



ІНФОРМАЦІЙНІ ТЕХНОЛОГІЇ ТА КОМП'ЮТЕРНЕ МОДЕЛЮВАННЯ



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Appreciative Inquiry (AI) method in the study of sustainable development of education quality improvement

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Abstract—Research is being conducted on the use of the method of positive-oriented research, the relationship of this method, and the results of its joint use. A practical example of research for university students is presented.

Keywords—the method of positive-oriented research, Appreciative Inquiry (AI)

I. INTRODUCTION

Appreciative Inquiry method, based on organizational development, that emphasizes a strengths-based approach to change and improvement. This approach differs from traditional problem-solving models by focusing on what works well in organizations and envisioning a positive future, which makes it possible to extend it to education to improve the quality and sustainability of educational practices through collaborative work among all stakeholders.

II. LITERATURE REVIEW

The method was developed by Dr. David Cooperrider and Dr. Suresh Srivastava in the 1980s. The approach is based on a structured framework known as the 5-D model: define, discovery, dream, design, and destiny. This model is aimed at identifying strengths, co-creating effective strategies, and developing a culture of positivity and collaboration. This method has been effectively implemented in various educational institutions and has demonstrated its potential as a catalyst for positive change by promoting innovative practices and improving learning outcomes. Today, educational institutions prioritize sustainable development, so this method is a tool for aligning educational practices with broader global goals. There are also challenges in applying this approach: an overemphasis on positivity can lead to ignoring underlying structural problems, the need for qualified facilitators, and the complexities associated with implementing this method create barriers to its effective use.

III. METHODOLOGY AND RESEARCH

The core principles of the Appreciative Inquiry method are based on several basic tenets that guide its application in change management. These principles point to a strengths-based approach and foster constructive engagement among stakeholders, promoting a positive and collaborative environment for sustainable change. The basic tenet is that positive questions generate positive change. It emphasizes that focusing on strengths and what works well in an educational institution can generate hope, enthusiasm, and motivation among stakeholders. Positive feedback leads to more effective and lasting results. An educational institution can be seen as an open

book in which the stories chosen to be told shape the organizational reality.

When we focus on positive stories and successes, on exploring the success of the entire industry, individuals, and the entire organization, we develop a culture of appreciation that encourages growth and innovation. This principle emphasizes the importance of language and storytelling in influencing perceptions and driving change, and emphasizes the importance of envisioning an attractive future. The power of imagining what could be serves to guide present actions and decisions, cultivating a shared vision that inspires collective efforts to achieve desired outcomes.

Appreciative Inquiry method encourages integrity and fosters a sense of ownership and collective commitment to the change process. This approach enhances collaboration and strengthens relationships within the institution, leading to more effective change initiatives. The method uses the principle of simultaneity, according to which research and change occur simultaneously. Exploring the strengths and capabilities of each individual engages participants in discussions that explore what works well. It creates a dynamic environment in the educational institution where change is not imposed but co-created, leading to sustainable improvement in practices and outcomes.

The 5-D model is a structured framework for research consisting of five stages: Define, Discovery, Dream, Design, and Destiny. Each stage is connected to the previous one and is aimed at the process of identifying strengths, anticipating future opportunities, co-creating effective strategies, and committing to continuous learning and adaptation to the learning process. This model promotes effective change management and strengthens cooperation and collective action between different participants of the educational process: students, teachers, and administration, which contributes to the improvement of the quality of education. The basic principles and the 5-D model form the basis for utilizing the strengths of an educational institution and contribute to the process of sustainable development. The application of this approach in education is becoming a transformative methodology in the field of education, in particular, in improving the quality and sustainability of educational practices. This strengths-based approach enables educators and students to jointly create a vision for improvement, focusing on the existing strengths and potential of educational institutions, involves all stakeholders in the educational process, and fosters a collaborative environment necessary for meaningful change. As part of Appreciative Inquiry method and to create a supportive and effective learning environment, multimedia research methods

were used, which was valuable in reflecting the diverse perspectives of students, for example, students expressed their thoughts through drawings, digital narratives and other forms of expression, which allowed them to articulate their dreams for improving their educational experience. The cycle concluded with students taking an active role in designing classes and reporting on their progress, which emphasized the importance of involvement in decision-making related to their education.

IV. RELATIONSHIP TO SUSTAINABLE DEVELOPMENT

Transformational changes in education. Values-based research plays a crucial role in promoting transformational change in educational institutions, which is essential for achieving sustainable development. Sustainable development requires fundamental transformation and change in educational systems. Traditional approaches prioritize efficiency, while there is a need to focus on developing new, effective processes, challenging existing stereotypes of thinking and questioning the status quo. Today, educators need to be encouraged to rethink their strategies and frameworks and align them with the Sustainable Development Goals (SDGs).

The integration Appreciative Inquiry method into education is closely linked to preparing future leaders to address complex global issues. It equips students with the knowledge, skills, and attitudes needed to contribute to a sustainable future and serves as a pedagogical tool that emphasizes the strengths and potential of educational systems, fostering a collaborative search for innovative solutions to pressing problems. This shift from traditional problem-solving to generative approaches is consistent with the broader goals of sustainable development. The focus on strengths and positive change in the structures of the method spans the phases of discovery, dream, design, and destiny, and focuses on identifying what is already working well and envisioning an improved future. This positive focus not only creates motivation among participants but also fosters a culture of collaboration and engagement, which is vital for implementing sustainable practices in education. Based on creating an environment in which stakeholders are encouraged to explore and build on their strengths, the Appreciative Inquiry method cultivates the conditions necessary for sustainable change.

The use of the Appreciative Inquiry (AI) method of positive-oriented research when working with first-year students who are just starting their way in the university community is based on the fundamental principles: constructivism (creating social reality - you should always be open to new knowledge), predictability (you need to move in the direction of thoughts, see and hear the expected results), positivity (many ways of open communication provide endless possibilities in understanding a person, object, phenomenon, action).

Students are actively involved in the initial stages of the 5D cycle – “Discovery” and “Dream” – where they identify the key ideas that shaped their educational experience. Their findings emphasized the importance of enjoyable learning, relevant life experiences, collaborative learning environments, and family metaphors in the learning environment. These findings have important implications for sustainable development to create a supportive and effective learning environment. Discovery, Dream, Design, and Destiny phases focus on identifying what is already working well and envisioning an improved future [3]. The use of the Appreciative Inquiry (AI) method of positive-oriented research when working with first-year students who are just starting their way in the university community is based

on the fundamental principles: constructivism (creating social reality - you should always be open to new knowledge), predictability (you need to move in the direction of thoughts, see and hear the expected results), positivity. Positive Inquiry Method in the academic context is intended to promote transformational change. In the present study, the method was used to explore the perspectives of first-year students to come together to solve common problems and find ways to improve pedagogical practices tailored to their needs. In the first month of studying at the university, a student actively gets acquainted with all the processes of the university community through the discipline “University Studies,” which allows the student to express their thoughts and impressions, gain new knowledge about the future specialty and unite students into an academic group with their views, observations, and preferences. During these first introductory classes, the Appreciative Inquiry (AI) method of positive-oriented research is used [3]. Students imagine all the years of studying... model what they would like to change in the process of studying. At the third stage of the research (Design), they form their idea of the future. In the fourth and final stage of research (Destiny), they develop an action plan to make their dreams come true. Going through all the stages of the Positive Inquiry cycle together leads to a rapprochement of students who have just entered the educational space of the educational institution and contributes to the organization of a new, friendly group. The result of the joint work is a series of visual works: infographics, drawings, digital narratives, and other forms of self-expression. The method allows students to express their dreams in a new form using modern information tools. Figure 1 shows samples of works in which students model their future, “Portrait of a Specialist of the XXI Century”.



Fig.1 Portrait of a Specialist of the XXI Century

V. CONCLUSION AND FUTURE INVESTIGATION

The use of the Appreciative Inquiry method is important in preparing a generation of leaders who are ready to solve complex global problems using their knowledge, skills, and attitudes to build a sustainable future. This approach is a pedagogical tool that emphasizes the strengths of educational systems and promotes the search for innovative solutions to pressing problems. The transition from traditional problem solving to generative approaches is in line with the goals of sustainable development. Innovative changes in the educational environment are associated with the use of various innovative methods and modern digital tools. A positive focus contributes not only to creating motivation among participants in the educational process but also to developing a culture of cooperation and engagement, which is vital for the implementation of sustainable practices in education.

Creating an environment in which stakeholders are encouraged to explore and develop their strengths, creating the conditions necessary for sustainable transformation, is what the Appreciative Inquiry method provides

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