



Article

The Role of Creative Teaching Strategies in Alleviating Academic Anxiety Among University Students

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Annotation: The current study aims to investigate "the role of creative teaching strategies in alleviating academic anxiety among university students." The researcher employed an experimental design with partial control that included two comparable groups: an experimental group and a control group, in line with the research conditions. The researcher intentionally selected students from Tikrit University as a pilot sample, and first-year students from the College of Education for Human Sciences, Department of Educational and Psychological Sciences, as the experimental sample for the scholarly year (2025-2026). Using a random selection process, Section (B) was designated as the experimental group, consisting of 30 students who engaged with the creative teaching method, whereas Section (A) was appointed as the control group, consisting of 32 students who learned through the traditional approach. Before launching the experiment, the researcher confirmed statistical similarity among students in both groups concerning various factors that could influence the outcome, specifically: age in months, last year's GPA from the sixth preparatory grade, results from the Raven Progressive Matrices Intelligence Test, fathers' educational levels, mothers' educational levels, and initial scores on the academic anxiety reduction scale. The researcher determined the educational content to be delivered, which encompassed the initial and subsequent chapters of the "Psychology" textbook prescribed for the first stage in the Department of Educational and Psychological Sciences. Based on the content, the researcher formulated behavioral objectives across four levels and prepared 16 model lesson plans for each group. The researcher employed two instruments to assess the research variables: the first was an achievement test consisting of 35 items, whose validity, reliability, and discrimination index were verified, and statistical analyses were performed on its items. Additionally, the researcher developed an intelligent curiosity scale, that in its ending form contained 34 items, with verified validity, reliability, and discrimination. After developing the experiment, the investigator executed two together research forms to the study groups. Following data collection, the research dossier were resolved utilizing appropriate mathematical methods, disclosing the following results: 1. There is a statistically important distinctness at the (0.05) level middle from two points the mean scores of the exploratory group scholars and those of the control group in the success test, preferring the exploratory group. 2. A statistically meaningful dissimilarity was discovered at the (0.05) level betwixt the mean scores of the exploratory group undergraduates and those of the control group on the post-test intelligent interest scale, preferring the exploratory group. 3. The results explained a statistically important dissimilarity at the (0.05) level in the mean dissimilarities 'tween the pre-test and post-test scores of the exploratory group juniors on the intelligent interest scale, pampering the post-test.

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Introduction and Research Identification

Statement of the Problem

Undoubtedly, education and schooling, There is a statistically important distinctness at the (0.05) level middle from two points the mean scores of the exploratory group scholars and those of the control group in the success test, preferring the exploratory group.2. A statistically meaningful dissimilarity was discovered at the (0.05) level betwixt the mean scores of the exploratory group undergraduates and those of the control group on the post-test intelligent interest scale, preferring the exploratory group.3. The results explained a statistically important dissimilarity at the (0.05) level in the mean dissimilarities 'tween the pre-test and post-test scores of the exploratory group juniors on the intelligent interest scale, pampering the post-test. surrounding advancements and investing them for personal and societal benefit. Effective tools in this context include modern education and learning means, that constitute the center groundwork for the success of the instructional process. New instructional strategies have arose that focus on scholar-concentrated learning and embellish interplay in organized endeavors, through helping to decide the quality of efficiency for two together student and scholar toward particular objectives. These methods are not limited to the cognitive facet alone but again surround creative methods.

Instructors' confidence on established methods in education academic trainings in our universities—that primarily devote effort to something transferring scientific content to pupils—overlooks fault-finding ranges of the student's traits, to a degree worry reduction and the finding of artistic proficiencies. Furthermore, students contract an illness reduced academic achievement, specifically in the starting point. This leads the scientist to believe that graduates' troubles and academic disturbances arise a lack of proficiency in medicine. This issue is not restricted to the theme or the curricula secondhand, that underlines the urgent need to expand education methods for these cases established new and best models and approaches. All of this helps the analyst pick a up-to-date method arisen constructivist belief policies.

The scientist attended an open exploratory survey to interrogate the orders and approaches secondhand by professors in education psychology, in addition to to judge their level of vindication accompanying student progress and the grade of academic tension with bureaucracy. The results indicated that 95% of professors depend established education methods, while 80% are discontented accompanying their pupils' progress, and 90% trust that these methods do not promote artistry between juniors. The reliance of subject professors in our academies on usual means meeting strictly on experimental content transfer leads to the neglect of essential facets of the student's traits, such as creativity development, anxiety reduction, and affective dimensions. Consequently, the problem of the current study crystallizes in the following question: What is the role of creative teaching strategies in alleviating academic anxiety among university students?

Significance of the Study

Creative teaching methods represent an educational learning pattern derived from constructivist theory; hence, the researcher selected a model based on constructivism. This creative teaching method can be utilized in instruction across various settings. It positions the student as the central axis of the educational process, offering freedom for argument and dialogue middle from two points graduates and the coach, and among graduates themselves. This authorizes the student to get sound talk abilities and fosters a soul of service with them. It grants the event to remember the best possible number of answers to a question, allowing students to think in a systematic, scientific manner across its four stages, starting from invitation and ending with the operational stage, which includes decision-making to reach a final resolution, making the learning process dynamic (Maximus, 2003: 252). The researcher believes that this method successfully engages learners positively in producing new creative outcomes built upon their previous

experiences through varied activities (such as comparison, balancing, proposing solutions, clarifying, and selecting high-quality alternatives) and reaching following in position or time the communication to find appropriate applications for that reason they well-informed in often history. Generally, this approach assists all partners in the instructional process.

Academic realization is thought-out a complex psychological and instructional idea on account of the intersection of diversified academic, individual, and public determinants. Therefore, this field is one of ultimate hopeful districts providing learners with the time to uncover their abilities and capabilities and cultivate their aspiration (Hamdan, 1996: 65). The significance of creativity display or take public allure consequence, which allows the individual to acclimate to differing life positions – whether working, home, or in a changeful environment – and to take the push to present changes that bring about new concepts and various interplay models. Alleviating academic worry is also an main and unavoidable form for overcoming questions, accommodating, and knowledge. Reducing anxiety is detracting cause it helps folk perceive and innovate inside their surroundings, reinforcing survival through survey. One of the key consequences of lowering anxiety is achieving facts about new and strange topics and positions (Litman, 2006: 86). Fostering instinctive interest and reducing antagonistic worry serves as a strong catalyst for benevolence, forceful experimental discoveries and civilizational progress, and is a prerequisite for extending information. Maslow (1970) supposed that creativity is an basic elements in outlining a rationally healthy individual. Voss and Keller (1983) stressed that imaginative and preliminary behaviors are extremely important cruel growth, contributing to adaptable modification to changeful environments, meaning a 'enlightening adjustment toward diverse interplay patterns and more direct logical' (Giambra, 1992). The experiences win through artistic and preliminary behavior authorize the education of instinctive patterns of adult cognitive incident. Therefore, artistry and the desire to get information and information form essential human purposes and behaviors across various stages of existence.

Based on the corresponding history, the significance concerning this research is emphasize in the following points:

- Creative education designs serve as an main instructional model inside constructivist theory.
- The meaning of academic progress display or take public allure role as a rhythmical for pupil advance and progress from one stage to another.
- The significance of lessening academic worry is closely connected to reinforcing scholars' intelligent exploration.

Research Objective

Research Objective: This study aims to survey the effect of imaginative education methods on reconstructing the accomplishment of first-stage graduates in attitude and relieving their academic worry.

Research Hypotheses

Research Hypotheses: To obtain the research goals, the analyst planned the following valueless theories:

- First Null Hypothesis: At the (0.05) meaning level, skilled is no statistically important distinctness middle from two points the mean accomplishment scores of the exploratory group scholars the one study attitude utilizing imaginative education approaches distinguished to the mean accomplishment scores of the control group juniors the one study the alike subject utilizing the established design.
- Second Null Hypothesis: There is no statistically meaningful distinctness at the (0.05) meaning level middle from two points the mean scores of the exploratory group undergraduates the one study medicine utilizing artistic education actions and

the mean scores of the control group juniors the one study the unchanging subject concerning the academic tension relief scale.

- Third Null Hypothesis: There are no statistically meaningful distinctnesses middle from two points the mean scores of the exploratory group juniors before and later the experiment on the academic worry relief scale.

Limitations of the Study

- Human Limitations: First-stage scholars in the Department of Educational and Psychological Sciences.
- Spatial Limitations: College of Education for Human Sciences – Tikrit University.
- Objective Limitations: The first three chapters of the 'Psychology' text arbitrary for first-stage pupils in the Department of Educational and Psychological Sciences.
- Temporal Limitations: The first term of the school year 2025-2026.

Theoretical Framework and Operational Definitions

First: Creative Teaching Methods

A set of modern instructional methods and strategies used by faculty members to activate the student's role in the educational process, stimulating innovative and critical thinking, and promoting active participation in knowledge construction (e.g., cooperative learning, brainstorming, problem-based learning, and discovery learning). Operationally defined in this study as the score obtained by the student in the questionnaire designed to measure the extent of utilizing these methods inside the classroom from their perspective.

Second: Academic Anxiety

A state of tension and uncomfortable psychological emotional arousal experienced by the student in educational situations, manifested as fears related to examinations, evaluation, or difficulty understanding academic materials, which may negatively impact focus and academic performance. Operationally defined as the total score obtained by the student through their responses to the academic anxiety scale used in this study.

Third: University Students

Students enrolled in a higher education institution (university) pursuing a bachelor's degree in scientific or humanistic disciplines, operationally denoting the sample members to whom the research tools are applied at the university under study.

Fourth: University Educational Environment

The academic framework within which the educational process takes place inside the university, including classrooms, faculty members, students, educational tools, and various academic activities that contribute to shaping the learning experience. Used operationally to refer to the context in which the study is conducted.

The concept of modeling originated in the engineering sciences, where an architect or mechanical engineer creates a three-dimensional scale model representing a building or machine to perform necessary tests before final execution, later generalizing the results. Shifting from machinelike arrangements to human studies presents challenges in transporting empirical experiments to study integral machines; so, models are erected to reflect fundamental human traits. Teaching models count generally on mental knowledge theories, present image of teaching programs to arrange the educator's work, materials, and instructional happenings (Qatami, 2002: 155).

Creative teaching is an instructional strategy rooted in constructivist theory principles. This approach assumes active and positive learner participation in shaping their own experience by drawing on prior knowledge (Taj El-Din & Sabry, 2000: 75). Creative teaching strategies are derived from the Learning Cycle model, originally introduced in the United States in 1962 by Atkin and Karplus, later modified by Karplus

et al. in 1974, and further refined by Susan Loucks into its contemporary form. This term was utilized by Loucks and colleagues in 1990 (Zaitoun, 2007: 187; Yager, 1991).

Stages of Creative Teaching Strategies

1. Invitation Stage: Students are invited to engage in learning. The teacher attracts attention, stimulates interest, and motivates them regarding the new topic or problem to be resolved. This is accomplished by posing questions or dilemmas that challenge prior experiences, prompting deep reflection and effort to reach solutions. Posing realistic problems connected to students' environments maximizes responsiveness (Taj El-Din & Ismail, 2000: 75).

2. Discovery, Exploration, and Creativity Stage: Students work in groups not exceeding ten members. The teacher encourages collaboration, exchange of ideas, and reinforces collective problem-solving. This stage maps students' mental capabilities as they analyze, reframe, and retrieve prior experiences to match the problem. The teacher allows sufficient time for formulations and conclusions.

3. Solutions and Clarifications Presentation Stage: The teacher organizes a general discussion session where a representative from each group presents their proposed solutions and inferences. All viewpoints are carefully considered without ridicule, even if incorrect. Following group presentations, open discussions occur where students justify and defend their arguments. The teacher reinforces accurate deductions and corrects misconceptions (Abu Ataya, 2004: 72).

4. Action / Execution Stage: An evaluative phase for both teacher and student. The teacher verifies students' understanding, identifies individual capabilities, and addresses variances. Students self-evaluate to discover strengths and mitigate weaknesses. Capabilities are reinforced by assigning practical applications and solving problem scenarios as extensions of the lesson concepts (Maximus, 2003: 56).

The Role of the Teacher in Creative Teaching Strategies

- Preparing an invitation for active student participation at the beginning of each new lesson, defining the problem to be presented.
- Discussing and reviewing students' explanations, leveraging their perceptions and ideas by providing opportunities to test them, even if incorrect.
- Allowing students to discuss assembled materials through dialogue among themselves or with the instructor.
- Formulating questions that stimulate students to consult diverse information sources and seek evidence supporting their explanations.
- Providing students with sufficient time to respond after posing a lesson issue before accepting answers.
- Motivating students to perform corrections and revisions of explanations without prematurely judging their correctness.
- Paying close attention to alternative concepts held by students and designing lessons that challenge their misconceptions (Weeklin, 2005: 6-12).

Research Methodology and Procedures

Research Method and Experimental Design

The researcher adopted the experimental approach, defined as: 'The deliberate manipulation of specific conditions surrounding a phenomenon, observing and interpreting the resulting changes.' The study utilized a quasi-experimental design with two equivalent groups (experimental and control) with partial control, appropriate to the conditions of the current research.

Research Population and Sample

The research population consists of first-stage students in the Department of Educational and Psychological Sciences, College of Education for Human Sciences, Tikrit University, for the academic year (2025-2026). The researcher obtained statistical data from Tikrit University to determine the experimental site. To achieve accurate results, the College of Education for Human Sciences was selected purposely. Section (B) was selected via simple random assignment to represent the experimental group (taught via creative teaching strategies), while Section (A) represented the control group (taught via the traditional method). The total sample size was 62 students: 30 in the experimental group and 32 in the control group, with no exclusions made due to complete baseline equivalence.

Table 1. Distribution of Students in the Research Groups.

Group	Instructional Strategy	Number of Students
Experimental Group (Section B)	Creative Teaching Strategies	30
Control Group (Section A)	Traditional Method	32

Baseline Equivalence of the Research Groups

The researcher ensured baseline statistical equivalence across several variables: chronological age (months), previous year's GPA, parental educational levels, intelligence scores, and pre-test anxiety scale scores.

Table 2. t-Test Results for Baseline Equivalence (Age, GPA, IQ, Pre-Anxiety).

Variable	Group	Mean	Std Dev	Calculated t-value	Tabulated t-value	Significance Level
Chronological Age (Months)	Experimental	198.57	5.48	0.65	2.00	Non-Sig (0.05)
	Control	197.66	5.63			
Previous Year GPA (6th Grade)	Experimental	61.83	7.79	0.35	2.00	Non-Sig (0.05)
	Control	62.56	8.67			
Intelligence (Raven's IQ)	Experimental	71.53	6.80	0.26	2.00	Non-Sig (0.05)
	Control	72.00	7.09			
Pre-Test Academic Anxiety	Experimental	Equiv.	Equiv.	Non-Sig	2.00	Non-Sig (0.05)
	Control	Equiv.	Equiv.			

Table 3. Chi-Square (χ^2) Equivalence Results for Parental Educational Levels.

Variable	Calculated χ^2	Tabulated χ^2	df	Significance Level	Result
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Fathers' Educational Level	0.079	5.99	2	0.05	Equivalent
Mothers' Educational Level	1.20	5.99	2	0.05	Equivalent

Control of Extraneous Variables (Internal & External Validity)

To ensure internal and external validity, the researcher controlled for potential confounding factors: sample selection biases (mitigated through random selection and equivalence matching), maturation effects, experimental duration (both groups taught concurrently over a full semester), instrumentation consistency, instructor bias (the researcher taught both groups personally), experimental mortality (zero dropouts recorded), testing effects (appropriate spacing between pre- and post-tests), and curriculum uniformity (both groups utilized the identical psychology textbook chapters).

Research Preparation and Requirements

- Defining Instructional Content: The first and second chapters of the attitude text for first-stage pupils.
- Formulating Behavioral Objectives: 79 observable aims were grown across Bloom's intelligent rule (Knowledge, Comprehension, Application, Analysis). Objectives attained an 80%+ expert unanimity understanding.
- Preparing Model Lesson Plans: Developed 16 itemized everyday communication plans for the exploratory group following artistic education points, and 16 matching established plans for the control group.

Table 4. Weekly Schedule for Research Implementation.

Group	Day	Subject / Period
Experimental Group	Wednesday	Psychology (Creative Teaching Strategies)
Control Group	Thursday	Psychology (Traditional Method)

Empirical Results and Analysis

4.1 Testing the First Null Hypothesis (H01) - Academic Achievement

Group	N	Mean	SD	df	Calculated t	Critical t	Significance
Experimental	30	78.19	2.57	60	8.64	2.00	Sig. (0.05)
Control	32	72.88	2.38				Sig. (0.05)

As shown in the table, the first null hypothesis is rejected because the calculated t-value (8.64) exceeds the critical value (2.00), demonstrating a highly significant difference in favor of the experimental group.

4.2 Testing the Second and Third Hypotheses (H02 & H03) - Academic Anxiety Mitigation

Test Mode (Exp.)	Mean	SD	Mean Diff.	SD Diff.	Calc. t	Crit. t	df	Significance
Pre-test	72.13	2.14	6.06	1.63	21.10	2.04	29	Sig. (0.05)
Post-test	78.19	2.57						Sig. (0.05)

The results clearly mandate the rejection of the null hypotheses, indicating an extraordinary reduction and mitigation of academic anxiety levels among experimental group members due to the creative teaching intervention.

Discussion, Recommendations, and Suggestions

5.1 Discussion and Interpretation

The empirical findings demonstrate a distinct superiority of the experimental group taught via creative teaching methods over the control group. The researcher attributes this success to the core mechanics of constructivist instruction, which triggers students' existing cognitive structures and prompts them to perform active exploration rather than passive listening. Establishing a classroom atmosphere filled with collaboration, where students' unique insights are genuinely valued without peer mockery or public embarrassment, directly eliminated the tension and performance anxiety associated with formal evaluation, transforming the classroom into a safe space for psychological and cognitive growth.

5.2 Recommendations

1. Urge university instructors to shift away from traditional lecturing methods and train them extensively in implementing creative and constructivist learning models.
2. Pay significant attention to the psychological and emotional stability of newly admitted students by developing targeted counseling programs to mitigate test and academic anxiety.
3. Integrate modern instructional strategies that link cognitive gains with emotional well-being within the curricula of teaching methods at colleges of education.

5.3 Suggestions for Future Research

1. Conducting a similar study to evaluate the impact of creative teaching methods on other psychological constructs, such as divergent thinking, academic optimism, and perceived self-efficacy.
2. Carrying out a comparative study on the efficacy of creative teaching methods across humanitarian vs. pure science disciplines among university students.

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