ACTUALIZATION OF ANDRAGOGICAL LEARNING STRATEGIES FOR HIGHER EDUCATION IN DISRUPTION ERA

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Abstract
This article examines the actualization of andragogical learning strategies for higher education in disruption era. Disruption era as an effect of globalization demands optimal integrity of an individual so that they can live their lives well. College students as adult learners are expected to be able to interpret and work around so that the learning they do can run effectively for their future. The library research qualitative approach is chosen in order to compile various relevant references related to andragogical learning strategies in a holistic manner. Based on studies from several references, it can be concluded that andragogy is very relevant to the needs of college students as adult learners. Desire to learn, ability to learn, means to learn, and need to learn become the consideration of the relevance of the concept of andragogy to the needs of college students. On the other hand, the principle of andragogy is also very synergistic with the development of learning independence from a learner. The development of a very rapid disruption era led to changes in learning patterns, from teacher centered to student centered. The andragogical learning process must consider the learner's needs and some aspects of individuality as uniqueness and potential that must be developed. The assumptions that underlie andagoogical learning strategies in tertiary institutions are that students must understand their learning orientation, have a responsible self-concept, learn their life experiences, realize their readiness to learn, learn in concrete, and strengthen their intrinsic motivation. The actualization of andragogical learning strategies can be maximized by studying the learning process contextually, increasing participation in learning, and utilizing the advancement of science and technology. The internet must be optimized as a learning aid so that college students can understand the current conditions of the environment that they will face in the real world. Thus, the demands of the disruption era

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can be overcome through the actualization of andragogical learning strategies.

**Keywords:** Andragogical Learning Strategies, Higher Education, Disruption Era

Abstrak

Artikel ini mengkaji aktualisasi strategi pembelajaran andragogis bagi pendidikan tinggi di era disrupsi. Era disrupsi sebagai efek globalisasi menuntut integritas optimal dari seorang individu agar mereka dapat menjalani kehidupan dengan baik. Mahasiswa sebagai pembelajar dewasa diharapkan mampu memaknai sekaligus menyesuaikan diri agar pembelajaran yang mereka lakukan dapat berjalan secara efektif demi masa depan mereka. Pendekatan kualitatif berjenis library research dipilih dalam rangka merangkai berbagai referensi yang relevan terkait dengan strategi pembelajaran andragogis secara holistik. Berdasarkan kajian dari beberapa referensi, dapat disimpulkan bahwa andragogis sangat relevan dengan
kebutuhan mahasiswa sebagai pembelajar dewasa. *Desire to learn, ability to learn, means to learn* serta *need to learn* menjadi pertimbangan relevansi konsep andragogi dengan kebutuhan mahasiswa. Di sisi lain, prinsip andragogi juga sangat sinergis dengan pengembangan kemandirian belajar dari seorang pembelajar. Perkembangan era disrupsi yang sangat pesat mendorong perubahan pola pembelajaran, dari *teacher centered* menjadi *student centered*. Proses pembelajaran andragogis harus mempertimbangkan kebutuhan pembelajar serta beberapa aspek individualitasnya sebagai keunikan dan potensi yang harus dikembangkan. Asumsi yang mendasari strategi pembelajaran andragogis di perguruan tinggi diantaranya yaitu mahasiswa harus memahami orientasi belajarnya, memiliki konsep diri yang bertanggung jawab, mempelajari pengalaman hidupnya, menyadari kesiapan belajarnya, belajar secara konkret, serta menguatkan motivasi intrinsiknya. Adapun aktualisasi strategi pembelajaran andragogis dapat dimaksimalkan dengan cara mengkaji proses pembelajaran secara kontekstual, meningkatkan partisipasi dalam pembelajaran, serta memanfaatkan kemajuan ilmu pengetahuan dan teknologi. Internet harus dioptimalkan sebagai alat bantu pembelajaran agar mahasiswa dapat memahami kondisi terkini dari lingkungan yang ia akan hadapi di dunia nyata. Dengan demikian, tuntutan era disrupsi dapat diatasi melalui aktualisasi strategi pembelajaran andragogis.

**Kata Kunci:** Strategi Pembelajaran Andragogis, Pendidikan Tinggi, Era Disrupsi

**Introduction**

Discourse on education is increasingly gaining serious attention over time. The era of globalization which is a key factor in the development of world civilization today increasingly shows its strategic role in various fields of life. Moreover, the era which is now known as the era of disruption has created various real challenges in every line of human life, including in the aspect of education. Disruption era as an effect of globalization demands optimal integrity of an individual so that they can live their lives well.

Higher education as a means of self-development for adult individuals must be able to provide an adequate climate of learning and maturity. College students as adult learners are expected to be able to interpret and work around so that the learning they do can run effectively for their future. However, the dynamics of the disruption era that requires individuals who are of high quality and integrity, must be balanced with learning strategies that are able to accommodate the needs of college students as adult learners.

Higher education faces major challenges such as economic uncertainty, accountability, and globalization itself. The shocking news came from the studies of Lehner and Ziegler, where cryptocurrency, which in...
recent years has been pro and contra in the eyes of the international community, has now begun to be calculated as a source of funding for the implementation of adequate higher education.\textsuperscript{1} This is intended as a strategic alternative, where higher education as we all know requires a considerable amount of funding.

The role of technology must also be taken into account so that higher education can answer the challenge. Research conducted by the New Media Consortium (NMC) and EDUCAUSE Learning Initiative has even predicted that there will be a number of important developments in educational technology, especially at the level of higher education. In these years, there will be many uses of personal gadgets, analytical learning, and adaptive learning. Not only that, the use of Augmented Reality (AR) and Virtual Reality (VR) is also increasing. Even in the next four or five years, affective computing and the use of robotic energy in higher education are not impossible anymore.\textsuperscript{2} This shows how important the level of sensitivity of higher education in utilizing extraordinary technological developments.

Education must be able to transform towards institutions that are multi-dimensional in nature, so that they are no longer tied to traditional education models. This is very necessary to maintain the existence of higher education in the midst of various dynamics of human civilization today. In other words, access to higher education must indeed be directed towards lifelong education.\textsuperscript{3}

Responding to the challenges of the disruption era as mentioned earlier, higher education must familiarize itself with the latest technological developments so that the education held is current. The emergence of cutting-edge technologies such as the Internet of Things (IoT) and Big Data must certainly be accommodated, as well as optimizing other technology products such as the use of social media or also the use of Cloud Computing. All of this is intended so that higher education can reach the personalization area for each individual in it.\textsuperscript{4}

Even the use of social media WhatsApp has been studied specifically related to its impact on the academic realm. Like a double-edged knife, the

\textsuperscript{1} Edward Lehner and John R. Ziegler, \textit{The disruption and diversification of Higher Education Funding: Cryptocurrency for Higher Education Wealth Generation} (New York: CUNY Academic Works, 2018), 124.


\textsuperscript{3} Michael D. Richardson, Wendi Jenkins, and Pamela A. Lemoine, “Planning for Innovation and Disruption in a Global Environment”, \textit{Educational Planning}, 24 (3) 2017, 11–24.

use of social media like WhatsApp can have a positive effect on education while leaving negative effects when used too much. The use of social media can have a positive effect in terms of building learning communities to improve academic performance. On the contrary, it has the potential to become an academic disruption if used excessively so that it becomes addictive for learners. Therefore, the use of social media must be thoroughly considered, especially in the aspect of education.

In response, higher education should indeed accommodate the individual needs of each college student as an adult learner. As the concept offered by Knowles, adult learners must be treated accordingly. The concept of andragogy is considered more appropriate than the application of pedagogical values. This is motivated by differences in the needs and maturity settings of different individuals. Therefore, this article will focus on the discourse of andragogical learning strategies which are assumed to be able to answer the challenges of higher education in the disruption era.

This article is compiled using a qualitative library research approach. Various references and literature relevant to learning strategies, andragogical concepts, and the dynamics of higher education in the disruption era are explored holistically. The main orientation to be achieved in this article is to get a synthesis of the andragogical learning strategy paradigm that is suitable for students as adult learners in higher education.

Andragogy and Its Relevance with College Student Needs

In some references, it is said that andragogy is considered to have a very strategic position in determining the success of college student learning. Andragogy considers that in spurring adult growth in learning it is necessary to create lifelong learning, especially in the development of desires, interests, motivational needs and other abilities. Holistically, Hatton introduced the concept of DAMN (Desire, Ability, Means, Need). The four concepts are interrelated like a learning cycle that must be carried out by college students as adult learners.

Desire to learn is a tendency that arises from within a person so that he wants to learn naturally, especially if it is not conditioned. For individuals who have a positive learning experience can develop self-confidence and

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passion for further learning. Adults in learning tend to carry out investigations and searches for what drives their curiosity and intellect.

However there are obstacles that often learning is not considered as a lifelong activity. Even if it is realized that learning activities stimulate reason, enhance motivation and provide basic skills for individuals. Besides that, learning does not only prepare someone to face life but is the essence of life. When the power of learning is less motivating, self motivation in itself will diminish and may not be meaningful or useless.

The application of the andragogy principle in the learning process is important, because the learner will never be independent in determining what he wants to learn, how to learn it and with what strategies are used to learn something and sometimes also not learn well. Knowless argues that learners will not learn, even though they are considered as adults who have motivation, orientation, readiness to learn and experiences. In line with that, Alan Rogers views that adult learners will be more articulate and responsive to their learning needs and continue to strengthen their positive self concept by empowering and leading the ability to learn independently and sustainably.

In order for learners with all their limitations to understand a meaningful manner, their expectations and preferences must be integrated into a learning process that implies andragogy, but while still considering all the different interests and abilities that they have, especially the limitations in learning. The thing to remember is that the learning process can only be created if the learner wants something, pays attention to something, does something and receives something.

Ability to learn is the ability and mastery of learners in learning. In a learning process, the learning goals need to be encouraged to understand the meaningfulness of the learning tasks, so that the goals are in the ability and mastery of the steps of learning activities in a meaningful manner. Novak and Gowin stated that learning is not just passive information, but an active activity in interpreting learning experiences. Hoxeng also argued that learning is not also an attempt to fulfill intellectual needs with compulsion, but learning needs to be done by actively engaging in the process of active participation as a subject, not an object.

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Delors sees learning as a power or resource that grows from within a person (individual). Where both of them recommend four pillars of the process of education and learning, namely learning to know, learning to do, learning to be, and learning to live together.¹³ That is, the learning process is not merely a transfer of knowledge. The learning process for gaining knowledge is one of four important aspects that are interrelated. Not only oriented towards obtaining knowledge, learning must also be directed at how learners can do things, become things, and understand how they will be in real life.

Means to learn means the carrying capacity of infrastructure that can provide strong support for learners in facing a more complex life. In this context, learning can be conceptualized more broadly as a process of fulfilling life's needs. Individuals must learn how to respond to the surrounding environment proportionally without limiting freedom and inhibiting the development of their potential.¹⁴ Thus, all education stakeholders must always work together in order to support government policies related to efforts to advance education.

Needs to learn is the most urgent need in order to increase the role of lifelong education. Changes in the world that are very progressive and massive as a result of globalization in various fields require individuals to continue to adapt to the current situation and conditions. Future challenges tend to be more dynamic and fast-paced. Rapid growth and obsolescence of information encourage people to learn throughout life. Knowledge and capabilities that have been obtained need to be periodically revalidated. The association of cooperation in economic development demands the need for the provision of advanced professional education for workers (personnel) who have high qualifications.

Given the increasing demands of those needs, learning must be conceptualized more broadly than conventional learning concepts. Learning styles need to be created efficiently, quickly, meticulously productive and pleasant and continue to be driven throughout life. The learning culture that has always seemed to only occur in schools has shifted and developed more than previously conceptualized. To get new knowledge, experience and attitudes, individuals and communities are also required to work and study or study while working as a model of learning to look for forms (a way of becoming and being) and showing renewal.¹⁵

From this description, it can be assumed that today's learning needs are no longer as simple as learning needs in the past. The era of disruption as an effect of globalization in all fields gave birth to various types of needs that forced individuals to always learn and continue to develop their potential. That is, the entire learning process must be able to meet all the needs of learners so that they can understand while carrying out their roles later in real life.

The Principle of Andragogy in Developing Learner Independence

Learning with the principle of andragogy is compiled and carried out jointly between educators and learners. In its development, learners are given the freedom to compile, implement, and conduct learning evaluations. The role of educators is more likely towards the facilitator, who provides guidance or direction. That is, learners develop programs on the basis of their own activities and abilities with available knowledge, skills and resources.

Modern education theory views that, students must be the subject and object in the learning process. Rogers termed it with "student centered or learner centered" or referred to as learning activities that "focused on students", learning activities are actually a process of ego activities of students. This conditions provides a significant influence on the success of students, both success in achieving learning goals and the success of the learning process. This is caused by a change or increase in reason, knowledge, skills and attitudes. With these assumptions students will easily understand, master the material given because they get knowledge directly from real life.

The preparation of an andragogically oriented education program must be based on the activities of the students themselves, thus making students "work while learning" (learning by doing or training by doing). The meaning that can be taken from the concept is that students can truly experience the process of the event being learned. Because students do it themselves, they will easily master what they learn, so the material they learn gives a fundamental meaning to themselves.

Following up on this, several principle components that must always be considered in the preparation of andragogically oriented education

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programs are aspects of needs, goals, sources, obstacles, and alternatives. The aspect of need referred to here is to give clarity to students to understand and understand what knowledge and skills they want to get from an educational activity. For this purpose students should finalize various desires, hopes through discussion, dialogue with tutors (learning resources) and fellow students, as well as outside parties who understand about the development of the program to be implemented.

The intended aspect of the goal is that in each development of an educational program it must be clear the target to be addressed. Or in terms of what knowledge and skills they need. Does what students need fits in with the conditions of the target. For example, if you have certain knowledge and skills, students can already live in a wider community and these skills can be relied on to compete and sell in the market.

The source aspect is positioned as supporting the activities of the education program, both as a supporter of the learning process and supporting the implementation of all the activities of the education program. These sources are usually in the form of funds (money needed), learning resources (teachers, facilitators, instructors, tutors etc.), other facilities and equipment needed both hardware and software.

Next is the aspect of obstacles, where these obstacles usually arise from students and from learning resources, or from facilities and infrastructure that do not fail. Therefore these obstacles need to be addressed as early as possible or predicted when educational programs are prepared (for example related to weather problems or unsupportive environmental conditions). Besides that each obstacle must be arranged based on the type and level of difficulty, this is important to do especially in the context of handling it.

And last is the alternative aspect, which means that every development of an education program should provide strategic choices for all alternatives by taking into account the sources and various known obstacles, and at the same time understanding the objectives to be achieved. In each alternative selection has been assessed about the benefits (cost benefits) of each program.

It must also be considered in carrying out learning with the principle of andragogy towards the independence of learners, namely the suitability of the content of learning programs with aspects of learner individuality. The first is heredity, where Joel M. Charon states that this hereditary factor is in the form of talent or disposition that exists in the learners. These factors also

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influence students in participating in an education program.\textsuperscript{21} Other traits that are naturally present in humans, are not only related to psychological or spiritual elements, but there are also biological traits.\textsuperscript{22} Therefore, hereditary factors in students need attention, especially in developing program content. This is so that they are able to develop their talents and innate abilities perfectly. And vice versa if the content of the program material does not pay enough attention to these factors, then the potential possessed by students becomes not fully developed.

The second is environmental factors, which include the physical and socio-cultural environment. The physical environment can be in the surrounding environment, including weather, climate, and so on. Whereas the socio-cultural environment can be in the form of customs, habits, norms, values, or the results of work and human cultivation. The environment provides experience and develops the personality of students. So that the circumstances of the environment and the experience of students greatly influence the activity, motivation and level of success.\textsuperscript{23} Material support: teachings that are in accordance with the learning environment will provide enthusiasm and arouse their interest. In addition, learners will more easily understand the content of learning.

Third is the factor of self determination. Andragogical orientation in the development of the program always refers to the assumptions of potential and autonomy possessed by students. Autonomy and potential are always the main reference for every education program planning and development, before the program is rolled out. Philosophically this view is in line with the humanistic concept. This is very reasonable because humanistic is one of the schools of philosophy that views, that humans have the potential and autonomy in their lives. In the context of learning, humans as autonomous beings have "learning and freedom".\textsuperscript{24}

Humans have the desire and will to determine their own destiny (self determination). Humans must always try and always be optimistic because they will not be able to entrust their fate to the conditions continuously. Andragogical values in the learner will foster a need for achievement so that they will always be motivated to improve themselves.\textsuperscript{25} In more detail, human will includes the will to gain new experience, recognition, mastery of


understanding, and security.\textsuperscript{26} Therefore, learning must be designed in order to fulfill the learner's will.

Fourth is the developmental rhythm factor. Humans have their own developmental rhythms, which sometimes are not always linear with the phases of their biological and psychological development.\textsuperscript{27} The point is that human development at a certain stage is very likely to experience shock or crisis so that it is not in accordance with what should have happened. Based on that, the content and process of learning must pay attention to the conditions that occur in each phase of the learner's development.

Thus, it can be said that the principle of andragogy does have a strategic role in terms of forming learning independence. This is because each learner has their own will to direct the learning they do. This individuality must be understood proportionally as a set of uniqueness that must be fulfilled and developed so that learners get what they want from the learning process they do.

\textbf{Andragogy as the basis of Higher Education Learning Strategies}

As explained earlier that andragogy plays an important role in the learning process for adults, higher education which in fact is an advanced phase after secondary education, should also apply the andragogy pattern. It is necessary to sharpen the study of the reorientation of the concept of andragogy in accordance with higher education in Indonesia, so that the right assumption is obtained as a basic principle in its implementation. The relevance of the concept of andragogy with higher education in Indonesia can be found in this new discussion on the basic assumptions of andragogy and its application in higher education.

First is the assumption that adults must know why they need to learn something before deciding to learn it.\textsuperscript{28} By explaining the purpose of the task and the results of learning when completing the task, the lecturer can increase the likelihood that students will be more motivated to try to complete the task. In this regard, the faculty can choose to explain or provide an outline priority for learning expectations to start the lecture. This will be one of the right methods to apply the basic assumptions in the classroom. College students will be more motivated when they understand what they will get from the learning process.

To sharpen this assumption, real case studies are the right tool in developing assignments for college students. real case studies can be applied

\textsuperscript{26} Elizabeth Warburton, The Bowmans of Martindale Hall (Adelaide: Department of Continuing Education, 1979), 351.


in life experiences and provide opportunities for students to collaborate with one another and reflect as time goes on. Contextual tasks will make their learning activities more relevant and fun. Case studies, which also test college student skills, can be an effective way of applying these basic assumptions, especially when applied to online learning environments. So, when college students are proactive in the learning process, they will have a strong interest and interest in learning the subject.

Second is the assumption that adults have the concept of being responsible for their own decisions, for their own lives. Based on the opinion of Dabbagh, the self-concept of students is the main predictor for success. In this case the faculty can estimate how college students access and incorporate their life experiences into class activities. This is because their experience as adults is a valuable learning resource. College students want to be seen as someone who is able to overcome problems, and collaborative activities in this case will provide opportunities for them to demonstrate their abilities.

Third is the assumption that adults have different life experiences with children, which will form more heterogeneous learning groups. Encouraging college students to connect their learning with real life can help them better understand lecture material. Lecture material must be arranged in such a way that it can help in exchanging experiences, for example through group assignments and interactive discussions. College students who actively participate and contribute to their learning will be increasingly involved and motivated in learning, and of course the learning will be more

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successful. In other words, lecture and lecture material should be designed to be flexible and able to develop, not rigid and textual.

Fourth is the assumption that the readiness of adults to learn must be directed by the existence of developmental concepts. Watkins advises lecturers to ask college students about specific experiences according to topics related to the content of the lecture and what is expected from the course. For example, lecturers can ask discussion questions in class, and students are asked to respond to these questions and then ask other questions to their friends. Heterogeneous circumstances will raise many questions or problems that must be answered. In this process, students will look for the right answers to respond to these questions. It is the student's answer that can help the lecturer to see how ready students are to study the subject. Good learning readiness will better understand students about lecture material.

The fifth assumption is that students will be more motivated to learn when given concrete learning activities. In other words, the curriculum must be process-based, not just material-based, so that there is meaningful learning. Concrete learning will provide deep meaning for students. Some applications of concrete activities include case studies, group problem-solving activities, and conducting interviews. The faculty can consider focusing on making assignment-based learning activities. With this assignment, students will be helped to get a sense of how to apply lecture material in their lives.

The final assumption is that students are motivated to learn intrinsically. Lecturers can help students' intrinsic motivation to learn by providing a learning environment that involves students and encourages them to actively participate in it. For this reason, lecturers must be sensitive to students who need to be appreciated, valued and respected. Applying learning assumptions above an invaluable effort in shaping the learning environment.

37 R. Watkins, 75 e-Learning activities (San Francisco, CA: Pfeiffer, 2005), 129.
process to be more conducive for adults,\textsuperscript{42} and of course this should be used as a guide for developing the adult learning environment.

From the explanation, the writer concludes that the concept of andragogy is very strategic if applied in higher education because it is very relevant to the characteristics of students as adult learners. Andragogy in this case is a set of assumptions that can be used for all types of adult learning situations, including higher education in Indonesia. The advantages in applying andragogy, as well as the ability to adapt the assumptions described earlier, are to meet the needs of students individually in the learning process. Thus, the learning done will be in accordance with their goals.

The Andragogical Learning Strategy for Higher Education in the Disruption Era

Andragogical learning strategies refer to the level of college student learning readiness, along with all aspects related to their needs. Broadly speaking, andragogical learning strategies for higher education need to be actualized in a tangible form. Moreover, we are currently in an era of disruption, where everything is very dynamic and practical. What is remarkable about this disruption era is that all the information we need can be presented in the blink of an eye, even without the need to go anywhere.

The era of disruption manifested concretely through technological developments, especially through the internet. As an adult learner, college students must be able to manage their learning styles independently. Internet assistance is very possible to be used optimally. This is in accordance with the principle of independent learning, where learning independence will occur when each individual takes the initiative, either with or without the help of others, in diagnosing their learning needs, forming their learning goals, knowing their learning resources, choosing and implementing appropriate learning strategies, and evaluate the results of their own learning.\textsuperscript{43}

Research on independent learning reveals that the majority of adult learners do independent learning at least once a year.\textsuperscript{44} Knowles himself proposed two concepts of independent learning. The first is independent learning which underlines the full authority of individuals on all technical aspects and the process approach chosen in learning. Second is learning that emphasizes control over learning goals and assumes ownership in the

\textsuperscript{42} M. S. Knowles, et.al., \textit{The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development}, 2.
\textsuperscript{44} A. Tough, “Major Learning Efforts: Recent Research and Future Directions”, \textit{Adult Education}, 28(1) 1978, 250-263.
learning process. Students as adult learners can choose modern or traditional learning styles. Of course, everything must be adjusted to their abilities and needs for each.

The era of disruption requires adequate learning integrity. In this regard, learning how to learn is a necessity. Smith defines learning how to learn as a discourse for adults to possess or gain knowledge to function effectively in various learning situations that they experience themselves. Next he added that learning about how to learn is all an effort to have the knowledge or skills to learn effectively in the various situations he faces. Education for adults is a very important learning process to involve their participation in each stage.

Student participation as an adult learner is carried out in all phases, from planning, implementation, to evaluation of learning that will be conducted. This detailed process illustrates that they will get a guarantee that what they learn can function well later. With the principle of understanding how to learn, and coupled with the possibility to access millions of sources of information in cyberspace, students will get adequate competency and capable credibility. Thus, they will still be able to compete in facing today's global challenges.

Adults always face various problems throughout their lives, as well as the learning process they experience. Learning from everyday situations, opportunities, dilemmas, and life experiences is a process that students must go through. As the results of Fellenz and Conti's study, learning from real life is very relevant to what should be achieved in learning. Formal learning processes in classes that use traditional approaches are very outdated and not in accordance with the dynamics of the information age. Therefore by maximizing contextual learning they will be more focused on learning and mastering the competencies set according to the initial orientation.

As a reinforcement, Al-Emran's study with his team came to the conclusion that mobile learning is indicated to be one of the most promising

46 R. M. Smith, Learning How to Learn in Adult Education (ERIC Clearinghouse in Career Education. Information Series No. 10, CE 007 702.) (DeKalb, IL: University of Northern Illinois, 1976), 5.
48 R. M. Smith, Learning How to Learn in Adult Education, 6.
49 R. A. Fellenz dan G. J. Conti, Learning and Reality: Reflections on Trends in Adult Learning (ERIC Clearinghouse on Adult, Career, and Vocational Training, Information Series No. 336) (Columbus: The Ohio State University, 1989), 3.
educational technologies to be applied in the future.\textsuperscript{50} This can be understood because the era of disruption that has developed so rapidly requires all of us to always innovate. Moreover, the tendency of humans to find effective and efficient learning systems is also increasingly becoming a hot topic among education experts.

Thus, andragogy plays an important role for adult learning. Students in higher education today should be able to participate more actively in the learning process, so that they understand the true meaning of the learning process. Learning is an ongoing process that is oriented towards optimal application of the knowledge obtained earlier in real life later. When compared to the past, more and more information age allows students to do many great things. However, as educators, lecturers must be able to become facilitators with the right proportions for students, so that they can build the meaning of learning that is appropriate to the needs and demands and challenges of the information age.

From this description, the author underlines how important the actualization of andragogical learning strategies for higher education. Students as adult learners must be able to arrange their own learning according to their needs. The development of increasingly sophisticated technology must be able to be used properly so that the andragogical learning strategy can be carried out optimally. For the writer, the key words that must be kept in mind in actualizing andragogical learning strategies are independence, initiative, and explorative. Thus, students will be able to maintain their identity and integrity as adult learners in the midst of very dynamic technological and information developments in the current era of disruption.

Conclusion

The disruption era requires optimal integrity of a learner. Students as adult learners must be able to demonstrate their capabilities and credibility in the midst of the increasingly severe disruption of the development era. The application of andragogical learning strategies in higher education is considered very relevant, because students as adult learners are always encouraged to answer their needs in the learning process, which includes desire, ability, means, and need. Learning-centered learning approaches must be fought for, in addition to educator-centered learning. This is because the principle of andragogy is oriented towards learning independence from a learner. That is, learning must be carried out independently in order to meet the needs of learners, of course, taking into account some of the principles of individuality that they have as a uniqueness.

\textsuperscript{50} Mostafa Al-Emran, Hatem M. Elsherif, and Khaled Shaalan, “Investigating Attitudes towards the use of Mobile Learning in Higher Education”, 
To face the challenges in the disruption era, students do have to understand the assumptions of andragogical learning strategies. First, they must understand why they learn something. Second, they must have a responsible concept of self in the whole set of learning. Third, they need to learn from their life experiences. Fourth, the learning process must be directed according to the concepts of development. Fifth, they will be more motivated to learn when given real learning activities. And finally, intrinsic motivation plays a dominant role in directing their learning process.

With this in mind, the andragogical learning strategies in higher education need to be actualized in a more concrete form. The disruption era that is very closely related to technological developments and massive dissemination of information requires a figure of integrity. Students must always actively participate in the learning process, and not be indifferent to the development of the global world. At least they must be able to master computational science to understand internet usage wisely. Thus, contextual learning carried out as a form of andragogical learning strategy can be accompanied by reading skills of the global world today through a series of technologies and the internet.

REFERENCES


