



Community Medicine & Education Journal

Journal Homepage:

<https://hmpublisher.com/index.php/CMEJ>



Concept of Pedagogy and Andragogy Education

Kathryn Holmes^{1*}, Greg Preston¹

¹ Center for Educational Research, Western Sydney University, Penrith, Australia

ARTICLE INFO

Keywords:

Pedagogy
Andragogy
Learning method
Education
Learning motivation

Corresponding author:

Kathryn Holmes

E-mail address:

k.holmes@westernsydney.edu.au

All authors have reviewed and approved the final version of the manuscript.

<https://doi.org/10.37275/CMEJ.v1i1.166>

ABSTRACT

Education can be a measure of the progress and quality of life of a nation, so it is said that the progress of a nation and state can be achieved by one of the reforms in terms of education. In education, there are two terms, namely pedagogy and andragogy. Pedagogy is known as the education of children, while andragogy can be interpreted as the science and art of teaching adults. Children's education will take place in the form of assimilation, identification, and imitation; while adult education focuses on improving their lives, providing skills and abilities to solve problems, so what is identical here is brain training for adults. The difference between pedagogy and andragogy lies in the different assumptions about the personality of students, such as the concept of students, student experience, readiness to learn, orientation towards learning from their learning motivation. And from these assumptions, it can be distinguished in terms of the process which includes elements of atmosphere, planning, needs diagnosis, formulation, objectives, lesson plans, learning activities, and assessments.

1. Introduction

Education is a word that is not foreign to us. It can never be separated from life, even if we continue to interact actively in it. Because education is a primary need of life and a process that will continue throughout life, it can be said that in the process of reaching maturity, every human being goes through this stage of education. Education can be a measure of the progress and quality of life of a nation, so it is said that the progress of a nation and state can be achieved by one of the reforms in terms of education. In education, there are two terms, namely pedagogy and andragogy. Pedagogy is known as the education of children, while andragogy can be interpreted as the science and art of teaching adults.¹⁻⁵ However,

because adults are independent individuals who can direct themselves, the most important thing in andragogy in the learning interaction process is independent learning activities that rely on the learning community itself and are not the activities of a teacher teaching something (learner-centered training). /teaching).⁶⁻⁸

Concepts of pedagogical education

The diversity of person's understanding of a term will have implications for the definition to be expressed. To avoid misunderstandings in interpreting a term and to understand what the term means, it is necessary to define it first. When we



<https://hmpublisher.com/index.php/CMEJ>

discuss the concept of pedagogy, surely we will find the terms pedagogy, pedagogical, pedagogy, pedagogic/pedagogical, pedagogia, paedagogos, pedagogic, pedagog, pedology. We will not know from some of these terms whether they have the same meaning or even different meanings. Pedagogy, pedagogic/pedagogical means the study of the methods and activities of teaching (learning methods and teaching activities).^{9,10} Paedagogia (Greek) is the origin of pedagogy which means association with children. Paedagogos, which is also Greek, means a servant in ancient Greece whose job is to take and pick up his employer's children to school. Pedagogy is a science that must be studied and studied by adults or educators who will be and are being prepared to be able to guide, socialize and at the same time provide education to children. Paedagog means people who are experts in educating. People who are experts in educating certainly cannot be separated from studying, discovering, and reviewing all pedagogical terms and intricacies. This pedagogical term is derived from the Greek "paid" which means "child" and "agogus" which means "leader of" (guiding). In general, experts define pedagogy as a systematic science or theory about the actual education of children until they reach maturity.¹¹⁻¹⁴

Everyone is born as a helpless child and doesn't grow up right away. Maturity is a value, standard of the universal quality of human life with the same drink content or characteristics even though the forms of maturity vary according to socio-cultural context. Educators are present in education to take action to educate as well as represent the norms of maturity. Education is trying to give a moral/rational influence on children in their efforts to reach maturity. Children reach maturity through stages. Broadly speaking, the schemes used by children to understand their world are divided into four main periods or stages as follows: a. Sensory-motor stage (lasts from birth to about 2 years of age). In the first

two years of life, babies can understand their environment by seeing, touching, holding, tasting, smelling, listening, and moving body parts. In other words, they rely on their sensory and motor abilities. b. Pre-operational stage (around the age of 2-7 years). Nowadays, the tendency of children to always rely on themselves in their perception of reality is very prominent. c. Concrete operational stage (lasts about 7-11 years). At this time the child's logical thinking begins to develop. In their efforts to understand the natural surroundings, they do not rely too much on information that comes from the five senses. d. Formal operational stage (from age 11 onwards). Since this stage children can think abstractly, namely thinking about ideas, they can think of several alternative problem-solving. Pedagogics consist of three types, namely traditional pedagogy, critical pedagogy, and transformative pedagogy. Pedagogics that is rooted in critical pedagogy both use a new perspective on educational praxis, namely education is part of the culture, in contrast to traditional pedagogy which uses micro-views, namely starting from students in the educational process which are generally limited to the school environment. (schooling), then critical pedagogy and transformative pedagogy put educational praxis as part of cultural activities in a broad sense.¹⁵⁻¹⁷

According to one of the original concepts of education (pedagogy), namely the formation of the younger generation to become cultured human beings who can take part in people's lives. A childhood that puts experience as a new thing. In this pedagogical concept, the teacher bears the responsibility for making decisions about what, how, and when to learn, so the teacher's job here is to direct learning. Because children's self-concept is still dependent on other parties outside themselves.¹⁸⁻¹⁹ The application of constructivism pedagogical methods shows that knowledge is the result of students' creation. With this method, the tabula rasa



pedagogical model that places students as empty vessels is abandoned. Traditional pedagogy is too rigid, sequential, logical, analytical and emphasizes silent classroom rituals, underestimating students as individuals. The traditional teaching model puts students on a low motivation scale and triggers stress and tension. The characteristics of traditional pedagogy are a. The teaching system is teacher-centered b. Acquisition of scientific knowledge based on books and teachers c. Teachers often convey scientific knowledge to students using lecture strategies and giving notes d. Printed materials such as books are a source of knowledge e. Passive learning f. Learning is the responsibility of the teacher g. Results of work or tasks as in the form of reports h. Results of work or assignments for yourself i. Less interaction between students and teaching materials. The concept of education for children (pedagogy) requires several things, namely, first, examples and examples of educators; second, the transformation of values and knowledge of students; third, the delivery of messages that are always informative to students (monological). In educational terms it is called the tabula rasa concept, children are like clean blank paper, and educators write ink on the blank paper until it is completely filled.²⁰

The concept of andragogy

The concept of education for adults requires several things, namely, first, to provide more space for student participation in solving problems; second, oriented to problem-solving jointly between educators and students; third, giving individual freedom to students in offering solutions according to their respective experiences; fourth, problem solving refers to the experience of the participants. The principle of the concept of andragogy is education as the transmission of knowledge (the transmittal of knowledge). According to Alfred North Whitehead, indeed in the past generation education was a

process of transmitting knowledge because the time spar for cultural change was greater than the life spar. The concept of andragogy as mentioned by Knowles has 6 principles, namely 1) the need for knowledge (the need to know); 2) the learners' self-concept; 3) the role of the learners' experiences; 4) readiness to learn (readiness to learn); 5) learning orientation (orientation to learning); 6) motivation (motivation). The six basic principles of andragogy each have sub-principles as contained in the book Concepts of Andragogy in the Qur'an; An Islamic Touch on Theory and Practice of Adult Education by Rosidin. The sub-principles are 1. The need for knowledge (the need to know) Adults want to know why they need to learn something before deciding to engage in learning activities. Tough found that when adults learn something they will put all their energy into investigating what benefits they will get from learning. The implication is that one of the real expressions in adult education is that a facilitator's first task is to help students realize the "need to know." The main principle that adults need to know is why they are involved in learning. This principle later became a generally accepted premise that adults should be involved in the design of their learning process. The involvement of adults can be aimed at designing objectives, materials, methods (techniques and media) as well as learning evaluation. The need for adults to know has now become an axiom for professional educators. Research in organizational training suggests three aspects of the need to know how the learning will be conducted (how the learning will be conducted), what will be learned (what will be learned), and why the lesson will be valuable (why it will be valuable).²²⁻²⁵ The research indicates that the need to know affects learning motivation, learning outcomes, and post-training motivation to use learning. The implication is that the task of adult educators is to explain the significance of learning so that adult learners know the positive impact of



participating in learning and the negative impact of not participating in learning. Materials and competencies that are targeted in learning are also important to be presented in front of students. In addition, it is important to convey learning methods to students, so that they know how learning takes place. In addition to the above understanding, the need for knowledge is reflected in the curiosity (curiosity) found in adults. One of the ways to express one's curiosity is through teaching questions. So, the question or word represents the need for knowledge of the person asking.

2. The learner's self-concept

There are generally two definitions of self-directed learning (SDL) in the literature. First, SDL is seen as self-teaching (self-teaching), that is, learners can control the mechanics and technicalities of teaching themselves in a particular subject. Second, SDL is defined as personal autonomy, which Candy also refers to as self-taught (autodidact). Autonomy means controlling the goals and objectives of the learner and presupposes "ownership of learning". Good self-teaching skills make adults less dependent on teachers, while good personal autonomy skills allow adults to determine the direction of their learning. The two SDL dimensions are relatively independent, although they can overlap. A person may have a high level of personal autonomy but chooses to study in a learning setting with a strong teacher-directed feel, due to convenience, speed, or learning style. Many adults decide that traditional learning is the best approach when they know very little about the learning material. So, choosing traditional learning does not mean that the person does not have ownership or control over self-teaching. And vice versa, it does not mean that people who are involved in self-teaching can be called to have autonomy. Thus, the presence or absence of activities categorized as self-teaching is not an accurate indicator of personal autonomy. For the majority of professional educators, the most important

dimension for SDL is fostering personal autonomy. Thus, SDL seems to be the goal of andragogy which is to help students reach the level of self-directed learning. It is also important to note that mismatches can occur in SDL. In that case, either too much or too little self-directedness can be a big problem, depending on the learner. For example, a learner who is experienced in learning material and has strong learning skills may be frustrated in a learning situation that is highly controlled by the teacher. On the other hand, a learner who is inexperienced with learning materials and developing SDL skills is weak, so he or she will feel intimidated if the learning situation places a high emphasis on SDL. Given that not all adult learners have the same SDL skills, it is appropriate to say that SDL is situational; and the task of educators is to adjust their roles to the level of SDL skills possessed by students.²⁶⁻²⁸

2. Conclusion

Pedagogical learning theory is for children, while andragogy learning theory is developed for the special needs of adults. There is a difference between adult education and children's education. Children's education will take place in the form of assimilation, identification, and imitation; while adult education focuses on improving their lives, providing skills and abilities to solve problems, so what is identical here is brain training for adults. The difference between pedagogy and andragogy lies in the different assumptions about the personality of students, such as the concept of students, student experience, readiness to learn, orientation towards learning from their learning motivation. And from these assumptions, it can be distinguished in terms of the process which includes elements of atmosphere, planning, needs diagnosis, formulation, objectives, lesson plans, learning activities, and assessments.



3. References

1. Alamri, HA, Watson, S., & Watson, W. Learning technology models that support personalization within blended learning environments in higher education. *TechTrends*. 2021; 65: 62-78. <https://doi.org/10.1007/s11528-020-00530-3>
2. Anthonysamy, L., Koo, A.-C., & Hew, S.-H. Self-regulated learning strategies and non-academic outcomes in higher education blended learning environments: A one decade review. *Education and Information Technologies*. 2020; 25: 3677-3704. <https://doi.org/10.1007/s10639-020-10134-2>
3. Baloch, GM, Kamaludin, K., Chinna, K., Sundarasan, S., Nurunnabi, M., Khoshaim, HB, Hossain, SFA, Sukayt, AA, & Baloch, LG. Coping with COVID-19: The strategies adapted by Pakistani students to overcome mplications. *International Journal of Environmental Research and Public Health*. 2021; 18(4), 1799. <https://doi.org/10.3390/ijerph18041799>
4. Ali, W. Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*. 2020; 10(3): 16-25. <https://doi.org/10.5539/hes.v10n3p16>
5. Atkinson, J., & Blankenship, R. Online learning readiness of undergraduate college students: A comparison between male and female students. *The Journal of Learning in Higher Education*. 2009; 5: 49-56.
6. Chung, E., Noor, NM, & Mathew, VN. Are you ready? An assessment of online learning readiness among university students. *International Journal of Academic Research in Progressive Education and Development*. 2020; 9(1), 301-317. <http://dx.doi.org/10.6007/IJARPED/v9-i1/7128>
7. Chung, E., Subramaniam, G., & Dass, LC. Online learning readiness among university students in Malaysia amidst Covid-19. *Asian Journal of University Education*. 2020, July; 16(2): 46-58. <https://doi.org/10.24191/ajue.v16i2.10294>
8. Cohen, J. *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum. 1988.
9. Collins, KMT, Onwuegbuzie, AJ, & Jiao, QG. Prevalence of mixed methods sampling designs in social science research. *Evaluation and Research in Education*. 2006; 19: 83-101. <https://doi.org/10.2167/eri421.0>
10. Anderson, T. Towards a theory of online learning. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning*. 2004; 33-60. Athabasca University Press.
11. Blankenship, R., & Atkinson, JK. Undergraduate student online learning readiness. *International Journal of Education Research*. 2010; 5(2): 44-54.
12. Bunz, U., Curry, C., & Voon, W. Perceived versus actual computer-email-web fluency. *Computers in Human Behavior*. 2007; 23(5): 2321-2344. <https://doi.org/10.1016/j.chb.2006.03.008>



13. Cattell, RB. The scree test for the number of factors. *Multivariate Behavioral Research*. 1966; 1: 245-276. https://doi.org/10.1207/s15327906mbr0102_10
14. Aristovnik, A., Keržič, D., Ravšelj, D., Tomažević, N., & Umek, L. Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*. 2020; 12(20): 8438. <https://doi.org/10.3390/su12208438>
15. Armatas, C., Holt, D., & Rice, M. Impacts of an online-supported, resource-based learning environment: Does one size fit all? *Distance Education*. 2003; 24(2): 141-158. <https://doi.org/10.1080/0158791032000127446>
16. Aurini, J., & Davies, S. COVID-19 school closures and educational achievement gaps in Canada: Lessons from Ontario summer learning research. *Canadian Review of Sociology*. 2021, May 26; 58(2), 165-185. <https://doi.org/10.1111/cars.12334>
17. Bao, W. COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*. 2020; 2(2): 113-115. <https://doi.org/10.1002/hbe2.191>
18. Crawford, J., Butler-Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, PA, & Lam, S. COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*. 2020; 3(1): 1-20. <https://doi.org/10.37074/jalt.2020.3.1.7>
19. Davies, JW. The experiences of part-time students in civil engineering compared with those of full-time students [Paper presentation]. *Engineering Education 2008— International conference on innovation, good practice and research in engineering education*, Loughborough, England. 2008, July.
20. Fedelis, I., & Anthonia, M.-A. Canonical correlation analysis, A sin quanon for multivariant analysis in educational research. *International Journal of Humanities Social Sciences and Education*. 2018; 5(7): 116-126. <http://dx.doi.org/10.20431/2349-0381.0507013>
21. Covaci, M. PSPP Student's perceptions of online learning in pandemic conditions. *Journal of Education Studies*. 2020, December 11; 55-67. <https://ssrn.com/abstract=3786148>
22. Field, A. *Discovering statistics using SPSS (5th ed.)*. Sage. Firat, M., & Bozkurt, A. (2020). Variables affecting online learning readiness in an open and distance learning university. *Educational Media International*. 2018; 57(2): 112-127. <https://doi.org/10.1080/09523987.2020.1786772>
23. Greenfield, NM. Fears that international student intake will keep falling. *University World News*. 2021. <https://www.universityworldnews.com/post.php?story=20210402091353306>
24. Henson, RK, & Roberts, JK. Use of exploratory factor analysis in published research. *Educational and Psychological Measurement*. 2006; 66, 393-416.



<https://doi.org/10.1177/0013164405282485>

25. Herman, AA, Stein, DJ, Seedat, S., Heeringa, SG, Moomal, H., & Williams, DR. The South African Stress and Health (SASH) study: 12-month and lifetime prevalence of common mental disorders. South African Medical Journal. 2009; 99(5); 339-344.
26. Hung, ML, Chou, C., Chen, CH, & Own, ZY. Learner readiness for online learning: Scale development and student perceptions. Computers & Education. 2010; 55(3); 1080-1090.
<https://doi.org/10.1016/j.compedu.2010.05.004>
27. Joosten, T., & Cusatis, R. Online learning readiness. American Journal of Distance Education. 2020; 34(3): 180-193.
<https://doi.org/10.1080/08923647.2020.1726167>
28. Kaiser, HF. The varimax criterion for analytic rotation in factor analysis. Psychometrics. 1958; 23: 187-200.
<https://doi.org/10.1007/BF02289233>

