Functional Analysis of Computer Software for Enhancing Creativity in Art Education

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C O N T E N T S

01 **Background** and Statement of the Problem

With the development of digital technology, the application of computer software in art creation is becoming more and more widespread, and the impact on art education is becoming more and more prominent.

Research Questions:

What are the specific functions of computer software that

enhancing creativity in art education?

Research Objectives:

To investigate the effectiveness of three computer software on the

enhancement of their artistic creativity

02 Literature Review

Kara (2020)

Found that teachers with positive attitudes towards computerized instruction were more innovative.

Thorsteinsson & Gisli (2014)

Found that the use of electronic portfolios increased student engagement and creativity.

Pycior (1984)

Stated that computer-aided design software can speed up the work of designers and increase creativity.

Lu (2005)

Discusses how changing course content can help teachers better understand and teach computer art.

Research Method

03

Research tools

01

Data were analyzed using SPSS software

Data analysis method

02

Sample size (n), frequency (f), percentage (%), mean ($\bar{x}$) and standard deviation (SD) were calculated by descriptive statistics

Research Method

Research process

03

Designing the questionnaire

↓

Data collection at Fuzhou Software Vocational and Technical College (FSVTC)

↓

Data were processed and analyzed using SPSS

Research Method

Posing the Problem

investigate how computer software affects art

students' creativity.

Data collection

the questionnaire was conducted in Fuzhou

Software Vocational and Technical College

with a total of 203 students participating.

Summary

analyze how computer software

enhances students' creativity.

Designing the questionnaire

creating a questionnaire that included four

areas: logical thinking, color sensitivity,

emotional expression, and self-

accomplishment.

Data processing

SPSS software was used to input,
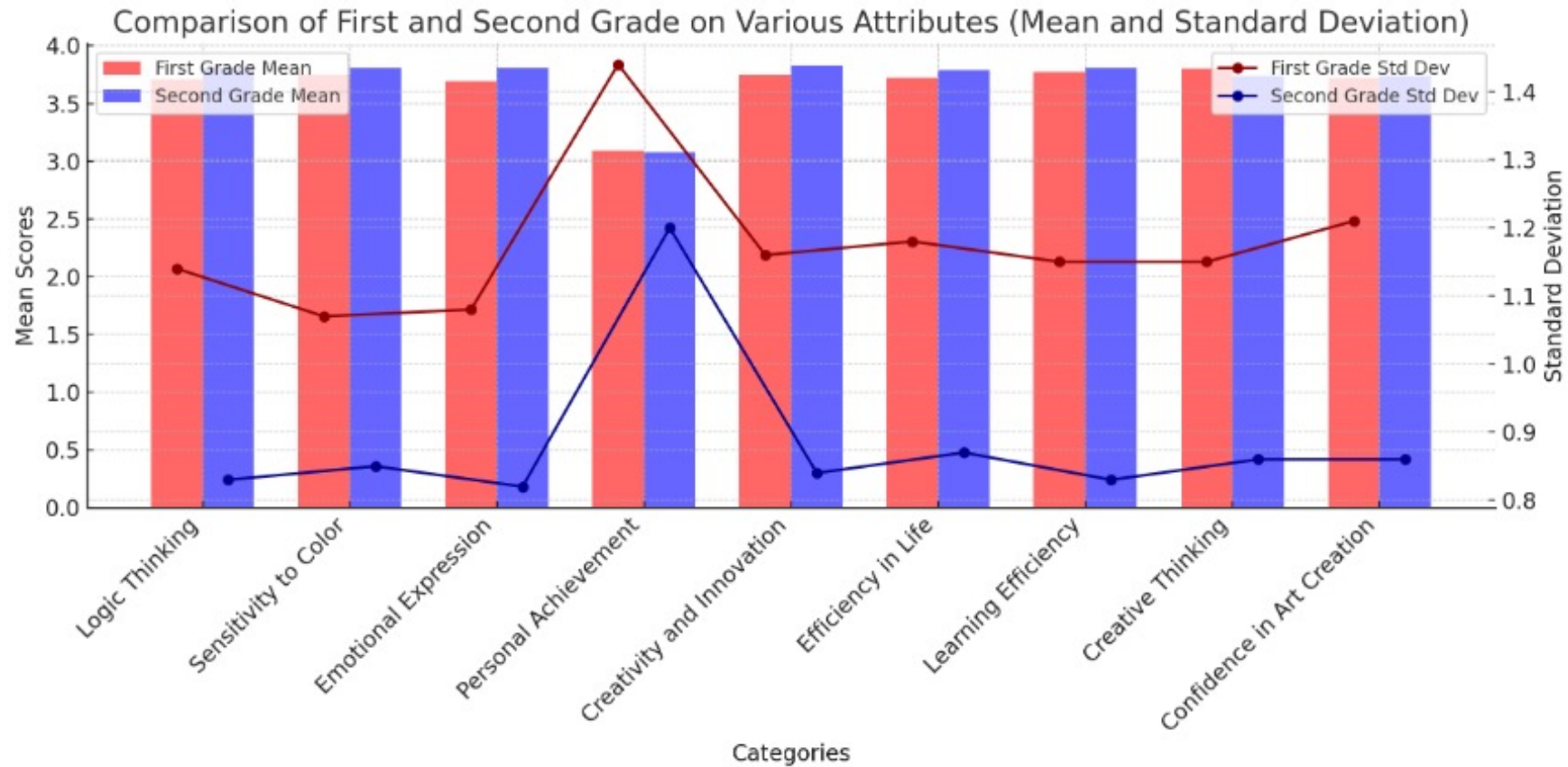
clean and analyze the data.

Data Analysis Results

Synthesize the data from the three software programs to show their impact and characteristics in different aspects of creativity.

Data Analysis Results

Comparison of First and Second Grade on Various Attributes (Mean and Standard Deviation)

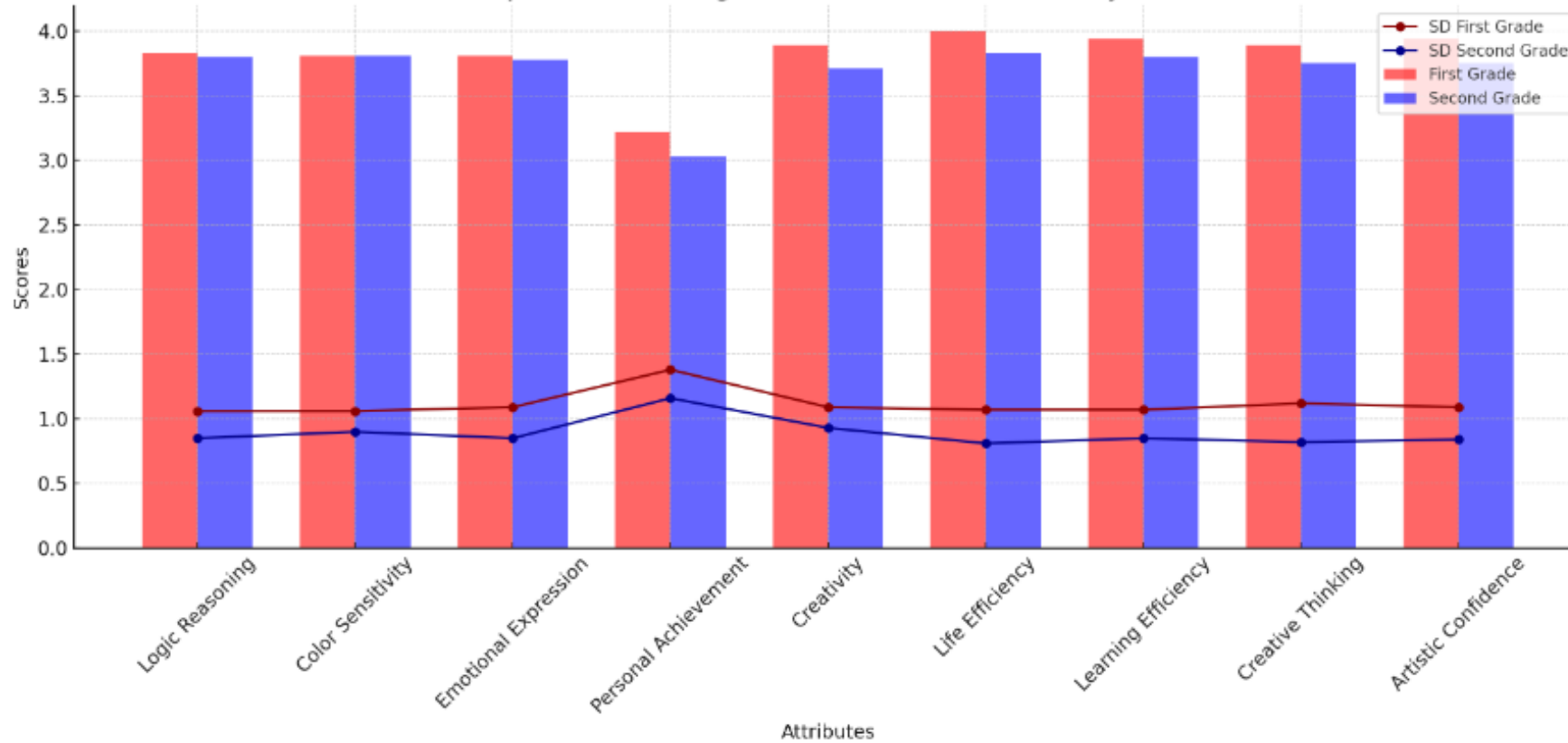The higher the X, the better.

The lower the SD, the better.

The positive role of Photoshop in enhancing student creativity

Data Analysis Results

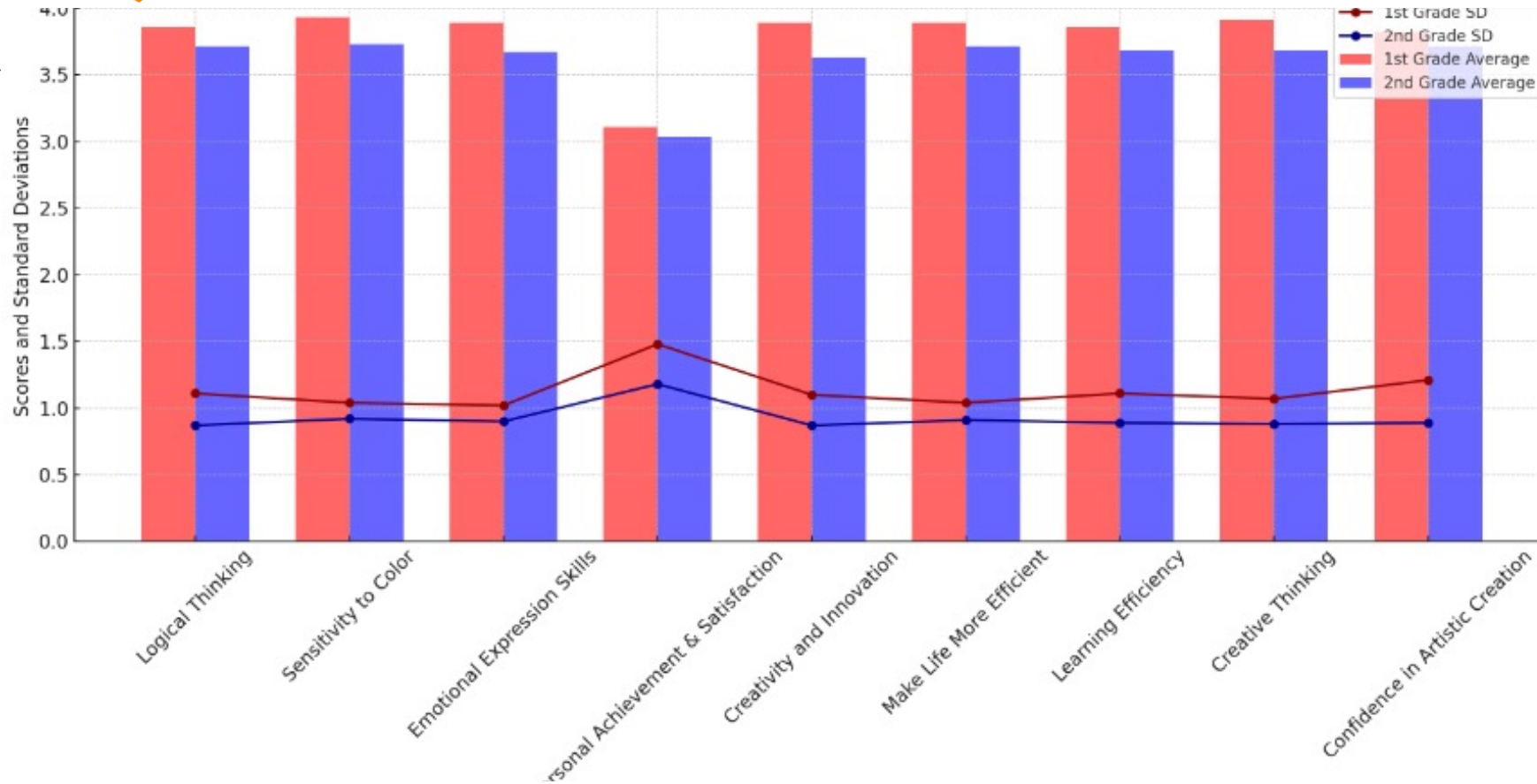Comparison of Averages and Standard Deviations by Grade

The higher the X, the better.

The lower the SD, the better.

The positive role of Krita in enhancing student creativity

Data Analysis Results

The higher the X, the better.

The lower the SD, the better.

The positive role of Scratch in enhancing student creativity

Data Analysis Results

Logical thinking

01

Scratch, Krita and Photoshop all significantly improved students' logical thinking skills, with Scratch showing the most significant improvement.

Color Sensitivity

02

Krita performed best in enhancing students' color sensitivity, followed by Photoshop.

Emotional Expression

03

Photoshop greatly enhanced students' emotional expression, especially in image processing and creative expression.

Self-accomplishment

04

All three software programs contributed to students' sense of self-accomplishment, especially after completing complex projects.

Conclusion and Recommendations

- This study confirms that Scratch, Krita and Photoshop can enhance creativity in art education to different degrees. Each of these three software has its own merits and educators should choose the appropriate software according to their teaching needs and students' characteristics.

These software significantly enhanced four aspects: 1. logical thinking,

2. color sensitivity,

3. emotional expression and

4. self-achievement

Conclusion and
Recommendations

01

Educators

Consideration should be given to integrating these software into the curriculum, especially in instructional sessions where specific

02

Policy Makers

Promote more research on the educational applications of such tools in order to develop effective educational policies and resource allocation

03

Students

Encourage students to explore a wide range of software tools to find the most suitable creativity enhancement methods for themselves.

Expect

This will be benefit to Art Education

Thank You!