

Developing Assessment Criteria for Self-Regulated Learning

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Abstract:- Providing students with independence, education, and maturity is the top priority of any educational institution, parent, and teacher. To detect this, it is necessary to develop and evaluate special criteria. A method with 5 criteria each, each with 3 contents, was developed to detect self-regulated learning from students and its nature was determined. With a reliability index of 0.9 or an excellent criterion, an attempt to detect the level of self-regulated learning from 1010 adolescent students was found to be 50.1 percent, which is insufficient. Therefore, it was determined that it is important to implement a pilot study to support self-regulated learning.

Keywords:- Self-Regulated Learning, Independent Learning, Assessment, Criteria.

I. INTRODUCTION

In order to improve self-regulated learning, the scientist Knowles (1975) has presented the results of the research that "... successful learning can be achieved through the process of taking the initiative, with or without the help of others, in diagnosing learning needs, identifying goals and learning resources, selecting and implementing appropriate learning strategies, and evaluating the learning process." On the other hand, Garrison defined it as "... a tendency to take personal responsibility, to have a desire to jointly control the process of creating and verifying cognitive (self-control) and situational (self-management) processes." It is of great importance that scientists have studied the results of various studies during the pandemic using the model developed by this scientist. Therefore, there is a need to develop criteria for evaluating self-regulated learning, assess the learner, and determine the extent to which it exists.

➤ Main Part:

The Minister of Education, Culture, Science and Sports (MCS) issued Order No. A/43 dated January 27, 2020, temporarily closing classroom classes in all types of private kindergartens, childcare centers, general education schools (GES), colleges, and universities from January 27 to June 1, 2020, which has led to the following problems for students. The results of the study indicated that students have weak independent learning skills. The participants rated the level of independent learning skills of students on a scale of one to eight. "O" was the worst grade, and "100" was the best grade, with 37.8% of participants scoring less than 59 points, and 50% scoring 60-79 points. In total, about 38% of the

participants rated the students with a score of 0-59, about 50% rated them with a score of 60-79, and the rest rated them with a score of 80-100. This indicates that independent learning skills are not yet well established (Teaching and Learning During the COVID-19 Lockdown Research Report, pages 27-29).

In our country, research on student-directed learning has been carried out to a certain extent in the field of education. Researcher D. Batbold (2016) A methodology for ensuring student participation and supporting learning through assignments has been clearly discussed in his monograph. Dr. T. Chimegsanaa (2023) The results of an experimental study on developing and assessing the creative thinking skills of primary school students have been reflected in his monograph.

➤ Research Section:

A total of 1011 students of Uvs province secondary school in the pilot study.

➤ Research Methods:

- Sociological questionnaire method
- Policy document analysis method
- Self-regulated learning method

➤ Research Methodology:

The research was conducted in 2 stages:

- Stage 1: Self-regulated learning criteria were developed and verified and their reliability was confirmed.

The criteria for evaluating self-regulated learning were developed and evaluated using a questionnaire to evaluate self-regulated learning using 5 criteria, totaling 15 criteria, including 1. Emotional competence and courage 2. Independent cognitive ability or independent acquisition of knowledge 3. Independent learning quality.

- Stage 2: Self-regulated learning was evaluated using the developed criteria and a survey was conducted involving 1010 students to identify the current status of self-regulated learning.

II. RESEARCH RESULTS

➤ Result-1

The Cronbach's α reliability of each of the 15 criteria for detecting self-regulated learning situations of secondary

school students was determined, and the overall reliability of these criteria was 0.9, which is an excellent reliable indicator (Table-1).

Table 1: Reliability of the 15 Criteria for Detecting Self-Regulated Learning Situations

Reliability Statistics				
Cronbach's Alpha	N of Items			
.901	15			
Question	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
question1	56.10	52.293	.552	.896
question2	55.96	52.463	.606	.894
question3	55.97	50.635	.712	.890
question4	55.90	51.263	.583	.895
question5	56.04	52.988	.482	.899
question6	56.12	52.935	.465	.899
question7	55.97	50.878	.570	.896
question8	56.04	51.938	.559	.896
question9	56.30	48.758	.657	.892
question10	56.31	50.479	.630	.893
question11	55.98	52.828	.554	.896
question12	55.89	52.867	.579	.895
question13	55.88	51.642	.672	.892
question14	55.77	53.270	.498	.898
question15	55.77	51.795	.678	.892

➤ Result-2

The developed self-regulated learning evaluation criteria were developed for each criterion, and the average result was 50.1%, which is insufficient. (Table-2).

Table 2: Criteria for Self-Regulated Learning

№	General	Criteria	1-5 Points
1	Development of emotional competence and courage	1. Do you set specific goals on your own initiative and find ways to achieve them without the help of others?	38%
		2. Do you evaluate any situation and choose a way to achieve your goals based on it?	39%
		3. Are you able to align your behavior with your goals and use your full potential to achieve them?	41%
		4. Do you approach things in a disciplined and organized manner without the need for pressure from anyone?	60%
		5. Can you reverse and adjust your decisions when necessary?	61%
2	Independent cognitive ability or independent acquisition of knowledge	6. When predicting problems, do you independently propose solutions based on the connections and patterns of nature and society?	64%
		7. Do textbooks and simplified science books and articles help students work independently and deepen their knowledge?	59%
		8. Do you observe the natural and social phenomena around you and draw conclusions from them on your own?	62%
		9. Can you acquire new knowledge by conducting experiments independently?	36%
		10. Can you independently acquire theoretical knowledge from observations of scientific facts and phenomena?	34%
3	Суралцахуйн бие даасан чанарын төлөвшил	11. Are you able to plan your work, organize your workspace during exercises, assignments, and study time?	65%
		12. Do you independently rework tasks that are interesting, similar, and work towards your goals?	32%
		13. Do you independently analyze the results of tasks and identify any errors that occurred during their execution?	63%

	14. Do you honestly evaluate and make self-assessments of completed lessons and assignments?	67%
	15. Can you take responsibility for your own tasks and learning activities?	31%

➤ Results-3

The results were obtained by identifying the students' situation using the developed self-regulated learning assessment criteria. When analyzing each of the students'

criteria, it was determined that 32-41 percent were insufficient on the goal-setting criteria and 31 percent on the responsibility-taking criteria (Graph-1).

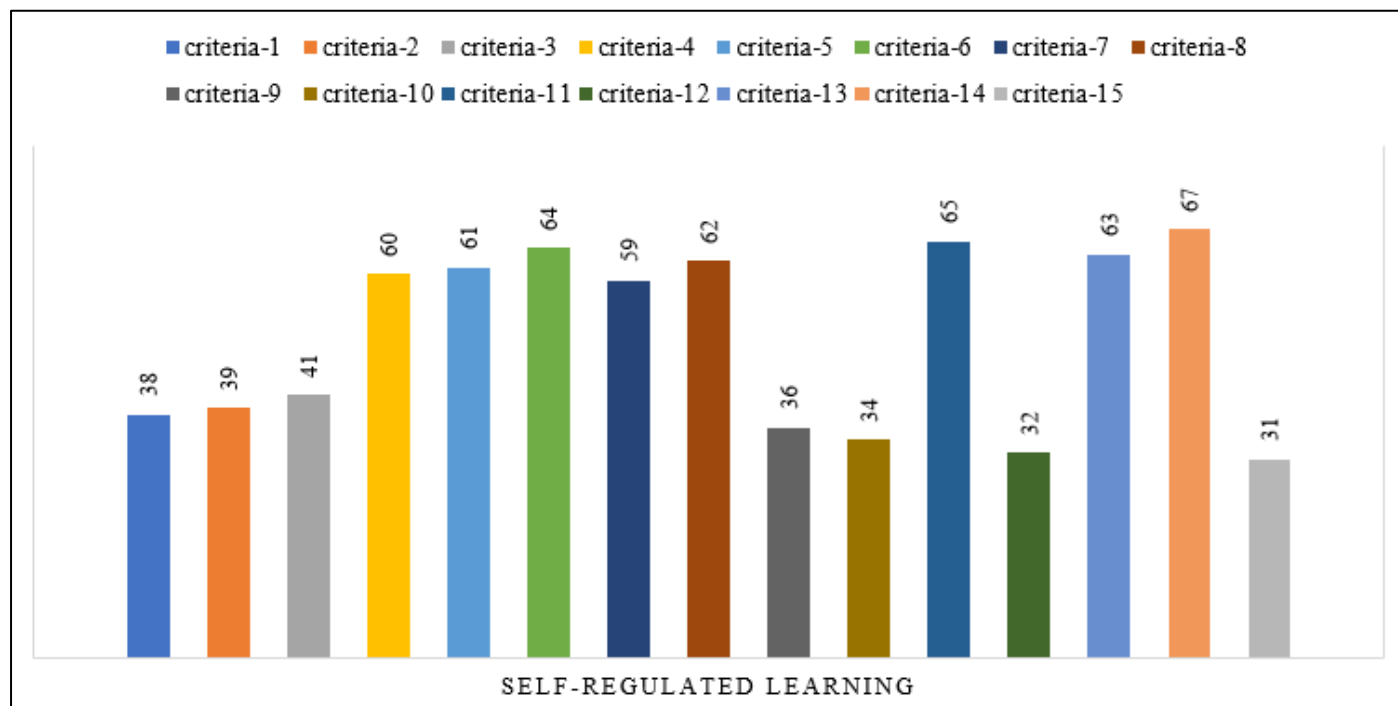


Chart 1: Analysis of Criteria for Self-Regulated Learning

III. CONCLUSION

The reliability of the developed criteria for detecting self-regulated learning was 0.9 which is very good, and it is possible to evaluate students using the above criteria. The study included 1010 students and found that 56% percent of them were insufficient. This indicates that students have weak self-regulated learning skills. Therefore, it is necessary to introduce training to support self-regulated learning skills.

When analyzing each criterion of students, it was determined that 32-41 percent were insufficient on the criteria for setting goals and 31 percent on the criterion for taking responsibility for their work. Therefore, the results of the study show that organizing goal setting is important to support self-regulated learning.

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