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Article

Training Future Primary School Teachers to Work with Lyric-Epic Works through the Steam Approach

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Abstract: The article examines the features of preparing future primary school teachers to work with lyric-epic works using the STEAM approach. The pedagogical possibilities of integrating science, technology, engineering, art, and mathematics into the process of studying literary texts are analyzed. The methods of developing literary, analytical, and creative competencies of students in педагorical fields are revealed. Particular attention is paid to the interdisciplinary nature of STEAM education and its influence on the development of critical thinking, emotional intelligence, and creativity of future teachers.

Keywords: STEAM approach, lyric-epic works, future teachers, primary education, literary education, interdisciplinary learning, teacher training.

Introduction

In the modern education system, where traditional teaching methods are becoming insufficient, increasing attention is being paid to new educational methodologies that encourage students to acquire the necessary knowledge independently. STEAM technologies in education not only help integrate several subjects into a unified whole, but also develop students' research skills [1]. The contemporary educational system requires the training of a new generation of teachers who are capable of applying innovative teaching methods and integrating various educational technologies into the learning process. In the context of the digitalization of society, the use of the STEAM approach becomes especially relevant, as it ensures interdisciplinary integration and contributes to the development of students' creative potential [2]. Particular importance is attached to the development of skills and competencies among future primary school teachers in applying STEAM technologies during the teaching process in primary education. In higher educational institutions, the inclusion of STEAM components in teacher training programs is highly appropriate, as it enables students to develop research skills and the ability to integrate the studied disciplines with STEAM subjects. The study of lyric-epic works in primary school plays an important role in shaping students' reading culture. However, traditional methods of analyzing literary texts do not always provide a sufficient level of engagement and creative activity among schoolchildren. In this regard, there is a growing need to prepare future teachers to use modern educational approaches, including STEAM technologies [3, 4].

Methodology

Theoretical Foundations of the STEAM Approach in Teacher Education. The STEAM approach is an educational model based on the integration of Science, Technology, Engineering, Art, and Mathematics. In pedagogical practice, this approach is considered a means of developing holistic thinking and the ability to apply knowledge in various situations. The use of STEAM technologies in teacher education makes it possible to combine literary text analysis with elements of visualization, digital modeling, project-based activities, and creative design. Work with lyric-epic works within this approach goes beyond the boundaries of traditional literary analysis and acquires a research-oriented character. Lyric-epic works are distinguished by the synthesis of lyrical and epic elements, which creates broad opportunities for interdisciplinary interpretation of the text. Future teachers should be able to organize students' learning activities in such a way that the analysis of literary works is accompanied by creative tasks, visual modeling of images, the use of digital technologies, and elements of project-based learning.

Features of Training Future Primary School Teachers. Preparing future teachers to work with lyric-epic works through the STEAM approach involves the development of the following competencies: the ability to design interdisciplinary lessons; skills in integrating digital technologies into literary education; the ability to organize students' research and creative activities; the capacity to develop critical thinking in primary school pupils; skills in artistic and aesthetic analysis of literary texts. In the process of professional training, it is advisable to use interactive teaching methods such as case-study technologies, project-based learning, digital platforms, multimedia presentations, and virtual literary workshops. For example, while studying ballads or poems, future teachers may create digital plot maps, animations of literary images, infographics, or multimedia projects.

Results and Discussion

Particular importance is attached to the development of students' pedagogical design abilities. Future teachers should not only analyze literary works, but also develop STEAM-based tasks adapted to the age characteristics of primary school pupils [5].

Practical Aspects of Applying the STEAM Approach. The practical implementation of the STEAM approach in the study of lyric-epic works may include various forms of activity:

Visualization of artistic images. Students create illustrations, collages, digital drawings, or 3D models of the characters from literary works [6].

Use of digital storytelling technologies. Based on the text, schoolchildren develop multimedia stories, video clips, or interactive presentations.

Project-based activities. Working on collaborative projects contributes to the development of communication skills and creative thinking [7].

Integration of music and dramatization. Lyric-epic works may be accompanied by musical arrangements, stage performances, and elements of dramatization. Musical illustration of a literary work helps children understand the mood of a lyrical or epic text more deeply and subtly. The use of this technique at the stage of preparing for the initial perception of a literary text helps create the necessary emotional atmosphere for students [8].

Such methods help increase students' motivation for reading, develop emotional and value-based perception of literary texts, and intensify cognitive activity [9].

Pedagogical Effectiveness of the STEAM Approach. Research shows that the application of the STEAM approach contributes to the development of creativity, critical

thinking, and communication skills among learners [10]. In the context of literary education, this approach makes it possible to:

intensify reading activities;

develop text interpretation skills;

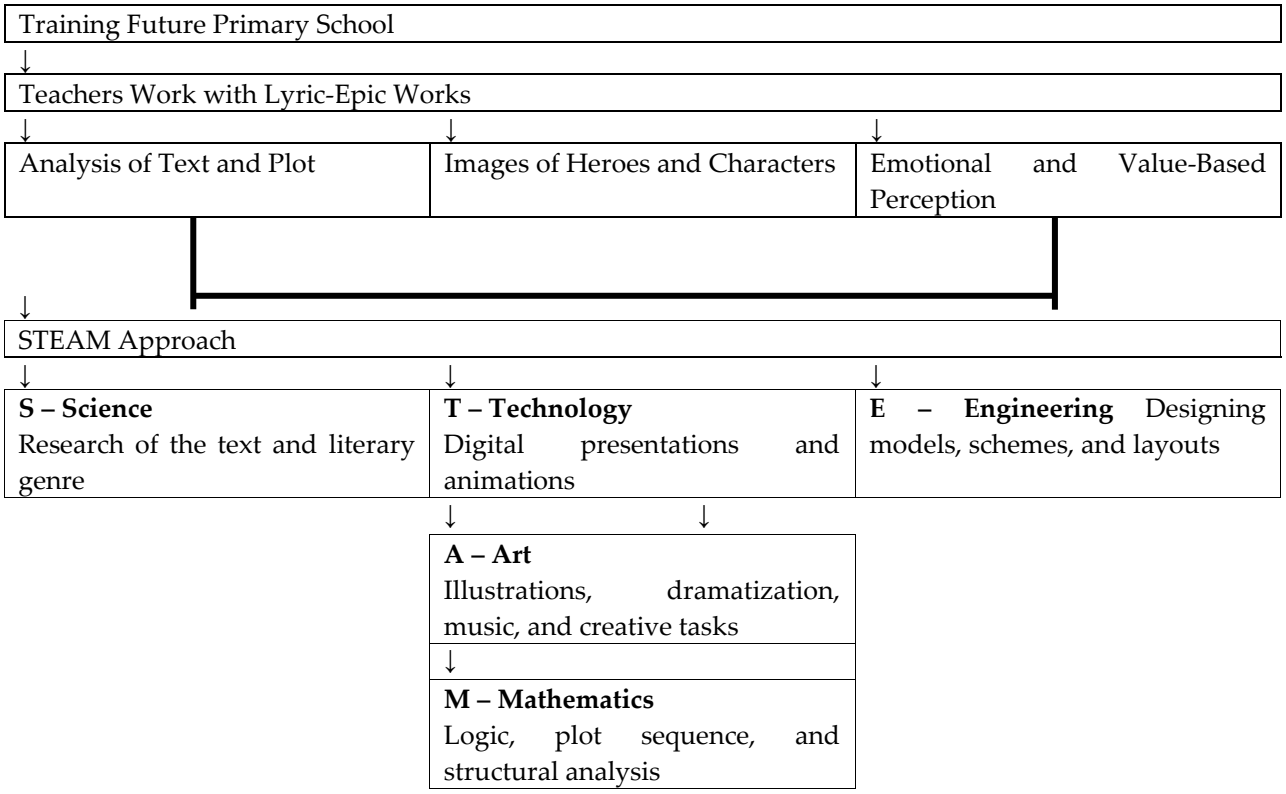
foster emotional intelligence;

improve digital literacy;

stimulate students' creative self-expression.

Moreover, STEAM technologies contribute to the professional development of future teachers themselves by forming their readiness for innovative pedagogical activity [11].

Below is a scheme on the topic "Training Future Primary School Teachers to Work with Lyric-Epic Works through the STEAM Approach."



Within the framework of this research conducted with students majoring in Primary Education, we examined the possibilities of teaching lyric-epic works through the use of STEAM technologies [12].

The study was carried out in five stages: Stage 1 – motivational stage; Stage 2 – theoretical block; Stage 3 – practical stage; Stage 4 – project presentation; Stage 5 – reflection.

The aim of the lesson is to develop students' abilities to design methodological recommendations for working with lyric-epic works in primary school using STEAM technology [13].

Objectives of the lesson:

- to reveal the specific features of lyric-epic works;
- to identify the possibilities of integrating the STEAM approach into literary reading lessons;
- to develop methodological recommendations;
- to create a lesson fragment with interdisciplinary integration;
- to develop project-based and research skills.

During the lesson, students will be able to:

design a STEAM-based lesson fragment;

integrate elements of science, art, and technology into text analysis;

develop creative and research-oriented tasks [14];

take into account the age characteristics of primary school pupils.

Structure of the Practical Lesson (80 minutes)

I. Motivational Stage (10 minutes)

Problem Question: Question 1. Is it possible to study a poetic work through research, modeling, and creativity?

Discussion: What does STEAM include? How can literary reading be connected with science and art?

II. Theoretical Block (15 minutes)

1. Lyric-epic work: combination of narration and emotion; presence of a plot; emotional background; imagery.

2. Possibilities of STEAM in literary reading:

Component	Application possibilities
S (Science)	investigation of natural phenomena described in the text
T (Technology)	use of multimedia and presentations
E (Engineering)	modeling the plot structure
A (Art)	illustrations and dramatization
M (Mathematics)	timelines and structural organization of the text

III. Practical Stage (45 minutes).

Task 1. Text analysis through the STEAM approach (group work). Each group receives a lyric-epic literary work.

Students are required to identify:

S: which natural phenomena or factual elements can be explored?

T: which digital tools can be used?

E: what type of plot model can be constructed?

A: what creative tasks can be offered to pupils?

M: how can the text be structured (scheme, plan, timeline)?

Task 2. Development of methodological recommendations. Prepare recommendations

Goal of the lesson	→	Educational objectives	→	Integration of STEAM components	→	Forms of work	→	Creative task	→	Reflection

according to the following algorithm [15]:

Task 3. Designing a lesson fragment (15–20 minutes). Develop a mini-lesson plan (10 minutes of class time) including: motivational stage; reading and text analysis; STEAM element (project/research/model); creative task; reflection.

IV. Project Presentation (10 minutes). Groups present their developed lesson fragments.

Discussion points: completeness of STEAM integration; alignment with age characteristics of primary school pupils; methodological justification.

V. Reflection (10 minutes). Answer in writing:

What advantages does STEAM provide in studying literary texts? What difficulties may a teacher encounter? How appropriate is interdisciplinary integration?

5. Assessment Criteria: logical structure; completeness of STEAM integration; practical applicability; creativity; consideration of age characteristics.

6. Homework. Assignment Develop a full lesson plan for a literary reading class based on a lyric-epic work, including at least three STEAM components.

Conclusion

Thus, training future primary school teachers to work with lyric-epic works through the STEAM approach is an important direction in the modernization of teacher education. The integration of art, technology, and research activities makes the process of studying literary texts more effective and creatively enriched. The use of the STEAM approach contributes to the formation of professional competencies of future teachers, the development of their creativity, pedagogical thinking, and ability to organize interdisciplinary learning. Further research prospects are associated with the development of methodological models of STEAM-based learning in primary school literary education.

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