An Analysis of Student Engagement for Online Microeconomics
Class Based on ELED

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Abstract

This study aims to analyze the factors affecting student engagement in Microeconomics online classes based on E-Learning Engagement Design (ELED). This study applied a mixed method with a sequential model. The study population included all students of the Department of Economics Education UNNES who took online courses in Microeconomics and Microeconomics 1, both regular and international classes, with a total of 320 students and 4 lecturers handled the classes. The results showed that situational interest, personal significance, mastery of self-talk and mastery of self-talk for performance had a positive effect on student engagement in Microeconomics online classes. Meanwhile, mastery of self-talk to avoid negativity, environmental control, independent consequences, and setting proximal goals do not significantly influence student engagement in Microeconomics online classes. The concept of E-Learning Engagement Design (ELED) has been applied to all components. However, it is necessary to standardize the learning environment components to make sure there is no gap among Microeconomics classes which leads to less optimal academic services.

How to Cite

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INTRODUCTION

The outbreak of Coronavirus Disease 2019 (COVID-19) in early 2020 created a significant transformation on the education system around the world. Many schools and universities shut down face-to-face teaching and learning activities and transform them into virtual classes. One of them is Universitas Negeri Semarang (UNNES) in Indonesia which encourage lecturers to apply online learning during the pandemic. However, this fast changing leads to a little chaos among lecturers. Some lecturers have different opinion about what and how to teach, the environment of teaching and learning, the workload of teachers and students, and the implications for education equity (Zhang, Wang, Yang & Wang, 2020).

On the other hand, UNNES has armed by the specific Learning Management System (LMS) named Elena (Electronic Learning Aid) which based on MOODLE version 2.0 to support academic activities. The problem emerged was there was only a few numbers of lecturers use this LMS due to the complexity of this system and the lack campaign how to use it, especially before the pandemic. Many of lecturers prefer to use another platform to conduct their online class activities. The existence of Zoom, Google Classroom, Google Meet, Skype, and other applications as learning media have been an alternative for lecturers and students to conduct their academic activities. All platforms supporting the online learning have to be optimized to deliver the knowledge and discussion means between lecturers and students during the pandemic.

The absence of face-to-face meetings at some certain condition might allow students to express their opinions more freely. This is because a different learning environment where the internet acts as an intermediary and easily accesses information related to the subjects being studied makes students more interested and supports their thinking power to think critically. This facilitates students who is too shy to speak up their arguments in the face-to-face meeting have a better opportunity to convey their opinion indirectly. Another positive effect of online learning is students have new experiences in learning that can be applied in the future, especially students majoring in education who later become teachers.

However, based on survey data conducted by UNNES which was released in April 2020, it indicated that the online learning process was less interactive which made learning objectives difficult to achieve. Online classes require the stable internet connection. It becomes an obstacle for some students, because not all areas where students live have a proper internet connection. In line with the results of the university-level survey, online learning activities conducted by Department of Economic Education also have not met expectations. This is reflected in the responses of 167 students in the online college satisfaction survey which can be observed in Figure 1.

![Figure 1. Students' Satisfaction in Online Learning Conducted by Department of Economics Education UNNES](image)

Although as many as 48.50% of students expressed a neutral opinion, more than a quarter of the respondents (25.10%) expressed disappointment with the implementation of online classes, 3.60% even stated that they were very disappointed. The reasons include the lack of communication and interaction between the lecturers and students during the pandemic. Furthermore, lecturers provide assignments to make sure students achieve learning objective. However, the assignment was deemed excessive because of the total courses taken could be around 10 courses in a semester. Therefore, it results in students being less enthusiastic in learning because they feel tired and under pressure. Thus, the complaints about online learning implementation in the beginning of pandemic are identified caused by the lack of students’ engagement in learning which results in a decrease in the level of persistence, efforts, positive emotions, and commitment in the learning process.

The key to success in learning is student engagement (Khan, et.al, 2017). It will provide learning satisfaction, especially in online learning. The engagement of students in online learning consists of three aspects which are also factors that influence it, namely behavioral involvement, cognitive involvement, and emotional involvement (Peng, 2016). Behavioral involvement is about how students involve themselves in learning such as completing assignments, having
high effort and persistence in learning inside and outside the classroom, asking questions and so on. Cognitive involvement can be defined as perceptions of motivation and strategy use, seriousness, desire, coping attitudes, and discipline. Meanwhile, emotional involvement shows interests, values, emotions about what is being learned. For example, having respect for other people’s opinions, willingness to treat properly their peers and teachers, having sense of belonging and high motivation.

Microeconomics is one of the basic courses that should be taken by students of the Department of Economics Education. Microeconomics is a branch of economics that studies consumer and company behavior. It contains how to determine market price, the input factors quantity and the number of goods and services being traded. It also studies how certain decisions can affect the supply and demand for goods and services so as to create a balance. This balance is represented by different curves. So that in delivering material, it is necessary to encourage interactive online learning strategies to highlight the cause-and-effect relationship caused by a certain economic phenomenon.

Online learning has a key role in the process of transferring knowledge in the Microeconomics course. The absence of face-to-face or physically class activities is a challenge that must be faced in order to maintain the enthusiasm for student learning. The positive side of it is interactions between teachers and students are not limited to physical classrooms or face-to-face learning can still be carried out in different places (Rahman, et.al, 2015).

Therefore, the appropriate online learning means and teaching strategies are needed to maintain student engagement in Microeconomics class. It is expected as a solution to increase the cognitive, behavioral, and emotional involvement of students. This research is needed to design a better online class which can synergize with the characteristics of the Microeconomics course resulting in obtaining the course objectives even though the teaching and learning process have to be distracted by the pandemic and have to be conducted online.

The student engagement in online learning is influenced by various factors. Lee, Hae, and Ah Jeong (2019) show that in the context of online learning, student engagement consists of six factors, they are (1) psychological motivation; (2) peer collaboration; (3) cognitive problem solving; (4) interactions with instructors; (5) community support and (6) learning management. First is psychological issues, they represent students’ thoughts and feelings, such as motivation, expectations, and interests related to what is learned in online learning. Second, the peer collaboration is activities where students discuss with their peers about the knowledge learned. Third, cognitive problem solving is defined as the process of acquiring, understanding, and utilizing knowledge. Activities such as analyzing and applying knowledge highly support students to improve learning achievement.

Fourth, interaction with instructors or teachers, it is related to behavioral involvement in which students communicate with their teacher (or in this case is lecturer) using online platforms. This interaction will affect student engagement. The more regular interactions between students and teachers, the higher the sense of being involved in learning. Fifth, community support factors are related to the psychological state of students, such as the feelings of brotherhood emerged among students in the classroom. This sense of belonging affects student involvement even in the online class. Therefore, it can be concluded that the success of building student engagement in the online learning caused by various factors that has to be synergized the teachers and students for the success of learning.

Zimmerman (2008) explains that students who are able to do the self-regulate can enjoy the independent learning process and are ultimately able to proactively transforms their mental abilities into performance skills. Independent learners also possess the cognitive ability to complete different academic assignments well (Wolters, 2003). The level of student motivation is phenomenologically seen as a product, while the tools that control their choices, efforts and persistence are seen as processes. Considering these two characteristics, motivation regulation refers to individual actions aimed at initiating, maintaining, or increasing their motivation to complete certain academic activities (Wolters, 2003).

The purpose of the Motivational Regulation Strategies (MRS) is to improve student learning exertions in the process of learning (Schwinger & Stiensmeier-Pelster, 2012). MRS is important for online students because MRS affects students positively to be involved more in learning activities (Smit, De Brabander, Boekaerts, & Martens, 2017). Therefore, in order to investigate the quality of the regulatory motivation results, it is very important to examine how the regulations of student motivation affect their learning engagement.
Steinmayr, and Spinath (2012) suggest eight indicators of MRS, they are (a) increasing situational interest, changing a tiring task to a more attractive one through imaginative modification, (b) increasing personal significance, establishing connections of tasks, personal interests and preferences, (c) mastering self-talk, accentuating the goal of enlarging one’s competence and mastering challenging tasks, (d) mastering self-talk for performance, getting better exam scores than classmates, (e) mastering self-talk to avoid negativity, averting to make fun of peer’s performance, (f) environmental control, deliberately eliminating possible distractions when having an online class, (g) self-consequences, self-managed gratification to achieve a goal, and (h) establishing proximal goal, breaking down the learning material into smaller and manageable chunks to experience success more frequently.

In its implementation, online learning activities during this pandemic find many obstacles. This study tried to apply the E-Learning Engage Design (ELED) framework to evaluate the stages of online learning in Microeconomics courses which are directed to encourage student engagement in online learning according to the feedback provided by students.

METHODS

This study combines the quantitative and qualitative method, named sequential explanatory design. The mixed-methods sequential explanatory design consists of two different phases: quantitative phase followed by qualitative phase (Creswell et al. 2003). In the first phase, the quantitative method applied using regression analysis. The second phase (the qualitative method), narrative inquiry is carried out through in-depth interviews and Focus Group Discussions (FGD). The qualitative data validity is ensured using triangulation technique. The interviews and FGDs conducted separately between students and lecturer’s session to get different perspectives and then the results were compared. The measurement results from the first and second phases are then triangulated and integrated to get a holistic understanding of making improvements.

Respondents are students in semester 3 of the Department of Economics Education, batch 2019 which consists of 3 concentrations, namely: Accounting Education, Cooperative Economic Education and Office Administration Education. Each concentration consists of 3 classes, namely, Regular Class A, Regular Class B and International Class (International Undergraduate Program - IUP) with a total of 320 students. Furthermore, as many as 4 lecturers also became participants for the qualitative phase.

Primary data and secondary data were used in this study. Primary data were obtained from questionnaire. Meanwhile, secondary data were obtained from literature studies related to research problems. The data collection techniques used in this study were questionnaires, literature studies, online focus group discussions. The FGD was conducted with student representatives and lecturers to collect qualitative data in the form of student and lecturer feedback for each stage of the ELED.

RESULTS AND DISCUSSION

Descriptive analysis results

The first variable is student engagement variable, a minimum value of 65 was obtained while a maximum value was 128. This indicates that the level of linkage of the students of Economic Education at Semarang State University is between 65 and 128, deviation 12.752, which means the deviation from the average value is quite small (slight data variation). The average value of 99.13 indicates that the level of linkage of students is high. The independent variables of
this study have varied categories. The increasing situational interest, mastering self-talk, mastering self-talk for performance, mastering self-talk to avoid negativity, and establishing proximal goal reach a high category. Meanwhile, increasing personal significance, environmental control and self-consequences get the moderate category.

**Multiple regression analysis results**

The results of multiple linear analysis are used to explain the level of influence of the independent variables on the dependent variable. These results are shown in Table 2 and Table 3.

Based on the results of the ANOVA test or the F test, the F value is 47.647 and the probability level is 0.000. The probability in this study is less than 0.05, so it can be concluded that the variables of increased situational interest, increased personal significance, mastered self-talk, self-talk for performance, self-talk to avoid negativity, environmental control, independent consequences, and goal setting proximal simultaneously affects the linkage of students to online classes in Microeconomics.

Based on Table 3, it is known that the $R^2$ value is 0.551 or 55.1%. This means that 55.1% of online student engagement is explained by increased situational interest, increased personal significance, mastering self-talk, self-talk for performance, self-talk to avoid negativity, environmental control, independent consequences, and proximal goal setting. The remaining 44.9% is explained by other factors outside the model. This indicates that there is a moderate relationship between increased situational interest, increased personal significance, mastered self-talk, self-talk for performance, self-talk to avoid negativity, environmental control, independent consequences, and proximal goal setting of online student engagement in Microeconomics online class.

Based on Table 4, column B states a constant value of 29.937, the value of increasing situational interest is 1.483, the value of increasing personal significance is 1.124, the value of mastering self-talk is 1.211, mastering self-talk for performance is 1.297, mastering self-talk to avoid negativity is 1.351, environmental control is 1.206, self-consequences is 1.153, and establishing proximal goal is 1.253.

### Table 1. The Descriptive Data of Variables

| Variables                        | Minimum | Maximum | Mean  | SD    | Categories |
|----------------------------------|---------|---------|-------|-------|------------|
| online Student Engagement        | 65      | 128     | 99.13 | 12.752| High       |
| increasing situational interest  | 7       | 15      | 12.11 | 1.901 | High       |
| increasing personal significance | 8       | 20      | 14.78 | 2.550 | Moderate   |
| mastering self-talk              | 5       | 15      | 12.11 | 2.057 | High       |
| mastering self-talk for performance | 7    | 15      | 12.97 | 1.872 | High       |
| mastering self-talk to avoid negativity | 9   | 15      | 13.51 | 1.674 | High       |
| environmental control            | 6       | 15      | 12.06 | 1.763 | Moderate   |
| self-consequences                | 6       | 15      | 11.53 | 2.000 | Moderate   |
| establishing proximal goal       | 7       | 15      | 12.53 | 1.821 | High       |

Source: Primary Data (2020)

### Table 2. Anova Test Results

| Model     | Sum of Squares | df | Mean Square | F     | Sig. |
|-----------|----------------|----|-------------|-------|------|
| Regression| 28564.920      | 8  | 3570.615    | 47.647| .000 |
| Residual  | 23306.080      | 311| 74.939      |       |      |
| Total     | 51871.000      | 319|             |       |      |

Dependent Variable: Student Engagement

Source: Primary Data (2020). Predictors: (Constant), a) increasing situational interest, (b) increasing personal significance, (c) mastering self-talk, (d) mastering self-talk for performance, (e) mastering self-talk to avoid negativity, (f) environmental control, (g) self-consequences and (h) establishing proximal goal.

### Table 3. Test Results of the Coefficient of Determination ($R^2$)

| Model | R        | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|----------|----------|-------------------|---------------------------|
| 1     | .742     | .551     | .539              | 8.657                     |

Source: Primary Data (2020)
mastering self-talk is 0.875, the value of self-talk for performance is 1.854, the value of self-talk is to avoid this, negative of -0.872, environmental control value of 0.366, independent consequence value of 0.387, and proximal goal setting value of 0.230. So that the multiple linear regression equation can be obtained as follows.

\[ Y = 29.937 + 1.483X1 + 1.124X2 + 0.875X3 + 1.854X4 - 0.872X5 + 0.366X6 + 0.0387X7 + 0.230X8 \]

The partial hypothesis test (t test) was used to test how the influence of increased situational interest, increased personal significance, mastery of self-talk, self-talk for performance, self-talk to avoid negativity, environmental control, independent consequences, and goal setting Proximal individually or partially affect the linkage of students of the Semarang State University of Economics Education where each independent variable is independently of the dependent variable. The rules for decision making are as follows: first, if the significance value \( t \) \(<\alpha \text{ or } t \text{ count}> t \text{ table} \) then \( H_0 \) is rejected and \( H_a \) is accepted, which means partially increased situational interest (X1), increased personal significance (X2), mastered self-talk (X3), self-talk for performance (X4), self-talk to avoid negative things (X5), environmental control (X6), independent consequences (X7), and proximal goal setting (X8) have an effect on student engagement (Y).

Second, if the significance value \( t \) \(<\alpha \text{ or } t \text{ count}> t \text{ table} \) then \( H_a \) is rejected and \( H_0 \) is accepted, which means partially increased situational interest (X1), increased personal significance (X2), mastered self-talk (X3), self-talk for performance (X4), self-talk to avoid negative things (X5), environmental control (X6), independent consequences (X7), and setting proximal goals do not significantly influence student engagement in Microeconomics online classes.

**Qualitative analysis results**

The Focus Group Discussion (FGD) were held online to determine the implementation of E-Learning Engagement Design (ELED) in Microeconomics classes. The FGD participants are representatives of students in the Microeconomics classes consisting of 31 students and 5 lecturers who teach the Microeconomics classes. Based on the E-Learning Engagement Design (ELED) designed by Czerkawski, Betal C & Eugene W. Lyman (2016), online learning preparation consists of several components, namely: (1) instructional needs, (2) instructional objectives, (3) learning environment, and (4) summative assessment. This section will discuss the evaluation of the progress of the 4 components based on the results of the FGD.

**Instructional Needs**

The results of the online FGD with student representatives of each Microeconomics class revealed that in general the lecturers had understood the needs of students and analyzed student

| Table 4. Multiple Linear Regression Analysis Test Results |
|-----------------|-----------------|-----------------|-------|-------|
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
| | B | Std. Error | Beta | B | Std. Error | Beta | t | Sig. |
| (Constant) | 29.937 | 4.354 | 6.876 | .000 |
| increasing situational interest | 1.483 | .383 | .221 | 3.871 | .000 |
| increasing personal significance | 1.124 | .288 | .225 | 3.896 | .000 |
| mastering self-talk | .875 | .355 | .141 | 2.467 | .014 |
| mastering self-talk for performance | 1.854 | .508 | .272 | 3.647 | .000 |
| mastering self-talk to avoid negativity | -.872 | .506 | -.114 | -1.721 | .086 |
| environmental control | .366 | .381 | .051 | .960 | .338 |
| self-consequences | .387 | .314 | .061 | 1.234 | .218 |
| establishing proximal goal | .230 | .427 | .033 | .539 | .590 |

Source: Primary Data (2020). Dependent Variabe: Online Student Engagement
characteristics well. This is reflected in the use of digital platforms that are close to students as a means for running online classes, such as Youtube, Telegram and Whatsapp Group. Most students find it very helpful with the learning videos uploaded on the lecturers’ Youtube account, because according to them this method really help them to understand the studied materials.

“In my opinion, online microeconomics class using google classroom and group chat is quite good, it can maximize learning, even though there are some friends who have difficulty in terms of internet connection. Especially for the video from the lecturer, it makes it easier for me to understand the material.” (Representative Student of Cooperative Economic Education A 2019)

“The online learning activities are fun, the explanation is easier to understand because it uses YouTube media and discusses the questions of each material.” (Student A, Representative of IUP 2019 Office Administration Education)

“Online microeconomics lectures are good enough because the lecturer has provided material via video so that students become more familiar with the learning material presented. In addition, groups in telegram also become a medium for discussion if there are things students do not understand.” (Student B, Representative of IUP 2019 Office Administration Education).

However, there are also complaints, especially for lecturers who only rely on learning through Whatsapp Group and do not use other media or platforms in the implementation of Micro Economics lectures. Student representatives from one of the classes complained about their discomfort and low understanding of the material presented.

“The learning activities with Whatsapp Group are less efficient” (Student Representative of Economics Education Cooperative B 2019).

The conclusion that can be taken in this FGD is that students of the Microeconomics classes feel enthusiastic about learning when the lecturer combines various learning media at once and not only uses one digital platform. In addition, students are satisfied if the lecturer provides the opportunity to interact in the form of discussion and question and answer rather than just providing material and assignments.

Instructional Objectives

From the FGD which was conducted with lecturers who taught the Microeconomics classes, it was known that the instructional objectives and professional standards that must be achieved by students taking the Microeconomics classes were clearly detailed in the Lesson Plan uploaded through the LMS in the beginning of the semester. This lesson plan has been accessible to students from the beginning of the semester before the student takes lectures for the first meeting.

In fact, generally each lecturer who teaches the Microeconomics classes dissects the Lesson Plan at the beginning of the meeting before starting to enter the first material of the lecture. However, unfortunately not all students pay attention to the lesson plan, only a few students download the lesson plan from the LMS which ultimately leads to student confusion in determining what to study next and when there will be periodic evaluations in lectures.

“Because there are many students who do not open the lesson plan. It makes me always have to remind them about what material to study next week and what aspects need a greater focus.” (Lecturer L)

“So far, students seem to be less independent and always ask about lecture techniques that can actually be studied on their own at the lesson plan which has been uploaded at the beginning of the semester.” (Lecturer J)

The conclusion that can be taken in this FGD is that basically the instructional objectives and professional standards of learning have been clearly formulated and uploaded in the learning management system so that they can be accessed by students, but there is a missing link that causes not many students to pay attention to this so that instructional goals and professional standards the material is not conveyed properly.

Learning Environment

In the FGD which was attended by student representatives for the Microeconomics classes, there were several complaints about assignments and evaluations of assignments that had been given by the lecturers who taught Microeconomics classes. Some students objected to the assignments given in almost every meeting, yet there was minimal discussion. Therefore, this FGD suggested that not every meeting had to be assigned a task that had to be submitted within a
week or more. The FGD audience would prefer giving a quiz at the beginning or end of the meeting with a few questions and a short time (taking a little time according to the lecture schedule), but discussing it immediately so that they better understand the material in question and can immediately confirm their answers.

Interaction in the form of questions and answers and discussion was an important point according to the FGD audience because with this interaction they felt that they received feedback according to their respective needs. Most of the participants admitted that the lecturers had facilitated them to hold discussions and opened the questions and answers forum. Even so, there were still some students who complained about their lack of understanding of the material because lectures were conducted online.

“I still don’t understand, the trouble is we have to study full using online system. (Student A, Representative of Cooperative Economic Education B 2019).

“Honestly, I get dizzy, because I am a typical person who learns from listening, so this kind of online doesn’t stay in my brain, not to mention when my mom suddenly asks me to tell me what will break up my brain.” (Student B, Representative of Cooperative Economic Education B 2019).

This complaint came from student representatives who admitted that their lecturers only used the Google Classroom and Whatsapp Group applications during lectures. Whereas for students with varied media use and evaluated assignments, the comments given were positive. The conclusion taken in this point is that some lecturers have carried out formative assessments well by evaluating each assignment given to students, have interacted well through discussions, and provided facilitation for students to learn using various media, so that students are able to analyze the material easily. However, there are still lecturers who only rely on one or two digital platforms without giving students the opportunity to discuss the assignment given.

**Summative Assessment**

During the pandemic, summative assessment of all lecturers was carried out through the LMS developed by UNNES, namely Elena. Elena allows lecturers to provide Mid-Semester Examinations and Final Semester Examinations in various formats, from multiple choice to submission of assignments via files. Lecturers who teach Microeconomics courses coordinate the implementation of the midterm examination and final examination through Elena using a multiple-choice system. This question model is considered very efficient, especially in terms of cutting the time needed to correct students’ answers.

In addition, Elena also allows students to find out the correct answer to the question after they have finished taking the test (or whenever it is according to the setting set by the teaching lecturer). However, this evaluation system still has weaknesses, namely that there is still a possibility of cooperation from students by sending photos of questions and discussing the answers in student groups because this system does not have a surveillance camera.

Therefore, it is suggested that for the future, summative assessment is carried out by utilizing an application that has recently been socialized, namely the E-Ujian. Unlike Elena, which is a comprehensive application that summarizes learning resources and the course of online learning, this E-Ujian application focuses on providing services for administering exams. The E-Ujian application is equipped with a question package feature, voice recording (if the lecturer wants an oral exam) to record the course of the exam process through the laptop camera of each test taker.

The interest ultimately develops from situational interest to individual interest through four different phases (Hidi & Renninger, 2006). The situational interests need to be stimulated and controlled before they are promoted into individual interests (Hidi & Renninger, 2006). Hence, situational interests are considered as underdeveloped interests, whereas individual interests are considered as more developed interests. Therefore, students with individual interests tend to pursue engagement with independent learning content considering that students with less developed interests may or may not engage in learning without external support (Renninger & Bachrach, 2015). However, although situational interest is said to be a temporary interest that is predicted not to develop in the future, students’ situational interest in studying online course material in Microeconomics in this study is considered to be the first capital to “link” students with online learning.

The situational interest in this research is in the moderate category, this is because different lecturers’ teams use different approaches in implementing online learning. There are classes with high situational interest and classes with low situational interest, namely in classes where the lecturers are more passive and do not develop va-
rious online learning media. The findings in this study indicate that increased situational interest has an effect on student engagement with online courses in Microeconomics.

Based on in-depth interviews conducted after the Focus Group Discussion (FGD) event, it can be analyzed that this situational interest arises due to several things, including: interest in lecturer figures, interest in the use of media by teaching lecturers, and demands to collect assignments so that they want to. do not want to have to try to understand the material. The findings in this study also explain that when attending online courses in Microeconomics, students are involved cognitively, thereby increasing personal significance for learning activities rather than increasing situational interest.

One interesting finding is that mastery of self-talk, including self-talk to improve performance, has a positive and significant effect on student engagement with online Microeconomics classes. This strategy is particularly concerned with orientation to achieving learning goals and mastering challenging learning tasks. The results of this study indicate that students are emotionally engaged when they focus on mastery of the material rather than comparing their learning outcomes with others. This is in line with the findings of Huang’s (2011) study of achievement goals and academic emotions which showed a significant positive correlation. However, the relationship between academic emotion and negative avoidance in Huang’s (2011) study showed a negative correlation, which was not significant. Huang’s findings are reinforced by the results of this study where self-talk to avoid negative performance is not proven to have a significant effect.

Cognitive engagement is the use of both cognitive strategies and self-regulated approaches in learning (Wang & Eccles, 2011). When using the self-talk approach to avoid negative performance, students tend to be involved cognitively in learning but have less participation in activities during learning session because they feel anxious and afraid that their participation will actually show their weaknesses, for example: incorrectly answering questions from the lecturer or expressing opinions that they feel less precise. Although for some students the strategy was considered positive because it placed them in a safe position, students who experienced it appeared to have less motivation to turn their cognitive efforts into actions. This condition will not have a good impact on the development of students’ emotional intelligence.

The lecturer should anticipate students’ low participation by improving the learning strategies. In accordance with the concept of “Merdeka Belajar, Kampus Merdeka” (Freedom to Learn, Independent Campus) launched by the Ministry of Education and Culture, it is suggested to apply some student-centered learning approaches, such as project-based learning and case study in order to increase students’ participation during the class. It has been confirmed by some researches that project-based learning can effectively enhance students’ learning motivation, problem solving competence and learning achievement (Hung, Hwang & Huang, 2011); improve creativity, encourage research and provide permanent learning (Genc, 2014) and increase critical thinking ability (Anazifa & Djukri, 2017). Meanwhile, the case study method acknowledges in-depth, multi-faceted explorations of complex issues in real-life settings (Crowe et al, 2011), promotes active learning and develops critical thinking skills (Popil, 2011).

Kuhl (as quoted in Keller, 2008) stated that environmental control is an active control strategy to support the implementation and maintenance of the expected actions. Kuhl illustrated that environmental control strategies can be managed to liberate oneself from irresistible distraction and to socialize commitments (in this case the commitment to attend lectures well online) by telling others about online lecture plans and how the other party supports the planned actions. However, in this study, these results indicate that environmental control has no effect on student engagement in Microeconomics online classes.

During the FGD, the fact that was revealed was that not all individuals (including the students themselves) and their families understood the concept of online lectures and the burdens that students must bear in carrying out lectures online. This was revealed from the statement of one of the FGD participants, as follows.

“Honestly, I get dizzy, because I am a typical person who learns from listening, so this kind of online doesn’t stay in my brain, not to mention when my mom suddenly asks me to tell me what will break up my brain.” (Representative of Regular Economics Education Student B 2019)

The family’s lack of understanding of the concept of online lectures causes parents to misunderstand students who are studying online. Parents consider their children to only play smartphones all day, so they tend to try to do something so that their children do not hold the
smartphone by asking them to do other activities that are not related to online lecturing activities, or even interfere with ongoing online lectures. This also causes the independent consequence factor and the setting of proximal goals in this study does not affect the student engagement to Microeconomics online classes.

The various findings in this study converge to the conclusion that the engagement to online classes in Microeconomics can work best if students have strong motivation within themselves. One way to maintain that motivation is by doing self-talk. However, the self-talk that is carried out must prioritize self-talk to improve performance in online learning, not self-talk for avoidance and being passive to maintain a safe position in the online classroom. On the other hand, the family environment sometimes does not support the implementation of online lectures and inhibits cognitive and emotional ties between students and the online classes they take. In this case, good and continuous communication is needed so that the family can understand the conditions of online lectures during a pandemic like today.

CONCLUSION

The crush transformation from conventional to online classes during the pandemic create many home works for lecturers to maintain the student engagement and achieve the learning goals. There are more distractions happens in online learning activities that need supportive environment for the students to maintain their focus to it. In the case of Microeconomics online classes in this study, the supportive environment consists of the internal condition of students themselves, which was examined in this study through the Motivational Regulation Strategies (MRS), the online class infrastructure and materials, the lecturers’ strategies and the neighborhood where students live. All these factors have to collaborate to support the online learning activities. The ELED framework has implemented fairly during the Microeconomics online classes. However, the assessment aspect has to be improved more.

This study needs improvement in the ELED framework evaluation to be able to design the better practice of ELED in online Microeconomics classes, instead of only describe the implementation of it. Furthermore, the next study should focus not only on the MRS, but also other factors in students’ online learning ecosys- tem. It is important to change the researcher’s point of view that student engagement is not merely a cause of successful learning, yet it is a result created by the supportive collaboration of various factors in student environments that support students’ online learning activities.

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