43

Presentation date: May, 2022 Date of acceptance: August, 2022 Publication date: October, 2022

### MAIN DIRECTIONS

OF SYSTEMATIC SELF-EDUCATION OF HIGH SCHOOL STUDENTS

# DIRECCIONES PRINCIPALES DE LA AUTOEDUCACIÓN SISTEMÁTICA DE LOS ESTUDIANTES DE SECUNDARIA

Mubariz Tahir Suleymanov<sup>1</sup>

E-mail: mubariz.suleymanov.74@bk.ru

ORCID: https://orcid.org/0000-0001-7544-3437

<sup>1</sup> Institute of Education of the Republic of Azerbaijan

### Suggested citation (APA, seventh edition)

Tahir Suleymanov, M., (2022) Main directions of systematic self-education of high school students. *Revista Universidad y Sociedad*, 14(S5), 437-444.

### **ABSTRACT**

Given the amount of information currently available and the constant need to improve self-education, it has become a highly relevant phenomenon. Therefore, the article analyzes the main directions of systematic self-education applied to high school students in Azerbaijan. The content, forms and methods of the process in which the self-education of students is carried out are indicated, highlighting the importance of acquiring a culture of self-education, for which the student's personal interest plays a fundamental role. The article provides suggestions to achieve a more effective self-education, and how it can be directed to positively influence the student to build a future profession and career. It was concluded that the main purpose of self-training activities should be to equip high school students with a culture of self-study, but teachers should also be prepared for this unorthodox model of education.

Keywords: self-education, systematic knowledge, culture of self-education

### **RESUMEN**

Dada la cantidad de información disponible actualmente y la necesidad constante de superación el autoeducación se ha convertido en un fenómeno de gran relevancia. Por ello en el artículo se analizan las principales direcciones de la autoeducación sistemática aplicado a estudiantes de una secundaria en Azerbaiyán. Se indica el contenido, las formas y los métodos del proceso en el que se lleva a cabo la autoeducación de los estudiantes resaltando la importancia de adquirir una cultura de la autoeducación, para lo que tiene un papel fundamental el interés personal del alumno. El artículo se aportan sugerencias para lograr una autoeducación más efectiva, y cómo esta se puede direccionar para influir positivamente en el estudiante para construir una futura profesión y carrera. Se llegó a la conclusión de que el propósito principal de las actividades de autoformación debe dotar a los estudiantes de secundaria con una cultura del autoestudio, pero igualmente se deben preparar a los profesores para este modelo de educación no ortodoxo.

Palabras clave: autoeducación, conocimiento sistemático, cultura de la autoeducación.

#### INTRODUCTION

According to du Toit-Brits et al., (2021) the concept of self-study (self-education) was a binding fragment and part of the lives of Socrates, Plato, Aristotle, Alexander the Great, Caesar and Descartes, to name just a few. Because of societal circumstances and the lack of official learning institutes and bodies, numerous individuals have to learn independently. In 1975, Knowles pioneered and established SDL as a student-centered process. He explained SDL as a process' of development by which students establish their learning aims, discover essential learning resources, select appropriate techniques and assess growth through reflection. It is evident in the body of scholarship of SDL that the most used explanation of SDL is that of Knowles (1975), who defined SDL as:

A process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes (p. 18).

In the opinion of Moore (1984), self-education is the extent to which in the teaching-learning relationship, it is the learner rather than the teacher who determines the goals, the learning procedures and resources, and the evaluation decisions of the learning program. Brockett and Hiemstra (2018) consider that self-directed learning activities cannot be divorced from the social context in which they occur because the social context provides the arena in which the activity of self-direction is played out. They call for more attention to the way in which global and cross-cultural factors frame this activity. Long (1992) in turn believes that successful, self-directed learners can be described by two psychological attributes. The first, personality traits, is associated with personality: selfconfidence, inner directed, achievement motivated. The second psychological attribute Huey B. Long relates to cognition. Assuming the individual has a moderate allocation of the identified personality attributes, at least six kinds of cognitive skills appear to be particularly important in successful self-directed learning. They are as follows: goal setting skills; processing skills; other cognitive skills; some competence or aptitude in the topic or a closely related area; decision making skills; self-awareness (Sagitova, 2014).

As highlighted by Pithouse-Morgan (2022) self-study involves inquiring into the researcher's own professional experiences to improve their practice. The methodology provides an in-depth understanding of professional practice by reflecting upon, critically analyzing, and evaluating

it through interaction, where self-study interaction can take on many forms; it may involve local and distant colleagues, students, and various types of text, etc. In this regard a fundamental requirement of self-study scholarship is revealing and studying one's experiences and practices to learn from them and improve. This critical and challenging course of action demands self-awareness, candor, and openness to feedback (Hamilton et al., 2020).

Taking the above as a reference, the objective of this work was to analyze the main directions of the systematic self-education of junior high school students. For this, a learning experiment was carried out where the level of understanding and evolution of high school students in different topics such as history, literature and general aspects was analyzed as detailed below.

In our research, we examined the systematic self-education of students. We present it as follows: 1) Work done by teachers in grades 9-11 to stimulate high school students to work on themselves, strengthen their self-confidence, expand their outlook (attitude to modern problems, formation of attitudes to events): "I love the world", "I understand myself" "I do it", "I value myself", "I believe in myself", "I will be able to do it", "I will overcome fear", "I interrogate people with a smile"; 2) In-depth study of certain subjects according to students' inclinations, interests and life plans (teacher's work). In order to conduct the learning experiment, work was carried out on the following topics in the learning process and extracurricular time in IX-XI grades:

## List of projects applied on the subject "History of Azerbaijan".

- 1. Implementation of the project on "History of Azerbaijan" in stages (9th grade).
- 2. "History of Karabakh" second stage (grades 9-10). The materials are presented.
- 3. Restoration of State Independence in Azerbaijan. The impact of the "Armenian-Azerbaijani Nagorno-Karabakh" conflict on the socio-political situation in Azerbaijan. Stage III (grades 9-10).
- 4. From the history of Baku.
- 5. The situation in Azerbaijan in the first years of independence. Struggle for the protection of statehood. Phase IV. (9th-10th grades).
- 6. Oil strategy of the Republic of Azerbaijan. "Contract of the Century". V stage. (Grades 10-11).
- 7. Azerbaijan on the way to building a secular, legal, democratic civil society. Adoption of the Constitution of the Independent Republic of Azerbaijan. Stage VI. (Grades 10-11).

- 8. Socio-economic and cultural revival in the Republic of Azerbaijan. Stage VII. (11th grades).
- 9. Independent Republic of Azerbaijan in the world community. Stage VIII. (11th grades).
- 10. Patriotic War. Martyrs and veterans.
- 11. Liberated lands. The joy of victory. Progress of restoration works.
- 12. Provide information on topics in a foreign language. (This is important because it is not enough to know all this in your own language. Students need to know foreign languages to convey this knowledge to the world.)

### List of projects applied in the subject "Literature".

- 1. Shah Ismail Khatai in our historical and literary heritage. (IX -X grades).
- 2. Activity of Molla Panah Vagif in the Karabakh khanate (IX-X grades).
- 3. Enlightenment activity of Gasim bey Zakir (IX -X grades).
- 4. National-democratic movement, about the struggle of Ahmad Javad in the Soviet period (X classes).
- 5. Longing for Azerbaijan in the work of Almas Yildirim. (IX -X grades).
- 6. Reflection of the period in the works of Ahmad Javad (X-XI grades).
- 7. National self-awareness in the works of Hussein Javid. (XI grades).
- 8. Literature in the period of national-spiritual self-awareness (1961-1990).
- 9. Issues of national awakening in Rasul Rza's works (X-XI grades).
- 10. Issues of national awakening in the works of Ismayil Shikhli (X-XI grades).
- 11. Azerbaijani literature in the period of independence. The role of Bakhtiyar Vahabzade in the national awakening. (Class XI).
- 12. The true voice of Azerbaijan in the works of Khalil Rza Uluturk (X-XI grades).

General self-education. Self-education of students to expand their worldview by showing interest in certain areas. Implementation of projects that expand the overall outlook.

- 1. "What do we think when we say homeland?" (lesson-trip).
- 2. Let's get to know our homeland (extracurricular travel).

- 3. How do we see Azerbaijan in the world community (generalization and systematization of knowledge).
- 4. From the lives of prominent people (reading and discussion in the learning process).
- 5. Sport is a symbol of peace (extracurricular sports games).
- 6. Environmental problems of the world (lesson-conference)

Self-education of students in connection with the development of their abilities. Practical task. Ability to work on material from sources:

- 1. Compilation of the abstract.
- 2. Indicate the main idea in the text.
- 3. Asking questions about the text.
- 4. Writing an annotation to the text.
- 5. Giving an oral presentation.

### **DEVELOPMENT**

In modern times, self-education activity determines the socio-cultural independence of the individual. Although the concept of self-education emerged as a result of the crisis in the world education system it in the current era of pandemics (Covid 19) this type of education is even more relevant. It is self-education that shows the way out of this situation. It is a way to develop the intellect, as well as the personality as a whole, and it always accompanies a person.

It is important to highlight that according to Knowles (1975) Self-directed learning entails the following prominent features:

- 1. Taking ownership of learning This involves individual responsibility to recognize and determine one's learning gaps and setting learning goals consistent with these learning gaps.
- 2. Extension of learning Students ought to engage in cross-disciplinary work promoting collaboration with other students, which they can use to form networks among formal and informal learning occurring inside and outside of self-directed environments.
- 3. Self-monitoring Students should manage learning tasks, learning time and appropriate resources. They must also take action to meet their identified learning goals.

But also involves nine competencies (Knowles, 1975):

1. Accepting the differences in students and the abilities necessary for learning in student-focused education.

The influence of the learning environment on promoting self-directed learning

- 2. Seeing oneself as a non-dependent, self-directed individual.
- 3. The ability to work collectively in the planning of learning and diagnosing needs.
- 4. The ability to ascertain learning requirements persuasively with the assistance of educators.
- 5. The ability to interpret learning requirements that are important for the formation of learning goals.
- 6. The ability to communicate and share with educators as facilitators and partners in learning and taking the initiative to engage with learning resources.
- 7. The ability to distinguish between learning resources applicable to various learning purposes.
- 8. The ability to handpick active approaches to employ learning resources.
- 9. The ability to self-assess the success of individual learning goals.

These qualities of high school students, such as the desire to learn new knowledge, spiritual and ethical development, the desire to improve in the professional sphere, the acquisition of new habits and certain skills are inherent in modern man. "In modern socio-economic conditions, there is a need to change the nature of training. In a market economy, knowledge and professionalism are the main capital of a specialist. According to the requirements of the time, the main condition is that the pupils and students themselves want to read. In this case, the basis of learning activities is the independent work and development of the learner" (Ibadova, 2015, p. 177). It should be noted that a student who raises the level of self-education enriches his inner world and shows that he is a better person for society in the eyes of others. However, in modern times it is difficult to find a place without additional education. This means that self-education belongs to everyone.

Tidwell and Jónsdóttir (2020) point out that the strength and the complexity of self-study research are reflected in the multiple ways in which self-study can be used. These multiple contexts and diverse approaches to self-study can often challenge researchers as they develop and engage in self-study research. In our opinion, there are two types of self-study according to the form and independence factor: free and systematic. By free self-education, we mean the need for self-improvement or any issue arising from the interests and needs of the student's personality. In this case, man determines for himself the purpose of the harvest and its volume. Systematic self-education is stimulated by the school where the student is studying.

The student performs the task in accordance with his interests and enriches his knowledge. In this type of self-education, the student goes beyond the requirements of the program and reaches the level of self-development.

After a bibliographic analysis, we believe that the following are adequate tips for proper self-education:

- Every young person must be an active creator of his life, be able to identify solutions to their problems, try to make a real contribution to their social experience.
   To do this, he must constantly update his knowledge and monitor his behavior.
- 2. Communicate, compare their activities with the knowledge activities of their peers, as well as express their position.
- Young people should be able to form their own position on their knowledge, defend it and prove it to others.

On the other hand, it is important to point out that the development of a creative personality gives more effective results in a collaborative environment. In this context, the teacher allows students to determine the methods and timing of the implementation of their ideas. The most interesting of ideas for students is creative self-management. These include the interaction of upper grade students with lower grade students, and the collaboration of upper grade students with parents and educators. The teacher's trust also plays a big role here. "The higher and clearer the teacher's faith, the deeper and more accurate the knowledge in his mind and feelings. A teacher who has a high pedagogical confidence, who submits his understanding and research to it, will definitely become a master, will bring joy to his students and will himself gain professional happiness" (Amonashvili, 2014, p. 17). This work is a humanistic direction of pedagogy based on democratic principles.

Recently, educators and teachers have complained that they do not find common ground with some students, that they spend more time on websites, that they are less interested in the lesson, but that they pay more attention to what is happening around them. With this in mind, during the experiment, we offered high school students to implement a project called "School Screen" using the websites of interest to them. Under this project, students had to communicate with teachers and parents, gather information needed by the school, and work with them to communicate their ideas to the entire school staff through a screen. It is this approach that has enabled students to develop their creativity, leadership and initiative skills in self-education.

The aim of the project was to create opportunities for the development of students' creative abilities. This project allows students to realize themselves, to clarify the possibilities of their activities. Thus, the main objectives of the "School Screen" project are:

- · to develop students' cognitive motives.
- to expand the creative activity of students.
- to create conditions for the development of creativity in students.
- And the forms and methods of project work:
- research work.
- practicums.
- creative work.

Creating such a program that will be displayed on the school screen allows students to demonstrate their creative potential, unlock their abilities in various activities (humanitarian and technical) and demonstrate their results. In this case, the teacher becomes not the transmitter of knowledge, but the organizer of the activity, the consultant. Each student who appears on the "School Screen" talks about an interesting project, acquaints the staff with important information happening in the world, allowing students to participate in school and city events.

A distinctive feature of our projects is a new approach to high school students. In addition to game elements, students also turn to computer technology and other historical sources. This project encourages students to explain their worldview, to feel independent, and to take responsibility for what they say. At the end of each month, it is conducted an analysis and evaluation of the work done with the participation of parents and teachers. Then, in Table 1 it is shown the results of the learning process in the students.

Table 1. Results of self-education of senior students in the learning process (IX-XI grades)

	Schools	Num- ber of students	Results of self-study work on classes in the learning process								
Years	Control classes	80 n 100%	IX class 25n			X class 28n			XI class 27		
			A	0	Υ	Α	0	Υ	Α	0	Υ
2019- 2020	Khirdalan 3 years Peacock № 1st Qazax №1- li	27 n 25n 28n	15n 60 %	8n 32 %	2n 8 %	13n 46.4 %	12n 42.8 %	3n 10.7 %	14n 51.8 %	8n 29.6 %	5n 18.5 %
	Experimental classes	83 n 100%	27n			29n			27n		
2019- 2020	Khirdalan 3 № li Tovuz 1№ li Qazax 1№ li	30 n 27 n 26 n	3n 11.1 %	11n 40.7 %	13n 48.1 %	4n 13.7 %	14 48.2 %	11n 37.9 %	3n 11.1 %	11n 40.7 %	13n 48.1 %

Note: A - low, O - medium, Y - high.

As can be seen from the table, the level of self-study habits formation in control class students (80 people) is low at 60% in IX grade, 32% at medium level, 8% at high level, 46.4% at low level in X grade, 42.8% at medium level, high level while 10.7%, in the 11th grade it was 51.8% at the low level, 29.6% at the intermediate level and 18.5% at the high level. Significant progress was observed in the dynamics of students' self-education activities in the experimental classes. Thus, the development indicators of the experimental classes (83 people) are as follows: in the ninth grade, mastery fell from 60% to 11.1% at the low level, from 32% to 40.7% at the medium level, and at the high level. Increased from 8% to 48.1%. In the 10th grade, it fell from 46.4% to 13.7% at the lower level, from 42.8% to 48.2% at the medium level, and from 10.7% to 37.9% at the high level. As expected, progress was made in the 11th grade. Thus, in the 11th control class, mastery fell from 51.8% to 11.1% at the low level, from 29.6% to 40.7% at the medium level, and from 18.5% to 48.1% at the high level (increased).

The analysis of the results shows that the majority of students are able to summarize the material they read, express the main idea, be able to plan for the presentation of the material and ask questions about the text.

On the other hand, students assessed themselves on three levels: 1) I can 2) I can, but sometimes it is difficult 3) I can't. 81% of students wrote a positive result. The same analysis was performed but for extracurricular activities as shown in Table 2

Table 2. Results of an experiment on self-education of senior students in extracurricular activities

	Schools	Number of students	Results of self-study classes in extracurricular activities									
Years	Control classes	80 n 100%				X cl 28n				XI class 27n		
			А	0	Υ		А	0	Υ	А	0	Υ
2019- 2020	Khirdalan 3 years Peacock 1st Qazax 1№- li	27 n 25n 28n	14n 56 %	8n 32 %	2 12		18n 64.2 %	6n 21.4 %	4n 14.2 %	13n 48.1 %	10n 37 %	4n 14.8 %
	Experimental classes	83 n 100%	27n			29n			27n			
2019- 2020	Khirdalan 3 years Peacock № 1li Qazax 1№- li	30 n 27 n 26 n	3n 11.1 %	13 48.1 %	11n 40.7 %		5n 17.2 %	11n 37.9 %	13n 44.8 %	4n 14.8 %	13n 48.1 %	10n 37 %

The next are the indicators of self-education activities of senior students in extracurricular activities (80 people): 56% low level in IX grade, 32% high level 12%, 64.2% low level in X grade, 21.4% medium level, 14.2% high level %. In the 11th grade it was 48.1% at the low level, at the middle level it was 37%, at the high level it was 14.8%. In the experimental classes the higher indicators were achieved in the dynamics of development. Thus, the indicators of development in the experimental classes (83 people) were as follows: in the ninth grade, self-education activity fell from a low level of 56% to 11.1%, from an average level of 32% to 48.1%, and at a high level. while it rose from 12% to 40.7%. In the 10th grade, self-education indicators fell from 64.2% to 17.2% at the low level, from 21.4% to 37.9% at the medium level and from 14.2% to 44.8% at the high level.

Significant progress has been made in the results of senior students in self-education in the 11th grade. Thus, the indicators of control class students decreased from 48.1% to 14.8% at the low level, increased from 37% to 48.1% at the medium level, and from 14.8% to 37% at the high level. It became clear from the results that 81% of the students

were able to accurately organize their self-study activities compared to the determinative experiment. We see the reasons for this in their correct understanding of the nature of self-education activities, their implementation in a consistent, planned manner and taking into account the nature of the period.

Proven the validity of the hypothesis about the effectiveness of the system of pedagogical conditions created for students' self-education and the model we present, during the learning experiment, 72% of high school students achieved a high level of self-learning activity. This indicator allowed to make a final decision on the outcome of personality-oriented self-education activities and to determine its future prospects. Thus, as a result of the obtained evidence, it can be concluded that such activities aimed at students' activities expand the scope of knowledge on self-education, form values, and develop activities that are not sufficiently reflected in curricula and textbooks. As a result of the experiment, it was determined that a number of changes occurred in the cognitive component of the preparation of students of the experimental group. Unlike control class students, they have a clearer idea of self-education, its purpose, methods and techniques.

Then, during the experiment, it was found that the students of the experimental class (51.5%) more precisely defined the goals of self-education activities: "get a good education", "increase spiritual wealth", "build a career", "self-development", "society's demands". keep up with", "broaden your worldview" and so on. During the determinative experiment, students' responses (17.4%) were as follows: "to enter the university", "to learn a profession", "to receive a diploma".

### **CONCLUSIONS**

In today's complex and dynamic world, keeping up-to-date and continuing to improve is of great importance, for which self-education plays a fundamental role. In this regard, positive results are obtained in this activity if students use motivational, cognitive, and activity-oriented structural components in the implementation of self-education. The basis of self-education of high school students is the formation of a culture of self-education, so it is relevant the gradual implementation of students 'self-education in the learning process and in the extracurricular time in different areas. This can help to develop students' planning and organizational skills.

It was found that students' self-education includes the following factors: 1) formation of motives of self-educational activity accepted in the form of self-educational values; 2) formation of ideas about self-education, its purpose,

tasks, methods and techniques; 3) formation of self-education skills. Thus, a component of self-education of students can be seen as the systematic implementation of the interaction of teacher and students in different areas, through the application of appropriate methods in the learning process and in extracurricular activities.

### **REFERENCES**

- Amonashvili, S. A. (2014). *Fundamentals of humanistic pedagogy*. Amrita.
- Brockett, R. G., & Hiemstra, R. (2018). Self-Direction in Adult Learning: Perspectives on Theory, Research, and Practice. Routledge. <a href="https://doi.org/10.4324/9780429457319">https://doi.org/10.4324/9780429457319</a>
- du Toit-Brits, C., Blignaut, H., & Mzuza, M. K. (2021). The promotion of selfdirected learning through the African philosophy of Ubuntu. In E. Mentz, D. Laubscher, & J. Olivier (Eds.), *Self-Directed Learning: An imperative for education in a complex society* (1st ed., pp. 1–24). AOSIS Publishing. <a href="https://doi.org/10.4102/aosis.2021.BK279.01">https://doi.org/10.4102/aosis.2021.BK279.01</a>
- Hamilton, M. L., Hutchinson, D. A., & Pinnegar, S. (2020). Quality, Trustworthiness, and S-STTEP Research. In J. Kitchen, A. Berry, S. M. Bullock, A. R. Crowe, M. Taylor, H. Guðjónsdóttir, & L. Thomas (Eds.), *International Handbook of Self-Study of Teaching and Teacher Education Practices* (pp. 299–338). Springer. <a href="https://doi.org/10.1007/978-981-13-6880-6">https://doi.org/10.1007/978-981-13-6880-6</a> 10
- Ibadova, M. A. (2015). *Scientific and theoretical problems of education modernization*. Translator.
- Knowles, M. S. (1975). *Self-Directed Learning: A guide for Learners and Teachers*. Association Press.
- Long, H. B. (1992). Philosophical, psychological, and practical justifications for studying self-directed learning. In *Self-Directed Learning: Application and Research* (pp. 9–24). Oklahoma Research Center, University of Oklahoma.
- Moore, M. (1984). On a Theory of Independent Study. In D. Sewart, D. Keegan, & B. Homberg (Eds.), *Distance Education: International Perspectives* (pp. 68–94). Routledge.
- Pithouse-Morgan, K. (2022). Self-study in Teaching and Teacher Education: Characteristics and contributions. *Teaching and Teacher Education*, *119*, 103880. <a href="https://doi.org/10.1016/j.tate.2022.103880">https://doi.org/10.1016/j.tate.2022.103880</a>

- Sagitova, R. (2014). Students' Self-education: Learning to Learn Across the Lifespan. *Procedia Social and Behavioral Sciences*, *152*, 272–277. <a href="https://doi.org/10.1016/j.sbspro.2014.09.194">https://doi.org/10.1016/j.sbspro.2014.09.194</a>
- Tidwell, D. L., & Jónsdóttir, S. R. (2020). Methods and Tools of Self-Study. In J. Kitchen, A. Berry, S. M. Bullock, A. R. Crowe, M. Taylor, H. Guðjónsdóttir, & L. Thomas (Eds.), International Handbook of Self-Study of Teaching and Teacher Education Practices (pp. 377–426). Springer Singapore. <a href="https://doi.org/10.1007/978-981-13-6880-6-12">https://doi.org/10.1007/978-981-13-6880-6-12</a>