

Active Learning Strategies as a Factor of Humanitarization of Modern Higher Education

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ABSTRACT

The author dwells on the nature of active learning strategies through the perspective of humanitarization of modern higher education.

This study examines the evidence to support the effectiveness of active learning. It defines the common forms of active learning most relevant for the University humanitarian environment. The paper focuses on four broad categories of active learning strategies contributing to the development of the humanitarian University environment. They are individual activities, paired activities, informal small groups and cooperative students' activities and projects. The choice of this or that category will depend on the size of the class, available physical space, objectives of the class, the amount of time the teacher can devote to the activity, and the comfort level of the teacher with the strategy.

The article regards active learning as a strategy wherein students are closely engaged in building understanding of facts, ideas, and skills through the completion of instructor directed tasks and activities as well as through experience sharing, reflection and inquiry. Active learning as a factor of humanitarization involves providing opportunities for students to meaningful discussions and listening, writing, reading, and reflecting on the content, ideas, issues, and concerns of an academic subject.

Keywords: active learning, methods of active learning, higher education, humanitarization, University environment.

Introduction

Our society today needs young people who are flexible, creative, and proactive – young people who can solve problems, make decisions, think critically, communicate ideas effectively and work efficiently within different teams and groups. The “knowing of knowledge” is no longer enough to succeed in the increasingly complex, fluid, and rapidly evolving world in which we live. In order to optimise life-long learning and potential success it is now widely accepted that young people need to have opportunities to develop personal capabilities and effective thinking skills as part of their well-rounded education. An establishment of higher education as a significant social institute reflects the development tendencies and condition of the society. Change in the system of public relations actively affects education, requires mobile and adequate answers for the challenges brought forward in the new stage of the historical development (Kulisha, 2008).

The contemporary age is often called an age of great knowledge and little culture. Humans' knowledge has increased, but the level of culture has been on a downward trend. A low level of culture causes incidents of unprofessionalism in different branches. A peculiar devaluation of a person's attitude is observed, as well as an increase of mentality deficit. “Getting carried away with the achievements of knowledge and abilities, we have developed an incorrect understanding of the culture. We value material achievements of culture too highly and we

do not maintain the necessary level of the significance of mentality” (Šveicers, 1991). The essential aspect of culture is not material achievement but rather the fact that individuals understand the ideals of human development and improvement of nations, humanity’s social and political condition, the moral values and that they live in their views and are constantly guided according to these ideals. “World through Culture” – this slogan was announced by N. Rerikh. These concepts are brought close by unity, the inseparableness of existence, a mutual necessity in present and future, integrity of human ideals.

Effective learning involves providing students with a sense of progress and control over their own learning. This requires creating a situation where learners have a chance to try out or test their ideas. This testing is ideally accomplished by connecting students’ ideas to concrete experience and that’s where the “active” part of the learning emerges (Zull, 2002).

The nature of active learning

The term “methods of active learning” was firstly used in Russian scientific and pedagogical literature in the 60-s years of the XXth century. Russian researcher Yu. Emelyanov suggested this phenomenon to describe a specific group of methods used in the system of social and psychological training as well as to interpret major effects of the methods under discussion (i.e. group effect, participation effect etc.). Alongside with this if to take into account current trends observed in the system of modern higher education it would be more appropriate to emphasize active learning rather than active methods. It suggests that learning is no longer regarded as a reproductive process but transforms into the voluntary inner activity of students designed to develop and modify their personal experience and skills.

Logically enough strategies of active learning were initially reflected in various reskilling programmes owing to their limited terms of implementation. Then active learning technologies were promoted in the system of higher education and finally in basic education curriculums (Kukushin, 2005).

Surprisingly, educators’ use of the term “active learning” has relied more on intuitive understanding than on a common definition. Consequently, many Universities and institutes assert that all learning is inherently active and that students are therefore actively involved while listening to formal presentations in the classroom. Analysis of the research literature (Chickering & Gamson, 1987), however, suggests that students must do more than just listen: they must read, write, discuss, or be engaged in solving problems. Moreover, to be actively involved, students are supposed to be engaged in such higher-order thinking tasks as analysis, synthesis, and evaluation. Within this context, it is believed that strategies promoting active learning should be defined as instructional activities involving students in doing things and thinking about what they are doing.

Referring to foreign contribution researchers started to focus on action learning as a part of active learning strategies.

Action learning emerged in the second half of the XXst century. Reginald W. Revans, the founder of action learning, had invented and developed this method in the United Kingdom in the 1940s. The term “action learning” was suggested by R.W. Revans as a means of development, intellectual, emotional or physical, that requires its subjects, through responsible involvement in some real, complex and stressful problems, to achieve intended

change sufficient to improve some observable behavior henceforth in the problem field (Revans, 1983).

He was the first to develop action learning as an educational process figure on the identification of a problem, integration theory, action determination and outcome evaluation. The purpose of this method is to solve problems through a process of asking questions, clarifying the exact nature of the problem, identifying possible solutions and incorporating them in a possible strategy for action.

Thus the purpose of action learning is to help people solve problems through a simple mechanism of asking questions. Learners should have the awareness of the gaps in their knowledge and motivation to its completion by properly asked questions and help other people with similar problems. R. Revans developed this idea and made it into the equation as: $L = P + Q$ Where “L” stands for “learning”, “P” – traditional ways of knowledge transfer – “programmed knowledge” and ‘Q’ as a question to allow insight into a given situation. For the ‘Q’ four ‘major questions could be raised: *Where? Who? When? What?* and three minor questions: *Why? How many? How much?* In this equation, “Q” reflects the idea of action learning. According to the International Foundation for Action Learning (IFAL) “During action learning assumptions are challenged, results are confronted, feedback from others increases self-understanding” (Welskop, 2013).

David Kolb contributed to the development of this theory in 1980’s. Kolb’s theory of the learning cycle implies that one has to go through a four step learning cycle in order to acquire: a) experience; b) reflection; c) abstract conceptualizing and e) active experimenting. The researcher specifically emphasized the significance to complete the whole cycle regardless of the starting point of the learning process.

Taking into account the outcomes of Kolb and Revans researches Bonwell states that “in active learning students are involved in the process and students participate when they are doing something apart from passive listening”. Thus active learning could take the shape of “a method of learning in which students are actively or experientially involved in the learning process and where there are different levels of active learning, depending on student involvement (Bonwell & Eison, 1991). As Beverly Cameron notes in *Active Learning*, we’re asking students to “use content knowledge, not just acquire it” (Cameron, 1999: 9). In the Association for the Study of Higher Education (ASHE) report the authors discuss a variety of methodologies for promoting “active learning”. They cite literature that indicates that to learn, students must do more than just listen: they must read, write, discuss, or be engaged in solving problems. It relates to the three learning domains referred to as knowledge, skills and attitudes (KSA), and that this taxonomy of learning patterns can be thought of as “the goals of the learning process” (Bloom, Krathwohl, Masia, 1956). In particular, students must be engaged in such higher-order thinking tasks as analysis, synthesis, and evaluation. Active learning involves students in two aspects – doing things and thinking about the things they are doing.

Douglas Barnes proved basic principles of active learning:

1. *Purposive*: the relevance of the task to the students’ concerns.
2. *Reflective*: students’ reflection on the meaning of what is learned.
3. *Negotiated*: negotiation of goals and methods of learning between students and teachers.

4. *Critical*: students appreciate and review different ways and means of learning the content.
5. *Complex*: students compare learning tasks with complexities existing in real life and making reflective analysis.
6. *Situation-driven*: the need of the situation is considered in order to establish learning tasks.
7. *Engaged*: real life tasks are reflected in the activities conducted for the sake of learning (Barnes, 1989).

Developing theoretical framework active learning techniques are built upon, foreign scholars point out two primary theories that have been commonly used to describe teaching and learning processes: “Information Processing” or “Objectivism”, which is often referred to as “traditional teacher-centered instruction” and “Constructivism,” which is often referred to as “student-centered instruction”.

Objectivists define learning as a change in the learner’s behavior patterns or in the learner’s cognitive structure. Objectivists claim that there is one true reality and knowledge is the learner’s exact reflection of that reality (Vrasidas, 2000). The belief is that effective instruction occurs when the teacher transfers objective knowledge to the learner.

Constructivism was founded on cognitive psychology, social psychology, extensive research in education, and neurological science. According to the Constructivist theory, learning occurs when students become engaged in an activity that utilizes the content and skill they are mastering. Any new information introduced during the activity that is consistent with current knowledge and understanding is assimilated easily. Any new information that is not consistent with past experiences and understanding is either rejected as being wrong or is transformed into new knowledge. New knowledge is constructed when students combine new information with existing knowledge through the process of reflection (Adams & Burns, 1999).

The analysis of foreign and Russian scientific literature as well as our own educational experience allow us to regard active learning as a factor of humanitarization of modern higher education.

The contribution of active learning into the shaping of the university humanitarian environment could be accentuated by:

- competence-based, culture-based and exploratory approaches;
- the system of both knowledge and experience exchange provided for students by the university;
- the development and strengthening of inter-university relations;
- implementation of extracurricular educational programmes allowing students to be engaged in learning and cognitive as well as creative activities.

The humanitarization of higher education content presupposes an essential change in all its components: goals, content, methods, models, technologies.

Thus, humanitarization is seen “as a way to stick a young person to the spiritual values of the civilized world, as his cultivation in the broad sense of the word, which is not reducible to narrow professionalization” (Kravets, 1996), as the way to update the means for improving culture lies through the expansion of the general cultural component of education, which means the development of new volumes of humanitarian knowledge (Gorovaya & Ulyaev,

2004; Grebennikov et al., 2016; Baklashova, Galimova & Baklashova, 2017; Wang et al., 2018; Kvon et al., 2018).

University humanitarian environment could be portrayed as integration of four components: university humanitarian environment, faculty humanitarian environment, department humanitarian environment and courses and disciplines humanitarian environment.

Active learning as a booster of the university humanitarian environment is supposed to follow a number of principles:

- principle of electivity which emphasizes the urge to develop responsibility, ability of adequate self-assessment, self-control and the strive for self-education as students personal priorities;
- principle of interaction which suggests beneficial and fruitful cooperation and joint efforts of students and teachers based on subject-to-subject relations, dialogueness of the learning process, promotion of students personal growth;
- support of students personal development and achievements which requires the structure of the learning process focused on the promotion of students' interests in different spheres of their activities, pedagogical support and professional socialization;
- positivity which implies beneficial mutual relations between students and teachers based on respect, sympathy and empathy.

Creating a supportive humanitarian university environment involves more than merely having the skills to encourage students to participate and learn in the classroom. Teachers and instructors are expected to create an intellectual and emotional climate that encourages students' taking risks. A list of behaviors that promote interpersonal rapport by projecting warmth, openness, predictability, and a focus on student-centered teaching includes:

- being strongly interested in students as individuals and highly sensitive to "subtle messages from them about the way they feel about the material or its presentation";
- acknowledging "students' feelings about ...class assignments or policy and encouraging them to express those feelings";
- encouraging students to ask questions and "...express personal viewpoints";
- communicating "both openly and subtly that each student's understanding of the material is important to him or her";
- encouraging "students to be creative and independent in dealing with the material and to formulate their own views" (Lowman, 1984: 17).

Active learning strategies

Let us focus on some examples of "active learning" through the perspective of humanitarization.

A class discussion with its emphasis on cultural backgrounds may be held in person or in an online environment and via e-learning technologies. Discussion can be conducted with any class size, although it is generally accepted to be more effective in smaller group settings. This environment lays the groundwork for instructor guidance of the learning experience. Discussion requires critical thinking of the learners regarding the subject matter and logic to evaluate their and others' positions. As learners are expected to discuss material constructively and intelligently, a discussion is a good follow-up activity given the module

has been sufficiently covered already. Some of the benefits of using discussion as a method of active learning are that it helps students explore a diversity of perspectives, it increases intellectual agility, it shows respect for students' voices and experiences, it develops habits of collaborative learning, it helps students develop skills of synthesis and integration (Brookfield, 2005). In addition, by having the teacher actively filling cultural gaps of the students, discussions allow learners to expand their cultural awareness and to increase their humanistic potential (Weimer, 2015).

A think-pair-share activity is when learners take a minute to ponder the previous lecture or seminar in order to get ready to discuss it with one or more of their peers, and eventually to share it with the class as part of a formal discussion. It is during this formal discussion that the instructor should clarify misconceptions. However students need a background in the subject matter to converse in a meaningful way. Therefore, researchers come to conclusion that a "think-pair-share" exercise is useful in situations where learners can identify and relate what they already know to others. If properly implemented, it saves instructor time, keeps students prepared, helps students to get more involved in class discussion and participation and provide cumulative assessment of student progress. The "think-pair-share" method is useful for teachers to hear from all students even those who are quiet in class. This teaching method functions as a great way for all the students in the class to get involved and learn to work together and feel comfortable sharing ideas. It can also help teachers or instructors to observe students and see if they understand the material being discussed. This is not a good strategy to use in large classes because of time and logistical constraints (Bonwell & Eison, 1991). Think-pair-share is helpful for the instructor as it enables organizing content and tracking students on where they are relative to the topic being discussed in class, saves time so that he / she can move to other topics, helps to make the class more interactive, provides opportunities for students to interact with each other as well as it contributes to the shaping of the university humanitarian environment (Radhakrishna, Ewing & Chikthimma, 2012).

Brainstorming. The key concept in the definition of brainstorming is generating. In brainstorming, students are encouraged to generate as many ideas on the topic as possible without judgment or critique. Brainstorming is a process for developing creative solutions to problems. Brainstorming works by focusing on a problem, and then deliberately coming up with as many solutions as possible and by pushing the ideas as far as possible. One of the reasons it is so effective is that the brainstormers not only come up with new ideas in a session, but also initiate associations with other people's ideas by developing and refining them (Barkley, Cross, Major, 2005; Prince, 2004).

A learning cell (or student dyad) supported by cultural comments and tasks is an effective way for a pair of students to study and learn together. The learning cell was developed by Marcel Goldschmid of the Swiss Federal Institute of Technology in Lausanne (Goldschmid, 1971). A learning cell is a process of learning where two students alternate asking and answering questions on commonly read materials. To prepare for the assignment, the students are expected to read the task and write down questions that they may have about the reading. At the next class meeting, the teacher randomly puts students in pairs. The process begins by designating one student from each group to begin by asking one of their questions to the other. Once the two students discuss the question, the other student is expected to ask his / her question and thus they take it in turns to put their questions. During this time, the teacher

goes from group to group providing feedback and answering questions.

A short written exercise that is often used as the “*one-minute paper*”. Supplemented with cultural and humanistic values this is a good way to review course content and provide feedback. Clearly enough “one-minute paper” does not take one minute and on average students are expected to have at least 10 minutes to complete this task.

A collaborative learning group is an effective tool to learn different material within different classes. It is where you assign students in groups of 3-6 people and they are given an assignment or task to work on together. This assignment could be either to answer a question to present to the entire class or to develop a culture-significant project. The students in the group are supposed to choose a leader and a note-taker to keep them on track with the process. This is a good example of active learning as it causes the students to complete the revision of the work that is being required at an earlier time and to improve their teamwork skills such as communication, conflict management, listening, reliability, respectfulness, critical thinking (McKinney, 2010). To create participation and draw on the wisdom of all the learners the classroom arrangement needs to be flexible seating to allow for the creation of small groups (Bens, 2005).

A student debate is an active way for students to master educational programmes because in this context students are given the chance to articulate and maintain their position, to gather information, to support their view and share it with groupmates. These debates not only give the student a chance to participate in a dynamic activity but they also let them gain some experience related to a verbal presentation (McKinney, 2010).

A reaction to a video is also included in the list of active learning strategies because it is commonly accepted that movie is an essential part of youth culture and embodies strong humanistic potential. The video-classes help students to understand what they are learning with the help of alternative educational tools and resources.

A small group discussion is also a component of active learning strategies because it allows students to express themselves, their identities and positions in the classroom. It is commonly assumed that students are more likely to participate in small group discussions than in a normal classroom lecture because they seem to be in a more comfortable setting amongst their peers, and from a sheer number of perspectives, by dividing the students up more learners get opportunities to speak out. A wide diversity of techniques is at the disposal of teachers to implement small group discussion in the class, such as making a game out of it, a competition, or an assignment (Hamann, 2015).

Just-in-time teaching promotes active learning by using pre-class questions to create common ground among students and teachers before the class period begins. These warm-up exercises are generally introduced as open ended questions designed to encourage students to prepare for classes and to elicit student’s thoughts on learning goals.

A class game is also considered an effective active learning strategy as it not only helps students to review the course material before their exam but it helps them to enjoy the learning process (McKinney, 2010). Teaching games open the way for expanding and strengthening humanistic and cultural grounds of higher education.

Learning by teaching is also an example of active learning strategies because students actively research a topic and prepare the information so that they can teach it to the class. This helps students learn their own topic in a more thorough way improving their level of

communicative competence, self-consciousness and critical thinking.

Gallery Walk is also applied as an active learning technique where students in groups move around the classroom or workshop actively engaging in discussions and contributing to other groups and finally constructing knowledge on a topic and sharing it. Thus Gallery work could become an important contributor to the shaping of the University humanitarian environment.

Active learning is generally defined as any instructional method that engages students in the learning process. In short, active learning requires students to be involved in meaningful learning activities and reflect on what they are doing. The core elements of active learning are student activity and engagement in the learning process. Active learning is often contrasted to the traditional lecture where students passively receive information from the instructor.

In the traditional approach to college teaching, most class time is spent with the professor lecturing and the students watching and listening. The students work individually on assignments, and cooperation is limited.

Such teacher-centered instructional methods have repeatedly been found inferior to instruction that involves active learning, in which students solve problems, answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during classes.

Curriculums focused on active learning strategies aim to empower young people to develop their potential as individuals and to make deliberate and responsible decisions for living and working in the XXIst century. They are also implemented as contributors to cultural and humanitarian grounds of the university environment. The “knowing of knowledge” is no longer enough to succeed in the increasingly complex, fluid, and rapidly evolving world in which we live. In order to optimise life-long learning and potential success it is now widely accepted that young people need to have opportunities to develop personal capabilities, competences and effective thinking and communicative skills as part of their well-rounded education. Tables 1 and 2 show the results of the research conducted by the Council for the Curriculum, Examinations and Assessment (CCEA), summarizing basic shifts in the roles of both teachers and students within active learning environment.

From	To
Teacher-centred classroom	Learner-centred classroom
Product-centred learning	Process-centred learning
Teacher as a ‘transmitter of knowledge’	Teacher as an organiser of knowledge
Teacher as a “doer” for children	Teachers as an “enabler”, facilitating pupils in their learning
Subject-specific focus	Holistic learning focus

Table 1. From – To grid showing shifts in the role of the teacher in creating an active classroom environment.

From	To
Being passive recipients of knowledge	Active and participatory learners
Focus on answering questions	Asking questions
Being “spoon fed”	Taking responsibility for their own learning - reflective learners
Competing with one another	Collaborating in the learning process

Wanting to have their own say	Actively listening to opinions of others
Learners of individual subjects	Connecting their learning

Table 2. From – To grid showing shifts in the role of students in an active classroom environment

A variety of research has made it clear that simulation model could be applied as a criterion to classify methods of active learning (see Fig. 1).

Thus classes supported by non-simulated methods have no model of the activity under examination. Dynamism of the learning process is provided due to direct and indirect communications between students and teachers.

As far as simulated methods are concerned they are based on a particular model of the subject under study (i.e., simulation of individual or collective professional activities).

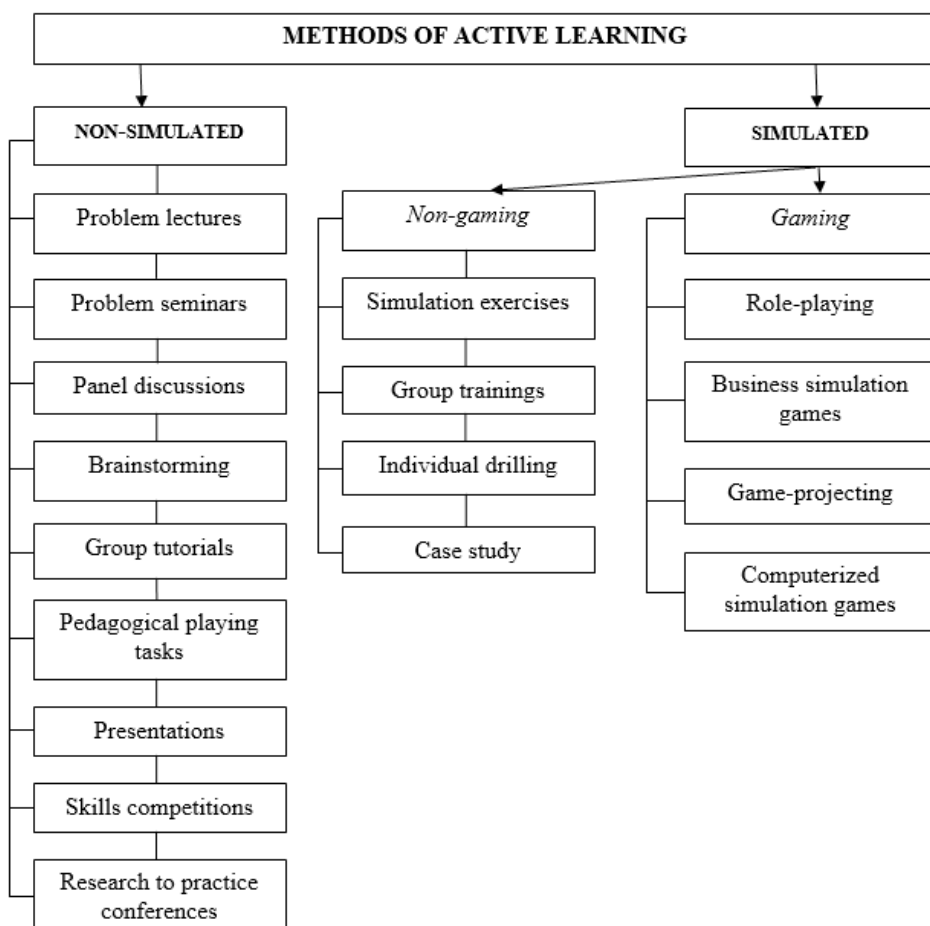


Fig. 1. Classification of methods of active learning (based on the research of E.V. Zarukina)

Traditionally modern researchers tend to divide simulated methods into gaming and non-gaming. Gaming techniques imply that students are supposed to take certain roles. Such techniques are effective tools for students to master course content since they enable to get closer to practical tasks while maintaining high level of motivation of students.

Therefore active learning technology is the organization of educational process which excludes nonparticipation in the cognitive process: every learner is responsible for certain task or role and while implementing the given task or role students are expected to share their public reports over the teaching objectives. Moreover the progress of meeting group targets depends on activities and contributions of every single learner.

Conclusion

Active learning strategy consists of methods that stimulate cognitive activity of students, involving each of them in mental and behavioral activity, and focus on the realization, refinement, enrichment and personal adoption of existing knowledge by each student.

Though the term “active learning” has never been precisely defined in educational literature, some general characteristics are commonly associated with the use of strategies promoting active learning in the classroom:

- students are involved in more than listening;
- less emphasis is placed on transmitting information and more on developing students' skills;
- learners are involved in higher-order thinking (analysis, synthesis, evaluation);
- students are engaged in activities (e.g., reading, discussing, writing);
- greater emphasis is placed on students' exploration of their own attitudes and values (Bonwell & Eison, 1991).

The primary goals of active learning as a constructor of the humanitarian University environment include:

- the shift of higher education from training a “knowing person” to shaping a “person of culture”;
- the development of the students' culture-related views as an expression of a generally human interest and encouragement of self-education and self-development;
- the development of creative personalities with critical minds who are able to adapt to the continuing both social and cultural changes and are ready to face current challenges, and who are expected to unlock their potential and abilities and give the full play to their humanistic, cultural, intellectual and moral intentions;
- empowering, engaging, and stimulating a classroom by putting students at the center of the learning process.

Active learning strategies implemented in the humanitarian University environment have a number of advantages including evolutive effects of higher education, creative search, emotional, mental and behavioral activities.

Methods of active learning are applied as a combination of techniques provoking qualitative and quantitative shifts in students' cognitive activities and expansion of the educational and personal experience of learners as well as contributing to the development of the university humanitarian environment.

Active learning puts clear focus on the learner: what the learner does, what the learner thinks, and how the learner behaves.

Crucially, active learning doesn't simply happen with a few simple instructions: it occurs in the classroom where the teacher is committed to a learning environment that makes active learning possible.

Finally, active learning strategies are believed to help gain understanding rather than memorization of facts, giving students the confidence to apply learning to different problems and contexts and achieve greater autonomy over their education.

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