

PRINCIPLES OF ANDRAGOGY AND NEW EFFECTIVE STRATEGIES FOR TEACHING MASTER'S STUDENTS

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Key words: *adult education, approach, M. Knowles, project-based learning, self-study, case study, information and communication technologies.*

The article considers the main trends in the use of the principles of andragogy for master's students, as the priority of independent learning, joint activities, taking into account individual experience, individualization of learning, systematic learning, contextual learning, the relevance of acquired knowledge and skills. Almost all the principles of andragogy are relevant in the modern educational process of student learning. The authors conduct a comparative description and analysis of the requirements of the educational process. The paper is devoted to the issue of a new attitude to students as initiators of the educational process: they make their own decisions about the form of study, time constraints, choice of subjects, the priority of tasks, which is especially

important in blended learning. The teacher acts as an assistant, and the goal is to make the student as independent as possible in acquiring knowledge, help organize a personal trajectory, provide resources for lifelong learning and model the environment for development so that after graduation the student continues to acquire knowledge and apply it in practice. With the constant development of society, new views on human development are formed and the educational process is centred not around the subject or teacher, but the acquirer of knowledge. Knowles based his theory for teaching adults on six principles: the importance of experience, self-awareness, the learner's need to know, readiness to learn, orientation to learning and motivation. Andragogy principles are the most general ideas and theoretical bases for organizing the process of adult learning. This study has clearly shown that modern adult students require new effective teaching strategies that is why several methods and approaches are analysed. Task-based learning, self-study, project-based learning, different types of blended learning can be readily used in practice. The main multimedia means for master's students include interactive whiteboard; Internet resources; electronic dictionaries and encyclopedias; distance courses developed in the Moodle system, etc. The use of video and audio materials, graphic information, drawings significantly increases the effectiveness of teaching and students' interest in learning new material. The main concept of application of the principles for master's students is to create such conditions that the student can independently analyze, find and contribute individual solutions both during the learning process and throughout life.

ПРИНЦИПИ АНДРАГОГІКИ ТА НОВІ ЕФЕКТИВНІ СТРАТЕГІЇ НАВЧАННЯ МАГІСТРАНТІВ

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М. Ноулз, проєктне навчання,
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комунікаційні технології.*

У статті розглядаються основні тенденції використання принципів андрагогіки для магістрантів, тому що пріоритет самостійного навчання, спільна діяльність, урахування індивідуального досвіду, індивідуалізація навчання, системність навчання, контекстуальне навчання, актуальність набутих знань і вмій, навчання за вибором, визначення освітніх потреб, усвідомлення навчання – майже всі принципи андрагогіки актуальні у сучасному освітньому процесі навчання студентів. Авторами проводиться порівняльна характеристика та аналіз вимог освітнього процесу минулого та сучасності. Статтю присвячено питанню нового ставлення до студентів як ініціаторів освітнього процесу: вони самостійно приймають рішення стосовно форми навчання, часових обмежень, вибору предметів, пріоритетності завдань, що набуває особливого значення в умовах змішаного навчання. Викладач виступає у ролі помічника, і його мета – зробити студента максимально незалежним у здобутті знань, допомогти побудувати особисту траєкторію, надати ресурси для навчання протягом усього життя та моделювати середовище для розвитку, щоб після закінчення навчання студент продовжував здобувати знання і застосовувати їх на практиці. Із постійним розвитком суспільства формуються нові погляди на розвиток людини, і освітній процес будується не навколо предмета чи викладача, а навколо здобувача знань. Дослідження чітко показало, що сучасні дорослі студенти потребують нових ефективних стратегій навчання, тому проаналізовано декілька методів і підходів. М. Ноулз заснував свою теорію навчання дорослих на шести принципах: важливості досвіду, самосвідомості, потреби студента у знаннях, готовності вчитися, орієнтації на навчання та мотивації. Принципи андрагогіки – це найзагальніші ідеї та теоретичні основи організації процесу навчання дорослих. Навчання на основі завдань, самонавчання, проєктне навчання, різні типи змішаного навчання можна легко використовувати на практиці. До основних мультимедійних засобів для студентів магістратури належать: інтерактивна дошка; Інтернет-ресурс; електронні словники та енциклопедії; дистанційні курси, розроблені в системі Moodle, та ін. Використання відео- та аудіоматеріалів, графічної інформації, малюнків значно підвищує ефективність навчання та інтерес студентів до вивчення нового матеріалу. Головною ідеєю концепції застосування принципів андрагогіки для студентів магістратури є створення таких умов, щоб студент міг самостійно проводити аналіз, не боятися мислити та знаходити свої індивідуальні рішення як під час процесу навчання, так і протягом усього життя.

Problem statement. The human potential, the level of education and professionalism of the future specialists are important for higher education in the high-tech information society. The rapid development of society, the growing interest in self-knowledge, the improvement of information and communication

skills necessitate the search for new methods and principles of learning that would meet new societal requirements and international standards. In the last few years, there has been a growing interest in finding new teaching methods as outdated methods are losing relevance among students and teachers.

Current research is focused on the principles of andragogy as the science of adult education and their theoretical rethinking and further implementation in the educational process of master's students. Understanding and awareness of what is being studied, why and how has a great influence on the progress of master's students. Andragogy is a theory of adult learning, which is based on the fact that the purpose of the modern approach to education is to promote the development of personality, the actualization of abilities and creativity.

In the middle of the last century (1950–1970s), a new scientific discipline in the field of education began to develop – andragogy as an independent science. The first discoverer of andragogy was Alexander Kapp (1833). The scientist indicated that self-reflection, character and life experience are the main points to consider when teaching adults. To study this subject many researchers have proposed various considerations. Eugen Rosenstock-Huessy, R. Smith, the English scientist P. Jarvis, and the German F. Peggeler made significant contributions [8]. The most interesting approach to this issue was proposed by M. Knowles who laid the groundwork for the development of adult education in the United States [10].

Knowles based his theory for teaching adults on six principles: the importance of experience, self-awareness, the learner's need to know, readiness to learn, orientation to learning and motivation [10]. Andragogy principles are the most general ideas and theoretical bases for organizing the process of adult learning [1, p. 75].

The primary task of andragogy is to create conditions and use methods, forms and principles that would satisfy the learning process of adult students. Knowles emphasized that the basis of such learning is that they are aware of their actions and are responsible for their decisions and therefore their learning requires special principles and methods. Thus, this point must be taken into account when creating educational programs for adults. Students need to be explained why certain topics are taught (especially theoretical ones, such as certain commands, functions, operations, etc.). Learning should be focused on practical implementation instead of memorization. When studying, it is important to consider the previous experience of students regarding their skills and abilities, for example, students may have different levels of computer skills.

The objective of this study is to consider the main trends in the use of andragogy principles for master's students and to suggest methods to implement the principles of andragogy to optimize the educational process of master's students.

Main part. The main tenet of andragogy is that first of all the teacher should place more emphasis

on the learning process, and secondly on the content. Examples include activities such as role-playing games, simulations of various real-life situations, case studies, presentations and more. Teachers take on the role of the course facilitator, not the lecturer or evaluator. Because the adults are included in the learning process and this should permit them to find something new and the teacher can give instructions to help with mistakes only.

The following aspects must also be taken into account when teaching adults. First of all, it is an awareness of why an adult needs to learn. Secondly, adults already have their own experience and they use this base for further training. Third, adult learning is also a kind of problem-solving. And the last thing is that an adult understands that learning makes sense.

Sysoieva proposed active forms and methods of adult learning, including creative situations, educational and creative tasks, collaborative learning (learning in small groups), project method, training, discussion method, game method, brainstorming method, Delphi method, case methods, etc. Teachers use these forms and methods in teaching students to diversify the learning process [3].

During the study, adult students named the most effective interactive methods and technologies that involve active communication and cooperation among students. The following methods were mentioned: group discussion, task-based learning, project-based learning, use of technology, blended learning [11, p. 72].

Task-based learning is the method of learning based on tasks that students are given in the process of performing. This approach is often more effective than the traditional one because students understand from the beginning how new knowledge can be applied and the material is memorized faster and easier. This method encourages students to use natural language and spontaneous speech and provides the student with realistic scenarios increasing motivation because the communicative task gives the student a real need for communication and independence [5].

Project-based learning uses real-world scenarios and situations for students that they may face in their future careers. Students can independently choose project topics and do what will stimulate their creative search and thirst for knowledge. Project-based learning involves the connection between teaching and the professional sphere. The methodology is based on cooperation, active participation, interaction and offers many opportunities for competence development. Students and teachers take more responsibility for their learning. During different stages, the scientific basis of project-oriented learning is a scientific and professional component in which students not only gain knowledge but practically immerse themselves in tasks of different levels of

complexity integrating skills from different fields of knowledge. An important achievement is the development of personal qualities as project work requires the development of creativity, teamwork skills, the ability to generate new ideas, awakening research skills and motivation to learn.

Six variants of *blended learning* can be implemented.

Face-to-Face Driver: material is passed directly to the teacher, and electronic resources are a means of consolidating knowledge.

Online Driver: the student masters the material independently, but if necessary he/she can consult with the teacher.

Flex model: online learning when the teacher is a process leader; all issues that arise the student can discuss with the teacher or in a group.

Rotation model: alternation of full-time and online learning.

Self-blend: learning is traditional, but if there is interest in certain subjects, students can take an additional online course.

Online Lab: conducting experiments in special programs and websites, but on the premises of educational institutions and under the supervision of teachers [4].

Dogme method is without reliance on the material: the teacher and students decide what will be the topic of the lesson in the process of communication. In such classes, students have the opportunity to independently determine the subject and direction of their studies, have lively conversations and improve the level by constantly working to correct the mistakes [9]. Dogme method requires enormous effort and professionalism on the part of the teacher: he/she must immediately be able to explain any grammatical topic, direct the discussion.

The *brainstorming method* is a method of active learning, the essence of which is to discuss a specific problem [3]. The group of students is divided into two subgroups: idea generators and critics. In the process of "brainstorming" participants' suggestions on how to solve the problem are analyzed. In the end, the best solution is chosen. Students give any answers, even if their correctness is questionable. A creative, friendly atmosphere is maintained which promotes the development of different opinions of students. Effectiveness is achieved by providing parallel answers and general inspiration in the search for truth.

Self-study is a process where people take responsibility for their learning. They plan, implement and evaluate their learning experience without the help of others. Students set goals, identify their educational or training needs, implement a plan, and so on to improve their performance. Self-study can take place outside or inside the classroom when

students work independently or collaborate as part of the self-study process. Adult students are more inclined to study independently because they are often aware of the importance of developing the necessary skills.

The use of information and communication technologies increases the level of knowledge, develops students' interest in learning, activates and diversifies independent work of students, increases motivation and cognitive activity due to the variety of forms and the possibility of including the method of gamification. The main multimedia teaching means for master's students include: interactive whiteboard; Internet resources; projector; CDs and DVDs; electronic dictionaries and encyclopedias; distance courses developed in the Moodle system containing texts, exercises, glossary, video and audio materials, presentations, etc. Emphasis is placed on the fact that the Moodle system should be used to form students' competences, as there are many tools for this: wikis, glossaries, blogs, forums, chats, etc. The use of video and audio materials, graphic information, drawings significantly increases the effectiveness of teaching and students' interest in learning new material [12].

Active learning methods promote the activation of mental and practical activities and provide independent mastery of knowledge and skills in the process of studying. If a teacher intends to use active teaching methods, he/she must ensure compliance with the basic principles of such teaching:

1. Priority of independent learning of students.
2. Joint activities of teacher and student.
3. Taking into account the individual experience of the student.
4. Individualization of education taking into account the personal characteristics of each student.
5. Systematic learning. Assessment of learning outcomes under this principle should be consistent with the form and objectives of learning.
6. Contextual learning. Purposeful performance of social roles taking into account the professional, social and domestic activities of the student.
7. Relevance of acquired knowledge and skills.
8. Elective training. The student is given the freedom to choose goals, means, deadlines, teachers.
9. Identification of educational needs.
10. Learning awareness.

From the outcome of our investigation, it is possible to conclude that most of the principles of andragogy are suitable for teaching master's students. Today, modern students have grown significantly because they are exposed to a large amount of information, have well-developed IT skills and often combine work and studying for a master's degree. These trends have significantly changed the attitude to the process and content of modern master's education.

First, students understand why they need the skills they will acquire while studying. Second, they are already fully aware of their responsibility for decisions and life paths. Third, although students' life experiences are not yet significant enough, the ability to perceive vast amounts of information sometimes makes students quite educated in some life issues.

Based on the findings presented in this paper, work on the remaining issues is continuing and will be presented in future papers.

Conclusion and prospects for further development in this direction. This study has clearly shown that modern adult students require new effective teaching strategies that is why several methods and approaches

are analysed. Task-based learning, self-study, project-based learning, different types of blended learning can be readily used in practice.

Therefore, the application of the principles of andragogy can help solve the problems facing teachers. Students are ready to practice situations that will help them cope with the problems and challenges that arise in a professional environment. New knowledge and skills with this approach are better acquired when they are presented in the context of real-life situations. The teacher becomes a facilitator of the process that guides students, helps to develop their individuality, creativity and professionalism.

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