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Students' EBA Academic Support System Usage According to Their Level of the Self-Regulatory Learning Strategy and Their Views on the System

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ABSTRACT

This research was conducted to reveal students' EBA academic support system (EBA-ASS) usage according to their self-regulated learning strategy and their views on the system. The study group of the research, in which the multiple special case design was adopted, consisted of 34 students studying in the 11th and 12th grades in different districts of Mardin. Before the students used the EBA-ASS, the system was introduced by the researcher, and then the Self-Regulatory Learning Strategies Scale (SRLSS) and participant information forms were filled in by the students. It was ensured that the students used EBA-ASS in the physics lesson for 5 weeks and filled out the diaries after each use. At the end of the application, semi-structured interviews were conducted with each student by using the questions prepared according to the answers given by the students to the diaries. The obtained data were subjected to content analysis. At the end of the research, it was determined that the views of the students with different levels of Self-Regulatory Learning Strategies (SRLS) on EBA-ASS and their usage of the system were generally similar. On the other hand, it can be said that as the student's SRLS level increases, the duration of using EBA-ASS increases. Students generally have positive opinions about EBA-ASS. It is recommended that this system, which is liked and easily used by students, should be developed in accordance with every grade level and every course content, and the promotion of the system should be increased to spread its use.

Key Words: EBA Academic Support System, Self-regulatory learning, Adaptive learning environment

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Öğrencilerin Öz Düzenleyici Öğrenme Stratejisi Düzeyine Göre EBA Akademik Destek Sistemi Kullanım Durumları ve Sisteme İlişkin Görüşleri

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ÖZET

Bu araştırma; öğrencilerin öz düzenleyici öğrenme stratejisi (ÖÖS) düzeyine göre EBA akademik destek sistemi kullanım durumlarını ve sisteme ilişkin görüşlerini ortaya çıkarmak amacıyla yürütülmüştür. Çoklu özel durum deseni benimsenen araştırmanın çalışma grubunu Mardin'in farklı ilçelerindeki Anadolu Liselerinin 11 ve 12. sınıflarında öğrenim görmekte olan rastgele seçilen 34 öğrenci oluşturmuştur. Öğrenciler EBA Akademik Destek Sistemini (EBA-ADES) kullanmadan önce araştırmacı tarafından sistemin tanıtımı yapılmış, ardından öğrenciler tarafından Öz Düzenleyici Öğrenme Stratejileri Ölçeği (ÖÖSÖ) ve katılımcı bilgi formları doldurulmuştur. Öğrencilerin 5 hafta boyunca fizik dersinde EBA-ADES'i kullanmaları ve her kullanım sonrasında günlükleri doldurmaları sağlanmıştır. Uygulama sonunda, öğrencilerin günlüklere verdikleri cevaplara göre hazırlanan sorular kullanılarak her öğrenci ile yarı yapılandırılmış görüşme gerçekleştirilmiştir. Elde edilen veriler içerik analizine tabi tutulmuştur. Araştırma sonunda farklı seviyede ÖÖS'ye sahip öğrencilerin EBA-ADES hakkındaki görüşleri ve sistemi kullanım durumlarının genel olarak birbirine benzer olduğu tespit edilmiştir. Farklı olarak öğrencinin sahip olduğu ÖÖS seviyesi arttıkça EBA-ADES'i kullanım süresinin arttığı söylenebilir. Öğrenciler EBA-ADES hakkında genelde olumlu görüşlere sahiptir. Öğrenciler tarafında beğenilen ve kolay kullanılan bu sistemin her sınıf seviyesine, her ders içeriğine uygun şekilde geliştirilmesi, kullanımının yaygınlaştırılması için sistemin tanıtımlarının artırılması önerilmektedir.

MAKALE BİLGİSİ

Anahtar Kelimeler: EBA, EBA-Akademik Destek Sistemi, Öz düzenleyici öğrenme, Uyarlanabilir öğrenme ortamları

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Introduction

With the change and development provided by technological opportunities, a demand for technological transformation has emerged in many fields. Countries have implemented many national projects to facilitate the process of adaptation to these technological developments in the field of education (Demirer & Sak, 2015). In Turkey, the Ministry of National Education (MoNE), which has carried out many projects to increase the use of technology in education, has implemented 32 projects such as Intel Education for the Future, Microsoft Cooperation in Education, and Information Technologies Project for the establishment of information technology infrastructure and the widespread use of information technologies since 1984 (Topuz & Göktaş, 2015). The last of these projects is the FATİH (Fırsatları Artırma Teknolojiyi İyileştirme Hareketi/The Movement for Increasing Opportunities and Improving Technology) project, which was realized in November 2010 with the cooperation of MoNE and the Ministry of Transportation (Kayaduman, Sarıkaya & Seferoğlu, 2011).

The FATİH Project has five main objectives. These are providing hardware and software infrastructure, providing and managing educational e-content, in-service training of teachers, ensuring conscious, secure, manageable, and measurable ICT (Information and Communication Technologies) use, and ensuring effective use of ICT in curricula (MoNE, 2016). In this context, to achieve the goal of providing and managing educational e-content, a platform called EBA (Education Information Network) was created for the use of students, teachers, and parents. Launched in 2012, EBA was designed to provide rich and educational content, popularize informatics culture, respond to content demands, use and structure information, appeal to different learning styles, and use technology as a tool (MoNE, 2021). There are three different user panels: teacher, student, and parent. Teachers can send videos, audio, homework, lecture notes, and documents and follow up on the work sent as homework to their students. They can also send messages or initiate voting, discussions, and activities for the class or the groups they create. Students can access videos, visuals, documents, and course content such as homework, exams, and lecture notes sent by their teachers through the system. Parents can follow the student's work by logging in as a user.

With the widespread use of EBA, a separate platform was developed to help students prepare for exams. This platform, defined as EBA-ASS (EBA- Academic Support System), was developed by MoNE as a sub-component of EBA and opened to the use of 11th and 12th-grade students on May 1, 2020. It was developed as a system that continuously monitors students' performances, instantly identifies the subjects they are missing, and thanks to its intelligent suggestion system, it offers students unique remedial lists and tests, taking them directly to the smallest piece of information they need, without the need to re-study all subjects from beginning to end (MoNE, 2020).

Students who log in to EBA-ASS start using the system by creating a preference list from their target universities and departments. After the placement test, the system prepares a study program for the user to intervene. Students help the system by choosing the study strategies

from beginning, covering their deficiencies, and loading the questions according to their course progress. In the study from beginning strategy, all the course media are shown. The topics in the cover-up strategy are shown according to the questions the student got wrong in tests and mock exams. The load questions strategy allows the student to solve more questions. The system supports students with videos, animations, lectures, summaries, and questions prepared for each subject. The wrong answers given by the students in the tests they solve at the end of the subject enable the system to recognize the sections they have learned incompletely. The system makes adaptations according to the student, provides the opportunity to review the missing learning, and offers personalized learning opportunities to the student.

Adaptive e-learning systems have been developed to meet learners' personal learning needs, considering individual characteristics such as different learning styles, learning backgrounds, learning needs, expectations, interests, and learning speeds (Tuna & Öztürk, 2015). An adaptive or personalized learning environment means a learning experience tailored to the learner's interest and learning style (Özarslan, 2010). Adaptive systems aim to tailor the learning experience to the individual's needs by considering the individual's unique behaviors and responses (EdSurge, 2016). EBA-ASS can be considered an adaptive learning system (ALS) because it offers personalized learning opportunities according to different learning strategies and responses that students prefer.

Adaptive learning systems are expected to positively affect achievement and academic performance (Gurunath, Ravi & Srivatsa, 2012). Systems have been developed, and experimental studies have been conducted to determine the effects of these systems on students' development (Baz, 2016; Çelebi, 2014; Güngören, 2015; Tuna Şen, 2009). Many studies have determined the positive effects of ALS (Verdú, Regueras, Verdú, De Castro & Perez, 2008). Burak (2020) and Güngören (2015) reported that the use of ILC made a significant positive difference in students' academic achievement; Özkeskin (2017) and Somyürek (2008) reported that the satisfaction levels of students using adaptive learning environment were high; Hopcan (2013) stated that the performance problems of students with particular learning difficulties decreased with the use of the system.

Learners' mental ability, cognitive style, learning style, prior knowledge, anxiety, motivation, and self-efficacy can affect the effectiveness of ALS (Park & Lee, 2008). The other variable that there is no direct information in the literature that can differentiate the effect of ALS is self-regulated learning. Self-regulated learning affects achievement and academic performance (Boekaerts, 1996). High levels of self-regulated learning find a way to succeed even when they face obstacles such as poor working conditions and complicated textbooks. They can conduct in-depth research to provide the best learning if needed. In defining the characteristics of a self-regulated learner, Zimmerman (1990) considered the learner in terms of behavior, metacognition, and motivation processes. Regarding behavioral processes, self-regulated learners choose the learning environments where they can learn best and use time effectively; metacognitive processes make plans, set goals, self-monitor, and self-evaluate

during their learning. In terms of motivation processes, they have a high level of self-efficacy belief and place a high value on the task they perform (Rizemberg & Zimmerman, 1992; Zimmerman, 1990). In this case, it can be thought that students' self-regulatory learning level differentiates their behaviors in the adaptive learning environment and the level of benefit from the environment. EBA-ASS is one of the adaptive learning environments accessible to all students. This study aims to examine the EBA-ASS usage status of students with different levels of Self-Regulatory Learning Strategies (SRLS) and their opinions about the system.

The research problem statement is as follows: "According to the level of self-regulatory learning strategy of the students, how is their use of the EBA Academic Support System and their opinions about the system?". In this direction, the sub-problems of the research are as follows:

- 1- How do students with different self-regulatory learning strategy levels use EBA-ASS?
- 2-What do students with different self-regulatory learning strategy levels think about EBA-ASS?

Importance of the Research

With the widespread use of e-learning, the learning environment for students has changed, giving them more control over their learning (Jansen et al., 2020). In e-learning environments, organizing learning environments according to students' individual differences and learning characteristics plays an essential role in increasing the quality of learning and students' academic achievement (Kurnaz & Ergün, 2018). In a study conducted by Barnard, Lan, and Paton (2008), it was emphasized that one of the most important factors of being successful in online learning environments is self-regulatory skills. In a study conducted in the context of Turkey, stated that learning strategies should be developed for students to benefit more from the EBA system (Coşkunserçe & Becit İççitürk, 2019). Adaptive e-learning environment refer to educational systems that leverage data analytics and AI to personalize the learning experience and dynamically adjust the presentation of educational content based on an individual student's performance, learning pace, and preferences (Gligorea et al., 2023; Khan et al., 2022). In the literature review, it was seen that there is not enough research on the use of EBA-ASS, an adaptive e-learning environment. The only two research on the system was conducted by İbili and Yalçın (2021) and Okyay (2022). In these studies, the researchers determined the opinions of high school administrators and teachers about the system. A study in which students using the system were included in the study group was not found in the literature review. The first step is identifying needs and barriers in adopting adaptive learning and developing appropriate programs. Effective strategies include providing training on the importance of adaptive learning, developing policies that support the use of adaptive learning technology, and creating mechanisms for feedback and evaluation (Rachmad, 2022). This study is considered to be important in terms of feedback and evaluation. Except for EBA-ASS, the other studies on Adaptive Learning Environment(ALE) generally examined the effects of ALE on achievement and motivation. Users' preferences affect their use of adaptive learning environments and their utilization level. The user should actively participate in learning (Bandura, 1986). The degree of active participation in this process is defined as self-

regulated learning (Zimmerman, 1989). It is necessary to examine the effect of users' SRLS on their use of ALE. No research in the literature examines the relationship between SRLS and ALE. It is thought that the study will contribute to the gap in the literature by determining how students with different self-regulatory learning levels use EBA-ASS, which is considered as an SLO in the study, and their views on the system. This research is as important as original research in the field in terms of reaching findings to illuminate the relationship between learners' levels of having SRLSs and the way they use ALS.

This research will contribute to promoting EBA-ASS, a new platform, and ensure its widespread use among teachers and students. This study used participant information forms, semi-structured interview forms, and diaries to determine how students benefit from the system according to their self-regulated learning levels. By asking questions about the frequency of use of the system, which strategies, and which sections students with different levels of SRLS prefer more, it was tried to determine their use of the system. In addition, their opinions about the system were obtained, and the system was evaluated from the student's perspective. Considering the results of this study, information can be obtained for more effective use of the system, and essential suggestions will be presented to teachers, system designers, and future researchers.

Methodology

Model of the Research

This research was conducted in the case study design (Aytaçlı, 2012), which is appropriate to the nature of educational research. In case studies, an individual, group, activity, event, or process can be considered a case (Mazlum, 2015). The most essential feature of case studies conducted with a qualitative approach is that all variables affecting the situation, such as one or more than one situation, events, individuals, and environments, are handled in a holistic manner (Yin, 2017).

In this study, a nested multiple-case design was adopted since the views of two different groups of participants (students with intermediate and high-level self-regulatory learning strategies) on the same situation (their EBA-ASS usage status and their views on the system) were investigated. This boundary can be formed by place, time, or participant characteristics (McMillan & Schumacher, p. 345). As seen in Table 1, the boundaries of this study are the SRLS of the participants. Since the use of EBA-ASS and the views on the system discussed in the research may be different according to the course used, the boundaries of the research were determined by considering the use of EBA-ASS and the views of the students in the physics course in this study.

Study Group of the Research

The study was conducted with 11th and 12th-grade students studying in high schools in the Artuklu and Yeşilli districts of Mardin province in the 2021-2022 academic year. In line with

the purpose of the study, the accessible population was determined, and the study group was formed (Creswell, 2014).

For the study group, 34 11th and 12th-grade students from four different Anatolian high schools in different districts were selected. While 14 of these students were informed about EBA-ASS, 20 were not. Eight students learned about the system through EBA, four through their relatives, and two through their teachers. The distribution of students by grade and gender is shown in Table 1.

Table 1. Distribution of students in the study group according to grade and gender

Gender	Grade		Total
	11th grade	12th grade	
Female	12	14	26
Male	3	5	8
Total	15	19	34

As seen in Table 1, most of the students in the study group were in the 12th grade and were girls.

The students were asked to fill in the SRLSS before using the system. Considering the maximum and minimum score range that can be obtained from each item in the scale, students with a mean score between 6-4,35 were classified as Group 1 (HLSR-LS,) those with a mean score between 4,35 - 2,68 were classified as Group 2 (MLSR-LS), and those with a mean score between 2,68-1 were classified as Group 3. The mean scores of the students from the sub-dimensions and the whole scale and the groups they belonged to according to the classification are shown in Table 2.

Table 2. The mean scores of the students on the SRLSS

Students with HLSR-LS		Students with MLSR-LS	
Participant	Score	Participant	Score
K14	5,76	K25	4,34
K26	5,59	K27	4,34
K15	5,34	K4	4,24
K10	5,24	K9	4,00
K32	5,24	K5	3,97
K6	5,03	K2	3,93
K24	5,00	K22	3,93
K11	4,86	K16	3,83
K34	4,86	K8	3,55
K7	4,66	K18	3,52
K20	4,62	K29	3,52
K21	4,62	K28	3,48
K31	4,62	K17	3,24
K3	4,59	K23	3,21
K12	4,59	K19	2,79
K33	4,59		
K30	4,52		

K13	4,48
K1	4,45

As seen in Table 2, among the students in the study group, there were 19 students (Group 1) with HLSR-LS and 15 students (Group 2) with MLSR-LS. There were no students with low-level SRLS.

Participant information about when students started using EBA-ASS is presented in Table 3.

Table 3. *Time of Starting to Use EBA-ASS*

Time to Start Using	Students with MLSR-LS	f	Students with HLSR-LS	f
Using the system since it was introduced	K16, K17, K18, K19, K22, K23, K25, K27, K28, K29	10	K14, K15, K20, K21, K24, K26, K30, K31, K32, K33, K34	11
For two years	K4, K8, K9	3	K3, K7, K10, K13	4
For one year	K2, K5	2	K1, K6, K11, K12	4

Table 3 shows that students with medium-level (f=10) and high-level (f=11) SRLSs have been using the system since it was introduced. There are a total of seven students who have been using the system for 2 years, including HLSR-LS (f=4) and MLSR-LS (f=3). Six students have been using the system for one year, 4 of whom have a high-level and 2 of whom have medium-level SRLSs.

Data Collection Tools and Process

"Self-regulatory Learning Strategies Scale" (Kadioğlu et al., 2011), "Participant Information Form", "Semi-structured Interview Form" and "Student Diaries" prepared by the researcher were used as data collection tools.

Self-Regulatory Learning Strategies Scale

The SRLSS (Kadioğlu et al., 2011) was used to measure students' SRLS. The scale has eight sub-dimensions: motivation regulation, effort regulation, planning, attention gathering, summarizing, emphasizing, self-direction, and using additional resources. The scale is a 6-point Likert-type scale consisting of 29 items that can be answered between "1 (Never)" and "6 (Always)" and was applied to 616 high school students.

The Cronbach's alpha internal reliability coefficient calculated for this study is between .80 and .87. The internal reliability coefficient ranges for the sub-dimensions of the scale were calculated as follows: organizing motivation .74 to .81, organizing effort .63 to .74, planning .79 to .84, focusing .75 to .81, using additional resources .67 to .76, summarizing .68 to .77, emphasizing .70 to .76, self-direction .72 to .80. Cronbach's alpha coefficients above .70 are considered sufficient for the use of a measurement tool (Nunnally, 1978; Özgüven, 2004). The fact that the sub-dimensions of the scale showed a high positive correlation with the scale score supports the scale's construct validity positively.

Semi-structured Interview

The semi-structured interview is neither as rigid as the fully structured interview form nor as flexible as the unstructured interview form; it lies between the two extremes (Karasar 1995, p, 165). Therefore, semi-structured interviews were conducted with the students in the study group at the end of the data collection process.

In line with the expert opinions, semi-structured interview questions were prepared according to the answers given in the participant information form and diaries. For this reason, each student was asked slightly different questions in the interview. This differentiation was created by considering situations such as the strategy and section used by the student. The questions were evaluated by two separate experts in terms of grammar and one expert in terms of content, and no problems were used in the data collection tool. The answers to the questions were recorded with the permission of the students. Thus, the students' use of the platform and their opinions were tried to be revealed with a semi-structured interview form.

Participant Information Form

The researcher used the EBA-ASS platform for a long time and created a question pool. The questions that allowed the research problem to be explained better were transformed into a draft form from the pool of questions. The draft form was submitted to two experts, one of whom was a Turkish teacher and one of whom was a literature teacher. The draft participant information form was finalized in line with the expert opinion. The finalized form was also evaluated by two experts in terms of grammar. The form, which had no grammatical problems, was used as a data collection tool. The participant information form was designed as three separate sections. The first section includes questions about the awareness of the EBA-ASS platform, the second section includes questions about the use of the platform, and the third section includes questions about the effects of the platform on self-regulated learning. A pilot study was conducted with four students for the participant information form. The students' answers to the questions were examined, and the questions thought to cause ambiguity were reorganized. To the question "What do you think about the system's ability to identify the missing sections of your learning?", the question "Did it correctly identify the parts you learned missing?" was added and made more understandable for the students.

Student Diaries

The act of keeping a diary to see and describe the steps of the research process in its entirety is one of the data collection tools used in qualitative research (Gürgür, 2005). Student diaries were used to examine the use of the EBA-ASS platform in more detail and to learn their feelings and thoughts. The student diaries, which consisted of questions about the study strategy chosen by the student, the sections that he/she benefited from, the section that he/she thought was most helpful or not, system use and design, and feelings and thoughts, were

created according to the purpose of the research. The finalized form was also evaluated for grammar by two experts, one Turkish and one Literature teacher. A pilot study was conducted with 4 students for the form that had no problems in terms of grammar and meaning. The diaries filled out by the students were examined, and no problems were found in terms of grammar and meaning for the students. The students in the study group were asked to fill in their diaries after each use of the EBA-ASS platform. The data obtained from the diaries and the data obtained from the interviews were evaluated together.

Data Collection

Necessary permissions were obtained from the Mardin Provincial Directorate of National Education and the parents of the participants in order to conduct the study. Firstly, schools were visited to collect data. With the help of the physics teacher and school administration, a total of 34 students who have used or will use the system were identified. These students were first administered the SRLSS in the first stage. Then, participant information forms prepared by the researcher were distributed, which were collected after the students had filled out the forms. Student diaries were introduced to the students in the study group, and 8 student diaries were given to each. Students were asked to fill in these diaries for approximately one month when they used the EBA-ASS platform in the physics course. At the end of the one-month period, the researcher collected the diaries from the students. Semi-structured interviews were conducted with questions prepared in line with the participant information form and the answers given to the diaries. Students' responses to the semi-structured interview questions were recorded. The average duration of the recordings varies between 5-7 minutes.

Data Analysis

The data obtained from participant information forms, semi-structured interviews, and diaries were analyzed using content analysis. The primary purpose of content analysis is to reveal the common concepts and themes in the collected data and to interpret them by organizing the similarity relationships (Yıldırım, Şimşek, 2013: 227). In this study, the researcher coded the answers given by the students, and the codes were classified into themes. Findings were prepared using frequency tables, graphs, and quotations indicating the frequency of codes. Another researcher coded the data and inter-coder agreement was ensured between the researchers. The inter-coder agreement coefficient was calculated using the reliability coefficient formula developed by Miles and Huberman (2016) [$\text{Agreement} / (\text{Agreement} + \text{Disagreement}) \times 100$] and 92% agreement was found. Quotations were frequently used in the presentation of the findings.

Findings

In this section, the findings obtained in the research are presented in the form of subheadings utilizing tables, graphs, and quotations.

Findings on How Students with Different Levels of Self-Regulatory Learning Strategies Use EBA-ASS

The findings related to the duration of the participants' use of EBA-ASS, the courses they utilized, and the strategies, sections, and sections they utilized while using EBA-ASS within the scope of the physics course are presented under this subheading. According to the data expressed by the students in their diaries, the findings related to the duration of using EBA-ASS are presented in Table 4.

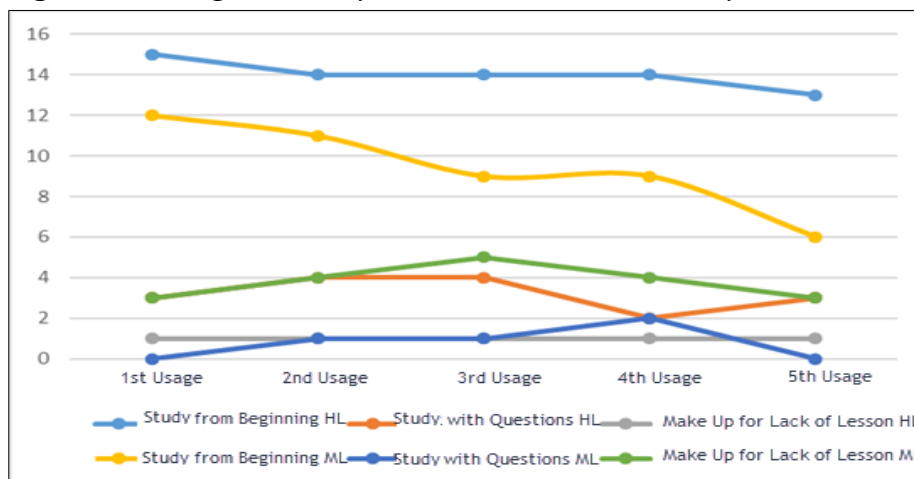
Table 4. Students' daily EBA-ASS usage time

Duration of Use	Students with MLSR-LS	f	Students with HLSR-LS	f
1-2 Hours	K8, K16, K17, K18, K19, K23, K29, K25	8	K3, K15, K20, K26, K30, K32, K34	7
2-3 Hours	K2, K3, K9, K22, K27, K28	6	K7, K33, K21, K11, K12, K13, K14, K24, K10, K1, K6, K31	12
3+ Hours	K4	1	-	-

When Table 4 is analyzed, it is seen that most of the students with high level ($f=12$) and medium level ($f=6$) SRLS use the system between 2-3 hours a day. The majority of the students who stated that they used the system for 1-2 hours a day were students with MLSR-LS ($f=7$). Some of the student statements participating in the study were "I have been using it since the Covid-19 period. 2-3 hours (K7).", "I have been using it since the distance education period. 2-3 hours a day (K10).", "I have been using it for the last 2 years. At least 3 hours every day. It varies according to the intensity of the daily lessons (P4).", "I have been trying to use it 2-3 hours a day since the system was introduced (K28).", "I have been using it 1 hour 2-3 times a week for 2 years (K8).", "I use it for 3 hours daily (K31)."

The graph showing the strategies students marked in their diaries after using EBA-ASS in physics courses is shown in Figure 1.

Figure 1. Strategies Used by Students in EBA-ASS in Physics Lesson



When Figure 1 was analyzed, it was determined from the diaries that students with high-level and medium-level SRLS mostly preferred the strategy of studying from beginning in their use of EBA-ASS. In the second place in strategy preference, make up for lack of lesson was preferred for students with medium-level SRLS, and work with questions was preferred for

students with high-level SRLS. It was obtained that students with high-level SRLS preferred make up for lack of lesson, and students with medium-level SRLS preferred study with questions very rarely.

The graph showing the sections that students marked in their diaries after using EBA-ASS in physics courses is shown in Figure 2.

Figure 2. Sections that Students Use in EBA-ASS in Physics Lesson

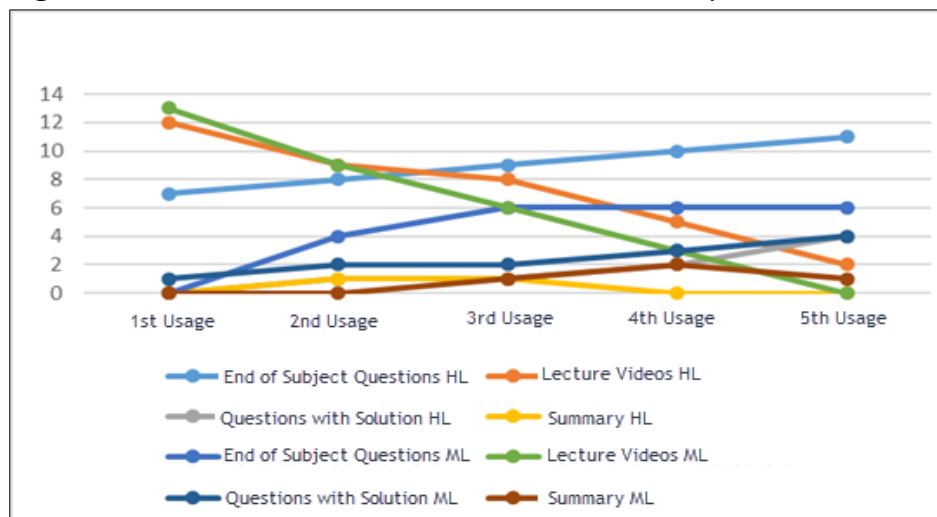
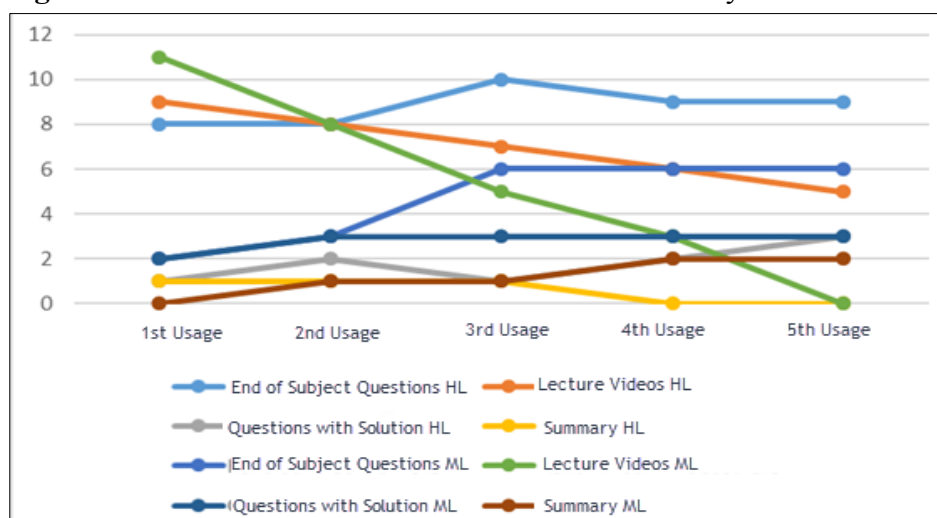


Figure 2 is analyzed, and it is seen in Figure 3 that the most used section in the first two usages by students with high-level and medium-level SRLS is Lecture Videos. As for the third use, it is seen that the students with HLSR-LS prefer End of Topic Questions more. It is seen that students with MLSR-LS preferred End-of-Subject Questions more in the fourth usage. In the fifth usage, it was determined that upper and medium-level students preferred the questions with solutions section. The least preferred section is the summary section.

Considering the students' SRLS levels, the change of the most utilized sections of EBA-ASS according to the number of uses is presented in Figure 3.

Figure 3. Sections that Students Use in EBA-ASS in Physics Lesson



When Figure 3 is analyzed, it is seen that the most utilized section of the students with high and medium-level SRLS is the lecture video in the first use and the end-of-topic questions in the subsequent uses. It is seen that the summaries section is not preferred by students with high and intermediate levels of SRLS, while the questions with solutions section is relatively more preferred.

The findings regarding the courses that students prefer to use EBA-ASS are presented in Table 5.

Table 5. Courses in which students use EBA-ASS

Lessons	Students with MLSR-LS	f	Students with HLSR-LS	f
Maths	K2, K8, K23, K28, K27	5	K1, K3, K10, K12, K14, K15, K21, K30, K31, K32, K33, K34,	12
Physics	K8, K19, K25, K28	4	K3, K6, K13, K15, K21, K26, K30, K34	8
Biology	K19, K22, K25, K26	4	K1, K10, K12	3
All Courses	K5, K18	2	K11, K20, K24	3
Chemistry	K25, K27	2	K12, K14, K31	3
Numerical Courses	K2, K4, K9, K29	4	K7	1
Literature	K2, K23, K16, K17	4	-	-
Total		25		30

Table 5 shows that most of the students used the system in mathematics ($f=17$) and physics ($f=12$) courses. 12 students who used the system for mathematics and eight who used the system for physics were students with HLSR-LS. Some of the statements of the students who participated in the study are as follows: "I used it for Biology and Mathematics (K1)." "I used it mostly for numerical courses. It is obvious and understandable for Physics course (K4)." "I used it for Mathematics and numerical courses (K2)." "I used it for Mathematics and Physics course (K28)."

Findings Related to EBA-ASS Usage Status of Students with Different Self-Regulatory Learning Strategy Levels

The findings obtained from the interview regarding the student's views on the advantages offered by EBA-ASS, the use of EBA-ASS in a physics course, the strategies they preferred in EBA-ASS in a physics course, the sections they used, the sections they liked and the role of EBA-ASS on their self-learning are presented under this title.

Students' views on the advantages of using EBA-ASS are presented in Table 6.

Table 6. Advantages of Using EBA-ASS

Advantages	Students with MLSR-LS	f	Students with HLSR-LS	f
Supporting Further Study	K2, K5, K8, K9, K16, K18, K19, K22, K25, K27, K29	11	K1, K3, K13, K14, K21, K24, K31, K34	8
Making the Lesson Comprehensible	K2, K4, K9, K16, K23, K27, K28, K29	8	K7, K10, K11, K12, K15, K26, K27, K34	8

Making the Lesson Fun	K17, K19, K22	3	K6, K10, K12, K14, K20, K24, K26, K30, K32,	9
Guidance	K2, K22, K23, K25	4	K10, K11, K14, K20, K26,	5
Being Systematic	K4, K7, K17, K5	4	K20, K21, K25, K31, K33	5
Providing Memorable Learning	K8, K16, K27, K29	4	-	-

When Table 6 is analyzed, most of the students with high level ($f=8$) and medium level ($f=11$) SRLS stated that EBA-ASS provided support for them to study more. Some of the student statements were as follows: *"When I used it, I could see my deficiencies, and I was solving tests. When I did not use it, I was not studying (P5)."*, *"Of course, using it is more useful (P2)."*, *"When I use it, I look at the questions with solutions. When I do not use it, the questions I cannot do remain unsolved (P8)."*, *"Of course, additional support is better (P3)."* Students with HLSR-LS ($f=8$) and MLSR-LS ($f=8$) stated that EBA-ASS made the lessons more understandable. Some students expressed this situation with the sentences, *"Showing my mistakes and showing the solutions makes the lessons more understandable (K16)."*, *"It makes me understand the subject very well (K12)."*, *"The multidimensional explanation of the lessons makes me understand better...(K15)."* 9 students with HLSR-LS expressed the advantage of EBA-ASS as making the lessons fun, interesting, and endearing. Some of the student expressions are as follows: *"The lessons are more fun for me, and I enjoy studying (K14)."*, *"I think it makes me like the lessons (K6)."* Three students with MLSR-LS stated that the lessons were fun. The student statements are as follows: *"...I enjoy listening to lessons and solving questions in the system (P22)."*, *"I think the lessons are more interesting for me (K19)."* The statements of the students who think that EBA-ASS provides guidance, identifies and directs incomplete learning are as follows: *"... I liked that it brought lecture videos about the questions I got wrong (K10)."*, *"I like the fact that it identifies the places I have learned incompletely ... (K23)"*, *"I like the fact that I see my mistakes in the tests I take and that it enables me to work on the aspects I am missing (K2)."*, *"It is a nice feature that it shows which department in which university I can go according to the score I get in each trial after determining my department preference at the university (K26)."* The statements of HLSR-LS ($f=5$) and MLSR-LS ($f=4$) students who stated that the lessons were taught in a systematic way were as follows: *"The sections that are all related and sequential are nice (K4)."* *"The fact that I can continue from the subject I left off while studying helps me to study regularly and I like this feature the most (K20)."* The students with MLSR-LS ($f=4$) stated that EBA-ASS provides more memorable learning as follows: *"I think that the system makes what I have learned more memorable, so I like to use it (K27)"*, *"I like to use the system for repetition and what I have learned is more permanent (P29)"*.

In addition to these advantages, students mentioned one disadvantage. The students (5 of them have HLSR-LS and one of them has MLSR-LS) stated that they did not understand the lessons or did not want to watch the videos because of the diction of the teachers in the subject expression videos of EBA-ASS. Some of the statements of the students who think so are as follows: *"It is a good system, but the diction of the teachers could be better (K1)."*, *"...the diction of the teachers is a bit bad (K32)."*

Table 7. *Opinions on the Use of EBA-ASS in Physics Lessons*

Opinions on the Use of Physics Lessons	Students with MLSR-LS	f	Students with HLSR-LS	f
Making Use of Question Solutions	K7, K18, K22, K28	4	K9, K11, K13, K20, K21, K24, K26, K30	8
Ensuring Understandability	K4, K5, K25, K29	4	-	-
Making the Lesson Popular	K19	1	K6, K15	2
Making the Lesson Useful	K8	1	K34	1

As seen in Table 7, students with high-level (f=8) and medium-level (f=4) SRLSs stated that they primarily benefited from question solutions while studying physics lessons in EBA-ASS. Some students expressed this situation as *"I used question solutions for physics lesson (K22)."* *"I solved questions in physics lesson (K30)."* Students with in MLSR-LS (f=4) stated that the physics course was more understandable with EBA-ASS as *"I think I understood the physics course better (K29)."*, *"I think I understood the physics course well (K5)."* Some of the students with high level (f=2) and medium level (f=1) SRLs also stated that they liked the physics lesson more in EBA-ASS with the sentences *"The teacher who taught the physics lesson made me like the physics lesson (K6)."*, *"I liked the physics lesson again (K19)."* The students with high level (f=1) and medium level (f=1) SRLSs who stated that the physics lesson was productively expressed their thoughts as, *"I think I got a lot of benefits and efficiency for the physics lesson (K8)."*, *"The physics lesson was very productive for me (K34)."*

The only negative feature the students expressed about using EBA-ASS in physics courses was that the lecture videos needed to be more comprehensible. This idea was stated by the students with high level (f=1) and medium level (f=3) SRLSs as *"For physics lesson, it is a lesson that I do not understand. I do not understand much from the lecturer, but I benefit from the questions (K7)."*, *"There may be better video lectures for some courses, especially for physics (K9)."*

Findings regarding students' opinions on EBA-ASS strategy preference in physics courses are presented in Table 8.

Table 8. *Opinions on EBA-ASS Strategy Preference for Physics Course*

Physics Course Strategy Preference	Students with MLSR-LS	f	Students with HLSR-LS	f
Study from beginning	K2, K4, K5, K9, K17, K22, K23, K25, K28	9	K1, K3, K6, K7, K11, K12, K13, K20, K21, K26, K32, K33, K34, K31,	14
Make up for Lack of Lesson	K8, K19, K27, K29	4	K10	1
Study with question	K16, K18	2	K14, K15, K24, K30	4

When Table 8 is analyzed, it is seen that students with high level (f=14) and intermediate level (f=9) SRLS mostly used the "study from beginning" strategy for physics courses. The statements of some students are as follows: *"I used it for subject repetitions. I used the strategy of study from beginning (K22)."*, *"I determined the course I wanted to study, I*

determined my program, I determined my target university, I worked from beginning accordingly. I got good efficiency...(K1)." It was observed that students with medium level ($f=4$) SRLS preferred the "make up for lack of lessson" strategy more than students with high level ($f=1$) SRLS. Some of the student expressions were "I used the " make up for lack of lessson " strategy (K19).", "I preferred make up for lack of lessson strategy more (K10)". Among the six students who used the "study with question" strategy, 4 have high-level SRLS, and 2 have medium-level SRLS. Some of the statements of these students are as follows: "I used the study with question strategy (K24)", "I preferred the study with questions strategy because I use the system to solve questions (K16)".

Students' opinions on the sections they used in EBA-ASS in physics courses are presented in Table 9.

Table 9. Sections Used in EBA-ASS for Physics Course

Sections Used in Physics Course EBA-ASS	Students with MLSR-LS	f	Students with HLSR-LS	f
Lecture Videos	K2, K4, K5, K8, K16, K17, K22, K23, K25, K28	10	K1, K9, K10, K11, K12, K20, K21, K26, K32, K31, K33	11
Tests	K2, K4, K8, K9, K17, K18,	6	K1, K6, K7, K11, K12, K15, K20, K21, K24, K30, K31, K34	12
Exams	K5, K25	2	K3, K6, K7, K14, K15, K21, K30, K31	8
Questions with Solutions	K25, K27, K28	3	K3, K7, K21	3
Questions in the Exams	K9	1	K21, K24	2
Summary	K19, K29	1	K3	1

Table 9 shows that the students (11 with high level and 10 with medium level SRLSs) primarily used "Lecture Videos" for physics lessons. Some students expressed this situation as "After watching the lecture videos ... (K4)" and "I watched the lecture videos the most (K21)." After the lecture videos, they mostly used the "Tests" and "Exams" sections, respectively. The statements of students with high level ($f=12$) and medium level ($f=6$) SRLSs who stated that they used the tests section were as follows: "... I solved the end-of-subject questions (P24)", "... I usually solved the tests (K17)". The statements of the students with high level ($f=8$) and medium level ($f=2$) SRLS who stated that they used the exams section were "... I used the exams section. (K25)", "... I participated in the exams. (K31)". It was observed that the number of students who stated that they used the "question with solutions" section was equal for students with high level ($f=3$) and medium level ($f=3$) SRLS. It was observed that 2 of the students who stated that they used the "question in the exams" section in the system had a high level, and 1 of them had intermediate level SRLS. Some of the student expressions are as follows: "I used the "...." section very fondly (K21)", "I also used the section of the "Question in the exam" (K9)". The students who stated that they used the summaries section (2 of them had intermediate level and one of them had high-level SRLS) stated their opinions as "I benefited from the summaries. (K3)", "...I also used the summaries section. (K29)".

Students' opinions on the sections of EBA-ASS that they liked are presented in Table 10.

Table 10. *Opinions on the Favorite Sections of EBA-ASS*

Favourite Sections	Students with MLSR-LS	f	Students with HLSR-LS	f
Test Solving	K8, K18, K27, K28	3	K21, K13, K30, K31, K32, K34	6
Video with Solutions	K25, K27	2	K10, K30, K15, K24, K7	5
Question in the Exams	K19, K29	2	K21, K15, K24, K1, K3	5
Displaying the Number of Solved Questions	K18, K22	2	K11, K32, K6, K14	4
Summarizing Topics	K5, K19	2	K33	1
Make up for Lack of Lesson	K8, K9	2	K10	1
System Design	K22	1	K1, K21	2
Exams	-	-	K6, K13, K31	3

When Table 10 is analyzed, the most liked sections of EBA-ASS are the Test Solving section ($f=9$), Videos with Solutions ($f=7$), and Questions in the Exams ($f=7$). Some student expressions are as follows: *"...I liked the test solving section (P13)", "I liked the test solving section very much because it is useful (P18)", "...I liked the questions section (P19)", "...I also liked the questions section (P1)", "...videos with solutions are my favorite section because they help me understand the questions I did wrong (K7)", "My favorite section is videos with solutions (K27)." The statements of the students with HLSR-LS ($f=4$) and MLSR-LS ($f=2$) who stated that the most favorite section of EBA-ASS is that it shows the number of questions solved are as follows: *"I like the section that shows how many questions I solved, how many correct and how many incorrect I did. (K22)", "I like that I can see how many questions I solved when (K14)". In EBA-ASS, 3 students (2 of them with medium level and 1 of them with high-level SRLSs) expressed that they liked the summaries of the subjects with sentences such as "Giving short summaries of the subjects... (K5)", "Summaries at the end of the subjects... (K33)". The expressions of the students (2 of them with medium level and 1 of them with high-level SRLS) who expressed that they liked the Make up for Lack of Lesson section were as follows: *"I like the Make up for Lack of Lesson section very much. It allows me to focus only on the sections I have learned incompletely. (K9)", "I usually use the Make up for Lack of Lesson strategy, and this is my favorite section. (K10)". The expressions of some of the students who stated that they liked the design of the system (2 of them had high level and 1 of them had medium level SRLSs) were as follows: *"I like the fact that I can find what I am looking for easily and in a short time in the system and I like the design. (K22)", "...I like that there is a green tick at the end of OSYM(presidency of measurement and selection)-style questions. (K1)". All students who stated that they liked the exams section consisted of students with MLSR-LS ($f=3$). Some of the student statements are as follows: *"I also liked the essays section (K6)", "The essays section is very well thought out (k13)".*****

Of the three students who expressed opinions about the sections of EBA-ASS that were disliked or found deficient, two had high-level SRLS, and one had medium-level SRLS. The students who did not like the fact that the system sometimes does not open expressed their opinions as *"The section I do not like is that the system sometimes does not open. (K7)", "There are times when the system does not open when I am about to study. (K3) "* expressed their opinions. A student with intermediate-level SRLS saw the lack of a timer as a deficiency

and said, *"I do not understand how much I study; I wish there were a timer. This is the only section I do not like (K9)".*

Students' views on the ability of EBA-ASS to detect missing learning are presented in Table 11.

Table 11. *Student Opinions on EBA-ASS' Ability to Detect Incomplete Learning*

Ability Detect	Students with MLSR-LS	f	Students with HLSR-LS	f
Correct/Sufficient Detection	K16, K5, K8, K22, K2, K29, K18, K17, K19, K28, K4, K9, K25	13	K7, K14, K13, K3, K6, K1, K34, K24, K15, K26, K30, K21, K10, K12, K33, K11, K31,	17
Partially Correct/Sufficient Detection	K23, K27	2	K32, K20	2

When Table 11 was examined, it was seen that the majority of the opinions about the role of EBA-ASS on self-directed learning were gathered in the codes of facilitating learning. An equal number of students with high-level ($f=7$) and medium-level ($f=7$) SRLSs stated that EBA-ASS played an essential role in easy learning and good learning. Some student statements were as follows: *"It plays an important role in my learning. I study the subjects I cannot learn on my own from EBA-ASS. I solve questions for the subjects I can learn. (K14)", "I usually use EBA-ASS for the subjects I do not understand. It helps me learn more easily. (K29)".* It was seen that the answers given by the students with high level ($f=8$) SRLS mainly were gathered in the codes of desire to study, motivation, and making lessons more enjoyable. The second highest number of answers given by students with medium level ($f=4$) SRLS were gathered in the codes of desire to study, motivation, and endearing the lessons. Some of the student statements are as follows: *"It makes me sit and study even if I have no desire to study because I have to meet the goals I have chosen. (K26)", "I get bored when I study myself, but I get less bored when I use EBA-ASS. (P23)".* The answers gathered under the codes of identifying missing learning, enabling students to close their deficiencies, and repeating them were distributed as high level ($f=2$) and medium level ($f=2$) according to the level of having SRLSs. Some student statements were as follows: *"It plays a very good role. Because I did not come in the first week of school and I completed my deficiencies from here... (K1)", "I see my deficiencies and solve tests. I reinforce them (K5)".* The students who defined the role played by EBA-ASS as teacher-like had medium level ($f=2$) and high level ($f=1$) SRLS. Some of the student statements were as follows: *"EBA-ASS is like a teacher for me, both guiding me and helping me with what I do not know. (K19)", "I use solved questions, especially for the*

questions I cannot solve myself. It helps me like a teacher. (K10)". It was observed that both students who stated that EBA-ASS's ability to enable them to study at any time played an important role in their learning, and they were students with medium-level SRLS. The student's statement was as follows: *"Being able to take a break and recuperate whenever I want is better for my learning. (K4)".* The statement of one student with medium-level SRLS who stated that he felt like group work while studying in EBA-ASS was as follows: *"It plays an important role. I feel like studying with someone (K2)."* The role played by EBA-ASS was expressed by one student with high-level SRLS as *"The publication of new videos and tests by MoNE makes me feel more ready for the exam (K7)."*

All students stated that they would continue using EBA-ASS within their means. Some student statements are as follows: *"I will continue to use EBA-ASS as long as I have internet (K15)."* *"I am delighted with EBA-ASS and plan to continue using it (K9)."*

Result and Discussion

The primary purpose of this study is to reveal the EBA-ASS usage status of 11th and 12th-grade students who use EBA-ASS according to their SRLS levels and their opinions about this system. According to the findings, it was determined that students, regardless of their SRLS levels, generally started to use EBA-ASS after the system was introduced. The only part they did not like in the system was the lecture videos, which they thought offered advantages in physics lessons. It was found that the ways of using EBA-ASS by students with different SRLS levels were similar. It was found that students used the lecture videos section the most at the beginning, but later, their preferences shifted toward the end-of-topic questions section. The findings of the study are discussed in detail in this section.

The fact that most students started to use EBA-ASS after it was introduced suggests that they did not have enough knowledge about the system or were not sufficiently introduced and guided. It is seen that students with HLSR-LS used the system before it was introduced compared to students with MLSR-LS. This situation suggests that those with higher-level SRLSs use environments that offer more self-learning opportunities. The fact that the students' EBA-ASS usage time is mainly in the range of 2-3 hours for students with high SRLS and mostly in the range of 1-2 hours for students with medium level SRLS shows that students with high SRLS prefer to use EBA-ASS more daily. According to these results, it can be said that as the level of SRLS increases, the rate of utilization of ALE also increases. Although MoNE assigned a teacher trainer to each district for the promotional activities of EBA-ASS, it was observed that these promotional activities were only partially reciprocated in schools due to different factors. Support from leaders and an organizational culture that supports adaptive learning is vital (Rachmad, 2022). The fact that the promotional activities coincided with the pandemic may be why students did not show enough interest.

When the use and non-use of EBA-ASS are compared, it is suggested that students with high-level SRLS mostly use another e-learning platform when they do not use EBA-ASS, suggesting that they need academic support while studying. It can be thought that there is a

parallelism between students' receiving support from the e-learning platform and their success, and therefore they prefer e-learning platforms. Studies show that students using e-learning platforms have increased academic achievement (Yaseen & Eryılmaz, 2021). It is seen that students with medium level SRLS study less when they do not use EBA-ASS and study more when they use it. It is thought that while students with medium-level SRLS have problems studying, students with high-level SRLS need additional academic support to make their learning more permanent. If students who have problems in studying can benefit from ALE, it may contribute positively to their academic achievement.

It was determined that students preferred to use EBA-ASS for math ($f=17$), physics ($f=12$), biology ($f=7$), and chemistry ($f=5$) courses, which are called numerical courses; however, students with high-level and medium-level SRLS preferred to use EBA-ASS mostly in standard courses. The fact that students have more difficulty understanding mathematics and physics courses (Karataş, 2020) shows that they prefer to use EBA-ASS in courses they have difficulty understanding. In a study conducted on EBA, another e-learning platform, it was stated that the most preferred courses of students in EBA were math, English, and science (Coşkunserçe & Becit İşçitürk, 2019). Regarding course preferences, the findings of the studies are parallel to each other, except for the English course (there is no English course in EBA-ASS).

According to the students, the most significant advantages of EBA-ASS were found to be helping them understand the lessons better (Chen & Duh, 2008) and making the lessons more fun (Brusilovsky, 2001; Drexler, 2010), which are the advantages provided by ALE. Most students with high level ($f=8$) SRLS stated that they found the lessons fun, and most students with medium level ($f=5$) SRLS stated that they understood the lessons better in EBA-ASS. Studies in the literature show that such environments provide memorable learning (Özyurt et al., 2014). Four students with MLRS-LS also stated that they learned more memorable when they used EBA-ASS. The fact that the students with high level ($f=5$) SRLSs stated that there were diction problems in the subject expression videos in EBA-ASS suggests that they did not prefer the subject expression videos because they did not find them understandable enough. Sound control can be done in the lecture videos in EBA-ASS, and professional support can be obtained for sound if needed. Teachers usually interact with students in classroom environments and differentiate their voice tones according to this interaction. However, since there is no interaction with students in the lecture videos in EBA-ASS, the teacher's tone of voice remains the same for a long time. This situation is perceived negatively by the audience. The fact that there are studies in the literature showing that the sound problem and sound quality in videos are among the negativities encountered in online learning supports this finding (Sezgin, 2021).

It was determined that most of the opinions regarding using EBA-ASS in physics courses were positive. It was stated that students with HLSR-LS preferred EBA-ASS mostly for question solutions while using EBA-ASS in physics courses. In contrast, students with medium-level SRLSs used EBA-ASS because it helped them understand the physics course

better. Students can get support from different educational platforms to better understand the physics course. Although there is no literature on using EBA-ASS in physics courses, a study was conducted on physics courses on the EBA platform. In the study conducted by Alabay (2015), it was observed that there was a significant positive difference between students who always used EBA for history and physics lessons and those who never used EBA. However, there was no significant difference between mathematics and geography lessons. This suggests that students' use of the e-learning platform in physics course learning contributed significantly to learning.

According to the graph in Figure 2, which shows the strategies students marked in their diaries after using EBA-ASS, it was determined that students mostly preferred the strategy of study from beginning regardless of the subjects and learning situations. Students' use of the system for repetition purposes may be a reason for this. It can be shown that the strategy of make up for lack of lesson, which is a strategy offered by the system according to incomplete learning, is preferred by the students only a little because most of the students are new users of the system. It was determined from the graph that there were no differences in the strategy preferences of the students according to their SRLS levels.

It was determined that students mostly preferred studying from beginning while using EBA-ASS in physics lessons and that their strategy preferences were generally the same even though their SRLS levels differed. This situation confirms that students need help understanding the physics lesson. The fact that the other strategy highly preferred by students with high-level SRLS was study with questions ($f=4$) shows that students with high-level SRLS also benefit from EBA-ASS to solve questions in physics lessons. The fact that the other most preferred strategy for physics lessons by students with medium level SRLS was make up for lack of lesson ($f=4$) suggests that students trusted EBA-ASS in determining the parts they were missing and preferred to study the subjects that the system showed as missing. The detection of incomplete learning, which is one of the advantages of ALE, supports the learning process of students and can increase their motivation (Somyürek, 2009).

The fact that the most preferred part of the physics course in EBA-ASS is the lecture videos shows that the majority of the students listened to the physics course at least once more. Studies in the literature show that e-learning platforms positively affect physics course achievement (Ece, 2004; Erdemir & Kandil İnceç, 2015). It is seen that students with HLSR-LS tend to solve more questions while using the system. Although MLSR-LS students prefer to use the system for question-solving, they usually solve questions after the lecture videos. It is thought that students prefer the summary and questions section for physics lessons less because the use of the system is not long-term. Students' longer use of EBA-ASS can be revealed through new research.

It was determined that students with high and medium-level SRLS preferred lecture videos in the first two uses and end-of-topic questions in the following uses (Figure 3). This situation suggests that students tend to solve questions as a result of learning the topics. It was

observed that the section preferences of high-level and medium-level students were similar according to the number of uses. There was no difference between the students according to their SRLS levels.

Although the most used part of EBA-ASS by the students is the Lecture, the fact that the most appreciated features are the Test Solving Part, Videos with Solutions, Released Questions, Detecting and Guiding Incomplete Learning, and Showing the Number of Solved Questions suggests that students use the system mostly to solve questions. The fact that students stated that they liked the parts of EBA-ASS related to question solutions the most shows that they were affected by the current education system and the evaluation element within this system. In the study conducted by Türker and Dündar (2020), it was determined that the most preferred parts by students were lectures and question solution videos. It suggests that students generally use lectures and question solutions in e-learning platforms. When they started using EBA-ASS, they may have focused on question solutions as they were oriented towards winning the university program they determined. In the test-solving section, it is thought that facilities such as the ability of students to mark directly in the test-solving section and to see their mistakes immediately as a result of the control are effective in making the test-solving section the most admired feature. The fact that the system does not open and students cannot use the system whenever they want is seen as the most disliked feature by the students. Studies show these situations are among the most common problems encountered in online learning environments (Akkuş & Acar, 2017). Having a timer in the system is thought to be important in terms of showing how much studying is done.

It was found that the most utilized sections of EBA-ASS by students with high-level and medium-level SRLSs are lecture videos and end-of-subject questions. Students' section preferences are in parallel with the utilized section and the section that is thought to be helpful. Students think the sections they benefit from are the most helpful. It was determined that there was no significant difference in the section preferences of students with high-level and intermedia-level SRLSs, except for the end-of-subject questions, and that there was no significant difference in the utilized sections, even though the students' level of having SRLSs differed. When the literature is examined, it is seen that as a result of the studies conducted on EBA, it is seen that the lectures and tests section stands out as one of the most utilized sections (Tüysüz & Çümen, 2016; Demir et al., 2018). This situation parallels the result of our research.

Most students thought they learned the lessons more easily when they used EBA-ASS while studying than when they studied independently. Facilitating learning, which is one of the purposes of ALE, was found to be the most crucial role of on students' learning in this study and other studies on adaptive environments (Shute & Zapata-Rivera, (2012); Özyurt et al. (2014); Somyürek, (2008)). The majority of the students with high-level SRLS think that their motivation increases when they use EBA-ASS while studying, but when they do not use it, they study less or are not motivated to study. Regarding the effect of ALE on motivation, studies are showing that ALE positively affects motivation and that it has no effect

(Brusilovsky & Paylo, 2003; Erdoğan, 2020; Güngören, 2015). In this study, the students expressed the view that EBA-ASS positively affects motivation.

Studies show no section in EBA-ASS that students do not use or experience any loss and that this situation positively affects learning (Mampadi et al., 2011). There was a consensus that EBA-ASS is very useful in terms of content and design. The fact that they did not experience any problems while using the system shows that it can meet the needs in terms of infrastructure. Not using the note-taking application is thought to be related to students' habits.

As a result, it was seen that the students with HLSR-LS started to use EBA-ASS earlier and used it between 2-3 hours daily. It was seen that the students with medium and high-level SRLSs stated that the most significant advantage of EBA-ASS was that it allowed them to study more and made the lesson comprehensible. Students with MLSR-LS prefer lectures, and students with HLSR-LS prefer test-solving sections more. The content presented in EBA-ASS was successful at different SRLS levels. While defining the role of EBA-ASS in their learning, students with HLSR-LS reported that it facilitated learning, and students with MLSR-LS reported that it increased motivation.

It is known that the learning environment affects the development of students' ability to organize their learning (Jin et al., 2023). Therefore, the effect of using the EBA-ASS environment on the development of students' self-regulatory learning skills can be investigated in other studies.

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