MEASURING THE EFFECT OF BLENDED LEARNING ON LANGUAGE LEARNERS' MOTIVATION WITH ARCS MODEL

KEMAL GONEN[1], AZAMAT AKBAROV, *PhD*[2]

[1]Zirve University, Gaziantep
[2]International Burch University, Sarajevo
[1]kemal.gonen@zirve.edu.tr; [2]azamatakbar@yahoo.com

ABSTRACT

Using technology to enrich learning has become increasingly common in the world of education. Almost %100 of university level students in Turkey own digital devices. Facebooking, Tweeting and taking selfies for Instagram are the most popular ways of using these devices, especially smartphones. Blended Learning (BL) is becoming an increasingly popular tool in education circles. In our research, Blended Learning was assessed as an aid to motivation and autonomy in tertiary level Intensive English Language Programs. The distinctive features of this study were that Schoology was used as the Learning Management System, which has a Facebook-like interface, and implemented in all four skills of English, and the data which was collected from the participants were compared with the control group with whom no BL was experienced. As a result of this study, Blended Learning is seen as significantly contributing to the motivation of the learners in four constructs of ARCS Model (Attention, Relevance, Confidence, Satisfaction) (Keller, 2010) to improve their English language skills.

INTRODUCTION

Mobile device technology is developing. The current generation has increasing access to affordable and highly capable computing mobile devices. Smartphone ownership in university level education in Turkey is over %77 (Gonen & Akbarov, 2014) and at private universities this percentage is almost %100. Not only the learners but also the teachers are expected to engage themselves with digital literacy skills. The advancement in technology has changed the way we teach, communicate, and even socialize with our friends. The Internet has also a big role to play on how we learn. Learning is now happening through many aspects of life.

Once we log in to the internet, we begin learning from every single page on web pages and Facebook or Twitter updates. Almost all mobile phone users, especially the younger generation, who we refer to as Digital Natives (Prensky, 2001), are constantly on real time access now, which means they use 3G or 4G technologies to connect to the internet and they try not to lose their connection.

Having more and more digital natives (Prensky, 2001) in life is not only changing their daily life experiences such as socializing with their friends, their chatting habits, the way of sharing their everyday life practices with their community, but also forcing the academics to change the way they teach to these digital natives.

Blended Learning

Personalizing education for learners is very important and blended Learning is the best way to do it (www.coursetalk.com, 2016). Norberg, Dziuban, & Moskal (2011) names Blended Learning as a new traditional model. It is actually the combination of online instruction and face-to-face teaching and supported by technology (Ross & Gage, 2006)   in a planned, pedagogically valuable manner (www.teacthought.com, 2015).

Motivation

As Scheidecker and Freeman (1999:116) specified `Motivation is the most challenging and complex issue which today's teachers facing.' *Dörnyei (2001:2) states that:*

> *Motivation is related to one of the most basic aspects of the human mind, and most teachers and researchers would agree that it has a very important role in determining success or failure in any learning situation. My personal experience is that 99 per cent of language learners who really want to learn a foreign language (i.e. who are really motivated) will be able to master a reasonable working knowledge of it as a minimum, regardless of their language aptitude.*

Motivation is a key factor to build interest on second language learning. There are several reasons why people become motivated. We as teachers can motivate the students through variety of creative teaching strategies. By using these strategies, we can create an excellent environment to enhance motivation in second language teaching.

The ARCS Model

Keller's ARCS Model of Motivational Design (2010) is set on four constructs (Figure 1) which he states that learners must have to be motivated. These constructs are:

Attention: Teacher should stimulate and sustain the learners' interests and curiosities

Relevance: Before the motivation, learners should feel that the instruction is connected to their personal goals.

Confidence: If the learners have no confidence or are expecting no success, then the teacher has nothing to do to motivate them even if the topic is relevant and they have curiosity. The learners may have fears of the topic or skill which hinders their learning.

Satisfaction: Keller (2010) specifies that achieving the goals ((A)ttention, (R)elevance, (C)onfidence) mentioned above results with motivation to learn. (Creswell J. W., Designing and conducting mixed methods research (2nd ed.), 2011) To continue this motivation, the learners must feel the satisfaction of the learning process and/or results of this experience.
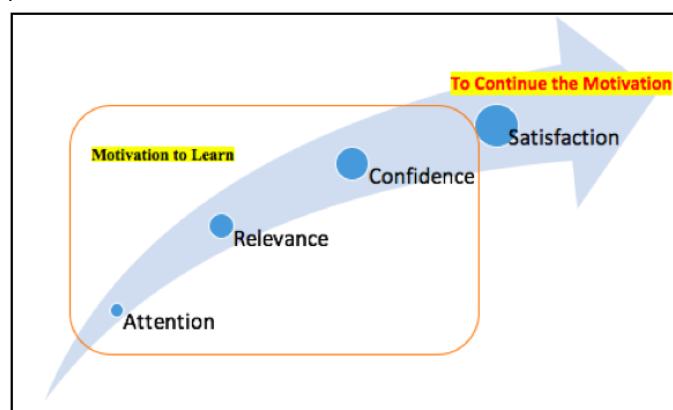

Figure 1: ARCS model

Purpose of the Study

The purpose of this study is to explore in what aspects of Blended Learning is affecting the ESL Learners' motivation in tertiary level English language programs.

Research Design

Mixed method has been used as methodology in this study. Qualitative and quantitative data have been used "because they work to provide the best understanding of a research problem" (Creswell, 2009). The procedure of collecting, analyzing, and then using and mixing both quantitative and qualitative data and methods in a single study or a series of studies to understand a research problem is called Mixed Methods Research Design (Creswell & Plano Clark, 2011). There are six sub designs of this methodology. They are; *Convergent Parallel Design, Explanatory Sequential Design, Exploratory Sequential Design, Embedded Design, Transformative Design, and Multiphase Design.* Exploratory mixed method has been employed in this study. In this model, the researcher collects the qualitative and the quantitative data at different time. After developing quantitative study, he/she uses the data retrieved from the qualitative findings and interprets the data (Creswell & Plano Clark, 2011).

As quantitative approach, IMMS (Instructional Materials Motivation Survey) has been employed in the study. Keller (2010) created IMMS to evaluate if the learners' motivational needs meet with ARCS strategies. Survey includes 36 items with Likert scale which evaluate learners' motivation level in four subscales of Keller's ARCS model (2010).

The IMMS has four subscales (attention, relevance, confidence and satisfaction) with 36-item scale. Keller (2010, p. 282) states that these subscales can be used separately and scored independently.

Instruments, Participants, and the Research Procedure

This study has been conducted with B1.1 level (CEFR) of Intensive English Language Program students at Zirve University in Turkey. Zirve University Intensive English Language Program has over 1600 students. The program is composed of 5 levels from beginner to upper intermediate level. After 2 weeks of orientation at beginner level, each student has to finish 4 levels of program called Level A(A1), B(A2), C(B1.1), D(B1.2) and each level is eight weeks long.

In the center of classes, there is a main course lesson as a main stream supported by four language skills (reading, writing, listening and speaking) and lab classes. There are a total of 26 hours of in class teaching time per week. This Blended Learning system has been implemented with all skills.

As participants, 3 classes (60 EFL students) were selected. Control group class was included 20 students and experimental group classes (2 classes) had 40 EFL students. The Blended Learning system has been designed for the experimental group classes. As the digital delivery system (Learning Management System), **Schoology** (www.schoology.com) was used as the digital tool which has Android and Apple IOS applications for smartphones and tablets that allows students reach the content anywhere they like. Since almost all the students specified (Gonen & Akbarov, 2014) that they use the internet for social networking and Facebook is one of the most famous social networking site, an LMS tool which has a Facebook like interface tool has been searched to be used.

Before the classes begin, the instructors had a training session about how to apply Blended Learning in to classes by using Schoology, and the learners were trained in the first week during Lab classes.

After orientation, the students were taught in class face-to-face and assigned online through Schoology. Some classes and assignments were given and assessed online. All the learners had smartphones and they were able to finish their assignments even while on the way home on the bus or tram.

Within this eight weeks long teaching and learning period, the learners and instructors were observed and data collected. The qualitative data was collected through interviews with students and instructors, observations of teacher planning meetings, and classroom observations. The collection of this data will provide important additional insight into the students' and teachers' experiences. After the term ended, the learners were given a Likert scale survey, which was adopted from "Adaptation of instructional materials motivation survey to Turkish: A validity and reliability study" (Kutu & Sözbilir, 2011). Also the learners' midterm and final exam results were compared as process assessment.

Results

Part 1. Attention

Table 1 : IMMS Questionnaire, Attention subscale

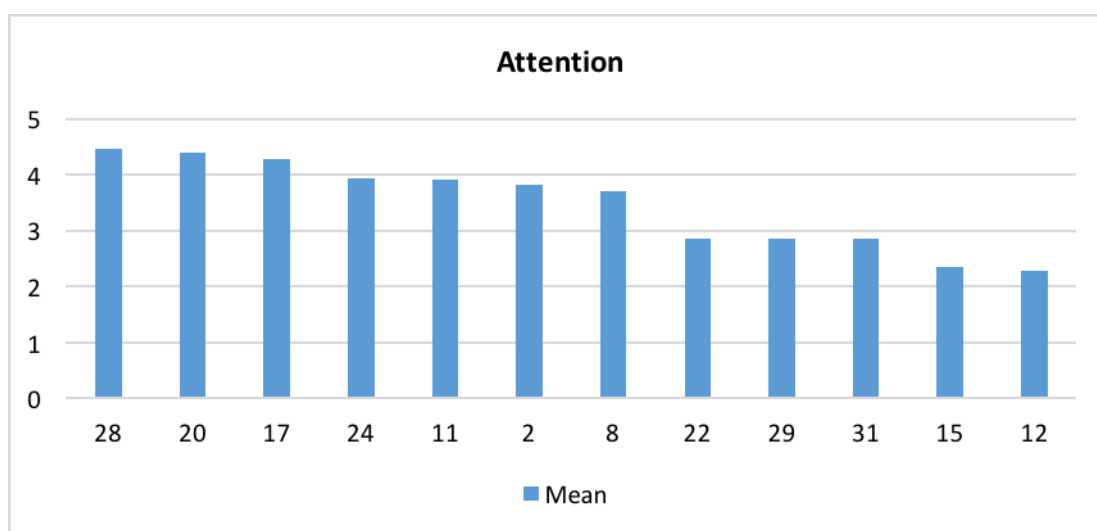| ITEM NO	MEAN	S.D.
28	4,45	0,60
20	4,40	0,67
17	4,28	0,82
24	3,93	1,27
11	3,90	1,26
2	3,83	1,11
8	3,70	1,22
22	2,85	1,41
29	2,85	1,41
31	2,85	1,41
15	2,35	1,37
12	2,28	0,99

Figure 2. IMMS Questionnaire, Attention subscale graphic

As stated in the questionnaire (Item no 28), most of the students agree with the item that "the variety of visual and audio materials help them learn better and since the teachers have thousands of materials online

just one click away and easily shared with the students", Blended Learning is the best solution for that as the students agreed in item 20 as well. The students also liked "the way the information was distributed" (item 17). They didn't find "using schoology boring" (item 29) and stated that they are almost in disagreement with items 15 and 12 which denote "Schoology's interface is unappealing and difficult to keep their attention". During the interviews the students talked about the same issues that it is very helpful for them to use Schoology and notifications to their smartphones are very helpful to keep their attention during the class and outside of the class, so it can be stated that attention is very high in Blended Learning.

Part 2. Relevance

Table 2: *IMMS Questionnaire, Relevance subscale*

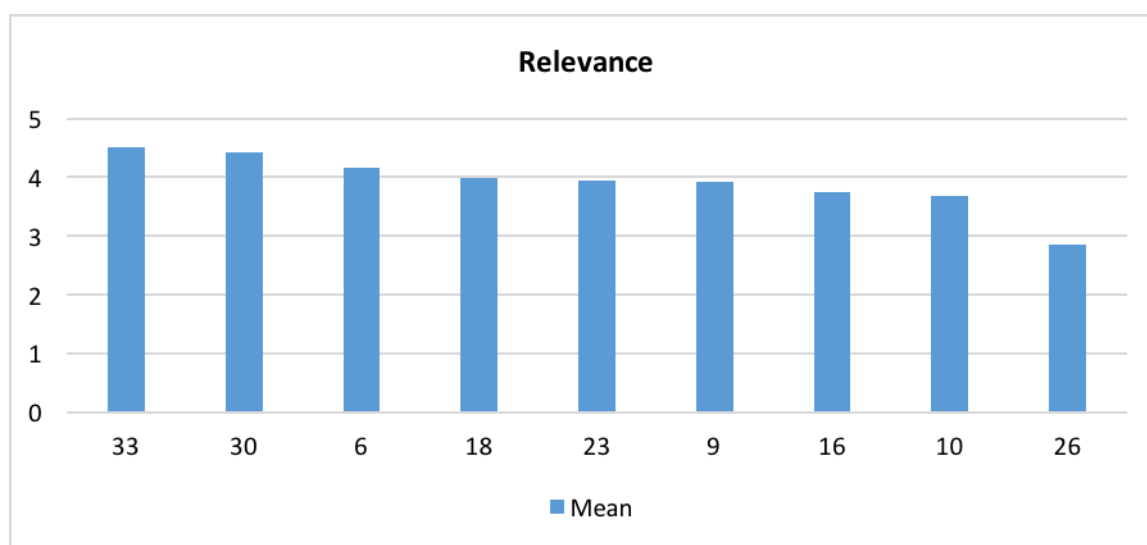| ITEM NO	MEAN	S.D.
33	4,50	0,68
30	4,43	0,59
6	4,15	1,00
18	3,98	1,05
23	3,95	1,21
9	3,92	1,09
16	3,75	1,21
10	3,68	1,27
26	2,85	1,41

Figure 3. IMMS Questionnaire, Relevance subscale

As shown in items 33, 30, and 6, "the students find something related to their daily lives" and "find it relevant to them", so that they find "Blended Learning very useful for themselves". A very small number of the learners claimed that using schoology did not help them to extend their knowledge. During the interviews, the students said relevantly, they claimed that they find it relevant for themselves since they always use social media on their smartphones and they feel themselves as digital natives. As a result of this subscale, it may be claimed that Blended Learning is including something relevant to their lives.

Part 3. Confidence

Table 3: IMMS Questionnaire, Confidence subscale

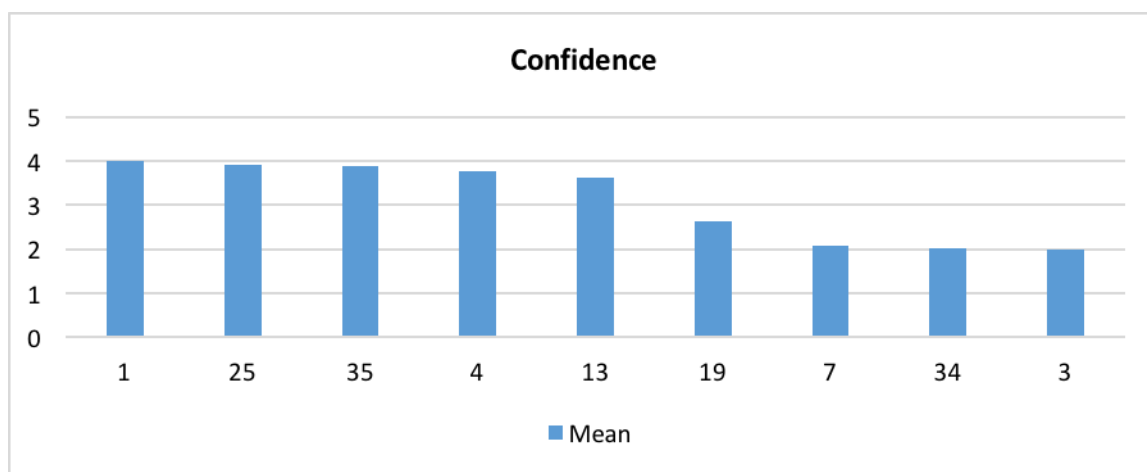| ITEM NO	MEAN	S.D.
1	4,00	1,34
25	3,92	1,11
35	3,88	1,22
4	3,75	1,15
13	3,63	1,39
19	2,63	1,29
7	2,08	0,94
34	2,03	1,21
3	2,00	1,13

Figure 4. IMMS Questionnaire, Confidence subscale

In this subscale of ACRS Model, most of the learners agreed with the items which shows that "they feel confident while using Blended Learning method and Schoology". This may be because most of the learners are digital natives (Prensky, 2001) and they spend most of their time on the internet (Gonen&Akbarov, 2014). The findings from the interviews also supporting these ideas.

As a result of the first three subscales of the ACRS Model, it is possible that Blended Learning helps the language learners, at tertiary level, become motivated in their learning.

Part 4. Satisfaction

Table 4: IMMS Questionnaire, Satisfaction subscale

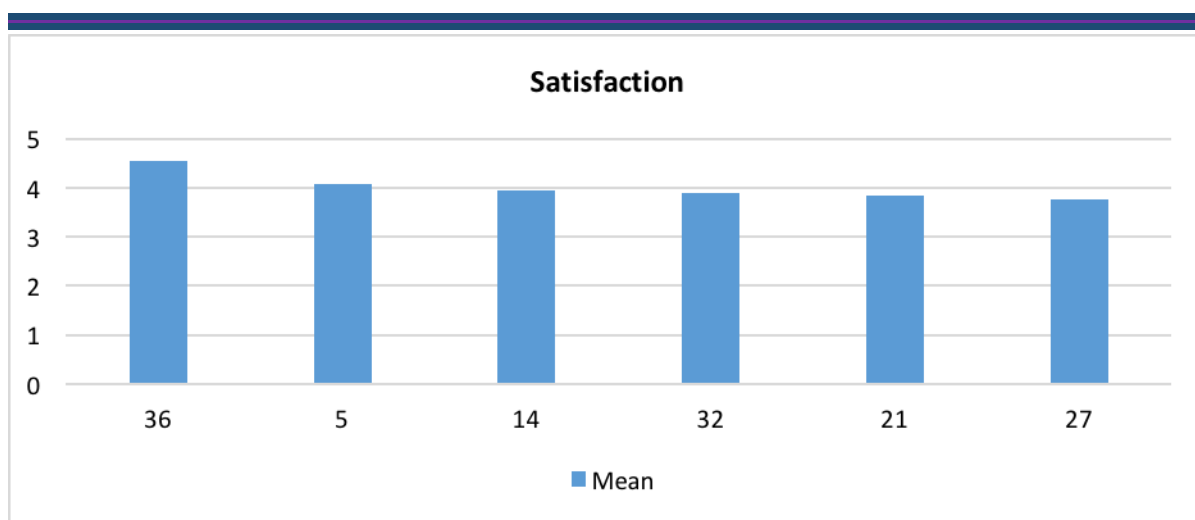| ITEM NO	MEAN	S.D.
36	4,55	0,55
5	4,08	1,02
14	3,95	1,13
32	3,90	1,30
21	3,85	1,29
27	3,75	1,32

Figure 5. IMMS Questionnaire, Satisfaction subscale

In this subscale, the learners state that "studying with a well designed phase helps them to retain their motivation". Also "doing the exercises online and tracking themselves as young adults is making them motivated and happy learners". The results of the interviews showed that they really feel the same way in terms of satisfaction with using Schoology aka Blended Learning.

In this subscale we understand that, using Blended Learning is helping the students keep their own records and retain their motivation and satisfaction while learning a language.

Discussion and Conclusion

Motivation is one of the fundamentals in most of the learning theories. Yet motivating the learners is one of the most confusing issues the teachers face in their everyday teaching.

Schoology was used as the digital delivery system (LMS) to extend the teaching time. The students were provided with online materials such as videos, presentations, exercises through this LMS. The students also submitted most of their assignment on Schoology. After the term ended, the experimental group students were asked to complete the survey (IMMS). Exam results and statistics from the student questionnaire, interviews with the students were compiled and evaluated. The results showed that Blended Learning is turning out to be a valuable program, when used as a motivator in ESL classes. There were also several challenges both for the instructors of English and the learners, such as building up the content, management of the schoology system, Internet access, the instructors' role.

It was also found with the *Instructional Materials Motivation Survey* that using the Blended Learning Strategy with Second Language Learners motivated them a lot. Applying Keller's ARCS strategies to Blended Learning instructional materials helped us to find out the level of motivation among Second Language Learners. Both Extrinsic (reward from the social environment to learn a language) and Intrinsic (enjoyment and satisfaction for oneself) motivation were observed in most of the learners.

Dornyei & Ushioda (2011, p. 118) state how to maintain and protect motivation as below:

- Make the learning experience enjoyable and stimulating
- Make the task challenging but achievable
- Help learners demonstrate a positive social image and show their strength
- Foster learners' autonomy

References

Coursetalk. (n.d.). Retrieved 1 15, 2016, from https://www.coursetalk.com/providers/coursera/courses/blended-learning-personalizing-education-for-students 2016

Creswell, J. W. (2007). *Designing and conducting mixed methods research.* Thousand Oaks,, CA: Sage Publications.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Los Angeles: Sage Publishing.

Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom.* Cambridge: Cambridge University Press.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and Researching Motivation.* Harlow, England: Pearson Education Limited.

Gonen, K., & Akbarov, A. (2014). Digital Natives in Higher Education Related to Language Learning. *J-Fltal , 1* (1), 107-122.

Keller, J. (2010). *Motivational design for learning and performance: The ARCS model approach.* NewYork: Springer.

Kutu, H., & Sozbilir, M. (2011). Adaptation of Instructional Materials Motivation Survey to Turkish: A Validity and Reliability Study. *Necatibey Faculty of Education Electronic Journal of Science and Mathematics Education , 5* (1), 292-312.

Norberg, A. D. (2011). A Time Based Blended Learning Model. *On the Horizon , 19* (3), 207-216.

Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon , 9* (5).

Ross, B., & Gage, K. (2006). Global perspectives on blended learning. In C. J. Graham, *The handbook of blended learning - Global perspectives, local designs* (pp. 155-167). Pfeiffer.

Scheidecker, D., & Freeman, W. (1999). *Bringing out the Best in Students: How Legendary Teachers Motivate Kids.* Thousand Oaks, CA: Corwin Press.

Appendix 1: IMMS (Instructional Materials Motivation Survey) Questionnaire

Item No	Items	Subscale
1	When I first learned about the schoology I had the impression that it would be easy for me	Confidence
2	There was something interesting at the beginning of this lesson that got my attention.	Attention
3	Studying with schoology was more difficult to understand than I would like for it to be	Confidence
4	After being informed about schoology, I felt confident that I knew what I was supposed to learn from this lesson	Confidence
5	Completing the exercises online gave me a satisfying feeling of accomplishment	Satisfaction
6	It is clear to me how the content of this material is related to things I already know	Relevance
7	Schoology was so complicated to handle	Confidence
8	Using schoology is eye catching	Attention

9	There were stories, pictures or examples that showed me how this material could be useful for some learners.	Relevance
10	Completing this lesson successfully was important to me.	Relevance
11	The quality of the lesson materials in schoology helped to hold my attention.	Attention
12	Using schoology was hard to keep my attention on it	Attention
13	As I worked on this schoology I was confident that I could learn the content.	Confidence
14	I enjoyed using schoology so much that I would like to learn more about the topics	Satisfaction
15	Schoology looks dry and unappealing.	Attention
16	The content of schoology is relevant to my interests.	Relevance
17	The way the information is arranged on schoology helped keep my attention.	Attention
18	There are explanations or examples of how people use schoology in lesson.	Relevance
19	The exercises in schoology were too difficult	Confidence
20	Schoology has things that stimulated my curiosity.	Attention
21	I really enjoyed studying on schoology	Satisfaction
22	The amount of repetition in this lesson caused me to get bored sometimes.	Attention
23	The content and style in this lesson convey the impression that its content is worth knowing.	Relevance
24	I learned some things that were surprising or unexpected.	Attention
25	After working on this lesson for a while, I was confident that I would be able to pass a test on it.	Confidence
26	Using schoology did not help me to extend my needs because I already knew most of it.	Relevance
27	The wording of feedback after the exercises, or of other comments on schoology, helped me feel rewarded for my effort.	Satisfaction
28	The variety of reading passages, exercises, illustrations, etc helped keep my attention on the lesson.	Attention
29	The style of lesson (using online materials) is boring.	Attention
30	I could relate to the content of this lesson to things I have seen, done or thought about in my own life	Relevance
31	There are so many information on schoology that it is irritating.	Attention
32	It felt good to successfully complete this lesson.	Satisfaction
33	The content of this lesson will be useful to me.	Relevance
34	I could not really understand quite a bit of the material in this lesson	Confidence
35	The good organization of the content helped me be confident that I would learn this	Confidence
36	It was a pleasure to work on such a well-designed lesson.	Satisfaction