

A Structural Analysis of the Effects of Film-based Liberal Arts English Teaching Methods on College Students' Cognitive and Defining Satisfaction

Hyun-Jin Kim^{1*}, Ji-Young Seo^{2*}

¹Dept. of Education, Kookmin University, Seoul 02707, Korea

²Dept. of General Education, Kookmin University, Seoul 02707, Korea

**Corresponding author:* Hyun-Jin Kim, hyunjin@kookmin.ac.kr; Ji-Young Seo, sjy@kookmin.ac.kr

Copyright: © 2023 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: This study was conducted to investigate the effects of general English class instructional pedagogy through movies on college students' cognitive and affective satisfaction. For the purposes of this study, conventional pedagogy (language driven) and film pedagogy (content driven) were employed with 146 college students enrolled in the Movie English Liberal Arts class at Kookmin university in Seoul. To find out the pure causal effects of conventional and film pedagogy on students' cognitive and affective satisfaction, other confounding co-variants were included in the research model and statistically controlled. The AMOS software was applied to analyze structural relationships based on participants' questionnaire data. The main research findings are as follows: first, conventional pedagogy and film pedagogy had statistically significant effects on students' cognitive satisfaction; second, conventional pedagogy and film pedagogy had statistically significant effects on students' affective satisfaction; third, in both cognitive and affective satisfaction, film pedagogy had larger standardized path coefficients than conventional pedagogy. These results suggest that, in terms of its role as an instructional method, not only did Movie English help students improve their English knowledge but also their confidence. In addition, to teach English through movies, film pedagogy integrated with conventional pedagogy is necessary. Moreover, pedagogical implications and future studies were discussed.

Keywords: Movie English; Film pedagogy; Cloudy with a chance of meatballs; Cognitive satisfaction; Affective satisfaction

Online publication: July 21, 2023

1. Introduction

This study aims to investigate the effect of video English teaching method on college students' class satisfaction. In particular, this study aims to compare the effects of traditional and film-based English classes on the cognitive and affective satisfaction of college students with English. This paper refers to traditional English classes as classes that are primarily concerned with language and apply conventional teaching methods such as explaining words and grammar, solving problems through quizzes, and reading aloud. Video-enhanced English class means a class where the primary focus is on understanding the content of the movie ^[1]. Specifically, descriptions of the movie, the filmmaking process, actors, voice actors, etc. Video-enhanced English classes include an explanation of the movie itself and explains the culture in the movie so that you can understand mistranslations or cultural differences that are not reflected due to a lack of understanding of the culture. It is a class that explains the culture of the movie so that you can understand

the language play and puns. The ultimate purpose of the teaching method is to learn English, and language and content should be seen as a continuum ^[2].

English classes in college liberal arts programs will need to be differentiated from English classes in English departments. As a liberal arts program, English classes will need to develop an understanding of foreign cultures, an international perspective and outlook, and the ability to use language in context and contextualized language skills. To this end, Lee (2010) argues that “the use of English novels in English language learning is quite effective. However, it is difficult to use complex novels directly in college liberal arts English. Therefore, it is necessary to choose a movie based on the novel as an alternative” (p. 144) ^[3]. It can be seen that there should be a difference in the purposes and teaching methods between general English and major-specific English classes. From this perspective, it is necessary to take an interest in teaching methods that utilize films to achieve the educational goals of liberal arts English classes.

Yum and Kahng (2007) stated that movies are an excellent teaching resource that can solve many problems encountered in the current English language teaching process ^[4]. In addition, Rhee (2011) states that “in order to apply knowledge from various fields and to make teaching and learning more effective. Among the various visual media, movies have become a cultural medium for modern people. It has been established as a key icon of popular and integrated modern cultural content. Films encompass comprehensive art forms where music, art, dance, fashion, as well as humanities, social sciences, politics, and economics are interwoven with storytelling, presenting a holistic art form” (p. 163) ^[5]. As a multidisciplinary art form in which human life is projected and woven together, film is a fairly suitable medium for effective teaching and learning.

As such, the need and significance of using film in college liberal arts English classes is likely to continue to grow in the future. According to You (2000, p. 102), in 1999, there were 17 schools with video English classes at the university level ^[6]. The number of universities planning to introduce video English classes in the future was 31. It can be seen that the number of universities that plan to introduce video English classes is higher than the number of universities that have implemented them. Seo (2018) mentioned that utilizing films for improving English proficiency among college students, who are digital natives, is one of the most effective methods ^[7]. As a result, the use of various films in classrooms has become increasingly popular. Consequently, the establishment of video-based English or screen English classes, utilizing films as a means to achieve the goals of English education as a liberal arts subject, is expected to continue to grow in many universities.

The use of films in English classes has gained attention primarily due to its positive effects on student engagement and alignment with the characteristics of the digital generation. Additionally, film-based English classes can aid in cognitive learning by exposing students to English usage and appropriate language expressions in various situations depicted in the film scenes. This study aims to investigate whether video-based English classes not only contribute to affective aspects such as motivation, interest, and confidence formation among college students but also facilitate cognitive learning in relation to English comprehension. The utilization of films in English classes has garnered considerable consensus, and the current focus of discussion revolves around determining specific teaching methodologies suitable for film-based English instruction. It is crucial to consider whether traditional English teaching methods, such as reading and writing, should be incorporated alongside film-based instruction.

Suh (2016) states that it is important to devise teaching methods that fit the sensibilities and emotions of digital native speakers ^[8]. For college students who live with digital devices all the time, a new way of teaching English using appropriate digital programs is absolutely necessary. Ryu (2010) proves the value of film as an educational material from the perspective of behaviorism, cognitivism, and constructivism educational learning theories. “It is argued that, in order to maximize the effectiveness of film in English education, we need to establish specific teaching methods for teaching and learning in English classes using

film. With this, the educational effectiveness of using film to teach English can be maximized” (p. 105) ^[9]. In response to this, Lipiner (2011) distinguishes film education as “education about film and education through film. Education with film involves the use of both traditional teaching methods and new teaching methods that utilize film” (p. 375) ^[10].

Therefore, in this study, we aim to empirically compare and analyze the impact of traditional English teaching methods and film-based English teaching methods on cognitive and affective aspects of English learning in a university general English course. Most of the existing studies that have analyzed the effects of incorporating films in classroom instruction have utilized methodologies such as mean comparisons, frequency analysis, and interviews. While these analytical methods can demonstrate the correlation between film-based instruction and variables related to student satisfaction, growth, and change, they have limitations in explaining causal relationships. Therefore, in this study, we intend to utilize a structural path analysis approach that statistically controls for influential variables, including the inclusion of these variables in the model, to compare the effects of traditional English instruction and film-based English instruction in a university English course. This approach reflects the attempt to incorporate innovative teaching methods in line with the current era and examine whether film-based English instruction, in conjunction with traditional English instruction, can contribute to the cognitive and affective aspects of university students.

2. Theoretical background

Movies, by resembling real-life situations while creating a dreamlike atmosphere, have many advantages as practical materials that generate interest and engagement in teaching and learning. Due to these advantages, the use of movies in education can contribute significantly to enhancing students’ learning effects and satisfaction. Lee (2010) suggested to use movies in college liberal arts English classes ^[3]. By utilizing films based on novels, it is possible to offer efficient reading lessons that appeal to students at different proficiency levels. By utilizing films based on novels, it is possible to offer efficient reading lessons that appeal to students at different proficiency levels. Kim (2019a) also argues that the development of science and technology has made it very easy to access authentic English materials, such as movies, which provide rich and realistic information experienced in real-life situations and are suitable for foreign language education ^[11]. Park (2014) suggests that movie characters can be used to build empathy with students and increase their engagement ^[12]. Lee and Kang (2019) found positive effects when using the animated movie *Zootopia* to teach students to understand other cultures and to increase their engagement in the classroom ^[13]. Rhee (2011) stated that movies can isolate audiences from their everyday space and allowing them to experience something similar to a dreamlike experience ^[5]. This suggests that using movies in the classroom may lead to increased student engagement.

Even in foreign studies, the use of movies in language education has been reported to have positive effects on learners’ cognitive and affective aspects. Bacon (1992) suggests that using authentic language learning materials like movies naturally provides learners with real-life conversational situations, leading to positive effects on their communicative abilities in terms of cognition ^[14]. Giroux (2002) claims that the use of movies has significant effects on affective aspects such as increasing students’ interest in learning, motivating them, and reducing learning anxiety ^[15]. Inage *et al.* (2013) found that students who enjoyed watching movies had increased motivation for language learning and improvement in vocabulary and pronunciation ^[16]. Brown (2001) describes the significant effects of using authentic materials in education on both learners’ language abilities and affective domains ^[17]. Scholars from abroad, such as Garza (1991), Lonergan (1995), Stempleski and Tomalin (1990), and Voller and Widdows (1993), have advocated for the various advantages of movies in education, including the provision of authentic materials, enhancing communicative abilities, presenting natural language contexts, and providing cultural background

knowledge ^[18-21]. Honebein (1996), emphasizing the importance of constructivist learning environments, has long proposed the use of various media to enhance students' learning effects ^[22].

Ryu (2010) also emphasized the value of movies as an excellent educational resource. Movies provide the most realistic situations and authentic contexts and showcase a wide variety of language use. Compared to artificially created conversation in textbooks, language used in movies offers the experience of conversational situations, dialogue skills, and conversational strategies within diverse cultural authenticity. A review of previous studies on the use of film in English language teaching reveals a variety of applications, including grammar instruction ^[23], vocabulary ^[24-26], classroom activities ^[27,28], teacher lesson plans ^[11,29-31,7], exploring the theoretical basis for using movies ^[32], and pragmatics instruction ^[33].

On the other hand, if we look at the research methodology of previous studies using movies to teach English, we can see that they mainly use frequency analysis, interview survey, or group mean comparison methods. These research methodologies are not able to show a correlation between the use of film and students' cognitive and justice development, but they do not make direct claims about the impact of film studies on student change. It is difficult to make direct claims about the effectiveness of the program. To address the influence of variables on the final dependent variable, it is necessary to include variables that can potentially affect the final dependent variable in the model and consider their influence. By statistically controlling for mediating variables such as background independent variables that precede the study and process mediators such as classroom participation, it would be possible to discuss the causal relationship between the variables of interest and the final dependent variable.

Ok (2012) proposes a research framework for exploring an effective instructional model and analyzing the effects of movie-based English instruction, focusing on English pronunciation and American culture depicted in the movie "Prime." ^[34] The framework for exploring class models that can efficiently operate classes and analyzing the its effectiveness includes the following three research components. First, it suggests conducting a survey on students' pre-existing thoughts and experiences regarding English (interest in English, confidence, etc.). Second, it recommends investigating aspects related to the instructional process (the content of the textbook, the professor's teaching style, the use of equipment, etc.). Third, it suggests conducting a survey on students' thoughts and opinions after completing the course (change in interest in English, understanding of pronunciation, vocabulary acquisition, grammar, and areas in which they felt the course was helpful such as listening, speaking, writing, and reading). This research design, which investigates students' thoughts and opinions before, during, and after the movie-based English course, provides an analytical framework for assessing the effects of the screen English instruction. It highlights the need to analyze changes in cognitive aspects such as pronunciation comprehension, vocabulary acquisition, grammar understanding, listening, speaking, writing, and reading, as well as investigate the impact on students' interest and satisfaction in the instructional process.

Furthermore, Joe (2017), in his study on using movies to teach English grammar, stated that analyzing the effectiveness of movie-based teaching requires three phases of research ^[35]. In the first stage, an initial survey is conducted at the beginning of the course to measure the starting point level (e.g., I think it is important to learn English. I want to be better at English than other subjects. I think I need to know English grammar to be able to communicate well in English, etc.). This highlights the importance of pre-assessing students' perceptions of the relevance and significance of English. The second stage focuses on the process variable, which is the level of active engagement and participation in the instructional activities. The degree of class participation is measured to assess the extent to which students concentrate and actively engage in the lessons. The third step is to examine the dependent variables, which include student satisfaction with the grammar lessons from the movies in terms of both affective aspects (interest, engagement, etc.) and cognitive aspects (comprehension, retention, etc.).

Meanwhile, considering the influence of process variables such as participation in extracurricular

education activities alongside the regular school curriculum, as highlighted by Kim (2007) [36], it would be necessary to include these additional English learning variables outside of regular classes in the model to account for their impact on the final dependent variables.

Based on the aforementioned prior research, the conceptual analysis model of this study was developed to compare and analyze the effects of traditional English teaching methods and movie-based English teaching methods on university students' cognitive and affective aspects of English satisfaction in the context of English video classes, a component of university general English education. To control for the influence of other potential variables, the conceptual analysis model includes these variables in the model and is depicted in **Figure 1**.

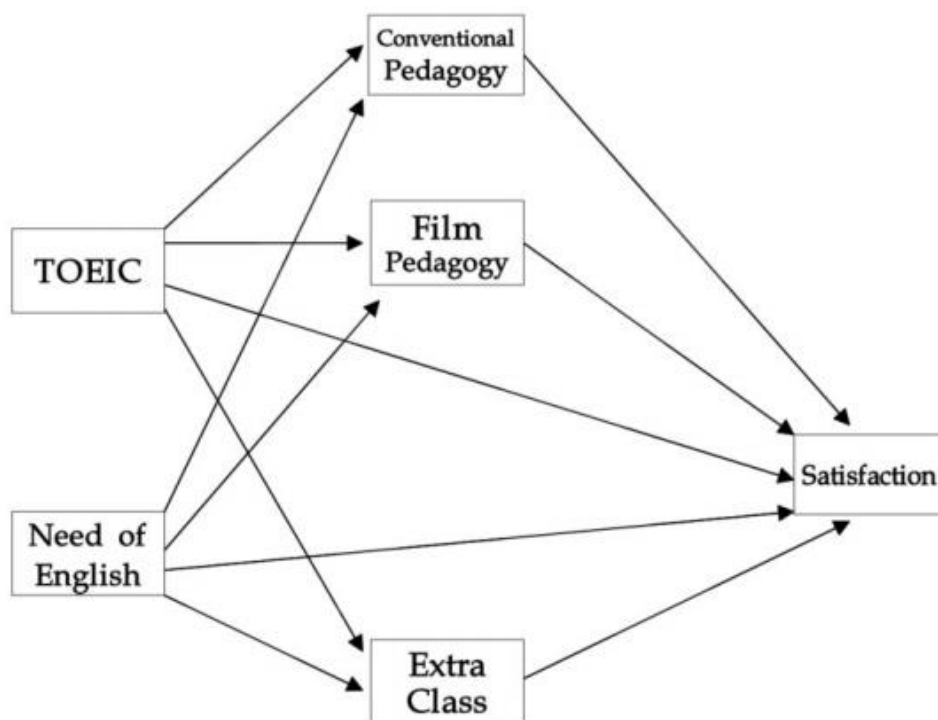


Figure 1. Conceptual model for this research

The background independent variables of university students, which are characteristics they possess prior to participating in the class and can influence their cognitive and affective satisfaction with English classes, are TOEIC scores and the perceived importance of English. Regular class participation and participation in English learning activities outside of regular classes are considered as process mediating variables. Cognitive and affective satisfaction with the class is set as the final dependent variable. It is assumed that students' background variables can influence their participation in regular class and English learning activities outside of regular classes. Furthermore, it is assumed that regular class participation and participation in English learning activities outside of regular classes can affect cognitive and affective satisfaction with English. Class participation is differentiated between traditional English classes and movie-based English classes. The background independent variables of university students have both direct and indirect effects on cognitive and affective satisfaction. For example, a higher perceived importance of English is expected to have a direct positive impact on cognitive and affective satisfaction. Additionally, a higher perceived importance of English may lead to increased participation in English learning activities, and through this increased participation, indirectly influence cognitive and affective satisfaction.

3. Research methods

The purpose of this study is to investigate the effects of traditional and movie-enhanced English teaching methods on college students' cognitive and affective classroom satisfaction. The subjects, measurement items, classroom management methods, and data analysis methods are as follows.

3.1. What to analyze

This study was done by distributing questionnaires (**Appendix 1. Questionnaire #1, Appendix 2. Questionnaire #2**) to 146 university students who took a video English course, one of the liberal arts English courses at a university in Seoul. **Table 1** below shows the background variables of the subjects analyzed.

Table 1. Background variable of participants ($N = 146$)

		<i>N</i>	%
Gender	Male	72	49.3
	Female	74	50.7
Year	1	36	24.7
	2	34	23.3
	3	34	23.3
	4	42	28.7
Colleges	Humanities	58	39.7
	Engineering	57	39
	Arts and Sports	31	21.3

3.2. Measurement questions

The sub-measures for each variable in this study are shown in **Table 2**.

Table 2. Variables and questionnaire items

Variables		Items	Scale
Independent variable	TOEIC	TOEIC test score	0–990
	Need of English	How much English do you need?	1–5
Mediating variable	Conventional pedagogy	Vocabulary worksheet, grammar explanation, speaking (3 items, Cronbach's $\alpha = 0.872$)	1–5
	Film pedagogy	Cultural elements, language play and puns, speaking (3 items, Cronbach's $\alpha = 0.881$)	1–5
	Study English outside of class	Do you study English outside of class?	0 = No, 1 = Yes
Dependent variable	Cognitive satisfaction	This course helped me to learn English. (3 items, Cronbach's $\alpha = 0.912$)	1–5
	Affective satisfaction	This course made me to be interested in learning English (3 items, Cronbach's $\alpha = 0.929$)	1–5

3.3 How to run a class

The purpose of this study was to analyze the effects of traditional and movie-enhanced teaching methods on college students' cognitive and affective satisfaction. Ryu (2010) stated that in order to utilize the various values and advantages of film, it is necessary to explore and discuss how to deal with and use film in class, to realize the effectiveness of film-based English teaching methods. To conduct the research by comparing an experimental group and a control group, where one group follows traditional English teaching methods and the other group follows film-based English teaching methods, would not align with the nature of video English classes. Therefore, in this study, both traditional English teaching methods and film-based English teaching methods were implemented equally in each class session of the university general English course utilizing video English.

The selected film for the course was “Cloudy with a Chance of Meatballs” (directed by Lord & Miller, 2009) [37]. This animated film is based on the eponymous original novel, which tells the story of a scientist who invents a machine that makes food rain down on a town where only sardines are eaten. Since a proper appreciation of the film requires reading the movie script, it was chosen for this purpose. For example, the film showcases diverse cultures through a variety of international foods, and the dialogue is filled with wordplay and humor. However, there were certain Korean expressions that could not be translated due to the lack of corresponding equivalents, or the humor effects were diminished through literal translation. Despite these translation limitations, the film was selected because it is believed to provide a fresh perspective for university students through its screenplay.

The course consisted of 2 hours per week and lasted for a total of 15 weeks, excluding the orientation, midterm, and final exams. However, only 12 weeks of classes were conducted. The teaching approach involved initially watching a movie scene with Korean subtitles for approximately 3 minutes. Afterward, the scene was explained using traditional English teaching methods and film-based English teaching methods. Finally, the scene was replayed without subtitles.

Traditional methods of teaching English focus on the language, explaining, interpreting, and quizzing on words and grammar, reading aloud, etc. On the other hand, film-based English teaching methods pays attention to the content of the movie, explaining the culture of the movie and the movie itself. Cultural explanations may cover aspects that are not reflected in the subtitles or may involve mistranslations due to a lack of understanding of the culture or language puns and wordplay that cannot be translated due to cultural differences. Explanations about the film itself may involve comparisons with the original novel on which it is based, discussions about the film's production process, and insights into voice actors. While traditional teaching methods centered on language involve the teacher selecting words and expressions for memorization, followed by activities to check comprehension, film-based teaching methods involve the teacher providing explanations about the content and culture, encouraging students to critically analyze the translated subtitles and engage in discussions.

In each class session, the film-based teaching method was applied alongside the traditional teaching method. To analyze the impact of each teaching method on cognitive and affective satisfaction, the study utilized a Likert-type 5-point scale to measure the extent to which students self-reported their engagement and participation in the class. The class procedure is outlined in **Figure 2**.

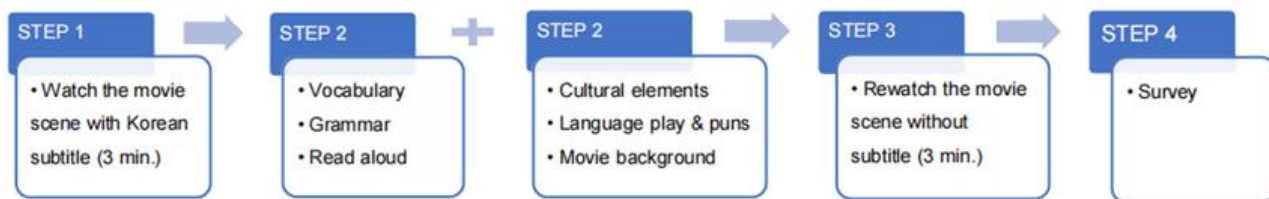


Figure 2. Instruction and class procedures

3.4. How to analyze your data

The data collected in this study were analyzed as follows using the AMOS 22.0 program. The purpose of this study is to compare the effectiveness of traditional and film-based instruction on cognitive satisfaction with English language learning and affective satisfaction with positive feelings toward English language learning. There may be variables that can already affect class satisfaction before the class takes place. This study included college students' TOEIC scores and the degree of need for English as background variables. In addition, while taking the class as a course variable, college students can study English in a space other than the class. To analyze the pure relationship between the variables of interest in the study, it was necessary to control for the influence of other confounding variables on the final dependent variable. Therefore, these variables were included in the structural model of this study. To examine the structural relationships among the background variables that temporally precede the study, the process variables during the course, and the dependent variable at the final stage, the AMOS program was utilized. The specific analysis procedures were as follows.

First, a structural analysis was conducted on the initial model, which is the analysis model set in this study.

Second, the model-data fit indices (χ^2 , p , GFI, AGFI, NFI, CFI, RMSEA) from the structural analysis results were examined to determine the fit of the initial model set up in this study.

Third, based on the fit indices and modification indices, the model is modified.

Fourth, the fit indices of the initial model and the modified model are compared to select the final model.

Fifth, in the final model, the standardized path coefficients among variables are analyzed and compared.

4. Research findings

This chapter presents a structural analysis of the relationship between cognitive and affective effects on class satisfaction in a university liberal arts video English class. First, the model-data fit of the initial model set up in this study was analyzed, and the final model modified based on the model modification index was derived. Then, the influence relationship between the variables was analyzed.

To examine the relationship between traditional teaching methods and film-based teaching methods on students' cognitive and affective satisfaction, it is essential to ensure that the conceptual analysis model of the relationship specified in this study is a good fit. The model should be evaluated as a good fit to enable the examination of the standardized path coefficients, which represent the influence relationships among the variables specified in the model.

4.1. Validate the initial model fit and modify the model

The goodness of fit of the initial model and the goodness of fit index of the final model through the modification process are shown in **Table 3**. The coefficient estimation method of the model used the maximum likelihood method, and the index that can judge the appropriateness of the initial model set in this study is χ^2 , p , RMSEA, GFI, AGFI, NFI, and CFI were utilized as indices to determine the appropriateness of the initial model.

First of all, if the model is optimal, a p -value of 0.05 or higher is considered desirable. And RMSEA values below 0.05, with values closer to 0, indicate excellent model fit. Moreover, GFI, AGFI, NFI, and CFI values of 0.9 or higher, approaching 1, suggest excellent model fit.

Table 3. Model-Data fit indices of initial and final models for cognitive and affective satisfactions

		χ^2	<i>df</i>	<i>p</i>	RMSEA	GFI	AGFI	NFI	CFI
Cognitive	Initial	69.636	3	0.000	0.391	0.888	0.214	0.543	0.515
	Final	1.227	2	0.541	0.000	0.997	0.971	0.992	1.000
Affective	Initial	69.636	3	0.000	0.391	0.888	0.214	0.555	0.529
	Final	1.227	2	0.541	0.000	0.997	0.971	0.992	1.000

Looking at the goodness-of-fit index of the initial model for cognitive satisfaction, it was determined that the model-data fit was not at a satisfactory level. The covariance relationship between the measurement errors ($e_1 \leftrightarrow e_2$) of the traditional and movie-utilized class variables was established. Goodness-of-fit test results of the modified model with covariance, χ^2 value was significantly lowered to 1.227, and the *p*-value is greater than 0.05, which is quite satisfactory. RMSEA = 0.000, GFI = 0.997, AGFI = 0.971, NFI = 0.992, and CFI = 1.000. Based on the assessment of excellent model fit, the final model of this study was adopted. By having students check their levels of participation in traditional teaching methods and film-based teaching methods, it is possible to infer that there are systematic correlations between various factors. When examining the fit indices of the initial model for affective satisfaction, it was determined that the level of fit was not satisfactory. To improve the fit, the model was modified by incorporating a covariance relationship between the measurement errors ($e_1 \leftrightarrow e_2$) of the traditional teaching method variable and the film-based teaching method variable, similar to the cognitive satisfaction model.

Looking at the fit of the modified justice satisfaction model, the χ^2 value was significantly lowered to 1.227, and the *p* value became larger than 0.05. The model-data fit index is quite good, so we adopted the final model. RMSEA = 0.000, GFI = 0.997, AGFI = 0.971, NFI = 0.992, and CFI = 1.000. All the remaining fit indices also indicate a high level of goodness of fit, supporting the selection of the final model.

4.2. Data analysis method: Path coefficient analysis of the final model

After going through the modification process and examining the ideal model fit, the final model for cognitive satisfaction shows the interrelationships between variables as depicted in **Figure 3**.

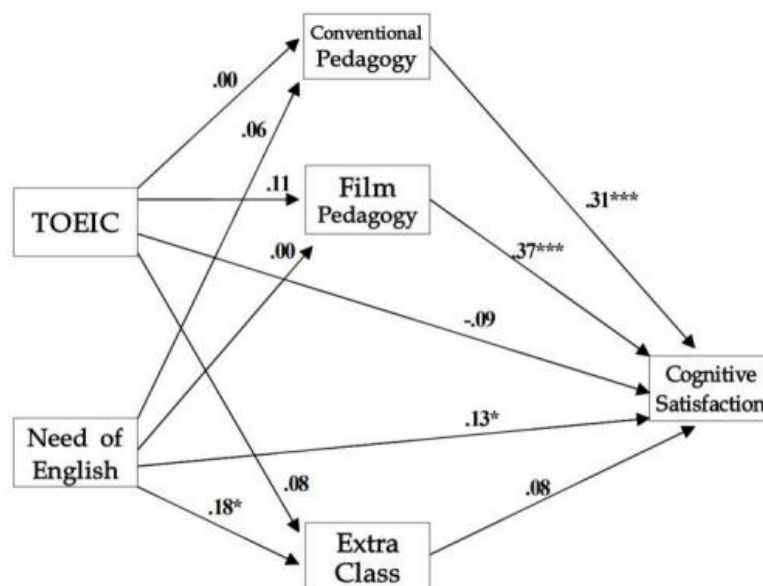


Figure 3. Structural analysis of the effects of instructional pedagogy on students' cognitive satisfaction in movie English college class (standardized path coefficients)

Standardized path coefficients indicate the influence of the final model on the proposed cognitive satisfaction. It can be seen that college students' interest and participation in both traditional and movie-enhanced classes help them to grow in cognitive and learning aspects of English. The standardized coefficient of the path from traditional classroom variables to cognitive satisfaction is 0.31***, and the standardized coefficient of the path from movie-enhanced classroom variables to cognitive satisfaction is 0.37***, indicating that the impact of film-based teaching on cognitive English learning is greater than that of traditional teaching. It is analyzed that the influence of movie-utilizing teaching method is more than that of traditional teaching method.

Furthermore, the perceived need for English, which was set as the background independent variable in this study, has a statistically significant direct effect (0.13*) on cognitive satisfaction. It can be observed that higher perceived need for English is associated with higher cognitive satisfaction with the class. Additionally, the standardized path coefficient indicating whether students engage in English study outside of class due to their perceived need for English is statistically significant at 0.18*. This suggests that the perceived need for English at the beginning of the semester influences the engagement in English study outside of class throughout the semester. However, the impact of English study outside of class on cognitive satisfaction is statically non-significant, with a coefficient of 0.08. This indicates that there is no indirect effect of the perceived need for English on cognitive satisfaction through English study outside of class.

In addition, neither the perceived need for English nor TOEIC scores, which were theoretically considered as background variables that could influence participation in the English course, showed statistically significant effects on the variables representing traditional teaching methods and film-based teaching methods as process variables. The perceived need for English showed a static influence on engagement in English study outside of class but did not have a significant effect on engagement in the English course within the university setting. TOEIC scores did not demonstrate significant effects on the process variables representing engagement in English classes within and outside of the university setting, as well as the final dependent variable, cognitive satisfaction.

Following the modification process and examining the ideal model fit, the final model for affective satisfaction, depicting the interrelationships between variables, is presented in **Figure 4**.

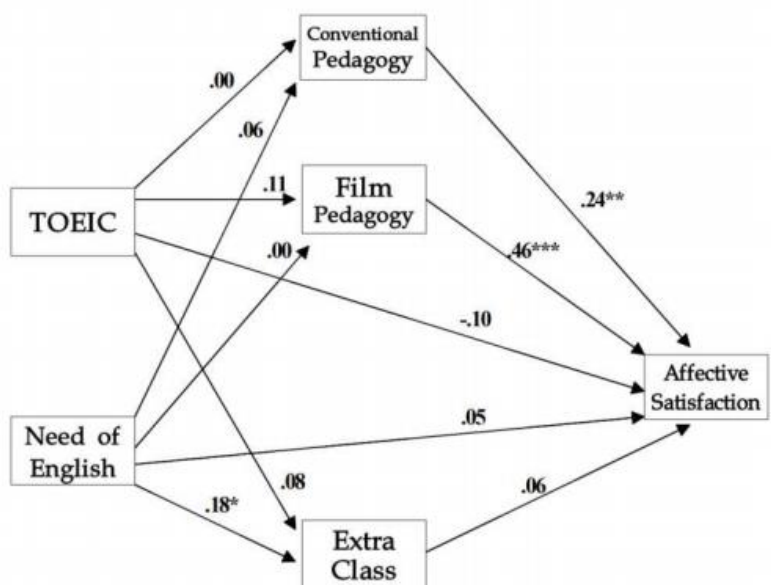


Figure 4. Structural analysis of the effects of instructional pedagogy on students' affective satisfaction in movie English college class (standardized path coefficients)

Both the traditional teaching method and the movie-enhanced teaching method in the video English class were analyzed to have a statistically significant positive effect on affective satisfaction. The more interested and engaged college students are in traditional and movie-enhanced classes is beneficial in terms of their interest, confidence, and enthusiasm for English. The standardized coefficient of the path from classroom variables to justice satisfaction is 0.24** and the degree of influence of the movie-enhanced classroom variables on college students' justice satisfaction is 0.46***, so the influence of the movie-enhanced teaching method on the affective satisfaction is more than the traditional teaching method.

As in the cognitive model, the standardized path coefficient indicating whether students engage in English study outside of class due to their perceived need for English is statistically significant at 0.18*. However, the direct effect of English study outside of class on affective satisfaction is statically non-significant at 0.06, indicating that there is no indirect effect of the perceived need for English on affective satisfaction through English study outside of class. Additionally, the direct effect of the perceived need for English on affective satisfaction is statically non-significant, with a coefficient of 0.05.

Similarly to the cognitive satisfaction model, in this study, both the perceived need for English and TOEIC scores, which were theoretically considered as background variables that could influence participation in the English course, did not show statistically significant effects on the process variables representing traditional teaching methods and film-based teaching methods. The perceived need for English exhibited a static influence on engagement in English study outside of class but did not have a significant effect on engagement in the English course within the university setting. Additionally, TOEIC scores did not demonstrate significant effects on the process variables representing engagement in English classes within and outside of the university setting, as well as the final dependent variable, affective satisfaction.

The following **Table 4** shows a comparison of the standardized path coefficients for the cognitive and affective satisfaction final models.

Table 4. Standardized path coefficients in the cognitive and affective models ($N = 146$)

Path	Cognitive model (standardized path coefficient)	Affective model (standardized path coefficient)
TOEIC → Conventional pedagogy	0.003	0.003
TOEIC → Film pedagogy	0.108	0.108
TOEIC → Extra English class	0.084	0.084
TOEIC → Satisfaction (cognitive/affective)	-0.090	-0.098
Need of English → Conventional pedagogy	0.057	0.057
Need of English → Film pedagogy	0.001	0.001
Need of English → Extra English class	0.183*	0.183*
Need of English → Satisfaction (cognitive/affective)	0.134*	0.046
Conventional pedagogy → Satisfaction (cognitive/affective)	0.310***	0.243**
Film pedagogy → Satisfaction (cognitive/affective)	0.365***	0.462***
Extra English class → Satisfaction (cognitive/affective)	0.075	0.055

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The effect of traditional class variables on college students' cognitive satisfaction (0.310***) was greater than the effect of affective satisfaction (0.243***). The traditional English teaching method applied in the video English class in the university liberal arts course has a greater impact on cognitive satisfaction than affective satisfaction of college students. It can be seen that college students who have learned test-

oriented English in Korea are comfortable with instructors explaining and assigning items to memorize and prefer this method because they believe it will bring about changes in their English proficiency in the short term [1].

On the other hand, the effect of film-based English teaching method on cognitive satisfaction of college students was 0.365*** and the effect on affective satisfaction was 0.462***. It can be seen that the film-based teaching method has more influence on the affective satisfaction such as interest, confidence, enthusiasm, etc. than the cognitive satisfaction.

When comparing the effects of traditional and movie-based teaching methods on the cognitive satisfaction of college students, we find that the effect of movie-based teaching method (0.365) is greater than that of traditional teaching method (0.310). In addition, the effect of the film-enhanced teaching method (0.462***) is significantly larger than the effect of the traditional teaching method (0.243***). It can be seen that the film-based English teaching method has a greater impact on both cognitive and affective satisfaction of university students than the traditional English teaching method.

On the other hand, the variable of perceived need for English, included as a background variable, showed a consistent static influence on engagement in English study outside of class in both the cognitive satisfaction and affective satisfaction models. However, it did not demonstrate a significant effect on traditional teaching methods and film-based teaching methods. Furthermore, the perceived need for English showed a statically significant direct effect on cognitive satisfaction, indicating that it has a direct impact in the cognitive aspect. However, no direct effect was found in the affective aspect.

5. Conclusion and recommendations

The purpose of this study was to compare the effects of traditional English teaching methods and film-based English teaching methods applied in university English courses on the cognitive growth and formation of positive affect in students' English learning. To control for the influence of other variables that could affect cognitive and affective satisfaction, these variables were included in the model as independent, mediating, and dependent variables. The background independent variables included TOEIC scores and the perceived need for English, which are characteristics that students possess before participating in the class and can influence cognitive and affective satisfaction with English classes. The engagement in English classes within the university setting and English study outside of class were included as process mediating variables, and cognitive and affective satisfaction were set as the final dependent variables. To analyze the structural relationships, the AMOS program was utilized, and data from students participating in an English video course at University K in Seoul were used for analysis. The initial models for cognitive satisfaction and affective satisfaction showed low model fit indices, and modifications were made based on the modification indices. The modified models for cognitive satisfaction and affective satisfaction exhibited good model fit, and thus, they were adopted as the final models in this study.

Based on the standardized path coefficients in the final model, the main findings of this study are as follows.

First, it was analyzed that both traditional teaching methods and movie-based teaching methods have statistically significant positive effects on students' cognitive satisfaction with English.

Secondly, it was analyzed that both traditional teaching methods and movie-based teaching methods have statistically significant positive effects on students' affective satisfaction with English. This indicates that both the traditional teaching methods and the movie-based teaching methods used during the English class contribute to students' cognitive and affective satisfaction.

Thirdly, in the cognitive satisfaction model, it can be observed that the movie-based teaching method has a greater impact on students' cognitive satisfaction compared to the traditional teaching method. This suggests that incorporating movie-based teaching methods in English classes has a stronger influence on

enhancing students' cognitive satisfaction.

Fourthly, in the affective satisfaction model, it is evident that the movie-based teaching method has a stronger impact on students' affective satisfaction compared to the traditional teaching method. This implies that using movies as a teaching tool is more beneficial in enhancing both students' cognitive and affective satisfaction, surpassing the effectiveness of traditional teaching methods.

Fifthly, the independent variable of English necessity, included as a background variable, was found to have a significant positive influence on extracurricular English study in both the cognitive and affective satisfaction models. However, it did not show a significant impact on in-class English learning. This suggests that the perceived importance of English has a direct influence on students' engagement in extracurricular English activities but may not significantly affect their participation in in-class English learning.

Sixthly, in both the cognitive and affective satisfaction models, the background independent variable of TOEIC scores for university students showed no significant influence on in-class English learning, extracurricular English study, cognitive satisfaction, or affective satisfaction. This implies that having higher TOEIC scores does not necessarily lead to increased participation in in-class or extracurricular English activities. Additionally, higher TOEIC scores do not directly contribute to higher cognitive or affective satisfaction with English learning, nor do lower TOEIC scores result in decreased satisfaction.

Based on these research findings, we can make the following suggestions regarding the use of movies in university English language courses. The movie-based approach, which focuses on understanding the content and analyzing the background of films, provides greater benefits in terms of enhancing university students' cognitive and affective satisfaction with English learning compared to the traditional approach that emphasizes vocabulary and grammar. It is evident from the study that watching movies and comprehending their content naturally leads to increased confidence in English and improved vocabulary skills. This empirical analysis of the relationship between movie-based instruction and students' cognitive and affective outcomes has significant implications.

The authors would like to propose the implementation of a movie-based English teaching method that focuses on understanding the content of movies and incorporates corresponding classroom activities. Instead of using traditional teacher-centered approaches that involve passive delivery and memorization, students can be encouraged to translate subtitles by themselves, compare their translations with their peers, and justify their translations based on cultural knowledge, movie content, and background information. Although students who are accustomed to memorizing teacher-provided materials may initially find this method unfamiliar, considering the results of the study that indicate higher cognitive and affective satisfaction with the movie-based approach, it is expected that students can adapt to this teaching method quickly. However, it is important not to overlook the fact that some learners still feel comfortable with traditional teacher-centered lectures. Therefore, when implementing movie-based instruction, it is essential for the teacher to effectively integrate the movie content with language learning and devise various teaching activities that engage students and pique their interest in language through movies.

One limitation of this study is that the data used consisted solely of self-report survey results, which may be subject to bias. Therefore, it is suggested that future research incorporates in-depth analysis through test results and in-depth interviews to examine language development processes from different perspectives. Additionally, conducting further research that includes other background independent variables that may influence the final dependent variable would be beneficial. This would allow for a reconfirmation of whether the traditional teaching method and the film-based teaching method continue to have a significant impact on college students' cognitive and affective satisfaction. By doing so, we can increase the reliability and generalizability of the research findings.

To enhance students' English proficiency and cognitive satisfaction, as well as their confidence,

interest, and enthusiasm towards English in college-level English courses, it is important to go beyond traditional teaching methods and actively incorporate film-based English teaching methods that align with the digital era. By doing so, we can better cater to the needs of the digital generation and create a more engaging and effective learning environment.

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Ryu D-H, 2015, Revisiting the Integration of Content and Language: With a Focus on Free Translation Activities. *STEM Journal*, 16(3): 67–86. <https://doi.org/10.16875/stem.2015.16.3.67>
- [2] Met M, 1999, Content-based Instruction: Defining Terms, Making Decisions (NFLC Reports), <http://www.carla.umn.edu/cobaltt/modules/principles/decisions.html>
- [3] Lee J, 2010, Why Movie Novels? *STEM Journal*, 11(2): 141–161. <https://doi.org/10.16875/stem.2010.11.2.141>
- [4] Yum M-S, Kahng Y-K, 2007, An Effect of Using Movies in English on Vocabulary Power and Interest in Primary English Education. *STEM Journal*, 8(2): 55–82. <https://doi.org/10.16875/stem.2007.8.2.55>
- [5] Rhee E, 2011, Creative Music Education Plan Utilizing Visual Media: Focusing on Storytelling the Movie, Jeon Woo Chi. *Korean Journal of Culture and Arts Education Studies*, 6(2): 161–180. <https://doi.org/10.15815/kjcaes.2011.6.2.161>
- [6] You Y-A, 2000, Today and Tomorrow of Screen English. *STEM Journal*, 1: 97–126.
- [7] Seo E-M, 2018, Cinema-based English Learning: Focusing on About Time. *STEM Journal*, 19(3): 45–64. <https://doi.org/10.16875/stem.2018.19.3.45>
- [8] Suh K, 2016, In the Web 2.0 Era, Studies on Teaching Methods of English Poetry Through Digital DIY (do-it-yourself) Building. *Studies in English Language & Literature*, 42(2): 141–159. <https://doi.org/10.21559/aellk.2016.42.2.008>
- [9] Ryu Y-A, 2010, The Theoretical Validity and Educational Basis of Using Movies in Language Education. *STEM Journal*, 11(1): 103–128. <https://doi.org/10.16875/stem.2010.11.1.103>
- [10] Lipiner M, 2011, Lights, Camera, Lesson: Teaching Literacy Through Film. *E-Learning and Digital Media*, 8(4): 375–396.
- [11] Kim D, 2019a, Teaching English Utilizing the Movie The Parent Trap. *Secondary English Education*, 12(1): 223–242. <https://doi.org/10.20487/kasee.12.1.201902.223>
- [12] Park Y, 2014, Teaching English with the Use of Movie Speeches. *STEM Journal*, 15(1): 57–81. <https://doi.org/10.16875/stem.2014.15.1.57>
- [13] Lee S-H, Kang M-K, 2019, A Study on the Role of Culture in the Animation, Zootopia: Based on Pop-culture References and Easter Eggs. *STEM Journal*, 20(3): 71–90. <https://doi.org/10.16875/stem.2019.20.3.71>
- [14] Bacon S, 1992, Phases of Listening to Authentic Input in Spanish: A Descriptive Study. *Foreign Language Annals*, 25(4): 317–333. <https://doi.org/10.1111/j.1944-9720.1992.tb00552.x>
- [15] Giroux HA, 2002, *Breaking into the Movies: Film and the Culture of Politics*. Blackwell, Malden.
- [16] Inage I, Lawn E, Lawn M, 2013, An Analysis of Student Motivation in an ESL Classroom by using a Movie and Reader’s Theatre Styled Assignments: Based on Student Feedback. *Bulletin of Faculty of*

Education, Nagasaki University: Curriculum and Teaching, 53: 61–63.

- [17] Brown D, 2001, *Teaching by Principles: An Interactive Approach to Language Pedagogy*. Longman, New York City.
- [18] Garza T, 1991. Evaluating the Use of Captioned Video Materials in Advanced Foreign Language Learning. *Foreign Language Annals*, 24(3): 239–258. <https://doi.org/10.1111/j.1944-9720.1991.tb00469.x>
- [19] Lonergan J, 1995, *Video in Language Teaching*. Cambridge University Press, New York City.
- [20] Stempleski S, Tomalin B, 1990, *Video in Action*, Prentice Hall, Englewood Cliffs.
- [21] Voller P, Widdows S, 1993, Feature Films as Text: A Framework for Classroom Use. *ELT Journal*, 47(4): 342–353.
- [22] Honebein PC, (eds) 1996, Seven Goals for the Design of Constructivist Learning Environments. In *Constructivist Learning Environments: Case Studies in Instructional Design*, Educational Technology, Englewood Cliffs, 11–24.
- [23] Kim H-J, 2018, Using Animation for Effective Grammar-focused Learning: With Reference to a Situation-based Approach using Context. *STEM Journal*, 19(1): 21–41. <https://doi.org/10.16875/stem.2018.19.21>
- [24] Rho Y-A, 2018, A Study on the Characteristics of Vocabulary Types in the Movie *The Holiday*. *STEM Journal*, 19(1): 43–64. <https://doi.org/10.16875/stem.2018.19.1.43>
- [25] Ryu D, 2019, A Study Suggesting an Effective Way to Teach Multi-word Units Through Movies: With Reference to *Now You See Me 2*. *STEM Journal*, 20(1): 23–44. <https://doi.org/10.16875/stem.2019.20.1.23>
- [26] Seo J-Y, 2014, Routines Revisited: Based on the American TV Drama, *Desperate Housewives*. *STEM Journal*, 15(1): 83–104. <https://doi.org/10.16875/stem.2014.15.1.83>
- [27] Im M, 2017, A Study on the Feasibility of Applying Noticing Activities in the EFL Classroom: With Reference to the American TV Sitcom *The Office*. *STEM Journal*, 18(1): 65–83. <https://doi.org/10.16875/stem.2017.18.1.65>
- [28] Lee J-H, 2019, Suggestions for Transmedia-based Classroom Activities: Using *Harry Potter and the Sorcerer’s Stone*. *STEM Journal*, 20(3): 91–114. <https://doi.org/10.16875/stem.2019.20.3.91>
- [29] Kim D, 2019b, Teaching English Through the Analysis of the Movie *The Proposal*. *Teacher Education Research*, 58(2): 171–182. <https://doi.org/10.15812/ter.58.2.201906.171>
- [30] Lee S, Cho G, 2019, The Effects of Creativity Enhancement Program using Movies on Everyday Creativity of College Students. *The Journal of Yeolin Education*, 27(4): 25–50. <https://doi.org/10.18230/tjye.2019.27.4.25>
- [31] Park J-E, 2011, Using Movies in University-level Liberal English Education. *Studies in English Language & Literature*, 37(2): 225–247. <https://doi.org/10.21559/aellk.2011.37.2.012>
- [32] Lee YJ, Lee J, 2012, Why Movies? Revisiting the Policy of Supporting General English Education: Using *Good Will Hunting*. *STEM Journal*, 13(3): 89–103. <https://doi.org/10.16875/stem.2012.13.3.89>
- [33] Park H, Jeon H, 2019, An Empirical Approach to the Study of the Pragmatic Competence Through Movies. *Journal of Learner-Centered Curriculum and Instruction*, 19(12): 1111–1133. <https://doi.org/10.22251/jlcci.2019.19.12.1111>
- [34] Ok J-S, 2012, An Effective Screen English Teaching Model: With an Emphasis on Teaching English Pronunciations and American Cultures in *Prime Love*. *STEM Journal*, 13(1): 105–127.

<https://doi.org/10.16875/stem.2012.13.1.105>

- [35] Joe J-O, 2017, A Study on an Approach to Communicative English Grammar Instruction using Movies. *Korean Journal of General Education*, 11(2): 689–714.
- [36] Kim H, 2007, Exploring the Effects of Family Background, School Education, and Private Tutoring on High School Students' Achievement in Korea. *The Journal of Educational Administration*, 25(4): 485–508.
- [37] Lord P, Miller C, (Directors), 2009, *Cloudy with a chance of meatballs* [Motion picture]. Sony Pictures Animation, United States.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Appendix

The purpose of this questionnaire is to assess the “Movie English for Speaking” course you took this semester. The questionnaire takes approximately 10 minutes to complete. Please take a few moments to reflect on each question and answer as honestly as possible. Your answers will remain confidential and will only be used to identify ways to improve this course in the future.

1. Gender: Female Male
2. What year are you in? Freshman Sophomore
 Junior Senior
3. Choose the major in which you are currently enrolled.
 Humanities (language, literature, social studies, law, education, business)
 Engineering (computer science, physics, mathematics, architecture)
 Arts and Sports
4. Have you ever taken the TOEIC speaking test before? Yes (score:) No
5. How much do you need English-language education?
Not necessary Very much
① ② ③ ④ ⑤
6. Do you study English outside of class? No Yes
7. On a scale from 1 to 5, please provide your opinion on the usefulness of the teaching methods and activities used in the “Movie English for Speaking” class.

Items	Not helpful					Very helpful				
	1	2	3	4	5	1	2	3	4	5
Vocabulary worksheet including Quizlet										
Grammar explanation										
Speaking activity, reading aloud										
Cultural elements										
Language play and puns										
Movie background										

8. Please rate how strongly you agree or disagree with each of the following statements.

Items	Strongly disagree					Strongly agree				
	1	2	3	4	5	1	2	3	4	5
This course helped me learn English.										
I think I know which expression to choose.										
I know how to study English.										
This course made me interested in learning English.										
Overall, I was satisfied with this class.										
I feel very confident about using movies to learn English.										

9. Please write any additional comments in the space below.

Appendix 1. Questionnaire #1

1. On a scale from 1 to 5, please provide your opinion on the importance of instructional design elements of online lectures.

	Not important			Very important	
	1	2	3	4	5
Incorporating real-life situations					
Lesson summary					
Background music					
Teaching digital skills					
Subtitles					
Review Quiz					

2. Please rate how strongly you agree or disagree with each of the following statements.

(1) When I watch videos, I pay attention to them and watch them all at once without pausing.

Strongly disagree Strongly agree

① ② ③ ④ ⑤

(2) I take notes while watching videos.

Strongly disagree Strongly agree

① ② ③ ④ ⑤

(3) I work as hard as possible to complete assignments and quizzes related to the videos.

Strongly disagree Strongly agree

① ② ③ ④ ⑤

3. Please write any additional comments in the space below

Appendix 2. Questionnaire #2