

**APPLICATION OF AGREE TECHNOLOGY AS AN INNOVATIVE APPROACH
TO HIGHER EDUCATION TEACHING IN STRESSFUL CONDITIONS**

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Annotation. *The article describes the author's experience in applying AGREE technology as an innovative approach to teaching in higher education under stressful conditions. The essence, purpose, and conclusions regarding the effectiveness of AGREE technology are characterized. Both original and traditional methods of this technology are proposed.*

Keywords: *AGREE technology, innovative teaching technologies, higher education, stressful conditions, psychopedagogical approach, interaction.*

Аннотация. *В статье описан авторский опыт внедрения AGREE-технологии в качестве инновационного подхода к обучению в высшей школе в стрессовых условиях. Описаны сущность, цель и выводы относительно эффективности внедрения AGREE-технологии. Предложено авторские и традиционные методы этой технологии.*

Ключевые слова: *AGREE-технология, инновационные технологии обучения, высшая школа, стрессовые условия, психопедагогический подход, интеракция.*

Today's global realities represent a stressful psychological state of general tension, anxiety, and uncertainty about the future – in other words, a sharpening of contradictions and the destabilization of various spheres of societal activity, including education. Stressful situations of societal significance are further specified by circumstances that continually arise within the educational process itself, such as the psycho-physical tension experienced by each participant.

Clearly, academic staff at institutions of higher education, as moderators of the educational process, must update their professional activities by mitigating and preventing stressful situations – primarily through the implementation of innovative teaching technologies. Furthermore, today's global realities necessitate both innovation and the psychological synchronization of the educational process in higher education institutions. This involves self-regulation and the regulation of psycho-emotional states among both students and instructors, to shift focus and encourage conscious, meaningful activity.

Innovative teaching technologies in higher education are consistently a relevant subject of scientific research (K. Shalgimbekova, T. Smagliy, R. Kalimzhanova, Z. Suleimenova [9], G. A. Toirova, A. Zilola, N. F. Malika, N. Jurayeva [10], and others). In recent years, studies analyzing specific types of stress – such as technostress among educators

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(Ya. Dong, L. Jialin, H. Wang, C. Peng, C. Wang, A. H. S. Metwally [2]) and students (N. M. Daud [1]) – have gained scholarly interest. However, we believe that the application of innovative teaching technologies in higher education under stressful conditions must be examined through various lenses: regional (specific to a country), socio-economic (level of access to technical teaching tools), and situational (linked to particular psychosocial contexts). This necessitates ongoing scientific and practical exploration within this framework.

According to the aforementioned researchers, the educational priority in implementing innovative teaching technologies under stress lies in shifting from the mere study of facts to the acquisition of fundamental skills. These include critical thinking, analysis, the ability to learn independently and work in teams, and making agile decisions under pressure – in other words, the development of soft skills, particularly stress resilience. However, it is important to recognize that cognitive processes under stress – both in students and teachers – are often significantly slowed or even blocked. Therefore, it is essential to stimulate and redirect students' attention to maintain engagement and learning efficiency.

In our opinion, practical implementation of new teaching methods and approaches in crises within the educational process in higher education institutions (HEIs) becomes possible through the application of relevant methodological frameworks, namely: a) an interdisciplinary approach, which ensures a holistic perception of the professional knowledge landscape; b) a creative approach, which enables innovative interpretation of conventional educational tools; c) a psychopedagogical approach, which emphasizes the conscious integration of pedagogical foundations and psychological concepts; d) a situational approach, which reflects realistic alignment with actual competencies applied in real-life professional scenarios – “here and now”; e) a learner-centered approach, which acknowledges the individualized nature of the educational process in HEIs.

Let us characterize a specific innovative teaching technology currently being implemented in our HEI – the “AGREE Technology”. This technology has been borrowed and adapted from the field of medical diagnostics, where it is used as a tool for the evaluation and certification of medical guidelines to address the issue of variability in guideline quality [8]. We introduced this approach into the educational process of the National University of Life Resources and Environmental Management of Ukraine (Kyiv) [3].

AGREE is thus a tool designed to evaluate the methodological clarity and transparency with which a guideline (in our context, instructional material) has been developed. The guideline, understood as a form of advice or instruction, becomes a teaching method in itself, where the content of the academic discipline is aligned with the manner in which it is delivered to students. The essence of the AGREE technology is embedded in the meaning of each letter – representing a holistic approach to teaching and student learning (questioning ↔ acquiring information ↔ reflecting ↔ generalizing):

- A – Ask (formulate questions);
- G – Get information (acquire information);
- R – Reflect (process and think over the content);
- E – Explain (summarize, explain, and generalize).

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The core idea of the AGREE technology, as we define it, is interaction in the classroom aimed at evaluating the quality of the instructor's guidelines, achieved through continuous feedback. Since this interaction involves assessing the quality of instructional input, the instructor, especially under stressful conditions, must be well-prepared, stress-resilient, and open to discussion. It is crucial to encourage students to express their opinions freely under the principle: "We don't make mistakes – we express our point of view. There are no mistakes – only experience". This motivational approach facilitates positive interaction. Thus, AGREE technology is characterized as an innovative, interactive, and partnership-based teaching method, grounded in a student-centered and learner-oriented educational philosophy.

Objectives of AGREE technology: a) improve the quality of learning; b) develop soft skills (critical thinking, argumentation, communication, analytical and creative skills, responsibility); c) make the learning process more engaging, motivating, and stimulating; d) evaluate the content, procedures, and learning outcomes through positive, assertive interaction involving discussion and reflection.

How to apply AGREE technology in higher education? Primarily through positive, assertive interaction, which includes discussions, reflections, argumentation, evaluation, and coordination with students on:

- the overall content or specific topic of a course and instructional procedures ("What questions would you like to have answered during the course (or this specific topic)?", "Which teaching methods and formats would be most effective for us to use while studying this topic?");
- types of learning activities and assessment criteria ("What kinds of homework assignments would you prefer for this topic?", "How would you assess such types of tasks?");
- expected learning outcomes vs. actual results at the end of a course/topic/module ("Did you receive answers to the questions you had at the beginning of this course/topic?", "Which learning methods and activities met your expectations?").

Examples of authorial and traditional methods for using AGREE technology in HEI practice. These methods are based on the psychopedagogical approach to managing and preventing stress in the educational environment through positive interaction, moderated by the instructor:

1. "Interactive Presentation" – this involves answering questions in a chat during an online (with elements of discussion) or offline lecture. The instructor does not proceed to the next instructional segment until the previous one has been discussed, reflected upon, and summarized – visually presented on the slide. Reflective questions, in the form of sentence stems, are recommended to be displayed in the classroom or inserted after each content slide, e.g.: "I understood that...", "Today I remembered...", "I learned for the first time that...", "I was surprised that...". At the end of the lesson, the following reflective questions can be used: "Evaluate your understanding of today's topic after the lecture/training", "What are your impressions of the lecture/training?". These reflective forms help reconstruct a complete picture of students' understanding, as well as verify their actual (not virtual) presence in the session. The reflective part may also be presented in the form of a Google Form (reflective survey) for feedback and control purposes at the final stage of the session. This helps track the dynamics of cognitive engagement, evaluate

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the effectiveness of the chosen methods, and ensure a feedback loop. Google Forms are easy to create and convenient to use.

2. Coordination of Specific Learning Activities and assessment criteria in higher education. Students are offered a choice in advance regarding the format of assignments, as outlined in relevant methodological recommendations. For example: a) types of homework assignments: 1) "Source Analysis" – preparation of a presentation based on a specific modern academic source, followed by sequential discussion of each slide. Students are not only required to listen to the presentation but also to ask questions related to each slide – both to the presenter and one another – reflect on the content, and only then move to the next part. 2) "One Topic for All" – creation of a post, video blog, or story in any social media platform (YouTube, Facebook, Instagram, TikTok, etc.) on a given topic or on the analysis of a recommended or independently found source. This is followed by peer comments and discussion in the educational group. 3) "Case Study Assignment" – independent preparation of a case from scientific or journalistic sources describing a problem relevant to the academic topic, its analysis and conclusions. The case is then discussed in class using the AGREE model: ask ↔ get information ↔ reflect ↔ explain; b) teaching methods chosen by students: (interactive discussions, outdoor lessons for relaxation, group work, etc).

3. "Thematic Preview" – this method involves collecting students' questions in advance regarding the upcoming topic via Google Forms or group chats (e.g., Viber). The instructor summarizes and presents these questions at the beginning of the next class as learning objectives. At the end of the class, these same questions are displayed again for reflection. Students discuss which questions were answered and what information they gained, while the instructor provides explanations and summarizes the reflective section. This approach enhances student engagement and motivation – crucial anti-stress factors.

4. Use of lingual, art-therapeutic, and anti-stress techniques; "Positivity Moments" implemented at any stage of the lesson to maintain emotional balance [5]. Two-minute storytelling on any course-related topic (e.g., "A Fairy Tale About My Nerves", "A Fairy Tale About the Social Status of the Population") as part of the "Fun Tale About..." method. This stimulates creativity and relaxes both students and teachers. Psycho-emotional self-regulation techniques should be integrated into both special and regular classes to develop students' stress resilience. These techniques can be used: at the beginning or end of the lesson, as energizers during the session (e.g., Stretching, Self-massage), during short "recharge breaks" to combat physical-mental fatigue (as prolonged sitting induces somato-psychological stress). Teachers are encouraged to perform simple relaxation exercises and self-massage together with students to demonstrate acceptance and involvement. Techniques like "Chocolate Therapy", "Coffee Therapy" [7], or "Drawing Sessions" serve as art-based stress relievers and allow cognitive processes to be reactivated through sensory pathways. These can be especially effective in breaking cognitive blocks caused by stress. When students draw freely or associatively during the class, they re-engage in logical thinking through emotional expression. This method has been described in another article [6].

5. "Google for Help" Method. Instead of directly explaining definitions, the instructor encourages students to use Google to find and explain key terms from the lecture. This role reversal promotes activation of student learning, development of information search

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and critical evaluation skills, improvement of language and pedagogical abilities (explaining, clarifying, interpreting), and better retention of new terms and concepts. Prompt: "Google what this term means – let's learn together!"

6. Traditional Interactive and Situational Learning Technologies. These methods improve practical skills, provide opportunities for students to temporarily take on the role of the instructor in pairs or small groups, facilitate role-based learning where students explain and pass on information to each other, and encourage re-evaluation of the instructor's role and its professional significance. Students are given the freedom to choose how to interact, assign roles, organize work, and present results. Case studies based on real-life or academic experiences of instructors or students serve as a foundation for effective and engaging learning [4].

Conclusions on the effectiveness of AGREE technology in higher education under stressful conditions are the following:

1. AGREE technology, originally developed as an international standard in medical diagnostics, has been successfully adapted as an innovative educational and psychopedagogical approach. It fosters critical thinking, collaboration, interactive learning, stress prevention and reduction. AGREE technology creates a dynamic and engaging learning environment that improves knowledge retention and promotes the development of professional skills. It is based on interdisciplinary, creative, situational, student-centered, and learner-focused approaches.

2. Teachers can apply AGREE technology by incorporating adapted techniques and strategies that engage students in discussions about course content, learning goals and outcomes and assessment criteria using the algorithm: ask ↔ get information ↔ reflect ↔ explain. Students become active participants in their own learning, which enhances their motivation, responsibility, and understanding of the learning process. Reaching mutual understanding at the beginning and during the course helps to prevent stress and misunderstandings.

However, further research is needed to provide a theoretical justification for using AGREE technology in higher education, since it was originally designed for use in medical diagnostics and has only recently been adapted to educational contexts.

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