

Autonomy of Undergraduate Students in an Asynchronous EFL Program in Korea

Inyoung Shin*

Namseoul University

Junghee Hwang

Pyeongtaek University

Shin, Inyoung & Hwang, Junghee. (2016). Autonomy of undergraduate students in an asynchronous EFL program in Korea. *Modern English Education*, 17(4), 263-287.

Autonomy is considered one of the most crucial elements for learners' academic success in asynchronous online programs. This study aimed to examine necessary attributes of autonomy and to measure students' autonomy levels depending on those attributes. Additionally, it attempted to investigate the relationship between autonomy levels and academic performance in an online English class at a university in Korea. To this end, students' self-reporting on necessary autonomous behaviors in their situated context, a questionnaire, semi-structured interviews, and a pre-test and post-test of English proficiency were used as research tools. It was found that 5 attributes of autonomy—extrinsic motivation (EM), intrinsic motivation (IM), learning strategies (LS), time and environment management (TM), and self regulation (SR)—were the major constructs of autonomy reported by the students in the online class. Participants had a moderate level of autonomy on average ($M = 3.54$). Among these variables students showed the highest EM ($M = 3.97$), but were less concerned with LS ($M = 3.39$) and IM ($M = 2.96$). Pearson's correlational coefficients ($r = .471, p < .01$) indicated a positive and statistically valid relationship between autonomy and academic performance. In particular, their LS demonstrated the highest relationship with their performance despite students' low levels of LS. EM showed a fairly strong relationship with performance while SR and TM had moderately strong relationships.

[autonomy/online program/academic performance/
/ /]

* First author: Inyoung Shin, Corresponding author: Junghee Hwang

I. INTRODUCTION

Recently, the demand for and interest in web-based online education (e-learning) has rapidly expanded among students and English teaching practitioners worldwide due to the unprecedented development of information communication technology (ICT) and Internet network systems (Capper, 2001; J. Y. Kim, 2008). With the help of such technologies, online learning, which usually refers to a mode of delivering course materials such as lecture videos, notes, and resources to the learners by utilizing ICT, has now become an important instructional approach (Cigdem & Ozturk, 2016). The environment of teaching and learning in Korea is not an exception. Highlighting that ICT can provide various teaching-learning materials and real-life experience, the Korean Ministry of Education encouraged educational institutions to use ICT through their “Education Master Plan and the Promotion Plan for using ICT in Schools” (Korean Ministry of Education, 2004). Along with support from the government for the ICT-integrated learning system, an increasing number of Korean universities have provided online courses. Around 90% of general universities as well as 21 cyber universities have offered online programs to complement or support offline programs (J. Lee, J. Kim, & S. Cho, 2010). The success and increasing number of online programs offered by universities in Korea have changed the preferences and attitudes of students towards online learning enormously, and more and more students and lecturers are keen on sharing diverse information and knowledge online.

Online education appears to have several advantages over conventional classroom instruction. Learners may access information and lectures they want to take at any time and place (Capper, 2001), which is the main reason why numerous university students in Korea choose online based lectures. In particular, universities have tended to offer online programs for English subjects. This is firstly because most university students are required to take English courses as one of the liberal arts programs, and online classes are more economical requiring fewer classrooms and English lecturers than offline classes (J. Lee et al., 2010). Secondly, online classes can easily facilitate multimedia techniques needed for English courses such as video clips and sound systems. Lastly, online courses can connect learners with the culture of English speaking countries or real-life English use situations by using ICT (J. Y. Kim, 2008). Thanks to recent prominent technological innovation, online English programs have suffered from fewer technical difficulties.

Despite the benefits and popularity of online classes, however, several concerns toward online programs are recognized. First, the satisfaction level of participantstends to be low compared to offline classes (J. J. Lee & M. S. Park, 2012), as some research reports that the rate of students who dropped out of online programs is high (Bouhnik & Marcus, 2006; Liaw, 2008). Another concern is that the learning experience in e-learning contexts may not be rich, and the learning process may not be efficient compared to traditional classrooms

(Mansour & Mupinga, 2007), as the interaction, especially the crucial relationship between students and instructor (Hurd, 2006), is minimized in online instruction.

In this regard, one factor considered key to shaping the effectiveness of online learning environments is a decent level of learners' self-directed learning or autonomy (Hashemian & Soureshjani, 2011; Vanijdee, 2003). It is frequently suggested that autonomy is more critical for effective learning when e-learning is the main instructional method than in traditional classrooms (White, 2003). Moreover, in this rapidly changing society, "the goal of education should be letting learners to be more autonomous in their learning to survive" (S. S. Kim, 2004, p.21). Autonomy is directly related to learners' abilities and attitudes in online environments, as the lack of interpersonal interaction puts a high responsibility on the students.

Learner autonomy generally refers to "the ability to take charge of one's own learning" (Holec, 1981, p. 3). However, the term "autonomy" is questionable because it is a multidimensional construct, including many different features which are highly context-specific (Benson, 2011). Autonomy has been defined by language teaching practitioners in different ways (Benson, 2011; Dickinson, 1987; Holec, 1981; Little, 1991; Tassinari, 2012). Therefore, it is necessary to elucidate the meaning and attributes of autonomy in a specific learning context and to discuss how autonomy is realized in the particular educational context. Another question is related to learner autonomy as a factor influencing academic performance in online learning contexts. A number of studies have found the positive results of online types of learning (B. C. Lee, J. O. Yoon, & I. Lee, 2009), and learner autonomy seems to be regarded as an important factor in determining the academic success of individuals (Cobb, 2003). Although the positive relationship between learner autonomy and academic performance has been empirically established in traditional settings by a number of studies (Cobb, 2003; K. Kim, 2013; B. C. Lee et al., 2009), few studies to date have addressed the dynamics between autonomy and academic performance in the online English learning context of higher education.

Therefore, the current study firstly aims to investigate the concept and attributes of autonomy which are particularly needed for learners to study effectively in an asynchronous EFL class at a university in Korea by analyzing participants' perceptions on autonomous behaviors in their situated context. This research secondly attempts to measure participants' autonomy levels as classified by the aforementioned attributes. This is because, despite difficulties in measuring learner autonomy (Benson, 2011), "an assessment of the learner's disposition for and capacities of learner autonomy" is the starting point of autonomous learning processes and research (Sheerin, 1997 as cited in Tassinari, 2012, p. 26). Lastly, this study examines the relationships between the learners' autonomy and academic performance in an online EFL context at a university in Korea. This will guide teachers to evaluate roles of each attribute of autonomy on second language

(L2) learners' academic success in online English education. Research questions for this study are as follows:

- 1) What attributes of autonomy are perceived by students to be required for online English classes at a university in Korea?
- 2) What are participants' levels of autonomy as classified by the 5 attributes—EM, IM, LS, TM, and SR?
- 3) How do the subjects' autonomy levels relate to and affect on academic performance?

II. LITERATURE REVIEW

1. Defining Learner Autonomy

Over the past 30 years, learner autonomy has gained importance in the field of language education. However, various researchers have defined the term in different ways and autonomy is not “a single easily describable behavior” (Little, 1990, p. 7). This often leads to conceptual confusion. After defining autonomy as “the capacity to take charge of one’s own learning” (Holec, 1981, p. 3), Holec described “taking charge” as having the responsibility for making decisions concerning all the learning processes. This definition implies that the autonomous learner is able to direct his or her own learning by making all the significant decisions. Little (1991) provided a similar definition of autonomy to Holec’s with regard to emphasizing an individual capacity. Little described autonomy as “a capacity for detachment, critical reflection, decision-making, and independent action. It presupposes, but also entails, that the learner will develop a particular kind of psychological relation to the process of and content of his learning.” (Little, 1991, p. 4). In this definition, autonomy is seen more in terms of cognitive processes involved in effective learning, and this element was absent in Holec’s definition. More recently, Little (2007) refined the concept and characterized it as “the product of an interactive process in which the teacher gradually enlarges the scope of her learners’ autonomy by gradually allowing them more control of the process and content of their learning” (p. 3). Benson (2001) offered another perspective of learner autonomy: “the capacity to take control of one’s learning” (p. 50) and argued that three stages—learning management, learning content, and cognitive processes—may be needed for ‘learner control’ to be exercised. Benson’s argument applies to the context of this study since students are expected to obtain a greater degree of control over their learning in the online course, and should be able to reflect on the value of their activities. Thus, in the present study, learner autonomy is defined as a capacity which enables learners to take responsibility and control of their learning in the

online educational system.

Another issue regarding autonomy is that the concept of autonomy is often discussed as an overlapping construct with that of self-directed learning and self-regulated learning. According to Dickinson (1978), autonomy means the upper limit of self-directed learning measured on an abstract scale. This implies that learners expand the ability to take charge of their own learning when they take full responsibility for the learning process, accepting that successful learning depends crucially on themselves, rather than on others. In this sense, as Benson (2011) claimed, autonomy can be a natural product of the practice of self-directed learning. Autonomy in language learning is also discussed under the label of “self-regulation.” Boekaerts, Pintrich, and Zeidner (2000) viewed self-regulation as a broad term referring to “an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment” (p. 453).

Apart from the various perspectives, a further issue with the concept of learner autonomy is in identifying its attributes, as autonomy “can manifest itself in very different ways” (Little, 1991, p. 4) depending on contexts. As indicated in its definitions, autonomy is considered an umbrella term consisting of a number of learning attributes. For instance, Holec (1981) argued that having a positive attitude, setting objectives, planning for learning, making decisions on the content, evaluation of learning, and making use of affective and metacognitive strategies were prerequisites for being an autonomous learner. Sinclair and Thang (2009), in identifying features of an autonomous learner, emphasized specific learner’s metacognitive knowledge, which includes knowledge regarding one’s self as a learner, the subject matter, one’s learning context, and the processes of learning. They also added taking responsibility for one’s learning and actively searching for new knowledge to the list of qualities of an autonomous learner.

A few researchers tried to capture attributes of autonomy by focusing on the context of online learning. Benson (1997 as cited in S. S. Kim, 2004, p. 24) divided autonomy into three versions of attributes in online language learning: “technical version” indicates skills and techniques to manage online educational situations; “psychological version” includes a capacity to take responsibility for learning; and “political version” means attitudes of control over learning content and processes. Considering the unique context of blended e-learning, Lynch and Dembo (2004) included some specifically relevant characteristics of autonomy: motivation, Internet self-efficacy, time management, study environment management, and learning assistance management. Vanijdee (2003) suggested eight qualities of learner autonomy for Thai distance English learners: language learning strategy use, awareness of learning process, seeking exposure to English, opinions on learning English on one’s own, interaction with self-instructional materials, distance learning,

problem solving, and tutorials.

As summarized here, there are various attributes that contribute to learner autonomy. Indeed, autonomy is a multidimensional construct. However, what should be noted is that autonomy is not an “all-or-nothing concept” but a matter of degree (Nunan, 1997, p. 92). Also, the construct of autonomy is highly contextually relevant (Benson, 2011). Taking these viewpoints, the construct of autonomy in this study will be understood as a composite of many other attributes, with which learners may seek different features of autonomy in their situated contexts.

2. Studies on Learner Autonomy

Several studies have investigated learners’ characteristics or attributes of autonomy in online learning and reported that certain autonomous attitudes and characteristics of learners play an important role in deciding learners’ academic success. Oxford, Y. Park-Oh, Ito, and Sumrall (1993) conducted a study on 107 high school students who were learning Japanese as a foreign language through the medium of satellite television. The researchers investigated factors influencing students’ academic performance, and found that motivation was the best predictor of student achievement in learning the Japanese language. They also claimed that the use of language learning strategies was a significant factor influencing language achievement. As significant determiners of achievement in online education formats, Hardy and Boaz (1997) included attention, time management skills, discipline, and ability to work independently and with group members to the learners’ characteristics. Stoney and Oliver’s (1999) study on 121 students in online master’s programs at two different universities reported that the abilities to organize time and work space, follow-up on suggested readings, and schedule time for coursework are strong predictors of success in learning. Moreover, Stewart (2007) argued that high self-management skills in self-regulated learning were the most important element predicting positive learning outcomes.

A longitudinal study by Hurd (2006) included personality, motivation, and tutor and student roles as factors in the experience of learners in a distance language course. The study reported that motivation, tutor feedback, and personal responsibility played a crucial role in successful academic performance. It also argued that increased confidence and self-regulation were beneficial outcomes of the process of learning at a distance. Another study conducted by Stone (2000) examined how individual learners assess their confidence in their own learning and how their self-assessment was related to self-regulated learning. According to the study, self-efficacy reflects confidence in one’s ability to complete tasks, influencing the type of goal orientation. In other words, different levels of confidence might suggest different applications of self-regulated learning, or different phases in task

completion or learning. A positive concept, specifically high self-efficacy, should invoke more self-regulation. Learners who are confident can learn the material and are more likely to implement self-regulated learning strategies. These might also result in higher academic achievement.

Hashemian and Soureshjani (2011) conducted a study to see whether autonomy, motivation, and academic performance are interrelated. Collecting data from 60 L2 learners of English at an Iranian university, the study revealed positive significant relationships between autonomy and GPA, and between motivation and GPA. As to the relationship between motivation and autonomy, on the contrary, no significant relationship was observed. Based upon the findings, they concluded that among the variables affecting language learning, motivation and autonomy play salient roles.

Although the previous studies suggested that learner autonomy is an important indicator anticipating effective e-learning, several scholars claimed that autonomous learning may be culturally conditioned. For example, Cao (2011) stated that, in eastern cultures which do not value independence, autonomous learning may not be compatible, and students might not be ready to exercise autonomy and take responsibility for their learning. On the other hand, Littlewood (1999) argued that L2 learners in East Asia tend to have a high level of reactive autonomy with innate effort and high motivation to achieve learning goals and tend to accept directions provided by authority or teachers, rather than individual proactive autonomy. These studies clearly imply that what is prevalent in one context might be considerably different in different settings.

So far, a limited number of studies have been conducted on autonomous learning in the EFL context in Korea. In one recent study, Y. A. Cho and J. H. Ma (2015) reported the positive relationships among self-directed learning, learning strategies and English proficiency in a traditional English class in Korea. The field of inquiry can hardly be said to be exhausted, however. The dynamics of students' autonomy in learning English in a Korean online context remains to be investigated. This study thus aims to look for required attributes of autonomy and to examine the relationship between autonomy and academic performance in an online EFL class at a university in Korea.

III. METHOD

1. Setting: An Online English Program at a University in Korea

The study was conducted in a 2 credit asynchronous TOEIC class as an elective course of liberal arts programs over a semester at S University located in Cheonan, Korea. The university has offered several online English classes for more than a decade, including

TOEIC, grammar, writing, conversation, vocabulary, business English and so on. One of the researchers of the present study is the instructor for the TOEIC class. The online class has 28 units to instruct TOEIC listening comprehension (LC) and reading comprehension (RC) skills, and each unit consists of opening quizzes, a lecture of about 30 minutes, and closing quizzes. Students are expected to take two units a week. In the context of this study, while the mean drop rate of online English classes was significantly higher (6.82%) than offline English classes (3%) in 2012-2013, the mean drop rate appeared to be similar both for online classes (4.38%) and offline classes (4.76%) in 2014-2015. This seems to indicate that as time goes by students have become used to the online educational system. Nonetheless, students' evaluation for online classes has been consistently lower than that of offline courses throughout the period. This signals that students' satisfaction levels with online courses are much lower than with offline programs.

2. Participants

The total number of students in the online TOEIC class was 296, and their majors and school years varied. At the beginning of the semester, all students were requested to take the online pre-test, including 30 TOEIC RC questions in order to gauge students' English proficiency. Only RC abilities were measured for the pre-test because letting them take the RC test was logistically simple in the distance context. After void data were eliminated, 51 students who acquired similar RC scores, namely around 70% scores, on the pre-test were chosen as the questionnaire participants of the present study. This is because those students with upper middle level RC proficiency among the whole students in the online class were expected to take part in the program earnestly. Students with higher than 80% scores on the pre-test were excluded for the questionnaire because they had already acquired high TOEIC RC skills, and were expected not to be fully engaged in the class. The demographic data of selected questionnaire participants are shown in Table 1.

TABLE 1
Demographic Data of Questionnaire Participants ($n = 51$)

Characteristics	<i>n</i>	%	
School Year	Year 1	2	4.4
	Year 2	3	6.7
	Year 3	14	31
	Year 4	26	58
Sex	Male	14	31
	Female	31	69
Major	Humanities and Social Science	6	13
	Engineering	10	22
	Health and Medicine	4	8.9
	Design and Sports	2	4.4
	Business Management	23	51

Among the survey participants, three students with high autonomy levels and another three students with low autonomy levels in the autonomy questionnaire were randomly selected and interviewed for the qualitative research. The profiles of those six students are shown in Table 2.

TABLE 2
Profiles of Interviewed Participants ($n = 6$)

Name*	Year	Sex	Major	Autonomy	Level
Yoonho	2	M	English	High	4.08
Kogun	4	M	Management	High	3.75
Seunghye	4	M	English	High	3.74
Junga	1	F	Dental Hygiene	Low	2.98
Minsuk	2	M	Architecture	Low	2.84
Minhee	1	F	Information Communication Technology	Low	3.29

* Pseudonyms are used.

3. Instruments

In this study, students' self-reporting of necessary autonomous behaviors in their situated context, a questionnaire, semi-structured interviews, and a pre-test and post-test of English proficiency were used as research tools. While autonomy is considered crucial for learners of asynchronous programs, measurement of their autonomy levels is challenging (Benson, 2011). This is because "the complexity of the construct of autonomy is generally understood as a composite of many other constructs" (Benson, 2011, p. 65) and different aspects of autonomous attributes are required depending on learning contexts. Therefore, the researchers attempted to develop a questionnaire to measure autonomy by analyzing students' self-reporting of appropriate autonomous approaches shared by students themselves in the open-discussion section. Firstly, all students of the program were encouraged to be aware of and to voluntarily write down their learning approaches or strategies for taking the online program in the discussion section on the course web site over the semester. The open discussion section has an introductory remark to the effect that online classes, unlike offline classes, require self-controlled and autonomous learning skills. It then recommends that students report and share their own autonomous learning approaches they have acquired or used to take the online class effectively. The open discussion seemed to lead students to reflect on their own learning behaviors, develop autonomy, and share useful tips while discussing desirable autonomous attitudes. More than 100 students actively reported their tips or strategies on being self-directed during the program. Then their descriptions of autonomous learning approaches were carefully analyzed and repetitive statements were deleted. The emerging significant descriptions on autonomous behaviors were used to design a questionnaire for measuring participants'

autonomy levels. Twenty-six distinctive learning approaches related to autonomy were itemized to formulate the autonomy questionnaire on a five point Likert scale (see Appendix).

The 26 items in the questionnaire were independently examined and discussed by the researchers with reference to relevant existing literature (Hurd, 2006; S. S. Kim, 2004; Lynch & Dembo, 2004; Vanijdee, 2003; White, 1995), grouped with closely related items, and divided into 5 attributes of autonomy: intrinsic motivation (IM), extrinsic motivation (EM), time and environment management (TM), self-regulation (SR), and learning strategy (LS). The two attributes, IM and EM, are concerned with motivation for learning. The most basic distinction of motivation is between intrinsic motivation and extrinsic motivation (Ryan & Deci, 2000). Intrinsic motivation refers to studying a subject because it is inherently interesting or enjoyable (e.g., “I enjoy looking for information on new expressions, vocabularies, and grammar by myself” in the questionnaire) while extrinsic motivation refers to doing an activity because it leads to a separable outcome (e.g., “I take the course to reach my target TOEIC score” in the questionnaire). Research on motivation has shown that academic performance can be different when a student learns for intrinsic or extrinsic reasons (Ryan & Deci, 2000). In this light, the current research attempted to follow the distinction of intrinsic and extrinsic motivation. TM is the learner’s ability to manage demands of the learning time and study setting to take online courses (e.g., “I do not tightly assign my time to take online lectures” in the questionnaire). SR is related to the learner’s ability to control and regulate themselves to fulfill academic tasks of online lectures (e.g., “I steadily take two units of lectures a week” in the questionnaire). Finally, LS refers to the learner’s ability to enhance learning efficiency by using study tactics or to seek learning assistance when necessary in the appropriate manner through proper channels (Lynch & Demo, 2004) (e.g., “While online lectures, I take a note on a memo pad or notebook” in the questionnaire).

It is important to note, however, that the items on the questionnaire produced for this study are thus rooted in students’ own perceptions and awareness of autonomous learning which grew from their experiences taking the online programs in the situated context. This procedure of using learners’ views as the basis of studying their autonomy is justified by Nielsen’s (1990) position that “to explain and understand any human social behavior... we need to know the meaning attached to it by the participants themselves” (p. 7, as cited in Leki & Carson, 1997, p. 43). As Benson (2011) states, “Learners may call upon different aspects of autonomy as different situations demand them” (p. 66). As a result, the investigation of participants’ subjective perceptions is an important prerequisite for understanding their concerns and attitudes in the context (Christison & Krahnke, 1986).

On the basis of the questionnaire, questions for the semi-structured interview were also developed to triangulate the questionnaire data. The semi-structured interview allowed for

spontaneous and flexible descriptions of interviewees' learning experiences and perceptions of their approaches and attitudes (Mynard, 2006), their own strategies to manage dilemmas without direct interventions from teachers or other students, and ways to control or be responsible for their own learning in the online course. In addition, to compare students' English proficiency before and after taking the online course over a semester, a pre-test and a post-test each consisting of 30 TOEIC RC questions were used.

4. Procedures and Data Analysis

In the beginning week of the program, the pre-test was taken online by all students so that the researchers would be able to select participants with similar English proficiency. Fifty-one students (Table 1) with similar scores on the pre-test were chosen for the follow-up study. Also, from the second week to the 14th week of the program,¹ all students were encouraged to specify and share autonomous learning behaviors or tips in the online open discussion section throughout the semester. The tips and strategies considered by students to be necessary for the online class were analyzed. Based upon the analyzed data, a questionnaire including 26 items was made to examine learner autonomy levels (Appendix). In the final exam week of the semester, the participants were requested to fill in the questionnaire for measuring the degrees of their autonomy in taking the online course. Individual participants were asked to tick the appropriate boxes describing their learning behaviors appropriately according to a five point Likert scale on the questionnaire. Upon filling in the questionnaire, the participants took the post-test for gauging their academic performance.

With reference to existing literature, the researchers grouped and divided the 26 items in the questionnaire into 5 attributes of autonomy—IM, EM, TM, SR, and LS. By using the IBM Statistical Package for the Social Sciences (SPSS) V22 program, the factor analysis and reliability test were conducted to test validity and reliability of the questionnaire data. Statistically invalid and unreliable items on the questionnaire were deleted, and the original 26 autonomy items in the questionnaire were reduced to 18 items ($1.738 < \text{Eigen value} < 2.313$, $0.635 < \text{Cronbach } \alpha < 0.849$) including 3 for IM, 3 for EM, 4 for TM, 3 for SR, and 5 for LS (Table 4). The questionnaire data with only 18 items were analyzed depending on the 5 attributes of autonomy by using descriptive statistics (Table 3). In addition, Pearson's product moment correlation analysis was carried out by using the SPSS to analyze the relationships between the participants' autonomy levels and academic performance on the post-test. Simple regression analysis was also conducted to examine causes and effects between the variables.

¹ The semester consists of 15 weeks at the university.

Furthermore, among the questionnaire respondents, 6 students (Table 2) showing high autonomy levels (> 3.74) and low autonomy levels (< 3.29) were selected for semi-structured interviews. Right after finishing the semester, the researcher contacted each interviewee. The interviews were conducted for about 30-40 minutes with each interviewee by recording their voices to examine their actual experiences of activating autonomous learning during the online English course. The comments of interview participants were translated and transcribed into English while the researchers cross-checked the meanings of the comments.

IV. RESULTS AND DISCUSSION

1. Attributes of Autonomy From Students' Self-reports

First of all, the questionnaire items based upon students' self-reports were categorized into five main attributes with reference to previous literature (e.g., Hurd, 2006; S. S. Kim, 2004; Lynch & Dembo, 2004; Vanijdee, 2003; White, 1995). The five attributes of autonomy perceived to be required for online English courses are: extrinsic motivation (EM), intrinsic motivation (IM), learning strategies (LS), time and environment management (TM), and self-regulation (SR). The 5 attributes were considered elements encompassing learners' autonomous learning in the distance educational setting.

The attributes found in this study are mostly related to the psychological version of autonomy in Benson (1997, as cited in S. S. Kim, 2004, p. 24), and less connected with technical and political versions. This is possibly because students are rarely concerned about learning skills or computer techniques via online classes in technologically well-developed countries such as Korea. Also, they would not likely consider taking control of the learning processes or contents with a political view crucial for their academic achievement in the online institutional system, where learners were merely expected to make decisions relevant to implementation. Self-efficacy for learning and performance, which is included as an autonomy attribute in Lynch and Dembo (2004) and Zhang, Li, Duan, and Wu (2001), was excluded in this study, because self-efficacy may be considered an outcome after experiencing other autonomous attributes.

TABLE 3
Mean Values of Autonomy Items ($n = 51$)

Attribute	Autonomy Item	<i>M</i>	<i>SD</i>
IM	(IM1) I enjoy looking for information on new expressions, vocabularies, and grammar by myself.	3.29	0.86
	(IM3) I enjoy studying on my own.	3.18	0.95
	(IM5) I am happy to have exams and assignments.	2.41	1.04
	Total	2.96	0.74
EM	(EM7) I am motivated to study until the last day of exams.	3.57	0.90
	(EM10) I take the course in aiming to get a good grade.	4.18	0.91
	(EM11) I take the course to reach my target TOEIC score.	4.13	0.94
	Total	3.97	0.79
TM	(T2) I manage my study time well.	2.98	1.10
	(T6) I plan my study time effectively.	3.36	1.03
	(T25) I do not tightly assign my time to take online lectures.	3.82	0.96
	(T26) During online lectures, I do not open other windows on my computer.	4.09	0.95
	Total	3.52	0.75
SR	(R17) I am responsible for my learning experience.	3.78	0.85
	(R12) I steadily take two units of lectures a week.	4.20	0.79
	(R15) I concentrate on online lectures just as I take offline lectures.	3.53	0.76
	Total	3.87	0.61
LS	(S17) While online lectures, I take a note on a memo pad or notebook.	3.51	0.94
	(S19) I solve exercises on my own before listening to tips of solving the exercises through the lecture.	3.47	0.99
	(S20) I always listen to class aims, opening quizzes, closing quizzes, and summary of every unit of lectures.	3.47	0.99
	(S23) I ask questions about what I do not understand through the question-and-answer session.	3.07	1.01
	(S24) I memorize new words or expressions and practice how to use those words or expressions.	3.51	0.89
	Total	3.39	0.65
Grand Total		3.54	0.55

TABLE 4
Results of Factor Analysis and Reliability Test for Autonomy Items ($n = 51$)

Attribute	Autonomy Item	Factor Loading	Communality	Eigen value	R^2	Cronbach α
IM	IM1	.827	.684	1.845	61.491	.849
	IM3	.784	.547			
	IM5	.740	.614			
EM	EM11	.900	.810	2.306	76.859	.680
	EM10	.893	.798			
	EM7	.835	.698			
TM	T6	.835	.697	2.175	54.369	.717
	T2	.821	.673			
	T25	.669	.448			
	T26	.598	.357			
SR	R12	.790	.624	1.738	57.919	.635
	R8	.785	.615			
	R15	.706	.498			
LS	S20	.780	.609	2.313	46.268	.705
	S19	.757	.573			
	S24	.644	.414			
	S17	.637	.406			
	S23	.558	.311			

2. Autonomy Levels of Students

To examine learners' autonomy levels, distribution of the questionnaire data was analyzed. Table 3 gives the means and standard deviations for five attributes of autonomy and question items for each attribute.

Overall, results reveal that students had a moderate level of autonomy on average ($M = 3.54$). The range of the means for autonomy levels by attribute is from 2.96 to 3.97. Students showed the highest mean value of autonomy for extrinsic motivation (EM) (3.97). They are also highly autonomous in SR (3.87) and TM (3.52), and indicated rather low autonomy in LS (3.39) and IM (2.96). These results imply that students were moderately autonomous during their online learning course. However, their autonomy may come externally rather than internally, as the levels of extrinsic motivation and of self-regulation among students are higher than those of other autonomous attributes.

The reason why EM is the outstanding attribute of autonomy among the five attributes seems to be related to the nature of the TOEIC class. To wit, students are highly motivated to acquire high grades in the course and high TOEIC scores. As the participants were mostly seniors (58%) at the university, their goals in taking the course is achieving a good grade or a high TOEIC score, which are valuable in searching for a job. They may thus have taken the course because of social pressure, rather than their own inner satisfaction or intrinsic motivation to study English. Participants seem to rarely enjoy taking the TOEIC

class, as indicated by the quite low IM level, which may not be desirable for learning English. Moreover, students were less seriously concerned with LS which might actually heighten their English proficiency and TOEIC scores. They appeared to maintain self-regulated behaviors (SR) and control study time and environment (TM) relatively well when they took the online course.

To triangulate the questionnaire responses, semi-structured interviews were administered to three students with a high autonomy value and another three with a low autonomy value from the online class. Interview results from the two groups contrasted with each other, mirroring their autonomy levels. For instance, Yoonho who had a high autonomy value said "I took the course to get a high TOEIC score and to have a systematic idea about TOEIC... I think if I work hard for the course a high grade will just follow." This reveals that the student has a clear goal and reason for taking the course, which is related to EM. Kogun is a senior at the university with a high autonomy value who had high EM, saying that he took the TOEIC class to have a high score, which is needed to get a job.

In addition, students with high autonomy levels reflected their high learning strategies (LS) in their responses. For example, Kogun was well aware of the limitations of learning efficiency in online classes and developed his LS to take the online class, as follows:

It is difficult to communicate with the instructor and to get the points of lectures, so I study the textbook before taking the online course. That is, taking the online lecture is just a reviewing process of the contents of the course for me... If I don't understand the contents of the online lecture, I stop the lecture and repeat it or look up the textbook or other references. (Kogun)

Yoonho was used to the online class format and was well-aware of aims and features of the course. Also, on the basis of his previous experience of taking online courses, he understood the structure and importance of dialog with other participants online, which led him to set numerous useful strategies of learning for himself, saying that:

The online class does not focus on hands-on practical skills. So I don't think there are big differences between online and offline TOEIC classes. If I learn the same subject, online courses will be more effective than off-line courses... I am used to listening to EBS lectures from my high school... If I have questions about the content, I upload my questions on the online chatting room. (Yoonho)

Seunghye, who had a high autonomy level, demonstrated his high TM abilities and found the most effective time and space for the online lecture, stating "I do not have any

offline class on Tuesday, but my roommate has. So, for 2 hours from 10 am-12 pm on Tuesday, I take 2 units of the online course of the week alone in the dormitory room... and then solve exercises of the textbook and other supplementary materials after the online course.”

In contrast, students with low autonomy values showed inadequate attitudes toward autonomy. For example, Junga did not have extrinsic motivation to study English in the online course, but just enrolled in the course to avoid commuting difficulties. She stated, “I took the course because of commuting problems. I didn’t want to take the TOEIC class, but there were few options of online courses.” The following excerpt demonstrates that Junga was unable to understand the structure and necessary attitudes for taking the course and to establish her own learning strategies to enhance her knowledge of English. Additionally, she failed to manage class time and to control her behaviors and could not concentrate on the class, while just seeking convenience of the online class.

During the online lecture I feel loose...I don’t use other resources. I just listen to the lecture and rarely study the subject before or after the lecture. I tend to turn on the cyber lecture on the last day of the week after taking other offline lectures, and usually review the content right before the exam. (Junga)

Minsuk, also with a low autonomy level, revealed low TM, commenting “I feel I could always listen to the online lecture in my free time because it is not obligatory to take the class at the exact time. I tend to delay taking it until weekends. I am taking three online lectures now including the TOEIC class, so I am pushed to take all three lectures on weekends.” As a result, he easily lost his interest and focus whenever he listened to the online lectures, and was distracted by other activities with computers such as Internet web surfing or listening to news.

3. The Relationships Between Autonomy and Academic Performance

In order to find out the possible relationship between autonomy and academic performance and to investigate which attributes of autonomy are more relevant to performance, Pearson’s correlational coefficients (r) were run as represented in Table 5. The results showed the statistically valid relationship between the autonomy² and performance (Pearson’s $r = .471, p < .01$). This means that the L2 learners who are more autonomous in English learning in the TOEIC online class can achieve better academic performance in their studies, which matches the results of previous research (Hashemian &

² Autonomy is calculated by using the mean autonomy value of all five attributes.

Soureshjani, 2011; Lynch & Dembo, 2004; Oxford, Park-Oh, Ito, & Sumrall, 1993).

TABLE 5

Pearson's Coefficients (r) between Autonomy and Academic Performance

($n = 51$)	Autonomy	IM	EM	TM	SR	LS	Performance
Autonomy	1	.686**	.784**	.832**	.787**	.790**	.471**
IM	.686**	1	.393**	.553**	.382**	.388**	.242
EM	.784**	.393**	1	.551**	.633**	.519**	.412**
TM	.832**	.553**	.551**	1	.605**	.486**	.315*
SR	.787**	.382**	.633**	.605**	1	.550**	.343*
LS	.790**	.388**	.519**	.486**	.550**	1	.482**
Performance	.471**	.242	.412**	.315*	.343*	.482**	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

TABLE 6

Regression Analysis of Autonomy to Academic Performance

Independent variable	Dependent variable	Normalized coefficient		β	t	p	Statistics
		B	Standard deviation				
Autonomy	constant	9.227	3.333		2.769	.008	$R^2 = .222$, R^2 amended = .206, $F = 13.958$, $p < 0.01$
	performance	3.490	.934	.471	3.736	.000**	
IM	constant	17.604	2.316		7.601	.000	$R^2 = .059$, R^2 amended = .039, $F = 3.051$, $p = 0.087$
	performance	1.326	.759	.242	1.747	.087	
EM	constant	13.120	2.707		4.847	.000	$R^2 = .170$, R^2 amended = .153, $F = 10.032$, $p < 0.01$
	performance	2.116	.668	.412	3.167	.003*	
TM	constant	15.505	2.647		5.858	.000	$R^2 = .099$, R^2 amended = .081, $F = 5.411$, $p < 0.05$
	performance	1.709	.735	.315	2.326	.024*	
SR	constant	12.616	3.524		3.580	.001	$R^2 = .118$, R^2 amended = .100, $F = 6.552$, $p < 0.05$
	performance	2.304	.900	.343	2.560	.014*	
LS	constant	11.285	2.711		4.163	.000	$R^2 = .232$, R^2 amended = .216, $F = 14.796$, $p < 0.01$
	performance	3.024	.786	.482	3.847	.000**	

* $p < .05$, ** $p < .01$

All attributes of autonomy except IM ($r = .242$, $p = .087$) demonstrated significant relationships ($.482 < r < .315$). LS and EM sustained strong relationships with students' performance, while students had the highest level of EM among attributes of autonomy

(Table 3). Students' LS indicated the highest relationship ($r = .482, p < .01$), despite their low LS levels (Table 3). That is to say, although LS is rarely applied by the distance students in taking the class, LS has the most significant relevance to their academic achievement, which agrees with the result of Oxford, Y. Park-Oh, Ito, and Sumrall (1993). SR ($r = 0.343$) and TM ($r = 0.315$) showed moderate relationships with performance, while the autonomy values for SR and TM were high. This indicates that participants were fairly self-disciplined and responsible for their learning, and acknowledged the importance of managing study time and environment in taking online lectures. However, these attitudes were less relevant to academic performance than LS and EM.

In order to examine the cause and effect relationship between attributes of autonomy (independent variable) and academic performance (dependent variable), a simple regression analysis was implemented (Table 6). Autonomy indicated significant effect on academic performance (R square = .222, R square as amended = .206, $F = 13.958$, $B = 9.227$, $t = 2.769$, $p < .01$). Except IM, attributes of autonomy caused positive effects on academic performance and made significant contributions to predicting students' academic performance (Table 5). In particular, LS and EM sustained strong effects on students' performance. Students' LS (R square = .232, R square as amended = .216, $p < .01$) indicated the strongest positive influence on their academic performance, despite their low LS levels (Table 3), indicating the most significant influence on students' academic achievement. This signals the acute necessity of learner training and lecturers' support regarding LS for distance English classes at university sectors in Korea. EM (R square = .170, R square as amended = .153, $p < .01$) had clear influences on acquiring high TOEIC RC skills through online courses, becoming a reasonable predictor of student achievement, while students had the highest level of EM among attributes of autonomy (Table 3). SR and TM contributed less to academic performance than LS and EM. Therefore it is likely that students need to be more cautious of strategic approaches (LS) in taking online classes to boost their learning outcomes.

V. CONCLUSION

The present study attempted to determine major distinctive attributes of autonomy for the online English class at a university in Korea and their impact on learners' success in the online course. The first major finding has to do with autonomous learning behaviors Korean students perceived necessary for successful e-learning: EM, IM, LS, TM, and SR. The second finding is that the participants of the current study had moderate levels of autonomy on average. Their autonomy mostly arises from external pressures as the levels of EM and SR among students are higher than those of other attributes. The final important

finding is that university students' autonomy was significantly associated with and influential in their academic performance. These findings are parallel with the studies by Hashemian and Soureshjani (2011), Lynch and Dembo (2004), and Oxford, Y. Park-Oh, Ito, and Sumrall (1993). This quantitative data analysis was also confirmed by the qualitative results from the interview data. In particular, students' LS was demonstrated to be the best predictor in determining the online academic performance despite their low autonomy value in LS. EM was not only the highest level among attributes of autonomy, but also a reasonable predictor of students' online academic performance.

This study has positive outcomes providing a rich source of information on students' autonomy. It focuses on defining the notion of autonomy in an EFL e-learning context of a Korean university. It also contributes to the understanding of individual learners' autonomy levels and the relation between the autonomy level and their learning performance. Another contribution that can be drawn from the study is that although measuring autonomy by using the questionnaire is considered skeptically by a number of studies (Benson, 2011; Dixon, 2011; Mynard, 2006), this present study challenged to design the autonomy questionnaire as a measurement tool for L2 learners of online EFL classes. Given that the quantitative data regarding learners have the potential to be of value to teachers to better support learners' autonomy (Dixon, 2011), effort in measuring autonomy by using quantitative techniques deserves to be valued.

A few implications of our findings for research and pedagogy can be made. In recognition of the more expanding requirements of online courses in the current era, understanding individuals' autonomy levels and providing appropriate learner training programs to address the necessary self-directed capacity of students is extremely beneficial for effective online language teaching and learning. Therefore, teachers and course designers should consider not only how to help learners gain communicative competence, but also how to facilitate autonomous learning, which will support success in online learning (Andrade & Bunker, 2009). In particular, given that learners' strategy levels have the highest relationship with their achievement, despite their low levels of LS, increasing awareness of LS and providing guided opportunities for using it will help learners gain the confidence necessary to become autonomous learners in remote English learning settings. Furthermore, universities and educational institutions, curriculum and material designers as well as teachers should be aware of the importance of autonomy in heightening learners' academic success and seek ways to provide appropriate support, resources, or learner training programs for students' dynamic and autonomous learning in the distance English learning context (Vanijdee, 2003).

In spite of its implications, this research has some limitations. Firstly, the study was conducted for only a semester at an online TOEIC class. Some further longitudinal research would provide more distinctive results of the features of autonomous learning and

relationships between autonomy and academic performance for students of online English classes. Secondly, the data were collected in one specific online setting at a university with only 51 students, mostly seniors or juniors, with intermediate level English proficiency. Therefore, generalizability of the result to different educational and sociocultural circumstances may be limited, and more studies are thus necessary. Lastly, as the participants had to fill in the questionnaire just before the post-test during the final exam period, they may not have had enough time to concentrate on the questionnaire. This may cause inaccurate replies from participants. As Tassinari (2012) points out, learners might need to be “in a familiar environment to feel more comfortable and to have more time to reflect” (p. 35).

By way of conclusion, given that autonomy is the central element required for learners to meet the varied demands of the e-learning context in the current society, teachers’ continual and proactive efforts to understand the nature of autonomy in language learning and their patience on, awareness of, and belief in learners’ potential to develop autonomous attitudes may be a meaningful challenge toward more responsible, fruitful and promising language learning outcomes in a distance learning context.

REFERENCES

- Andrade, M. S., & Bunker, E. L. (2009). A model for self-regulated distance language learning. *Distance Education, 30*(1), 47-61.
- Benson, P. (1997). The philosophy and politics of learner autonomy. In P. Benson & P. Voller (Eds.), *Autonomy and independence in language learning* (pp. 18-34). London: Addison Wesley Longman.
- Benson, P. (2001). *Teaching and researching autonomy in language learning*. London: Longman.
- Benson, P. (2011). *Teaching and researching autonomy* (2nd ed.). Harlow, the UK: Pearson.
- Boekaerts, M., Pintrich, R., & Zeidner, M. (2000). *Handbook of self-regulation*. San Diego, CA: Academic Press.
- Bouhnik, D., & Marcus, T. (2006). Interaction in distance-learning courses. *Journal of the American Society for Information Science and Technology, 57*(3), 299-305.
- Cao, T. N. (2011). Impacts of socio-culture on the development of autonomous learning: A lens of Vietnamese context. *Journal of Studies in Education, 1*(1), 1-19.
- Capper, J. (2001). E-Learning growth and promise for the developing world. *TechKnowLogia, 2*(2), 7-10.
- Cho, Young-Ah, & Ma, Jee-Hyun. (2015). The relationships between the self-directed

- learning, learning strategies, and English proficiency in L2 learning. *The Linguistic Association of Korea Journal*, 23(3), 49-67.
- Christison, M., & Krahnke, K. (1986). Student perceptions of academic language study. *TESOL Quarterly*, 20(1), 61-79.
- Cigdem, H., & Ozturk, M. (2016). Critical components of online learning readiness and their relationships with learner achievement. *Turkish Online Journal of Distance Education*, 17(2), 98-109.
- Cobb, R. (2003). *The relationship between self-regulated learning behaviors and academic performance in web-based courses*. Unpublished PhD dissertation. Virginia Polytechnic Institute. Retrieved from the World Wide Web: https://theses.lib.vt.edu/theses/available/etd-03212003-130332/unrestricted/srlonline_dissertation.pdf.
- Dickinson, L. (1978). Autonomy, self-directed learning and individualization. In *ELT documents 103: Individualization in language learning* (pp. 7-28). London: The British Council.
- Dickinson, L. (1987). *Self-instruction in language learning*. Cambridge: Cambridge University Press.
- Dixon, D. (2011). *Measuring language learner autonomy in tertiary-level learners of English*. Unpublished Ph.D. thesis, University of Warwick, Coventry. Retrieved from the World Wide Web: <http://wrap.warwick.ac.uk/58287/>.
- Hardy, D. W., & Boaz, M. H. (1997). Learner development: Beyond the technology. In T. E. Cyrs (Ed.), *Teaching and learning at a distance: What it takes to effectively design, deliver, and evaluate programs* (pp. 41-48). San Francisco: Jossey-Bass.
- Hashemian, M., & Soureshjani, K. H. (2011). The interrelationship of autonomy, motivation, and academic performance of Persian L2 learners in distance education contexts. *Theory and Practice in Language Studies*, 1(4), 319-326.
- Holec, H. (1981). *Autonomy and foreign language learning: Council of Europe*. Oxford: Pergamon Press.
- Hurd, S. (2006). Towards a better understanding of the dynamic role of the distance language learner: Learner perceptions of personality, motivation, roles, and approaches. *Distance Education*, 27(3), 303-329.
- Kim, Jeong-Yeol. (2008). *E-Learning and English education*. Seoul: Hankookmunhwasa.
- Kim, Keumsun. (2013). A study on the self-directed classroom learning in the university setting. *Modern Language Education*, 14(2), 189-212.
- Kim, Seong-Shik. (2004). The meaning of autonomy and its implementation in language learning. *Studies in English Education*, 9(1), 21-35.
- Korea Ministry of Education. (2004). *Education master plan and the promotion plan for using ICT in schools*. Seoul: Korea Ministry of Education.
- Lee, Byoung-Chan, Yoon, Jeong-Ok, & Lee, In. (2009). Learners' acceptance of e-

- learning in South Korea: Theories and results. *Computers & Education*, 53(4), 1320-1329.
- Lee, Jeonghwa, Kim, Joohee, & Cho, Sookeun. (2010). A study of interactive teaching-learning strategies of e-learning English conversation courses. *Korean Journal of Applied Linguistics*, 26(2), 51-83.
- Lee, Joung-Jik, & Park, Myung-Su. (2012). Korean secondary students' perceptions toward the cyber home learning system-based ELT contents. *English Teaching*, 67(1), 157-185.
- Leki, I., & Carson, J. (1997). 'Completely different worlds': EAP and the writing experiences of ESL students in university courses. *TESOL Quarterly*, 31(1), 39-69.
- Liaw, S.-S. (2008). Investigating students' perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the blackboard system. *Computers & Education*, 51(2), 864-873.
- Little, D. (1990). Autonomy in language learning: Some theoretical and practical considerations. In I. Gathercole (Ed.), *Autonomy in language learning* (pp. 7-15). London: Regent's College, Center for Information on Language Teaching and Research.
- Little, D. (1991). *Learner autonomy: Definitions, issues and problems*. Dublin: Authentik.
- Little, D. (2007). Language learner autonomy: Some fundamental considerations. *Journal of Innovation in Language Learning and Teaching*, 1(1), 14-29.
- Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistics*, 20(1), 71-94.
- Lynch, R., & Dembo, M. (2004). The relationship between self-regulation and online learning in a blended learning context. Retrieved from the World Wide Web: <http://www.irrodl.org/index.php/irrodl/article/view/189/271>.
- Mansour, B. E., & Mupinga, D. M. (2007). Students' positive and negative experiences in hybrid and online classes. *College Student Journal*, 41(1), 242-248.
- Mynard, J. (2006). Measuring learner autonomy: Can it be done? *Independence*, 37, 3-14. Retrieved from the World Wide Web: lasig.iatefl.org/uploads/1/1/8/3/11836487/seiten_aus_independence_37.pdf.
- Nielsen, J. M. (1990). *Feminist research methods*. Boulder, CO: Westview Press.
- Nunan, D. (1997). Designing and adapting materials to encourage learner autonomy. In P. Benson & P. Voller (Eds.), *Autonomy and independence in language learning* (pp. 192-203). London: Addison Wesley Longman.
- Oxford, R., Park-Oh, Young, Ito, S., & Sumrall, M. (1993). Japanese by satellite: Effects of motivation, language learning styles and strategies, gender, course level, and previous language learning experience on Japanese language achievement. *Foreign Language Annals*, 26(3), 358-371.

- Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67.
- Sheerin, S. (1997). An exploration of the relationship between self-access and independent learning. In P. Benson & P. Voller (Eds.), *Autonomy and independence in language learning* (pp. 18-34). London: Addison Wesley Longman.
- Sinclair, B., & Thang, S. M. (2009). Learner autonomy in Malaysia and Singapore. In S. M. Thang & B. Sinclair (Eds.), *Learner autonomy: Research and practice in Malaysia and Singapore* (pp. 1-12). Petaling Jaya, Selangor: Pearson Longman.
- Stewart, R. (2007). Investigating the link between self directed learning readiness and project-based learning outcomes: The case of international mastersstudents in an engineering management course. *European Journal of Engineering Education*, 32(4), 453-465.
- Stone, N. (2000). Exploring the relationship between calibration and self-regulated learning. *Educational Psychology Review*, 12(4), 437-475.
- Stoney, S., & R. Oliver. (1999). Can higher order thinking and cognitive engagement be enhanced with multimedia? *Interactive Multimedia Electronic Journal of Computer-Enhanced Learning*, 2(7). Retrieved from the World Wide Web: <http://imej.wfu.edu/articles/1999/2/07/index.asp>.
- Tassinari, M. G. (2012). Evaluating learner autonomy: A dynamic model with descriptors. *Studies in Self-Access Learning Journal*, 3(1), 24-40. Retrieved from the World Wide Web: <http://sisaljournal.org/archives/march12/tassinari>.
- Vanijdee, A. (2003). Thai distance English learners and learner autonomy. *Open Learning*, 18(1), 75-84.
- White, C. (1995). Autonomy and strategy use in distance foreign language learning: Research findings. *System*, 23(2), 207-221.
- White, C. (2003). *Language learning in distance education*. Cambridge: Cambridge University Press.
- Zhang, J., Li, F., Duan, C., & Wu, G. (2001). Research on self-efficacy of distance learning and its influence to learners' attainments. In C. H. Lee (Ed.), *Proceedings of the International Conference on Computers in Education (ICCE)/SchoolNet 2001* (pp. 1510-1517). Incheon, South Korea: Incheon National University of Education.

APPENDIX

Autonomous Learning Scale Questionnaire for University Students

가

A.

1	2	3	4	5

1		1	2	3	4	5
2		1	2	3	4	5
3		1	2	3	4	5
4		1	2	3	4	5
5	가	1	2	3	4	5
6		1	2	3	4	5
7	가 가	1	2	3	4	5
8		1	2	3	4	5
9		1	2	3	4	5
10		1	2	3	4	5
11		1	2	3	4	5
12		1	2	3	4	5
13		1	2	3	4	5
14		1	2	3	4	5
15	offline	1	2	3	4	5
16		1	2	3	4	5
17		1	2	3	4	5
18		1	2	3	4	5
19		1	2	3	4	5
20	, opening quiz, closing quiz,	1	2	3	4	5
21	가	1	2	3	4	5
22		1	2	3	4	5
23		1	2	3	4	5
24		1	2	3	4	5
25		1	2	3	4	5
26		1	2	3	4	5

가 가

B.

1. :
2. : _____, : _____
3. : (M, F)

Examples in: English

Applicable Languages: English

Applicable Levels: Tertiary

Inyoung Shin
Namesoul University
91 Daehak-ro, Seonghwan-eup, Sebuk-gu, Cheonan-si, 31020
Chungcheongnam-do
Tel: (041)580-2557
Email: 6000@nsu.ac.kr

Junghee Hwang
Pyeongtaek University
3825 Seodongdae-ro, Pyeongtaek, 17869
Gyeonggi-Do
Tel: (031) 659-8388
Email: jhwang@ptu.ac.kr

Received 24 September 2016

Revised 27 October 2016

Accepted 11 November 2016