Self-Directed Learning: An Essential Learning Skill for the Amelioration of 21st Century Learners

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Abstract: The increase in accessibility of information has changed the way we acquire and use information significantly in the recent era. This has challenged both the absolute and correct nature of information and the belief that information cannot be changed. The aim of education has its paradigm shift from the content of learning to the process of learning, from what we learn to how we learn. This skill is known as Self-Directed Learning. The learner of the 21st century is expected to have various skills such as personal skills, interpersonal skills & professional skills, but the foundational skills are learning skills. Self-Directed Learning has a positive impact on the development and expertise of various other skills required to excel in any profession. The New Education Policy 2020 also emphasizes professional development in higher education for which Professional Standard Setting Bodies (PSSBs) will be established for the development of professional standards. This paper attempts to describe how SDL is related to the enhancement of learning at higher education & also describes SDL's need and effect in producing better professionals in higher education.

1 INTRODUCTION

"The only person who is educated is the one who has learned how to learn and change."
- Carl Rogers (Carl Rogers Quote)

1.1 Role of Digital Technology and SDL for 21st Century Learner

Learning in the 21st century has its goal of developing learners who can initiate their own learning. The vast availability of information and learning opportunities in this digital age requires nothing but mindful urge and action of learning for self-development and skills enhancement. Learners of the 21st century need the perspective of active learning; hence Self-directed learning opens the space of taking charge of their own learning. To find answers to questions such as what to learn, why to learn, and its importance for their respective goals and development, Self-directed learning paves the way. Learning in the 21st century in relation to higher education is having its paradigm shift from 'what to learn' to 'learning how to learn'. This paradigm shift of learning emerges due to the requirement of learners and the utilization of available technology. 21st-century learning is a term used to denote three major components which are 21st-century learning goals, 21st-century learning skills, and traits of a successful 21st-century learner. Some crucial 21st-century skills as mentioned in various literature are creativity, critical thinking, thinking skills, innovation skills, and technological skills, if we see the foundation of these skills, self-directed learning can be found.

Further, in the digital technology era, learning at a higher level has few to no boundaries or dependencies apart from the learners themselves. Technology has revolutionized the learning process like never before. The learners of the 21st century are more likely to learn through their own efforts and under their own circumstances, unlike the learners before them. As a result of increased learner autonomy and accessibility of learning, learning skills in this dynamic world of technology are not the same as they were previously. The main emphasis of education has now shifted from what to learn to how to learn. Realizing this paradigm shift to the process of learning is known by different terms for various learning approaches such as active learning, experiential learning, learning by doing, etc. And these learning approaches have their roots in self-directed learning. (Self-Directed Learning Strategies in

Adult Educational Contexts - UNESCO Digital Library, n.d.)

2 SELF-DIRECTED LEARNING OVERVIEW

2.1 SDL as Skill & Process

Self-directed learning skills are not specific to any particular domain. They are prerequisites for gaining any knowledge specific to any domain, which means that these skills are prior requirements for developing skills specific to any domain (Taminiau et al., 2015).

To know what Self-Directed Learning is, we need to look into our own example whenever we do or initiate a task out of our own curiosity's sake, and we complete that task with or without taking the help of others we follow Self-Directed Learning approach. We do it unknowingly in our day-to-day tasks, but when we consciously apply this skill for our professional and academic growth and ameliorate this process we eventually get better at our respective fields. Adult learners learn this process gradually as they get the responsibility at different levels, but learners of young age should be taught to become self-directed learners. The answer to the question of "why self-directed learning is required for young learners?'' is in synchronicity in the emergence of various digital learning approaches such as digital pedagogy, Cybergogy, or autodidactism. Learning in the technological era has reduced the dependency on other factors than the learning self-directedness of the learners. The millennial and gen z learners are thriving on this Self-directed learning is an understanding of "learning how to learn." From a broader perspective, it can be defined as a process in which individuals, with or without the assistance of others, take the initiative in diagnosing their learning needs, developing learning goals, identifying human and material resources for learning, selecting and implementing appropriate learning strategies, and evaluating learning outcomes.

In the words of Malcolm Knowles "In its broadest meaning, 'self-directed learning' describes a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identify human and material resources for learning, choosing and implement appropriate learning strategies, and evaluating learning outcomes" (Knowles 1975).

Self-directed learning is a process of learning that is personalized, progressive, and purposeful. The focus of individualized learning is on self-actualization, choice, and autonomy. It is believed that students are independent and capable of making intelligent judgments, that they have a feeling of responsibility for both themselves and others, that they are inherently compassionate, that they are driven to achieve self-actualization, and that they are special and have limitless potential (Elias & Merriam 1995; Morris, 2019). As a result of self-direction, these learners can take responsibility for their meaning-making, choosing how they will use information. This is very important for a teacher to utilize and address this feeling of understanding a subject and discipline of learners, if it does not use and promoted it creates a hurdle in initiating the learning. appropriate facilitation can induce the self-directed learning skills of learners.

2.2 Significance of Self-Directed Learning for 21st-Century Learners

John Dewey affirmed that everyone has an unbounded capacity for growth and development from birth. He described education as the mechanism that promotes this growth and cautioned that the role of the teacher should be of guidance rather than interference or control over the learning process (Dewey, 1916,1938). Much of the world continues to use the obsolete transmission model of education, in which teachers teach students factual knowledge using lectures and textbooks (OECD, 2009). Self-directed learning is a type of learning which enables the learner's control and lead in the learning process. The term "self-directed learning" is most famously defined by Knowles, who defined it as a process where a person takes the initiative with guidance or without it, to independently control their learning experience with regard to needs, defining learning goals, identifying learning resources, choosing proper learning plan, and self-reflection on their performance and learning. As a learner grows and gain insight into a discipline or field, they also gain interest and curiosity, this curiosity pushes them to make their learning goals, finalize their resources and simultaneously find ways to evaluate their learning (Knowles 1975).

3 SELF-DIRECTED LEARNING & DEVELOPMENT

3.1 Importance of SDL in Personal and Professional Development

Self-directed learning skills are found to be associated with lifelong learning, which will enable the learner's continuous development in their various roles as successful professionals and enthusiastic individuals. The information and communication society of the 21st century expects humans to adapt to their way of life by updating their knowledge in accordance with their needs, keeping up with global change and innovation, and developing into qualified individuals (Şentürk & Zeybek, 2019). In today's dynamic world, everything is transforming at a fast pace, which makes it imperative for learners to become self-directed learners in order to sustain themselves. People's lifelong learning abilities must be developed if they are to create learning chances for themselves in terms of personal development and job development. The qualities and skills that people are expected to possess have changed concurrently with the information age's rapid changes and conversions in information and communication technologies.

3.2 Teachers' Role in SDL

Teacher holds an important role in establishing self-directed learning among learners at the higher education level. The term coined for this approach to teaching and learning is andragogy. This process requires a self-directed learner to take facilitative guidance from a teacher or mentor in gaining mastery or learning something new. The choice of taking the guidance of a teacher for a particular learning experience enables learners' sense of self-directed learning (Gerard et al., 2022). Promoting SDL among learners is undoubtedly a big challenge for educators, it requires a change in perspective from teaching the learners to facilitating the learning process. Teachers teaching at the senior secondary level can integrate such teaching strategies that can help students understand the process of self-directed learning and gain the skills required for it on an initial level.

The teacher plays an important role in helping the students to motivate the students for self-directed learning. First of all, teachers need to be self-directed learners and present themselves as a role model for it. These SDL skills can be learned through a supportive environment where self-directed learning is a passion for others. Therefore, observation and guided practices played a significant role in the SDL. The teacher needs to develop learner autonomy, assess the student's readiness for learning, give them ample opportunities to organize their learning by themselves, motivate the learners to taking decisions for their own learning, self-study habits, library visits, recommended computer/mobile-assisted learning, enhancing reflective dialogue; and let them understand the methodology. Teachers need to motivate the learners for autonomy, self-discipline, self-assessment, and self-reflection skills among the learners. Researchers suggested that at preschool learners should be ready, aware, and motivated cognitively, socially, and emotionally for self-directed learning. And these skills should be continued nurturing at secondary and higher education levels. SDL should be taken as a core skill in higher education. Teachers should always provide ample opportunity for self-directed learning. And all the Institution practices must emphasize on personalized & individualized learning, project-based and challenge-based learning, open learning, independent learning, etc. Overall teacher needs to play a mediating in self-directed learning. In their teaching, teachers must have to implement metacognitive strategies so that learners get a deeper understanding of how to learn them in an effective manner. A teacher must have to involve in all teaching-learning activities that shape self-directed learners.

3.3 Student's Role in SDL

Now a day, self-directed learning is highly helpful to develop the problem-solving skills of learners. Therefore, it becomes an essential learning skill, although, yet no more emphasis is given to it in the various institutions. Because, it is not considered an easy job to regulate own learning, and take responsibility of own learning. To be a self–directed learner, a learner needs to work on himself personally. Firstly he/she has to work on his/her personal level; to be ready for learning set the goals of learning, engage in learning as well as assess own learning.

The center of self-directed learning is individuals/learners themselves. As they themselves have to be curious about learning, set their goals for learning, be self-motivation, self-regulated, self-discipline, etc. All of the learning requirements are to be curious. To start their own learning learners, need to ask these basic questions to themself:

- Why do they want to learn? (Learning Motivation/Goals)

- What do they want to learn?
  (Subject/Content/Skill)
- How they will learn it? (Engage Yourself in Learning)
- How they will assess your own learning? (Self-Assessment)

3.3.1 Steps Involved in Organizing Self-Directed Learning

In the initial phase, Students need to know what they want to learn in order to initiate their self-learning experience. Teachers can facilitate in this step by discussing and associating the need of their respective courses and the student's interest. Further in this step learners will decide what skills and subjects they want to focus on and they'll create their learning goals accordingly. After knowing what they want to learn the next step is digging into the why of learning, why you want to learn. In this step, learners need to decide their own motivation, reason, and learning milestones they want to achieve.

Then learners have to ponder on the question of deciding how will they learn, and what they have decided to learn. He/she will decide their learning methods and activities. At last, learners should also know about assessing their own learning. this step is about self-reflection of own performance and skills. As it is a continuous process students can monitor their learning process with some practices such as keeping a diary of learning events and maintaining a personal portfolio and journal. Maintaining a personal portfolio will help in identifying strengths and weaknesses, tracking performance, and self-evaluation.

3.3.2 Role & Responsibilities of Learners in Self-Directed Learning

For the first step of deciding what they want to learn, learners must keep some roles and responsibilities in their attention, such as being aware to curious about learning. to do a Self-assessment of their learning readiness. Describe their learning goals and develop a plan of learning. Decide on learning resources. Take mindful action for the sequence of stages of the learning process & be intrinsically motivated. outline long-term and short-term goals. identify tasks that will build towards goals. Utilizing computer and mobile-assisted learning.

For the second step of this process, a student must go through the purpose of the unit of study and should have an overview of the activities and their sequence. A timeline for completing the activities.

Material requirements for each goal. Specifics about the grading procedure. The completion of each goal is followed by feedback and evaluation. Schedule a meeting with the advising facilitator. contract on unit policies, such as a policy for late submission of assignments.

Then learners will Assess their Learning Resources. Engage in a Learning Process. Apply What They Learn. Collaborate With Other Learners. Share their knowledge. Determine a schedule. Determine your learning style. Study in a positive environment. Find educational media. Take notes while you study. Review materials on the same day. Organize information. Apply your knowledge. Collaborate with others. For the last step learners need to do self-evaluation, regular consultation with the instructor, take feedback responses, and do self-reflection on their achievements, which means, asking self some questions such as: How do they know that they've learned? Are they having the scope to redesign and use the learning? Do they have confidence in explaining content/concepts? When do they know that they've learned properly? To know when is it the time for self-reflection and when to go for consulting with the teacher? Re-evaluate and redesign the goals as required during your unit of study. Consult with your facilitator from time to time as required. These are the steps and responsibilities of a self-directed learner.

4 CONCLUSION

The role of digital technology and web-based material is undeniable for the enhancement of self-directed learning for higher education learners (Gerard et al., 2022). Self-directed learning is not specific to any domain of subject, discipline, or profession. In context to courses that aim to produce professionals, Self-directed learning becomes very crucial to be developed and promoted for learners at higher education. NEP 2020 also emphasizes on learning "how to learn" and "self-learning". It discusses the importance of education as a medium for the development of human potential. It focuses on the importance of learning how to learn and its need for 21st-century learners. To improve their performance, they must have the ability to learn on their own (Alotaibi & Alanazi, 2021). Students' abilities to learn independently are a key result of the instructional strategy and can improve other outcomes including academic mindset, rational reasoning, and problem-solving abilities (Mahata and Fine 2015, Fullan et al. 2017, Berger et al. 2016). People need to be able to manage their learning, plan, develop, adapt, and change in a digital, interactive, and

global environment if they want to flourish in the workforce of today (Brandt, 2020). These learning skills should be the main aim of higher education learning mindset.

REFERENCES

Alotaibi, K., & Alanazi, S. (2021). The influences of conceptions of mathematics and self-directed learning skills on university students' achievement in mathematics. European Journal of Education, 56(1), 117–132. https://doi.org/10.1111/ejed.12428

Berger, R., Wooden, L., & Vilen, A. (2016). Learning that lasts: Challenging, engaging,and empowering students with deeper instruction. Jossey-Bass. Brandt, D.

Carl Rogers - The only person who is educated is the one... (n.d.). Retrieved April 10, 2023, from https://www.brainyquote.com/quotes/carl_rogers_13 0364

Dewey, J. (1916), (2007 edition) Democracy and Education, Teddington: Echo Library.

Dewey, J. (1938), (1997 edition) Experience and Education, New York: Touchstone.

Elias J.L., Merriam S.B. (1995). Philosophical foundations of adult education. Malabar, FL: Krieger.

Fullan, M., Quinn, J., & McEachen, J. (2017). Deep learning: Engage the world change the world. SAGE.

Gerard, L., Bradford, A., & Linn, M. C. (2022). Supporting Teachers to Customize Curriculum for Self-Directed Learning. Journal of Science Education and Technology, 31(5), 660–679. https://doi.org/10.1007/s10956-022-09985-w

F. Giuseffi (Ed.), Self-Directed Learning Strategies in AdultEducational Contexts (pp. 138-182). IGI Global. https://doi.org/10.4018/978-1-5225-8018-8.ch008

Knowles, M. S. (1975). Self-Directed Learning: A Guide for Learners and Teachers. Association Press, 291 Broadway, New York, New York 10007 ($4.

Mahata, J., & Fine, S. (2015). The why, what, where, and how of deeper learning in American secondary schools: Deeper learning research series. Jobs for the Future

Morris, T. H. (2019). Self-directed learning: A fundamental competence in a rapidly changing world. International Review of Education, 65(4), 633-653.

Mynard, J., Ohashi, L., Peeters, W., Shelton-Strong, S. J., Tweed, A. D., Watkins, S., & Wongsarnpigoon, I. (2020). Understanding learner autonomy through research: A summary of a forum at JALT 2019. Studies in Self-Access Learning Journal, 11(1), 53-63. doi:10.37237/110106

http://sisaljournal.org/archives/mar20/mynard_et_al

OECD (2009), Creating Effective Teaching and Learning Environments: First Results from TALIS, TALIS, OECD Publishing, Paris, https://doi.org/10.1787/9789264068780-en.

Şentürk, C. & Zeybek, G. (2019). Overview of Learning From Past to Present and Self-Directed Learning. In F. Giuseffi (Ed.), Self-Directed Learning Strategies in Adult Educational Contexts (pp. 138-182). IGI Global. https://doi.org/10.4018/978-1-5225-8018-8.ch008

Taminiau, E. m. c., Kester, L., Corbalan, G., Spector, J. m., Kirschner, P. a., & Van Merriënboer, J. j. g. (2015). Designing on-demand education for simultaneous development of domain-specific and self-directed learning skills. Journal of Computer Assisted Learning, 31(5), 405–421. https://doi.org/10.1111/jcal.12076

W. C. (2020). MEASURING STUDENT SUCCESS SKILLS: A REVIEW OF THE LITERATURE ON SELF-DIRECTED LEARNING.

Wilcox, S. (1996). Fostering self-directed learning in the university setting. Studies in Higher Education, 21(2), 165–176. https://doi.org/10.1080/03075079612331381338

https://www.brainyquote.com/quotes/carl_rogers_130364

https://www.collpoll.com/blog/teacher-education-in-nep-2020/#:~:text=NEP%202020%20holds%20dismal%20c onditions,of%20high%2Dquality%20teacher%20educati on