



RESEARCH ARTICLE

THE IMPACT OF SELF-DETECTED LEARNING STRATEGIES ON ACHIEVING MORE EFFECTIVE LEARNING OUTCOMES

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Manuscript Info

Manuscript History

Received: 29 May 2023

Final Accepted: 30 June 2023

Published: July 2023

Key words:

Metacognitive Skills, Self-Directed Learning, Growth Mindset, Lifelong Learning, Academic Achievement

Abstract

Humans' curiosity and desire to learn have enabled them to gain knowledge and find solutions for overcoming obstacles in their lives. This has formed the foundation of science. Consequently, teachers can develop structured teaching strategies that incorporate self-directed learning techniques. The motivation behind this study is that learning is influenced by factors such as growth, environmental influences, and genetic predispositions, all of which contribute to personal development and professional growth. Teaching individuals how to learn through self-directed learning is crucial for unlocking their secrets of success in life. Therefore, it is important to prioritize this strategy and include it in teaching plans, as achieving learning outcomes has become a priority in educational systems. Teachers and policymakers strongly support this approach as it benefits both learners and society within the education system. In this context, we present a collection of information highlighting the connection between self-directed learning and achieving outcomes in education. Exploring the connection between students' ability to make decisions during their learning process and the likelihood of achieving learning outcomes. The impact of the learners' active role during the educational process and the importance of work to increase learners' self-image and self-concept.

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Introduction:-

Self-directed learning has proven to be one of the most efficient methods, enabling individuals to control the course of their learning process. The results of self-directed learning, compared to those of traditional learning, remain stored in the learner's memory and behavior for a longer period, meaning that they can be used and referred to when needed. Therefore, it is necessary to address this issue and analyze all its aspects to facilitate learners' achievement of more effective learning outcomes by encouraging them to search for innovative solutions, cultivate their problem-solving skills, and enable the learner to accept their learning style. Guiding him towards different ways to develop them so that he can make the most of his abilities and skills to acquire new ones. Therefore, in the following sections, all these aspects and others have been addressed to shed light on the complementary relationship between self-directed learning and the emergence of positive learning outcomes.

Education plays a vital role in personal and professional development. Academic success is a key goal of the education system and often reflects governmental policy and societal expectations. Educators and scholars have drawn extensive attention from disciplines such as psychology to explore ways to encourage the pursuit of academic excellence. Self-directed education is a way to attract people's attention. This article identifies the conceptual

implications of self-directed education, emphasizing its importance in the learning process and its impact on various aspects of personal development, by exploring the concept and mechanism of self-directed learning and presenting basic skills such as effective time management, organizational skills, and others that can be developed through it. The advantages and types of self-learning are also discussed.

Self-directed education is important because it has a transformative approach that enables learners to take charge of their learning journey, and because the teaching strategies built with it act as a catalyst for academic success and personal development, enhance learners' achievement of basic skills, and support their ability to learn effectively throughout life.

The conceptual meaning of the term self-directed education

Education plays a significant role in the personal and professional development of individuals, which has led to the achievement of academic success as one of the most significant goals of educational systems and representation of state policy, especially when the learning process involves the attainment of academic success. Therefore, various attempts have been made to demonstrate the most effective methods of achieving academic excellence through a pedagogy that has been facilitated by various sciences, but mostly by psychology. This includes the design of interpretive and experimental research on various educational phenomena. Such studies have demonstrated that self-directed learning has a significant impact on enhancing the quality of individualized learning results and can be rederived and utilized over time. 'What, how, and when do they need them?

In his book "Self-Directed Learning," Malcolm Knowles explains the general meaning of the term self-directed learning by describing it as a learning process through which individuals take the lead with or without the help of others regarding their learning.

Educational goals are designed based on the needs of learners and the community, so the human and material resources necessary to achieve them are predetermined, referencing the most appropriate educational strategies that are compatible with them. The self-learning strategy is referred to as an appropriate tool to achieve these goals and to evaluate learning outcomes.

Malcolm Knowles also referred to a group of synonyms that describe this process of self-learning as self-study and external learning. He explained that these synonyms refer to the need to involve many assistants, such as teachers, colleagues, and others in the process of self-directed learning, which takes these nouns away from the essence of the work of self-directed learning.

Undoubtedly, self-directed education calls for mutual guidance and participation without relying entirely on it.

The mechanism of self-directed learning work through its various axes

In the following section, the factors that contribute to the adoption of self-directed learning techniques will be presented, and the focus will be on positive outcomes that arise from this approach, such as increased motivation and engagement in the learning process, development of effective time management and organizational capabilities, and cultivation of enhanced critical thinking and problem-solving skills.

One of the primary reasons for implementing self-directed learning strategies is the potential to increase motivation and engagement in learning. Research has shown that when students have autonomy to make choices about their learning, they are more likely to be intrinsically motivated. (Donggil Song, Curt Bonk, Rebecca Maree, 2016)

Motivation in education plays a guiding role in learning, and in its absence, the chances of achieving it might fade away.

Motivation, in general, is either in the form of an external or internal stimulus so that the internal motivation stems from within the learner and leads him towards interest in educational activity and enjoyment of academic tasks and functions, while the surrounding environment is the source of external motivation and is represented by rewards, punishments, instructions, and people, etc., that the learner receives or interacts with. Thus, when integrating internal and external stimuli, the individual can achieve more quality educational results, especially

since motivation provides the ability to help learners focus their attention on a long-term educational end, which allows them to embrace the set of behaviors necessary to achieve this.

The most prominent is the positive participation of learners during academic activities. However, motivation is not the same as participation; rather, it is one of the manifestations from which we infer the existence of motivation to learn. Thus, we can say that motivation is a long-term experience with a clear and predetermined end to success.

Intrinsic motivation refers to behavior when engaging in an activity with the goal of self-gratification, rather than external reinforcement.

Intrinsic learning motivation facilitates learners' opportunities to participate effectively in the learning process, paving the way for finding the knowledge and skills required for learning success. (Claudia Gherghel, Shoko Yasuda, Yosuke Kitaa, 2023). Self-directed learning allows students to pursue their interests and passions, thereby making connections between their learning and real-world applications. This sense of autonomy and relevance contributes to the motivation and willingness to engage in the learning process. (Donggil Song, Curt Bonk, Rebecca Maree, 2016) By taking ownership of their learning, students become active participants in their educational journey, which can have a profound impact on their overall academic success.

In addition, the inclusion of self-directed learning strategies within educational plans provides the learner with the possibility of improving effective time management skills and organizational skills. Choosing and setting goals is one of the foundations of this strategy to make the most of the learning activities and avoid wasting their potential without benefit.

To achieve effective time management, the learner must apply the following steps, set realistic goals, divide them into manageable tasks, and develop a time matrix for all tasks in an integrated manner. By strengthening this skill, the organization and analysis skill is automatically enhanced, thus improving the academic performance of the learner so that he is armed with the most important smooth skills. He will be successful in all aspects of life.

Implementing self-directed learning strategies requires training in learners' and teachers' critical thinking. Involving teachers in this type of thinking, training programs allow them to open themselves up to motivating and creative teaching strategies as well as letting them think openly and see things from a more effective perspective. What is new and out of the ordinary allows educational creativity to control the educational process, and with the teacher's possession of this skill, they will be able to communicate it to the learners through various activities, so that clear changes appear in them. Methods of critical thinking and finding different and more effective unfamiliar solutions to various problems and obstacles.

By including self-directed learning strategies in educational plans, teachers can increase learners' self-awareness and allow them to develop various cognitive and metacognitive skills. The term metacognition refers to the ability to achieve self-interest skills that allow the individual to control, evaluate, and monitor their attainment on their own because they stem specifically from their internal stimulus in a certain way, thinking about the individual's thought processes, and organizing and controlling their learning.

Through self-directed learning, learners become more aware of their strengths, weaknesses, learning preferences, and areas for improvement, gain a deeper understanding of how they learn best and adapt their learning strategies accordingly. This self-awareness allows them to set realistic goals and make informed decisions about their learning, ultimately leading to more effective and efficient learning outcomes. Moreover, self-directed learning encourages learners to monitor their understanding and progress actively. They learn to reflect on their educational experiences, identify gaps in their knowledge, and seek additional resources or support as needed. (Shadi Asadzandi, Rita Mojtahedzadeh, Aeen Mohammadi, 2022)

Metacognitive monitoring enables learners to continually assess and adjust their learning strategies, ensuring that they stay on track and make the most of their learning opportunities. (Melissa S. Medina, Ashley N. Castleberry, Adam M. Persky, 2017) By developing metacognitive skills through self-directed learning, learners become more independent and self-regulated learners, which can have a significant impact on their educational success.

Such abilities appear to be like self-directed learning strategies that stimulate critical thinking and self-evaluation, encouraging individuals to participate in activities that reflect the nucleus of educational content or an educational message.

Self-directed learning also promotes self-evaluation skills, as individuals take responsibility for evaluating their progress and learning outcomes. They learn how to set clear and realistic criteria so that they can achieve success, monitor their progress, evaluate the results obtained, and critique and analyze the steps that have been taken. Through the process of self-evaluation, individuals can evaluate their work and enhance their sense of responsibility toward their learning process.

According to Bloom's taxonomy of learning, it is necessary to emphasize that the learner receives information through several stages; in the advanced stages, the learner must be able to retrieve information and use it partially or completely under similar conditions or use it to solve a problem that he is exposed to. When making sure that the learner reaches this stage, he can positively evaluate himself and confirm his learning of information, and by examining what has been mentioned about self-directed learning strategies, we conclude that it allows keeping pace with Bloom's steps necessary to achieve cognitive learning because it provides the learner with the ability to store knowledge for a long period. Obtaining them requires extra effort and individual attention from the learner who will be able to retrieve and apply them when needed.

Research has shown that self-directed learning promotes deeper and more meaningful learning experiences, leading to better information retention. (Donggil Song, Curt Bonk, Rebecca Maree, 2016)

Self-education is an educational strategy that requires the teacher to analyze the educational material and divide it into two parts. The first part is related to basic information. The learner plays a positive role in this section, and the degree of learning that the learner has reached is evaluated directly and continuously without any delay because it is necessary to correct mistakes and fill any learning gap before moving on to the second section, which usually consists of 20% of the information needed to complete the basic information. In one educational session, the teacher builds a job or task that requires the learner to search for new and complementary information for 80% of the content (basic information section). Usually, this section can be worked on through homework or class assignments that are worked on individually or in groups depending on their content, and require detailed explanations of the tasks and direct assessment to interpret and correct incorrect information and confirm the fixation of correct information. This section increases the chances of achieving active learning and making connections between new information and previous learning experiences. Self-directed learning encourages learners to take responsibility for their learning and actively look for opportunities to apply their knowledge in different contexts of reality. (Ogene A. Oyibe, Ogene Azubuike, Sunday David, 2015)

In particular, the implementation of self-directed learning strategies improved communication and cooperation skills. This is because it motivates individuals to engage with their peers and find opportunities to cooperate, reach answers, and solve various tasks, especially when necessary to achieve them through cooperative educational activities (working within groups). The cooperative learning approach develops thinking skills, oral communication, self-management, and leadership skills.

By actively participating in the learning process and applying knowledge directly, learners develop a deeper understanding of educational material and are better equipped to achieve academic success. Moreover, it allows them to focus on topics or areas of interest and discuss them from their point of view publicly, which allows them to believe in their abilities and competencies, increase their self-confidence, and automatically believe in their ability to succeed in specific tasks or situations by showing self-efficacy. That is, it automatically increases their motivation and engagement during learning activities.

Logically, learners who are passionate and interested in what they learn will seek to invest their time and effort in a meaningful way to understand the information and retain it for a longer period, so that they can benefit from it and apply it to the fullest.

Characteristics of self-directed learning

Self-directed learning focuses more on the process than on the outcomes. In general, the learner does not face any pressure while learning, as he/she can learn by taking the time needed, whatever he/she feels useful and

captivating, relying on their sources. This type of learning comes from learners' internal motivation. The goal is to achieve satisfactory results, regardless of the period or method used. For this reason, we found that self-learners are better able to absorb information than traditional people. This is because they choose what they have learned and set the period according to their schedule. By improving adaptability and lifelong learning skills, self-directed learning stems from the fact that human beings have a natural drive to explore, learn, and grow, thus encouraging individuals to improve their quality of life and sense of self-worth and strength, becoming active participants in their educational journey, while also contributing to their adaptability and lifelong learning skills.

As an educational tool, when it comes to self-directed learning, the teacher must find a method through which he motivates students to learn about a specific subject.

One of the most important characteristics of a self-directed learning strategy is its flexibility, which allows individuals to adapt their strategies based on their unique needs and preferences. They are free to explore different resources, technologies, and learning environments that suit their learning style. This flexibility and adaptability enable individuals to navigate the rapidly changing educational landscape and keep abreast of advances in knowledge and technology. Moreover, self-directed learning fosters a constant learning and growth mind-set. Individuals who engage in this type of learning are more likely to develop a growth mindset, believing that their abilities and intelligence can be developed through effort and perseverance. (İlkay Aşkin Tekkol, Melek Demirel, 2018)

This mindset encourages individuals to embrace challenges, persevere in the face of setbacks, and seek opportunities for learning and development. By developing adaptability and lifelong learning skills, individuals become better equipped to succeed in a rapidly changing and competitive world.

Generally, the implementation of self-learning strategies has a significant impact on students' academic success and achievement. By empowering students to take control of their learning, providing teachers with effective teaching strategies, and reinforcing self-efficacy beliefs, self-directed learning creates an environment conducive to academic excellence.

Research has shown that skills acquired through self-directed learning strategies have positive effects on individuals' right to self-determination, which is closely related to the motivation for lifelong learning as a direct outcome because it enables individuals to take responsibility for their learning and develop the necessary skills and attitudes to engage in lifelong learning.

To develop self-learning skills and enjoy the learning process, the learner must search for what arouses his/her curiosity in learning about the educational material. According to a study conducted at the University of California, researchers have confirmed that curiosity makes the brain more receptive to learning. When a learner feels curious, the learning process becomes more interesting and useful. The Harvard Business Journal also published an article that indicated that employees who are curious about their work are often 30% more creative than others, are less affected by stress and pressure, and have better communication skills. (Dance, Franck E. X., 1989)

Likewise, a learner should practice setting clear goals for their learning process that are realistic and achievable, as is the case with a teacher who develops a teaching plan aimed at helping students acquire certain skills at the end of a lesson. As mentioned earlier, self-learning strategies include setting clear goals. By defining the learner's objectives behind the academic process, he will be able to assess his progress and see if they have acquired the knowledge he was looking for. In addition, setting clear learning goals will allow him to develop a specific learning methodology that will enable him to achieve the results he aspires to.

The learner must be able to apply a realistic assessment of his/her initial and acquired abilities and skills during the self-learning process through the application of continuous evaluation so that he/she can select appropriate learning resources for his/her type of learning and level of intelligence. There are countless available resources for self-learning. This is unlike the traditional method, which is often limited to a single method. Because of the vastness and abundance of resources available in the self-learning process, choosing the correct and reliable source becomes difficult. Therefore, the learner must be careful to be skeptical about everything and always check the source of each piece of information before adopting it, especially if it comes from electronic search

engines. The Internet contains a huge amount of information, but not all of it is correct; therefore, it must instruct learners to use academic search engines such as Google Scholar or World Cat, which allows access to reliable academic articles and books instead of misleading and ambiguous information.

Finally, to ensure long-term positive learning outcomes, the learner can resort to the practical application of the learning he has achieved in his daily life to ensure that it is settled for as long as possible as a learning experience in his memory.

The five main benefits of adopting a self-directed learning strategy in the educational path

Adopting a self-learning strategy in educational activities provides many benefits that can greatly enhance the learning experience and increase the rate of emergence of positive learning outcomes, as mentioned in the following:

1. **Enhanced motivation and engagement:** Through self-directed learning, the learner interacts and cooperates directly with his peers and teachers to enrich his inner motivation so that he can achieve success in the task entrusted to him, which provides him with enjoyable and meaningful educational and social experiences simultaneously.
2. **Effective time management and organizational skills:** Incorporating self-directed learning strategies into instructional plans provides learners with the opportunity to develop effective time management skills and efficient organizational skills to maximize their abilities.
3. **Cultivation of critical thinking and problem-solving skills:** Self-directed learning strategies encourage learners to think outside the box because they are based on creativity and innovation, with a focus on their active and positive participation in educational activities to enhance analytical and logical thinking.
4. **Metacognitive development and self-evaluation:** Metacognitive development requires developing the three axes of awareness, regulation, and self-evaluation. Through the strategy of self-directed education, the teacher and the learner can reach the three axes, allowing the teacher to develop knowledge integrated with metacognitive, to make it easier for students to design goals that are consistent with their reality.
5. **Long-term knowledge retention:** Self-directed learning strategies provide learners with the possibility of applying what they have learned practically in a way that suits them, and by making additional independent efforts in this direction, they will be able to retain this information for a longer period and benefit from it in their practical lives.

Self-directed learning types

There are more types of self-education than can be counted, as self-learning includes many patterns associated with the types of learning, and the individual relies on one or more of them according to their effectiveness in learning, including:

1. **The reading style:** where the individual learns by himself through readable sources, the most prominent of which are books and articles. Whether these sources are traditional or electronic, they are shown to help him acquire the knowledge and information he needs when learning in a field.
2. **Visual style:** Many individuals tend to learn through visual sources such as documentaries and videos, because they have clarity in providing information and realistic examples of it, and thus contribute to enhancing understanding and comprehension.
3. **Auditive style:** The individual learns by listening to audio sources such as recorded lectures, books, and audio clips, which are sources that allow him to focus and pay more attention because they depend on sound only. Through this style, the individual can write down important information to learn.
4. **The pattern of experience:** This pattern leads the individual to go through the experience of learning new things that he has not done before, making it one of the most effective patterns in self-learning. This is because it allows him to apply what he learned on the ground, and the most prominent of these examples are scientific experiments.
5. **The style of cooperation:** the individual in this style tends to interact with others and work with them, as this allows him to benefit from the knowledge, experiences, skills, and ideas that they possess. This doesn't only contribute to learning, but it also leads to development since it opens new and different horizons in the mind that have not been passed on to the learner before.
6. **The Practice style:** It is like the experience pattern, but the practice only differs through applying what the individual has learned repeatedly and regularly intending to reach the stage of proficiency. An example of this is the practice of foreign language skills by speaking with others in the language that the individual learns.

7. Thinking pattern: it allows you to think about the learning experience and the knowledge gained from it.
8. Observational style through which learning is made from the experiences of others by observing what they do.

Conclusion:-

Self-learning, as a teaching method, allows people to oversee their learning path. This provides them with the possibility of building and enhancing the various skills needed in practical life. What makes the self-directed learning strategy so special is that it allows focusing on the learning process, not just the result, providing individuals with many methods to suit their preferred learning style and better their educational journey. Ultimately, self-learning plays a pivotal role in promoting independence, self-confidence, and academic achievement.

From the foregoing, we conclude that self-directed learning positively impacts the educational learning process because it encourages interaction between the learner-the teacher and the learner-learner. Whether it takes place inside or outside the classroom takes into consideration the reliance on cooperation and teamwork used. It also provides quick and immediate feedback, and continuous follow-up to learners to intervene promptly, while providing sufficient time for learning commensurate with the employment of multiple intelligences in the learning process.

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