Poor
21-40%	Below average
41-60%	Average

61-80%	Good
81-100%	Excellent

To obtain the percentage score, the following formula was used,

$$\text{Score (\%)} = \frac{\text{total score obtained}}{\text{maximum score}} \times 100\%$$

Moreover, the students' feedback on the motion graphic video use was also recorded. An online questionnaire was administered to 477 students from different study programs, asked mainly about whether the video was clear and interesting to be used for the speaking practices. The questionnaire consisted of 7 statements measured with a five-point Likertscale; the data then are presented descriptively using a bar graph in the finding.

RESULTS AND DISCUSSION

The process of designing and developing the product is discussed in this section. Moreover, the users' feedback on video usage perception is also presented.

3.1 Analyze

In this procedure, researchers firstly analyzed the syllabus to find out which topic needs supporting media to encourage the practice. The syllabus used was from Technical English course in mechanical engineering study program. As mentioned earlier, only one topic was covered for each team in the project, thus researchers decided to choose "job interview" as the topic because this topic contains the most speaking practice than any other topics in the syllabus. Once the topic was picked out, a questionnaire then was given to 58 students to confirm the needs of the topic. The result indicates that most students were aware that job interviews in English are more common nowadays, however, they likely were not ready for it. More than seventy percent of the students stated that it is hard for them to explain and market themselves during the interview in English (77,6%). Also, vocabulary and pronunciation were mentioned as the most problem faced by students (79,3%). For the matter of confidence, all of the students said that they were not confident to attend a job interview in English. Students also mentioned that they felt likely to be accepted if they could interview in English (64%). As the consequence, they agreed that they need some tips and tricks to prepare for their interview in English (100%) and it would be easier to understand if the tips are delivered using media (84,5%). Based on these results, the topic "Job Interview: Tips and Tricks" then was confirmed to be worked on in the project.

3.2 Design

After analyzing the needs, the next procedure is designing the product. In this procedure, motion graphic production was started. There were several stages of work, namely building the story idea, writing the script, modeling the character, building the storyboard, and collecting the audio material.

3.2.1 Story Idea

The idea of the story was discussed together by the researchers and the students' team. As the purpose of the video is for modeling the language used for the audience, the story was decided to be made in a role-play setting. There were two main sections; the first one was the tips in preparing for the interview in English and the second one was a role-play between an interviewer and interviewee.

3.2.2 Script

Based on the story idea, the script then was composed. The script draft was initially written in Bahasa Indonesia by the students' team based on the story idea discussed above. The draft then was confirmed and translated into English by the researchers, and after that, the script was divided into scenes.

3.2.3 Character

The next step was modeling the character. The character used in this motion graphic was a 2D character that was designed using Adobe Illustrator CC software application. There were two main characters modeled, namely interviewee (male character) and interviewer (female character, HR manager).

3.2.4 Storyboard

After the characters have been modeled, the next step was to build the storyboard. A storyboard is a visual representation of a video sequence and breaks down the scenes into an individual panel. It contains details of what will be put in each frame, including action, dialogue, or composition. The storyboard of the motion graphic video of "Job Interview: Tips and Tricks" was made digitally.

3.2.5 Audio

Audio is used to give the ambiance to an animation, create the atmosphere, and give emphasis to a scene. There were three kinds of audio used in this motion graphic, namely sound effects, background music, and characters' voice. The background music used in this motion graphic video was non-copyrighted. As for the character voice, the dubbing was recorded through the audio interface in a broadcast studio. The details of audio used in the motion graphics of "Job Interview: Tips and Tricks" can be found in the following Table 2.

TABLE 2. Summarize of Audio Materials

Audio type	Description
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Sound effect	1. Hollow pop 2. Swoosh 3. Click
Background music	Downloaded from YouTube Audio Library “Lovable Clown Sitcom – Sir Cubworth”
Character voice	Male character: Student Female character: Researcher

3.3 Develop

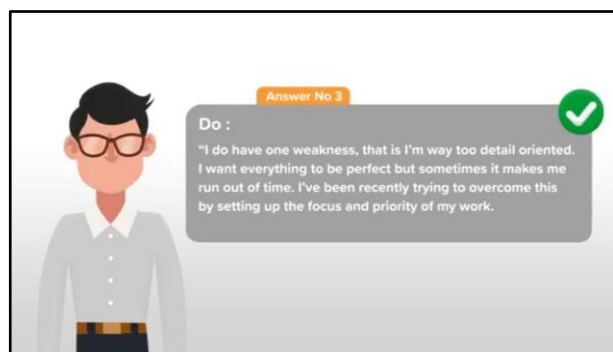
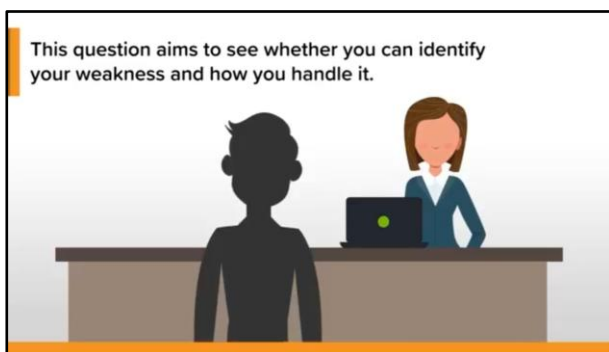
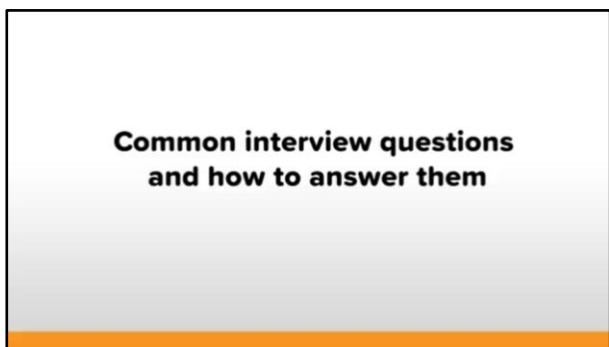
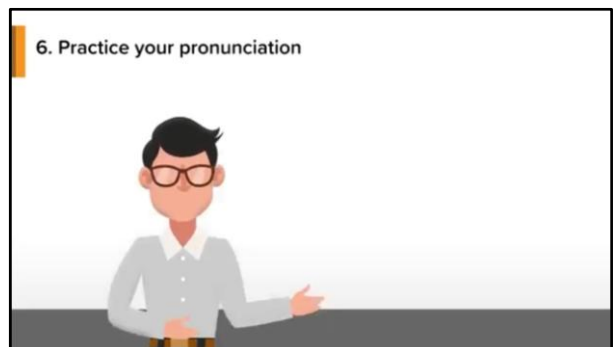
At this stage, all materials prepared in the designing stage were developed into a motion graphic product. Each frame in the storyboard was animated using Adobe After Effects CC 2015 software. After that, all animated scenes were put together and the audio was embedded following the scenes. The next step was rendering the video. Rendering is an editing activity, the process of merging and building images from an object collectively to become a complete video. This editing procedure used Adobe Premier Pro software.

After the motion graphic video was done, the initial review was then conducted. This initial review process was conducted by researchers. The content was reviewed by the English lecturer and the media was reviewed by the animation and multimedia lecturers. The summary of the initial review can be found in the following Table 3.

TABLE 3. Initial Review of Motion Graphic Video

Content review	Media review
1. The audio dubbing for the female character got some pronunciation errors, some problems in pitch control, word stress, and intonation (It has to be re-recorded with a different voice actor, i.e. the researcher).	1. Use more of typewriting effect (words move following the character voice) when showing the long text to make the scene more interesting.
2. There were some typing errors in the text.	2. Add the university logo in the opening and closing scene as project ownership identity.
3. The content was in line with the content purpose.	3. Sound (music and character voice) and sequences were clear.

Based on the initial review above, the students’ team then worked on revisions. The preview of several scenes in the final video can be found as follows.



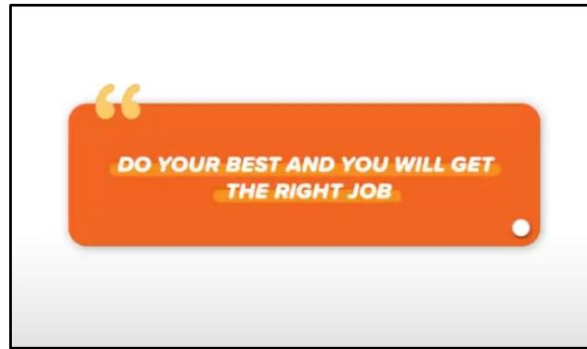


Figure 1. Preview of motion graphic video scenes

Once the final product was ready, the expert judgments were carried out. There were two experts' judgments namely content judgment and media judgment. The judgment of three content experts obtained an average score of 97,33% with an excellent qualification. The result indicates that the content of the motion graphic video "Job Interview: Tips and Tricks" was appropriate for the purpose and the concept of the video making, as well as suggests that the content delivery in the video has used standard English. Moreover, the excellent qualification also represents the recommendation for the motion graphic video to be used as a teaching and learning media, as the depth of the video content can be understood by students with different language proficiency levels.

In like manner, the judgment from media experts was also conducted. The media experts' judgment resulted in the average score of 87,62% with excellent qualification as well. It appears from the qualification obtained that the visualization of the motion graphics video "Job Interview: Tips and Tricks" is interesting to watch. Specifically, the overall visual appearance (typology, colors, illustrations, icons, transition, and layout) of this motion graphics video is attractive and creates a good combination to understand the content of the video as a whole. Besides, the audio elements support the whole visualization that makes information conveyed clearly and video content is easy to understand. Based on the qualification attained, this motion graphic video is highly recommended to be used as learning material for English speaking practice.

Furthermore, to explore students' perception toward the use of the motion graphic video, seven items of five-point Likert scale questionnaire was used. The items in the questionnaire all addressed statements about the content (items 1, 2, 3) and the visual appearance of the video (items 4, 5, 6, 7). As for the content, 87,84% of students contended that the content of the motion graphic video "Job Interview: Tips and Tricks" is generally easy to understand (see Figure 2). Similarly, 83,86% of the total students' correspondence agreed that the motion graphics video about "Job Interview: Tips and Tricks" can be recommended for use by English lecturers as an alternative teaching media.

Moreover, the responses demonstrated that 82,81% of the students either agreed or strongly agreed that the motion graphic about "Job Interview: Tips and Tricks" can be recommended for use by students in improving their speaking skills in English.

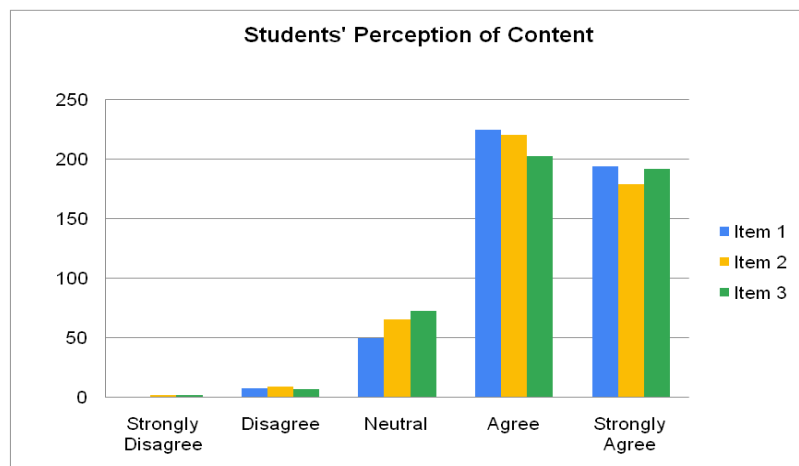


Figure 2. Students' perception of the content in the motion graphic video

In addition, items 4, 5, 6, and 7 examined the overall video presentation including visual and audio (see figure 3). Most of the students stated that the audio on the motion graphic "Job Interview: Tips and Tricks" is clear to help understand the content of this video, to the tune of 87,63% responses. When it comes to the visual, 82,39% of students either agreed or strongly agreed that the visualization of the motion graphic video is interesting to watch. Moreover, the color combination is also not boring (82,39% responses). At last, 83,65% of students concluded that the overall appearance (typology, colors, illustrations, icons, layout, etc.) is attractive and a sufficient complement to understand the content of the video.

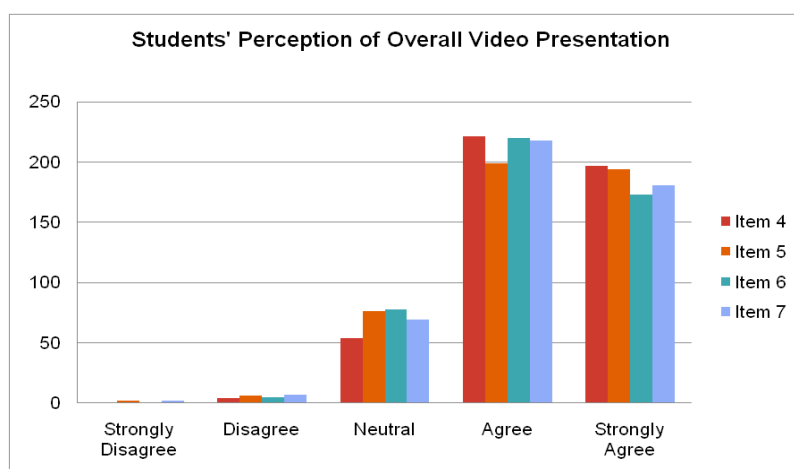


Figure 3. Students' perception of overall presentation in the motion graphic video

The finding highlights the process of designing and developing a motion graphic video as learning materials for speaking practice. The final product then was categorized as excellent in both content and media criteria and potential user (students) also revealed a highly positive attitude toward the motion graphic video. It can be noted that the present finding is consistent with findings of past studies by Ampa et al. (2013), which concluded that contextual learning materials should satisfy students' needs, promote independent language learning, present realistic content, and have clarity design and layout. In this study, the motion graphic video was developed using a need analysis and was projected as supporting learning materials for independent learning. The content was also clarified to use standard English and appropriate for different students' proficiency level, as it reflects that the level and the intended audience is clear (Ampa et al., 2013). Moreover, the fact that students positively recommended the use of the motion graphic video in their English class reveals that the motion graphic video encourages students' autonomy in learning. This is in line with a study by Davis (2013) which concluded that letting students use their autonomy in learning will lead to more meaningful learning experiences.

CONCLUSION

The present study set out to design and develop a motion graphic video as a teaching and learning medium, especially for speaking practices. The findings explain the process that starts from analyzing the needs, designing the product, and developing the product. Based on need analysis, one topic was confirmed to be chosen, which is job interview speaking practice. Furthermore, all the material needed for the video development was collected and composed in the design process, including the story idea, script, character, storyboard, and audio material. Finally, the motion graphic video was developed and assessed by the experts. Based on the assessment, the motion graphic video "Job Interview: Tips and Trick" was categorized as excellent, in both media and content qualifications. In addition, students' feedback after catching a glimpse of the video dominantly concluded that the overall video was recommended to be used as alternative media for speaking practice.

Practically, the findings in this study might be beneficial for English teachers to prepare the alternative supporting learning media in speaking practice activity for vocational students. More broadly, the experience of designing and developing learning media shared in this study theoretically may assist other practitioners who want to execute a similar idea and can be used as a reference to

develop motion graphics as learning media in more various topics and fields. Besides, the product of this study can also be used by students to support their self-guided learning.

Nevertheless, the present study has only revealed a halfway of the development, as the motion graphic video has not yet been implemented in the class and the effectiveness of the video use for students speaking comprehension has not yet been evaluated. Therefore, implementing the developed video in class may help to gather more insight into the effectiveness of using motion graphic video for English speaking practices. Furthermore, designing and developing videos in more varied speaking practice topics is also recommended to make a fruitful collection of speaking practice media.

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