# Personalization in Multimedia Integrated Environments: An Example from an EAP Course

## Çoklu Ortam İçeren Ortamlarda Kişiselleştirme: Akademik Amaçlı İngilizce Dersinden Bir Örnek

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### Abstract

This study aims to examine the effects of a multimedia presentation designed according to the researched principles in both non-personalized (formal) and personalized (informal) narrations concerning students' understanding of the exam questions in a freshman year course with a focus on English for academic purposes. A nonequivalent control group design was employed in this five-week study in which a group of students were exposed to the multimedia presentation in non-personalized narration (NPN) while another group of students were exposed to the multimedia presentation in personalized narration (PN). Both groups took to the same test at the pre-stage and post-stage of the study. The design of the study also required the participants in both groups, to evaluate the language that they were exposed to in the

### Öz

Bu çalışmanın amacı, üniversitenin ilk yılındaki akademik amaçlı İngilizce dersinde öğrencilerin sınav sorularını anlamasıyla ilgili araştırılmış prensiplere göre tasarlanmış kişiselleştirilmemiş ve kişiselleştirilmiş anlatımlı bir çoklu ortam sunumunun etkilerini açıklamaktır. Çalışmada eşitlenmemiş kontrol grup deseni kullanılmıştır. Bir grup öğrenci kişiselleştirilmemiş anlatımlı çoklu ortam sunuma maruz bırakılırken diğer bir grup öğrenci kişiselleştirilmiş anlatımlı çoklu ortam sunuma maruz bırakılmıştır. Her iki gruba da hem ön hem de son aşamada aynı test uygulanmıştır. Buna ek olarak, açık uçlu bir soru yoluyla, her iki gruptaki öğrencilerden de maruz bırakıldıkları sunumlarda kullanılan dili ve kendi öğrenme durumlarını değerlendirmeleri

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presentation and their own learning experience, through an open ended question. The findings of the study yielded meaningful differences between the groups.

**Keywords:** Multimedia Presentation, Personalization Principle, English for Academic Purposes.

istenmiştir. Çalışmanın bulguları gruplar arasında anlamlı bir farka işaret etmiştir.

**Anahtar kelimeler:** Çoklu Ortam Sunumu, Kişiselleştirme Prensibi, Akademik Amaçlı İngilizce.

## Introduction

Many universities in Turkey like the ones around the world are in the process of internationalization by offering educational programs in English. As a result, the term English as a/the Medium of Instruction (EMI) is increasingly being used in Turkish higher education. More specifically, EMI refers to the use of English to deliver courses on academic subjects in countries where English is the foreign language of the majority of the population. In universities which have EMI programs, students with a B level of proficiency in English language are admitted to their departments for their academic studies. These students are also required to take English for academic purposes (EAP) courses which aim to equip them with the knowledge and skills required for listening to academic lectures and presentations, answering exam questions effectively, reading academic books, articles, and journals, writing academic papers and reports, joining international school projects, and taking part in discussions on academic topics during their studies. It has been observed that many of these student's experience difficulty in using their time efficiently in the exams they take in English. Thus, it seems essential that they be supported so that they can develop their ability to understand the exam questions and plan their answers quickly and effectively. Therefore, this study aims to examine the effects of a multimedia presentation, designed according to the researched principles, in both non-personalized (formal) and personalized (informal) narration with regard to students' understanding of the exam questions in an EAP course.

It is hoped that the findings of this small-scale study will contribute to the accumulation of knowledge in the fields of acquisition theory and cognitive theory of multimedia learning in three ways. First, unlike the studies of Mayer (2005a) which were conducted in an experimental environment, this study has been conducted in authentic learning setting, and seems to be among the first studies to establish external validity of findings when using multimedia within the curriculum of an actual hybrid course. Second, the study was carried out in a different content area, EAP. Plass and Jones (2005) had suggested that further research focusing on "the integration of second language acquisition theory and cognitive theories of multimedia learning" was needed (p. 483). Third, the study was conducted with actual university students performing in a real learning context where EMI was being used. This can be considered as another contribution to the literature on EAP and multimedia

learning. In addition, an open-ended question was directed to the participants to collect data about their perceptions regarding the presentations and their own learning experience. As it is believed that multimedia instruction creates the opportunity for learners to improve their learning skills, student perceptions regarding the impact this particular type of instruction has on their own learning process would become important considerations for the field. In brief, this small-scale study aims to contribute to a growing body of research-based principles for the design of multimedia for EAP.

**Literature Review**

Graduate courses with a focus on EAP in higher education in Turkey are usually designed with the aim of equipping students with the knowledge and skills necessary to successfully fulfil the requirements of the departmental and non-departmental courses delivered through English as a medium of instruction. In other words, EAP generally involves isolating and teaching the skills, language forms and study activities believed common to all disciplines (Hyland, 2006). Thus, EAP courses aim at helping the students acquire the appropriate language skills and the study skills needed so that they can successfully perform in academic settings. More specifically, these courses focus on formal writing styles and academic conventions as well as formal communication skills.

Hyland (2006) defines EAP as "specialized English-language teaching grounded in the social, cognitive and linguistic demands of academic target situations, providing focused instruction informed by an understanding of texts and the constraints of academic contexts" (p. 2). De Chazal (2014) states that the instruction in EAP courses includes formative academic discourse dealing with critical thinking skills, cognitively challenging topics, contextualization, topic-driven vocabulary, formulated units or chunks of language use in terms of grammar, reading genres such as textbooks, journal articles, abstracts, reports, summaries, essays, critiques, and literature reviews, and global academic prose concerning the language of social, political and socio cultural contexts (pp. 3-16). More exactly, EAP in teaching and learning is formal and depends on different techniques of language use framed by the English language teaching (ELT) field. On the other hand, Patel (2013) points out that the development of the multimedia technology and its application to teaching has a

great impact on ELT in terms of creating "a favorable platform for reform and exploration on English teaching model in the new era" (p. 117). Obviously, EAP teaching has started to change dramatically with the emerging technology. Hyland (2006) further points out that there is a strong need for "a needs analysis, course design and materials, methodologies" and a new perspective of language and learning among teachers regarding EAP instruction due to their direct effect on students' learning experiences (p. 193).

In Mayer's (2005b) cognitive theory of multimedia learning, it is assumed that instruction is the key component in reducing the cognitive overload during learning. Moreover, research on three principles for multimedia design based on social cues such as personalization, voice, and image indicates that social cues as aspects of instructional messages can prepare learners to social responses by leading them to deeper cognitive processing and better test performance (Mayer, 2005a). That is, learners discern the tutor as a social partner. Particularly, according to the *personalization principle*, people learn more deeply when the words in a multimedia presentation are in conversational style rather than formal style (Mayer, 2005a). However, as explained before, the major objective of the courses designed for EAP is to enable learners to use language in a formal style and thus the instruction in these courses is essentially not personalized.

The personalization principle is one of the four research-based principles of multimedia learning (Mayer, 2009). According to Mayer (2004), people learn more deeply from words and graphics than from words alone in multimedia learning. The multimedia instruction including words with graphics, illustrations, charts, photos, animation or video leads learners to meaningful learning (Mayer, 2004). In this sense, the materials used in multimedia learning are the combination of visuals with words narrated verbally or presented as text. The personalization principle theorizes the fact that people learn better when texts intended to be used for instructional purposes in multimedia learning are designed in a conversational rather than a formal style (Mayer, 2009).

Mayer (2009) mentions that it is not beneficial to use too much personalization (p. 252). Ginns, Martin, and Marsh (2013) conducted a meta-analysis to understand how a conversational style was operationalized and identified two major components coded as personalization and politeness. When the personalization principle is adapted to the instructional texts, a third person form of address is changed to first or second person. As

an example, the statement "Calculate the result" would be changed to "Let's calculate the result", a polite conversational statement directed at learners through multimedia materials. This is sometimes done with an additional personal expression such as "In my opinion, this is how it works …" (Mayer, Johnson, Shaw, & Sandhu, 2006). Ginns et al. (2013) state that this principle has a strong empirical support only in the context of up to 35 minutes long interventions designed in English language. In addition, the debate on the ideal level of personalization continues (Schworm & Stiller, 2012).

## 2. Method
## 2.1 Context

This study was conducted to examine the effect of a multimedia presentation, designed according to the researched principles, in both non-personalized (formal) and personalized (informal) narration with regard to students' understanding of the exam questions in a freshman EAP course offered by the Department of Modern Languages in Bahçeşehir University which has EMI. The department offers two consequents must EAP courses in the freshman year with the same credit and hours of instruction. The study was carried out for the ENG1003 Communication Skills and Academic Reporting I course, the first of the two courses. The course was partially delivered via the distributed learning software using a platform which made the use of the Internet possible for the researcher as a connecting link to provide asynchronous and collaborative learning experiences for the participants by customizing the tasks to support the students' own learning and the writing activities done in class. As one of tasks in the course syllabus, the students were expected to analyze the features of exam questions, which aimed to help them understand what was expected from them. To this end, they were given tests with some exam questions to identify the title and features with the key expressions and words in them. Throughout the process, the teacher gave students feedback in terms of re-checking and evaluating their understanding of the exam questions in the tests.

## 2.2 Participants

All participants in the study had intermediate levels of English as indicated by their scores on TOEFL, IELTS, and the institution's own proficiency exam, which is a core requirement for admission to their departments. The participants in this study were 285 irregular

students who were admitted to their departments in the spring term. From these students, 189 took the pretest. Those participants were randomly assigned to either the NPN group (93 students) or the PN group (96 students). In the NPN group 23 participants took the pretest but did not take the posttest, and in the PN group 23 participants took the pretest but did not take the posttest. These participants were not included in the quantitative data analysis. From the students in both groups who took both the pretest and the posttest, 27 responded to an open-ended question. The answers of 16 participants out of 70 participants in the NPN group and 11 out of 73 participants in the PN group were included in the qualitative data analysis.

## 2.3 Design and variables

The purpose of this mixed-methods study was to identify the effect of a multimedia presentation, designed according to the researched principles, in both non-personalized (formal) and personalized (informal) narration with regard to students' understanding of the exam questions in the freshman EAP course by obtaining both quantitative data from a pretest and a posttest and qualitative data from an open-ended question which was given at the end of the posttest to explore students' understanding of the presentation in terms of the language use they were exposed to and also to explore their perceptions regarding the learning experience.

In this design, the quantitative data and the qualitative data were collected and analyzed concurrently. It is believed that using more than one data collection tool would contribute to the reliability of the findings. The quantitative data further enabled the researcher to gain a deeper understanding in answering the research question. Using the mixed-method approach helps to gain a more comprehensive understanding of the problem being researched (Creswell et al., 2003).

In the quantitative method of the study, a quasi-experimental pre-post control group design was employed (see Table 1). The study lasted for five weeks. In this phase, questions in both the pretest and the posttest addressed the four features of the exam questions: instruction, focus, topic, and limitation. The effect of the key independent variable (personalization) on students' retention (dependent variable) was analyzed in this study. After the treatment, the participants took the same test as a posttest to assess retention.

**Table 1: Research Design**

| Groups | Before treatment | During Treatment | After treatment |
|--------|------------------|------------------|-----------------|
| Control | Pretest | Non-personalized narration (NPN) | Posttest |
| Treatment | Pretest | Personalized narration (PN) | Posttest |

In the qualitative method of the study, students' responses to the open-ended question given at the end of the posttest were analyzed with reference to the language used in the presentation and their perceptions of the learning process. Inductive analysis was carried out, the data was transcribed, coded and the themes that emerged were included in the findings.

### 2.4 Instrument and material

The qualitative data collection instrument for this study was a test that was administered on an e-learning platform (Table 2). There were 10 test items in both the pretest and the posttest, which were developed by the researcher. In the process of the test development, expert feedback was sought regarding the clarity and format of the test items. These questions were also pilot-tested with undergraduate students.

**Table 2: The Test on the E-Learning Platform**

| Order | Type | Question | Objective | Score |
|-------|------|----------|-----------|-------|
| 1 | Fill in the blanks Instruction: | Write the features of essay titles. Identify the features of the essay titles in the questions below | Analyze | 1 |
| 2 | Match | Explain the effectiveness of online marketing strategy in modern companies. | Analyze | 1 |
| 3 | Match | Describe the changes telecommunications have made to modern business life. | Analyze | 1 |
| 4 | Match | Evaluate the effects of nuclear energy use on the environment. | Analyze | 1 |
| 5 | Match | Illustrate the use of computer technology in education. | Analyze | 1 |

| 6 | Match | Analyze the dynamics of immigration in Turkey. | Analyze | 1 |
| 7 | Match | Compare the benefits of digital technology to its disadvantages. | Analyze | 1 |
| 8 | Match | Discuss the significance of sustainable development in urbanization. | Analyze | 1 |
| 9 | Match | Discuss the key effects of individual success in academic performance. | Analyze | 1 |
| 10 | Match | Describe the role of innovation and creativity for software companies. | Analyze | 1 |

In the process of collecting expert feedback for each step related to the many principles such as signaling and spatial contiguity in multimedia learning, the two presentations which were designed by the researchers were shown to five other graduate students to find out whether there were any issues concerning pronunciation, voice clarity, polite speech, human pedagogical agent, video design and pacing. Feedback related to technical issues was also gathered. Eventually, regarding the principles of multimedia presentation, the same presentation was narrated in both formal style and informal style with a particular focus on the personalization principle.

The lecturer who delivered both presentations holds a BA with a dual major in Teaching English as a Foreign Language and Teaching English as a Second Language. She has excellent communication skills certified both in Turkish and English, and intermediate communication skills certified in German and Spanish. She is a TOEFL supervisor at the Turkish-American Association. She has been teaching EAP at the same university where she was pursuing an MA in Educational Technologies. She has been teaching English with technology since she graduated from university in 2011.

The presentations were shown both in NPN in the control group and PN in treatment group using the Power Point software on an e-learning platform. Both presentations consisted of four parts. While the non-personalized version of the narration lasted three minutes 50 seconds, the personalized version of the narration lasted four minutes five milliseconds.

The following tables show the merged version of the NPN and PN with the related screenshots from the presentations. The expressions and words in the brackets shown in

the tables indicate the additions made to the non-personalized script, and the expressions and words in italics demonstrate the changes made again to the non-personalized script while creating the personalized version.

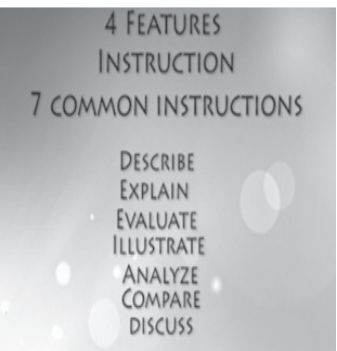**Table 3: The Merged Version of the NPN and PN with the Related Screenshot (Part I)**



Hi [everyone]. This presentation is about analyzing essay titles and will help [you] understand the essay questions. [You are going to] Watch *the* [a] presentation. [Please] take notes [on your notebook]. *University students* [You] sometimes do worse than *they* [you] should in examinations in English, not because *their* [your] writing skills are weak or *their* [your] knowledge of the subject is insufficient, but because *they* [you] have not understood what *they* [you] have been asked to do. To get high marks in an examination, *it is important to* [you need to] understand what the title means and how *it should be answered* [you should answer it]. In order to understand an essay title it is useful [for you] to look for certain features.

**Table 3: The Merged Version of the NPN and PN with the Related Screenshot (Part I)**



*The goal of this presentation is to show a model to analyze the features of essay titles* [In this presentation you will see a model to find the features of essay titles]. In this model there are 4 main features. The first one is the instruction. It states what type of essay *to be written* [you are going to write]. There are seven most common instructions in essay titles: Describe Explain Evaluate Illustrate Analyze Compare Discuss.

The open-ended question asked the participants in both groups to reflect on their learning experience and also the language use in the presentation they were exposed to at the end of the posttest as a last question was: "How do you feel about the presentation in terms of language use, and what do you think about your learning?"

**Table 5: The Merged Version of the NPN and PN with the Related Screenshot (Part II)**

| | |
|---|---|
|  | [Now you know] The first one is the instruction. The second one is the focus. It gives [you] the perspective *to be considered* [you need to consider]. The third one is the topic. It gives [you] the main theme. And the last one is the limitation. It shows [you] the context *to be considered* [you need to consider]. |

**Table 6: The Merged Version of the NPN and PN with the Related Screenshot (Part III)**

| | |
|---|---|
|  | [I am sure] The essay title and the highlighted features will help [you] analyze the essay titles. Describe the relationship between research and creativity in business. In this example describe is the instruction as *it is seen* [you see] at the beginning of the title and gives [you] the essay type, the relationship between is the focus. In other words, it gives [you] the perspective, research and creativity is the topic. To put another way, it gives [you] the main theme, in business is the limitation as *it is seen* [you see] it is at the end of the title and gives [you] the context. |

**Table 7: The Merged Version of the NPN and PN with the Related Screenshot (Part III)**

| | |
|---|---|
|  | [Let's] identify the features in the following essay title [together]. Explain the contribution of political parties to the development of democracy. *It can be easily guessed* [Now you can easily guess] that explain is the instruction, the contribution of is the focus, political parties is the topic, to the development of democracy is the limitation. |

**Table 8: The Merged Version of the NPN and PN with the Related Screenshot (Part III)**

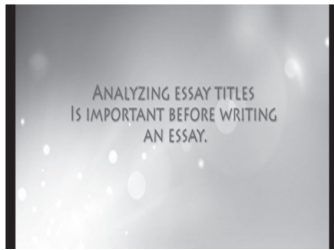| | |
|---|---|
| DISCUSS ⟶ INSTRUCTION<br>THE USE OF ⟶ FOCUS<br>DIGITAL DEVICES ⟶ TOPIC<br>AS LEARNING TOOLS. ⟶ LIMITATION | [Let's] analyze the features in the following essay title [one more time]. Discuss the use of digital devices as learning tools. Discuss is the instruction, the use of is the focus, digital devices is the topic, as learning tools is the limitation. |

**Table 9: The Merged Version of the NPN and PN with the Related Screenshot (Part III)**

| | |
|---|---|
| ANALYZING ESSAY TITLES IS IMPORTANT BEFORE WRITING AN ESSAY. | In this presentation *analyzing essay titles is introduced* [we have learned how to analyze essay titles]. [Remember next time] When an essay title is given [to you] it is important to analyze the title [and check your understanding] before moving on to plan [your] essay. This is the end of the presentation. [Thank you for listening and taking notes.] |

## 3. Results and Findings

Independent sample *t*-test and paired-sample *t*-test analysis were carried out to compare the retention test scores in NPN and PN conditions.

**Table 10: Independent Samples Test Results for Both Groups**

| | | *F* | *Sig.* | *t* | *df* | *Sig. (two-tailed)* |
|---|---|---|---|---|---|---|
| Pretest Total | Equal variances assumed | 6.422 | .012 | 1.320 | 141 | .189 |
| Scores | Equal variances not assumed | | | 1.331 | 123.584 | .186 |
| Pretest Total | Equal variances assumed | 13.451 | .000 | 2.403 | 141 | .018 |
| Scores | Equal variances not assumed | | | | | |

According to the pretest scores shown in Table 10, the students were almost equal in terms of prior knowledge on Analyzing Essay Titles with a $t = 1.320$ (df = 141, $p > .05$). However, when the group statistics shown in Table 11 are taken into consideration, the students who received the presentation with NPN matched more items on the retention test ($M = 90.87$, $SD = 18.24$) than did the students who received the presentation with PN ($M = 81.50$, $SD = 27.27$). Paired-sample $t$-test was conducted in order to see if the difference is significant when it is compared with pretest retention test results for each group.

**Table 11: Group Statistics for Pretest and Posttest**

|          | Groups | $n$ | M       | SD       |
|----------|--------|-----|---------|----------|
| Pretest  | NPN    | 70  | 86.9714 | 13.00053 |
|          | PN     | 73  | 83.2055 | 20.19761 |
| Posttest | NPN    | 70  | 90.8714 | 18.24147 |
|          | PN     | 73  | 81.5068 | 27.27541 |

As shown in Table 12, the results indicate that there is a significant difference between pretest and posttest scores of the retention test in the NPN group $t(69) = -2.01$, $p = 0.047$ whereas there is no difference between pretest and posttest scores of the retention test in the PN group $t(72) = 0.544$, $p = 0.588$.

**Table 12: Paired Samples T-Test Results**

| Group | Total            | M        | SD       | Std.er.m. | t      | df | Sig. (two-tailed) |
|-------|------------------|----------|----------|-----------|--------|----|-------------------|
| NPN   | Pretest-Posttest | -3.90000 | 16.16056 | 1.93156   | -2.019 | 69 | .047*             |
| PN    | Pretest-Posttest | 1.69863  | 26.66911 | 3.12138   | .544   | 72 | .588              |

As for the effect of students' gender, age, department, and computer use literacy (novice and experienced learners on e-learning platform), the results revealed that there is no meaningful relation between the scores of retention with those variables.

The researcher was interested in generating themes rather than testing a theory with certain themes adopted from previous studies. Thus, after compiling all of the students' responses to the open-ended question about the presentation in terms of language use in the

presentation and their learning process, the researcher with another researcher followed the principles of the grounded theory (Glaser and Strauss, 2009) in the analysis of them. They read the students' responses individually. Each conducted inductive analysis to explore the themes from verbal data by following three stages in the analysis: open, axial and selective coding (Cohen, Manion, and Morrison, 2007, p. 493). Once the individual analysis was complete, they met to discuss any similarities and differences in their individual findings. They worked together to code and categorize (Strauss and Corbin, 1998) the students' responses according to the emerging themes related to the language use in the presentation and learning experiences in their data analysis. This act resulted in revisions to the codes with the clarification and confirmation of the findings.

When all students' (27 out of 143) responses were analyzed regardless of their groups, it was seen that the same three categories related to the language use in the presentation emerged: obscurity, comprehension, and efficacy while only one category emerged related to their learning experience: improvement.

The students who answered the question in the NPN group (16 out of 70) wrote positive sentences on their learning experience and the language of the presentation such as "The language in the presentation was clear and understandable. I think that I understand every point of the presentation" and "Presenter's language was quite clear to understand. This presentation is very useful for us" and "In my opinion language is good and understandable. It is helpful for my language." Likewise, the students who answered the question in the PN group (11 out of 73) gave positive responses to the same question related to their learning and the language used in the presentation such as "When I watch the presentation I feel that it is so clear and understandable. Language of presentation and also the presenter's language are obvious and comfortable. For these reasons, this presentation is really beneficial for me" and "This presentation was very clear and easy to understand. The words which were used by the presenter were not complex. My learning is getting better week by week thanks to our English lessons at university and e-learning practices. These practices and presentations are very useful indeed" and "I think this presentation was good in terms of the language use because we can understand easily each word in the presentation. I think my learning improved."

## Conclusion

This study has examined the effects of a multimedia presentation, designed according to the researched principles, in both non-personalized (formal) and personalized (informal)

narration with regard to students' understanding of the exam questions in an EAP course. Research on personalization principle indicates that words in informal style rather than formal style in a multimedia presentation result in better learning outcomes due to the feeling of social presence which leads the learner to employ deep cognitive processing to comprehend what the narrator is saying (Mayer, 2005a; Moreno & Mayer 2000; 2004; Mayer, Fennell, Farmer, & Campbell, 2004). In other words, the personalization principle in multimedia instructional messages is originated from the idea that social cues can prime a social response in learners that fosters deeper cognitive processing and better learning outcomes. The results in the quantitative analysis show that the formal (non-personalized) narration in the multimedia presentation helped students learn, and the learning outcome was improved in a multimedia integrated learning environment designed for an EAP course**.** This result is not concurrent with Mayer's (2005a) research, and the findings are not consistent with the research literature related to the personalization principle in multimedia learning. The research literature related to the personalization principle in multimedia learning includes studies which were conducted in language one (L1). In other words, the participants in those studies were exposed to presentations which were carried out in their native language. An important difference related to this particular research is that both presentations were delivered to the participants in the English language, which is the participants' foreign language, and the study was carried out in an EFL setting. Following a lecture in a foreign language presents serious cognitive challenges to learners. The learner is expected to process information in the target language in order to receive the transmitted message while dealing with challenges related to the academic discourse. One reason why the results show difference might be that the participants might have allocated their linguistic resources to receiving the intended message of the presentation, and as result, they might have had a tendency to discard the more subtle differences in language use such as personalization and politeness. Another reason why the studies' findings have shown difference with similar studies might be that this study has been carried out in the Turkish educational context where the language of instruction has a high level of formality. Therefore, students might have felt more comfortable with a formal presentation style which they are used to. Moreover, the major objective of the EAP course, which is to teach the language use in a formal style, might have led the participants to prefer the instruction that was not personalized so that they responded better to the formal (non-personalized) narration.

In addition, the findings in the qualitative analysis showed that students' evaluations do not differ in both groups as students reported that the language used in the presentations are clear, easy to understand, and very useful. They also reported that the multimedia integrated presentation they were exposed to helped them improve their language. The students' positive attitude towards the use of multimedia integrated environment can be explained by the fact that this was a novice and engaging experience compared to the routine face-to-face learning environment. As for the relationship between students' opinions and retention test results, the results revealed no significant correlation. This might be due to the limited time in which the study was carried out.

The data was collected from the participants through a pretest, a posttest, and an open-ended question. These findings can be further confirmed by using other data tools such as focus group or individual interviews with participants. As the study is a small scale study, the numbers of participants are low. The findings might be more realistic if a larger sample is used. This aim of the study was to describe the effects of the personalization principle in a multimedia presentation. Further research needs to be conducted in order to explore the underlining causes of the students' preference for this particular type of instructional material.

There is much room in the design of multimedia presentations for further exploration, and much still remains to be investigated in terms of teaching EAP in multimedia integrated environments. Best practices in any subject can only be achieved once enough research has been conducted. Further comprehensive research could explore the effects of personalization in multimedia integrated EAP courses in EMI environments in terms of social cues so that it would be possible to design future EAP instruction aiming to support the university studies of future students in EMI.

### References

Cohen, L., Manion. L., & Morrison, K. (2007). *Research Methods in Education.* London: Routledge.

Creswell, J. W., Plano Clark, V. L., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook on mixed methods in the behavioral and social sciences* (pp. 209-240). Thousand Oaks, CA: Sage.

De Chazal, E. (2014). English for Academic Purposes: A comprehensive overview of EAP and how it is best taught and learnt in a variety of academic contexts. UK: Oxford University Press.

Ginns, P., Martin, A. J., & Marsh, H. W. (2013). Designing instructional text in a conversational style: A meta-analysis. *Educational Psychology Review*, 25(4), 445-472.

Glaser, B. G., & Strauss, A. L. (2009). *The discovery of grounded theory: Strategies for qualitative research*. London: Transaction publishers.

Hyland, K. (2006). *English for Academic Purposes: An Advanced Resource Book*. NY: Routledge.

Mayer, R. E., Fennell, S., Farmer, L., & Campbell J. (2004). A Personalization Effect in Multimedia learning: Students learn better when words are in conversational style rather than formal style. *Journal of Educational Psychology*, 96(2), 389-395.

Mayer, R. E. (2005a). Principles based on social cues: Personalization, voice, and image principles. In R. E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (pp. 201-212). Cambridge: Cambridge University Press.

Mayer, R. E. (2005b). Cognitive Theory of Multimedia Learning. In R. E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (pp. 31-48). Cambridge: Cambridge University Press.

Mayer, R. E., Johnson, W. L., Shaw, E., & Sandhu, S. (2006). Constructing computer-based tutors that are socially sensitive: Politeness in educational software. *International Journal of Human-Computer Studies*, 64(1), 36-42.

Mayer, R. E. (2009). *Multimedia Learning* (2nd ed.). NY: Cambridge University Press.

Moreno, R., & Mayer, R. E. (2000). Engaging students in active learning: The case for personalized multimedia messages. *Journal of Educational Psychology, 93,* 724–733.

Moreno, R., & Mayer, R. E. (2004). Personalized messages that promote science learning in virtual environments. *Journal of Educational Psychology, 96,* 165–173.

Patel, C. (2013). Use of Multimedia Technology in Teaching and Learning communication skill: An Analysis. *International Journal of Advancements in Research & Technology*, 2(7), 116-123.

Plass, J. L., & Jones, L. C. (2005). Multimedia Learning in Second Language Acquisition. In R. E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (pp. 467-488). Cambridge: Cambridge University Press.

Schworm, S., & Stiller, K. D. (2012). Does personalization matter? The role of social cues in instructional explanations. *Intelligent Decision Technologies*, 6(2), 105-111.

Strauss, A., & Corbin, J. (1998). *Basics of Qualitative Research: Procedures and Techniques for Developing Grounded Theory* (2nd ed.). Thousand Oaks, CA: Sage.