

# The Extent of Promoting the Art Education Teachers' Preparing Program for Sustainable Development from Practicum Students' Perspective

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## Abstract

This paper aims primarily to explore the extent of promoting the art education teacher's preparing program for sustainable development from the perspective of practicum students in the Department of Art Education at King Faisal University. This comes by the UNESCO sustainable development goal No. 4, which states: ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. This is further confirmed by the strategic objectives of King Faisal University in the field of community partnership, and considering education as a mechanism for national development in the Kingdom of Saudi Arabia in the light of (Vision 2030). The researchers used the descriptive and analytical approach, the study sample consisted of (50) male and female practicum students in the department of art education, Faculty of Education, King Faisal University, Saudi Arabia, graduates of (2018-2019). The results confirmed that the art education teachers' preparing program promotes sustainable development from the practicum students' perspective. Additionally, it showed that there are statistically significant differences between the male and female average responses in the questionnaire of promoting the art education teachers' training program for sustainable development.

**Keywords:** Art; Education; Training; Students; Sustainable

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## Introduction

No century has ever witnessed the challenges posed by the twenty-first-century with which meticulous attention to the creative idea is it posed as a prerequisite for sustainable development. Sustainable development has been the focus of attention in Saudi Arabia in the last few decades. Saudi Arabia is the giant of Asia not because of the acres of lands it occupies but due to its commitment to human resources and economic buoyancy for sustainability and development. Education is the spinal cord of all sectors and creativity is the soul of education. Education has been regarded as a mechanism for national development in Saudi

Arabia (Vision 2030). On the other side, there has been a reflection from the advocacy for education reform by infusing creative and critical thinking into the curriculum of education for the cognitive development of the students, (According to the general objectives of Education in 2020) Little attention is practically devoted to creativity despite of agitation or advocacy for it.

The term "Art Education" consists of two elements "Art" and "Education", referring to education through art, which in all its various fields is a means of artistic education. Every artist's idea about artistic taste, the evolved aesthetic relations, the artistic expressions with all their human or social feelings, as well as all the technological creations in applied

arts are translated into means upon which one can build foundations and programs of art education (Shawky, 2002).

Art education is one of the pillars of the cultural structure and the environment surrounding the learner. It is a stand-alone science with its history, ideology, and philosophical and logical thought, which is a cognitive and expressive trend. Art education is a twofold concept. One is about “knowledge”, including the scientific content of art education, while the other is about “Value”, which influences the individual and society through aesthetic studies. Thus, Art education addresses knowledge about art and through art and is not just limited to the possession of knowledge, but it goes beyond the experience of the strength of expression and the value inherent in art. Art education would be meaningless without this concept (Ojail, 2014).

Sustainable development is defined as the development that meets the needs of the present generation without limiting the possibility of meeting the needs of future generations. In other words, this production should continue for life without interruption generation after generation. This requires adequate and sustained economic growth that truly serves all social groups without destroying or depleting natural resources, or going against the integrity of the environment. In other words, sustainable development is the development that balances the economic, social and environmental aspects, where growth must be achieved on each aspect of the three without prejudice to the other two. That means the growth of one aspect should not be at the expense of one or both of the other aspects (<https://www.moe.gov.sa/ar/news/Pages/a-l-5976.aspx>).

### **The problem of the Study**

In the early twenty-first century, the world is witnessing a remarkable development in all aspects of life, particularly in the field of information and communications technology. This requires the educational institutions to keep pace with this development by ensuring the high-quality education for teachers and to qualify them vocationally, educationally, scientifically and behaviorally as they are considered the backbone of the educational

process and its promising tool. The quality of education, the achievement of the educational goals, and the improvement of the students’ performance level are dependent on the teacher outcomes and the effectiveness and efficiency of the performance of his mission. The matter that urges countries with different philosophies and objectives to devote great care and attention to improve the teacher’s performance. In short, the teacher is required to play multiple roles. This diversity of roles made his mission more difficult, which entailed constant development for the teachers, along with raising their skills and knowledge, which can only be achieved through proper and sustainable training. Based on the above, the problem of the current study is to know the extent of promoting the art education teachers’ preparing program for sustainable development from practicum students’ perspective at King Faisal University - Faculty of Education.

### **The problem of the study can be illustrated by the following questions**

#### **Questions of the Study**

1. Does the art education teachers' training program promotes sustainable development from the practicum students' perspective.
2. Are there significant differences between the average of female and male responses in the questionnaire of the teacher education program for sustainable development.

#### **Importance of the study**

1. To recognize of teaching environment into the department of art education at the King Faisal University to achieve sustainable development goals in Saudi Arabia.
2. Researchers are expecting to achieve the University's strategic objectives in the community partnership area.

#### **Objectives of the stud**

1. Knowing the extent of promoting the art education teachers’ preparing program for sustainable development from practicum students' perspective.
2. Exploring the motivating environment of creativity for graduates of the department of art education.

## Methodology of Research

This study involved a total sample of 60 students from the Department of Art Education, Faculty of Education, King Faisal University, Saudi Arabia, Teachers' Training program (2018 – 2019). The sample was divided into two main groups: 10 and 50. Cross-validation was done on the first group, which was further be divided into two subgroups: 8 and 7 respectively. The purpose of conducting cross-validation was to determine the validity and reliability of the instruments employed. The validated instruments were then distributed to the second main group.

The statistical program (SPSS) was used to statistically analyzed questionnaire data and has been analyzed using appropriate statistical treating. (T. Test), It has been verified of differences between the test scores.

## Sustainable development in Saudi Arabia (Vision 2030)

Furthermore, a minute connection is made on the role of the department of art education in achieving sustainability and creativity. According to the majority of Saudis, Art education is regarded as persona-non-grata- (undesirable element) in the sustainability and creativity discourse. In other words, art education is rarely considered as covering all facets of human endeavors unlike myopic restriction to theosophical issues and aesthetic dimensions. The recent consciousness of Saudi Arabia's government on the reformation of art education for the attainment in Saudi Arabia (Vision 2030) has brought to limelight, the desirability of art education, through the development of art education at King Faisal University.

Sustainable development has been examined in various disciplines in the Saudi context. Just recently, the Saudi government has been making a relentless effort under the auspices Development Goals (Vision 2030) in promoting sustainability and development, particularly in Saudi Arabia. Provision of Universal Basic Education.

Saudi Arabia has paid meticulous attention to (Vision 2030) especially in promoting sustainability and development. Enough literature as far as Saudi

Arabia is concerned, is available on sustainable development

(<https://www.moe.gov.sa/ar/Pages/vision2030.aspx>).

One of the practical strategies made by the Saudi government to improve sustainable development is the establishment of a new partnership for the development of the country and the national initiative named "National Economic Empowerment and Development Strategy". The goal of the government of the country is the accelerated growth and sustainable development.

Sustainable development is being chatted, day in day out, all efforts of every nation of contemporary world revolve around solving social-cultural, economic, educational, etc; "Our biggest challenge in this new century is to take an idea that sound abstract sustainable development and turn it into reality for all the world's people" (United Nations, 2001).

Art education is the activities of the individual and works to develop his character through his definition of the sensory world around him, and change his behavior through training skills, concepts, and special customs in art education and acquisition through artworks.

Verily, the socio-economic progress requires problem-solving techniques rather than mere intellectual ingredient or exercise ascribes to art education skills. Hence, for art education to be meaningful there is a need to integrate the problem-solving technique being an integral component of creative and critical thinking skills mentioned earlier. By this, it means that there is a need for a shift of art education from being a mere intellectual exercise to real problem-solving. In an attempt to shift this, it is a daunting task. It is the shifts of art education from a mere intellectual exercise to the problem-solving technique that will enable art education to have an influential and principal role to play in sustainable development; and make a meaningful contribution to the current effort to achieve the vision of Millennium Development Goals (Vision 2030) in Saudi Arabia. This is why creativity, takes significance of deep thinking into cognizance, but not restricted to problem-solving (Badri, 2000). The assertion of Badri is essential, but the problem-solving technique is deficient in the

content of art education in Saudi Arabia (Growth and Well-Being, 2015).

## Results

1. The art education teachers' training program promotes sustainable development from the practicum students' perspective.
2. There are statistically significant differences between the male and female average responses in the questionnaire of promoting the art education teachers' training program for sustainable development.

## Discussion of Results

### 1- Scientific Coefficients of the Questionnaire:

- **The validity of the questionnaire**  
The two researchers used the internal coherence to calculate the validity coefficient of the questionnaire to verify the validity of the questionnaire. The questionnaire was applied to a group of (10) students from the research community from outside the basic research sample. This is illustrated in tables (1), (2), (3), and (4).

**TABLE (1)**

Correlation Coefficients between the terms of the first axis and the sum of the axis for the questionnaire of promoting the art education teacher training program for sustainable development from practicum students' perspective (n = 10)

| serial | Terms  | Arithmetic Average | Standard Deviation | Calculated Value of (r) |
|--------|--|--------------------|--------------------|-------------------------|
| 1      | The courses promote capacity building and learning in art education.   | 3.50               | 1.27               | 0.95                    |
| 2      | The educational programs of the department promote heritage.   | 3.50               | 1.35               | 0.97                    |
| 3      | Learning outcomes are related to the Saudi environment.  | 3.50               | 1.51               | 0.98                    |
| 4      | The courses develop students' talents and creativity.  | 3.00               | 1.49               | 0.98                    |
| 5      | The courses contribute to the promotion of cultural and cognitive diversity.   | 3.20               | 1.48               | 0.98                    |
| 6      | The courses instill values of citizenship and national belonging among students.   | 3.60               | 1.35               | 0.97                    |
| 7      | The courses support community partnership and problem-solving.   | 2.70               | 1.57               | 0.96                    |
| 8      | The department ensures serving social issues through its outcomes.   | 2.80               | 1.62               | 0.97                    |
| 9      | The Art Education Program enhances the students' leadership capabilities in scientific exhibitions and increases their effectiveness in the knowledge society. | 3.10               | 1.37               | 0.97                    |
| 10     | The department courses are original and contemporary about education.  | 3.30               | 1.34               | 0.98                    |
| 11     | The Art Education program develops social responsibility.  | 3.30               | 1.49               | 0.98                    |
| 12     | The courses have activities and events that  | 3.20               | 1.32               | 0.97                    |

|    |  |      |      |      |
|----|--|------|------|------|
|    | have a positive impact on the efficiency and effectiveness of students' performance.                               |      |      |      |
| 13 | The department's courses promote capacity building and develop verbal expression.                                  | 3.10 | 1.60 | 0.98 |
| 14 | The department's courses promote capacity building and skills development in the practical field of manual skills. | 3.30 | 1.57 | 0.98 |
| 15 | The courses' outputs contribute to the establishment of art exhibitions inside and outside the university.         | 3.50 | 1.27 | 0.95 |
| 16 | The courses contribute to creativity and innovation by holding competitions.                                       | 3.20 | 1.81 | 0.97 |
| 17 | The courses encourage creative ideas by contributing to showing and marketing them.                                | 3.50 | 1.65 | 0.97 |

**The Tabulated Value of (r) at 0.05 = 0.60**

Table (1) shows that correlation coefficients between the terms of the first axis for the questionnaire of promoting the art education teacher training program for sustainable development from practicum

students' perspective and the total sum ranged from (0.95: 0.98) which are statistically significant correlation coefficients at (0.05) which refer to the internal consistency of the axis.

**TABLE (2)**

Correlation Coefficients between the terms of the second axis and the sum of the axis for the questionnaire of promoting the art education teacher training program for sustainable development from practicum students' perspective (n = 10)

| serial | Terms  | Arithmetic Average | Standard Deviation | Calculated Value of (r) |
|--------|--|--------------------|--------------------|-------------------------|
| 1      | The teacher uses technology or laboratories if needed.   | 3.70               | 1.42               | 0.95                    |
| 2      | The teacher uses various teaching aids (computers, blackboard, boards, etc.).                    | 3.50               | 1.27               | 0.96                    |
| 3      | The teacher uses a method that captures the students' attention and makes them like the subject. | 3.20               | 1.40               | 0.97                    |
| 4      | The teacher ensures that the students understand the subject he teaches.                         | 3.40               | 1.26               | 0.97                    |
| 5      | The teacher encourages students to participate and discuss.                                      | 3.60               | 1.35               | 0.97                    |
| 6      | The teacher takes into account the differences between the students.                             | 2.80               | 1.55               | 0.97                    |
| 7      | The teacher develops the learners' ideas in light of the objectives of the course.               | 2.80               | 1.48               | 0.98                    |
| 8      | The teacher uses modern teaching methods to commensurate with the nature of the courses.         | 2.80               | 1.55               | 0.97                    |
| 9      | The teacher uses modern technologies in the  | 2.70               | 1.49               | 0.95                    |

|    |   |      |      |      |
|----|---|------|------|------|
|    | innovation field.   |      |      |      |
| 10 | The teacher encourages discussion and dialogue.                                     | 2.80 | 1.48 | 0.98 |
| 11 | The teacher is keen to activate organizational culture and accuracy of performance. | 2.90 | 1.45 | 0.99 |
| 12 | The teacher works to root a culture of vocational production among students.        | 3.50 | 1.35 | 0.97 |

**The Tabulated Value of (r) at 0.05 = 0.60**

Table (2) shows that correlation coefficients between the terms of the second axis for the questionnaire of promoting the art education teacher training program for sustainable development from practicum

students' perspective and the total sum ranged from (0.95: 0.99) which are statistically significant correlation coefficients at (0.05) which refer to the internal consistency of the axis.

**TABLE (3)**

Correlation Coefficients between the terms of the third axis and the sum of the axis for the questionnaire of promoting the art education teacher-training program for sustainable development from practicum students' perspective (n = 10)

| serial | Terms   | Arithmetic Average | Standard Deviation | Calculated Value of (r) |
|--------|---|--------------------|--------------------|-------------------------|
| 1      | The necessary labs (the studio, the lab, ...) are available in my faculty                           | 3.10               | 1.29               | 0.97                    |
| 2      | Public safety tools (aid box, fire extinguisher, ...) are available in my faculty                   | 3.20               | 1.32               | 0.98                    |
| 3      | Moving the components of the room (furniture) allows the use of the room for other purposes.        | 3.00               | 1.41               | 0.97                    |
| 4      | Faculty components (furniture) are distributed in proportion to the movement of the students.       | 3.20               | 1.40               | 0.97                    |
| 5      | The teacher moves appropriately to supervise the teaching process in the classroom.                 | 3.50               | 1.27               | 0.94                    |
| 6      | Nature lighting and Artificial lighting designs contribute to the educational environment purposes. | 3.50               | 1.35               | 0.97                    |
| 7      | Comfortable seats and tables are available in my room.  | 2.70               | 1.49               | 0.96                    |
| 8      | The tools, materials, and workshops I need are available in my faculty.                             | 2.70               | 1.57               | 0.97                    |

**The Tabulated Value of (r) at 0.05 = 0.60**

Table (3) shows that correlation coefficients between the terms of the third axis for the questionnaire of

promoting the art education teacher training program for sustainable development from practicum

students' perspective and the total sum ranged from (0.94: 0.98) which are statistically significant

correlation coefficients at (0.05) which refer to the internal consistency of the axis.

**TABLE (4)**

Correlation Coefficients between the sum of each axis and the total sum of the questionnaire of promoting the art education teacher training program for sustainable development from practicum students' perspective (n = 10)

| serial | Axis                                   | Arithmetic Average | Standard Deviation | Calculated Value of (r) |
|--------|--|--------------------|--------------------|-------------------------|
| 1      | The first axis (Courses).              | 55.30              | 24.32              | 0.97                    |
| 2      | The second axis (Teaching methods).    | 37.70              | 16.51              | 0.98                    |
| 3      | The third axis (Teaching environment). | 24.90              | 10.74              | 0.95                    |

The Tabulated Value of (r) at 0.05 = 0.60 Table (4) shows that correlation coefficients between the sum of each axis and the total sum of the questionnaire ranged from (0.95: 0.98) which are

statistically significant correlation coefficients at (0.05) which refer to the internal consistency of the questionnaire as a whole.

**- Reliability of the questionnaire**

The researchers used the test-retest method to calculate the reliability coefficient of the questionnaire to promote the art education teacher training program for sustainable development from practicum students' perspective, and the participants in this questionnaire were (10) students from the research community and outside the basic research sample that has been used to calculate the validity coefficient. Table (5) explains this:

**TABLE (5)**

Correlation Coefficient between the test-retest method for the axes of the questionnaire of promoting the art education teacher training program for sustainable development from practicum students' perspective (n = 10)

| serial | Axes                                   | Test   |       | Retest |       | Value of (r) |
|--------|--|--------|-------|--------|-------|--------------|
|        |  | a      | b     | a      | b     |              |
| 1      | The first axis (Courses).              | 55.30  | 24.32 | 51.10  | 21.24 | 0.99         |
| 2      | The second axis (Teaching methods).    | 37.70  | 16.51 | 33.30  | 14.67 | 0.98         |
| 3      | The third axis (Teaching environment). | 24.90  | 10.74 | 20.20  | 7.74  | 0.93         |
| 4      | The Questionnaire as a whole           | 117.90 | 51.42 | 104.60 | 43.26 | 0.98         |

The Tabulated Value of (r) at 0.05 = 0.60 Table (5) shows that correlation coefficients between the test and retest of the axes for the questionnaire of promoting the art education teacher training program for sustainable development from practicum students' perspective and the questionnaire as a whole ranged from (0.93: 0.99) which are statistically significant correlation coefficients at (0.05) which refers to the reliability of the questionnaire.

**Showing Results**

The researchers are trying to show, interpret and discuss the results to achieve the research objectives and verify its hypotheses within the data that they obtained through statistical analysis. The results will be listed below according to questions of the research:

1. Does the art education teachers' training program promotes sustainable development from the practicum students' perspective.

**TABLE (6)**

The estimated score, the relative weight, the arithmetic average, the trend, and the significance of differences of the practicum students' responses to the first axis of the questionnaire to promote the practical education teacher program for sustainable development (n = 30)

| S | Terms  | Agree | Disagree | Un-bias ed | Dis-agree | Totally Dis-agree | Estimated score | Relative weigh t | Arithme tic average | trend       | Chi- <sup>2</sup> |
|---|--|-------|----------|------------|-----------|-------------------|-----------------|------------------|---------------------|-------------|-------------------|
| 1 | The courses promote capacity building and learning in art education.             | 27    | 20       | 2          | 1         | 0                 | 223             | 89.20            | 4.46                | Very strong | 40.72             |
| 2 | The educational programs of the department promote heritage.                     | 25    | 22       | 2          | 1         | 0                 | 223             | 89.20            | 4.46                | Very strong | 39.12             |
| 3 | Learning outcomes are related to the Saudi environment.                          | 13    | 28       | 3          | 4         | 2                 | 195             | 78.00            | 3.90                | Strong      | 48.2              |
| 4 | The courses develop students' talents and creativity.                            | 23    | 21       | 3          | 2         | 1                 | 212             | 84.80            | 4.24                | Very strong | 48.4              |
| 5 | The courses contribute to the promotion of cultural and cognitive diversity.     | 18    | 28       | 3          | 1         | 0                 | 214             | 85.60            | 4.28                | Very strong | 39.44             |
| 6 | The courses instill values of citizenship and national belonging among students. | 20    | 23       | 3          | 3         | 1                 | 211             | 84.40            | 4.22                | Very strong | 44.8              |
| 7 | The courses support community partnership and problem-solving.                   | 13    | 25       | 6          | 2         | 4                 | 187             | 74.80            | 3.74                | Strong      | 35                |

|          |  |    |    |   |   |   |     |       |      |             |      |
|----------|--|----|----|---|---|---|-----|-------|------|-------------|------|
| <b>8</b> | The department ensures serving social issues through its outcomes.   | 21 | 26 | 2 | 1 | 0 | 217 | 86.80 | 4.34 | Very Strong | 39.6 |
| <b>9</b> | The Art Education Program enhances the students' leadership capabilities in scientific exhibitions and increases their effectiveness in the knowledge society. | 19 | 27 | 3 | 1 | 0 | 214 | 85.60 | 4.28 | Very Strong | 38   |

**Continue TABLE (6)**

The estimated score, the relative weight, the arithmetic average, the trend, and the significance of differences of the practicum students' responses to the first axis of the questionnaire to promote the practical education teacher program for sustainable development (n = 30)

| S         | Terms   | Agree | Disagree | Un-bias ed | Dis-agree | Totall y Dis-agree | Estimat ed score | Relative weight | Arithm etic average | trend       | Chi- <sup>2</sup> |
|-----------|---|-------|----------|------------|-----------|--------------------|------------------|-----------------|---------------------|-------------|-------------------|
| <b>10</b> | The department courses are original and contemporary about education.   | 19    | 27       | 3          | 1         | 0                  | 214              | 85.60           | 4.28                | Very Strong | 38                |
| <b>11</b> | The Art Education program develops social responsibility.   | 20    | 28       | 2          | 0         | 0                  | 218              | 87.20           | 4.36                | Very Strong | 21.28             |
| <b>12</b> | The courses have activities and events that have a positive impact on the efficiency and effectiveness of students' | 19    | 28       | 2          | 1         | 0                  | 215              | 86.00           | 4.30                | Very Strong | 42                |

performance.

|           |  |    |    |   |   |   |     |       |      |             |       |
|-----------|--|----|----|---|---|---|-----|-------|------|-------------|-------|
| <b>13</b> | The department's courses promote capacity building and develop verbal expression.                                  | 23 | 25 | 2 | 0 | 0 | 221 | 88.40 | 4.42 | Very Strong | 19.48 |
| <b>14</b> | The department's courses promote capacity building and skills development in the practical field of manual skills. | 29 | 17 | 2 | 2 | 0 | 223 | 89.20 | 4.46 | Very Strong | 41.04 |
| <b>15</b> | The courses' outputs contribute to the establishment of art exhibitions inside and outside the university.         | 19 | 28 | 3 | 0 | 0 | 216 | 86.40 | 4.32 | Very Strong | 19.24 |
| <b>16</b> | The courses contribute to creativity and innovation by holding competitions.                                       | 21 | 27 | 2 | 0 | 0 | 220 | 88.00 | 4.40 | Very Strong | 20.44 |
| <b>17</b> | The courses encourage creative ideas by contributing to showing and marketing them.                                | 16 | 30 | 2 | 1 | 1 | 208 | 83.20 | 4.16 | Strong      | 66.2  |

Table (6) shows that the relative weight of the research sample responses of the first axis (courses)

of reality the questionnaire of promoting the art education teacher training program for sustainable

development from the practicum students' perspective ranged from (83.20: 89.20). The arithmetic averages of the sample response in the axis terms also ranged among (4.16: 4.46). The trend

of the terms ranged from (Strong to Very Strong). Also, the value of the Chi-squared test in the sample responses ranged from (19.24: 66.2).

**TABLE (7)**

The estimated score, the relative weight, the arithmetic average, the trend, and the significance of differences of the practicum students' responses to the second axis of the questionnaire to promote the practical education teacher program for sustainable development (n = 30)

| S | Terms  | Agree | Agree | Un-bias ed | Dis-agree | Total ly Dis-agree | Estimated score | Relative weigh t | Arithme tic average | trend       | Chi- <sup>2</sup> |
|---|--|-------|-------|------------|-----------|--------------------|-----------------|------------------|---------------------|-------------|-------------------|
| 1 | The teacher uses technology or laboratories if needed.   | 26    | 21    | 2          | 1         | 0                  | 223             | 89.20            | 4.46                | Very Strong | 39.76             |
| 2 | The teacher uses various teaching aids (computers, blackboard, boards, etc.).                    | 12    | 32    | 3          | 2         | 1                  | 202             | 80.80            | 4.04                | Strong      | 68.2              |
| 3 | The teacher uses a method that captures the students' attention and makes them like the subject. | 20    | 24    | 3          | 2         | 1                  | 209             | 83.60            | 4.18                | Strong      | 49                |
| 4 | The teacher ensures that the students understand the subject he teaches.                         | 25    | 22    | 1          | 2         | 0                  | 220             | 88.00            | 4.40                | Very Strong | 39.12             |
| 5 | The teacher encourages students to participate and discuss.                                      | 25    | 22    | 2          | 1         | 0                  | 221             | 88.40            | 4.42                | Very Strong | 39.12             |
| 6 | The teacher takes into account the differences between the students.                             | 28    | 20    | 2          | 0         | 0                  | 226             | 90.40            | 4.52                | Very Strong | 21.28             |

|    |  |    |    |   |   |   |     |       |      |             |       |
|----|--|----|----|---|---|---|-----|-------|------|-------------|-------|
| 7  | The teacher develops the learners' ideas in light of the objectives of the course.       | 21 | 27 | 2 | 0 | 0 | 219 | 87.60 | 4.38 | Very Strong | 20.44 |
| 8  | The teacher uses modern teaching methods to commensurate with the nature of the courses. | 19 | 29 | 2 | 0 | 0 | 217 | 86.80 | 4.34 | Very Strong | 22.36 |
| 9  | The teacher uses modern technologies in the innovation field.                            | 20 | 26 | 2 | 2 | 0 | 214 | 85.60 | 4.28 | Very Strong | 36.72 |
| 10 | The teacher encourages discussion and dialogue.  | 29 | 18 | 2 | 1 | 0 | 225 | 90.00 | 4.50 | Very Strong | 43.6  |
| 11 | The teacher is keen to activate organizational culture and accuracy of performance.      | 25 | 23 | 2 | 0 | 0 | 223 | 89.20 | 4.46 | Very Strong | 19.48 |
| 12 | The teacher works to root a culture of vocational production among students.             | 19 | 29 | 1 | 1 | 0 | 216 | 86.40 | 4.32 | Very Strong | 46.32 |

Table (7) shows that the relative weight of the research sample responses of the second axis (teaching methods) of reality the questionnaire of promoting the art education teacher training program for sustainable development from the practicum students' perspective ranged from (80.80: 90.40).

The arithmetic averages of the sample response in the axis terms also ranged from (4.04: 4.52). The trend of the terms ranged from (Strong to Very Strong). Also, the value of the Chi-squared test in the sample responses ranged from (19.48: 68.2).

**TABLE (8)**

The estimated score, the relative weight, the arithmetic average, the trend, and the significance of differences of the practicum students' responses to the third axis of the questionnaire to promote the practical education teacher program for sustainable development (n = 30)

| S | Terms  | Agree | Disagree | Un-bias ed | Dis-agree | Total ly Dis-agree | Estimat ed score | Relati ve weigh t | Arithme tic average | tren d        | Chi- <sup>2</sup> |
|---|--|-------|----------|------------|-----------|--------------------|------------------|-------------------|---------------------|---------------|-------------------|
| 1 | The teacher uses technology or laboratories if needed.   | 17    | 31       | 1          | 1         | 0                  | 214              | 85.60             | 4.28                | Ver y Stro ng | 50.16             |
| 2 | The teacher uses various teaching aids (computers, blackboard, boards, etc.).                    | 16    | 31       | 2          | 1         | 0                  | 212              | 84.80             | 4.24                | Ver y Stro ng | 47.76             |
| 3 | The teacher uses a method that captures the students' attention and makes them like the subject. | 20    | 28       | 2          | 0         | 0                  | 218              | 87.20             | 4.36                | Ver y Stro ng | 21.28             |
| 4 | The teacher ensures that the students understand the subject he teaches.                         | 17    | 30       | 1          | 2         | 0                  | 212              | 84.80             | 4.24                | Ver y Stro ng | 45.52             |
| 5 | The teacher encourages students to participate and discuss.                                      | 26    | 22       | 1          | 1         | 0                  | 224              | 89.60             | 4.48                | Ver y Stro ng | 42.96             |
| 6 | The teacher takes into account the differences between the students.                             | 23    | 23       | 2          | 1         | 1                  | 215              | 86.00             | 4.30                | Ver y Stro ng | 56.4              |
| 7 | The teacher develops the learners' ideas in light of the objectives of the course.               | 21    | 27       | 2          | 0         | 0                  | 219              | 87.60             | 4.38                | Ver y Stro ng | 20.44             |
| 8 | The teacher uses modern teaching   | 28    | 20       | 1          | 1         | 0                  | 225              | 90.00             | 4.50                | Ver y Stro ng | 44.88             |

methods to commensurate with the nature of the courses.

Table (8) shows that the relative weight of the research sample responses of the third axis (teaching environment) of the questionnaire of promoting the art education teacher training program for sustainable development from the practicum students' perspective ranged from (84.80: 90). The arithmetic averages of the sample response in the axis terms also ranged from (4.24: 4.50). The trend of the terms was (Very Strong). Also, the value of

the Chi-squared test in the sample responses ranged from (20.44: 56.40). This assures that the art education teachers' training program promotes sustainable development from the practicum students' perspective.

2. Are there significant differences between the average of female and male responses in the questionnaire of the teacher education program for sustainable development?

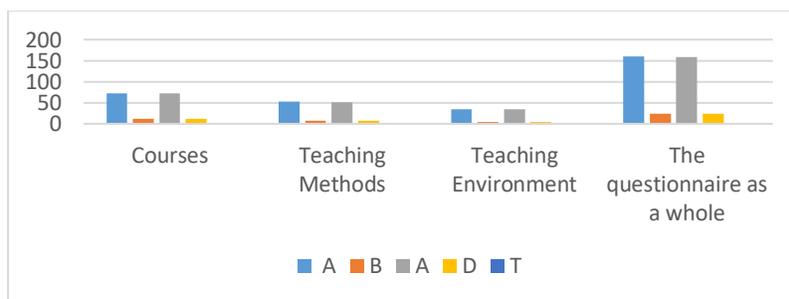
**TABLE (9)**

The significance of differences between the male and female average responses in the questionnaire of promoting the art education teacher program for sustainable development (n=50)

| Variable                                 | Measuring unit | Female (n=30) |       | Male (n=20) |       | Accounted value of (t) |
|--|----------------|---------------|-------|-------------|-------|------------------------|
|  |                | a             | b     | a           | b     |                        |
| <b>First Axis (Courses)</b>              | score          | 73.03         | 11.76 | 72.00       | 11.31 | 0.31                   |
| <b>Second Axis (Teaching Methods)</b>    | score          | 52.60         | 7.55  | 51.85       | 7.57  | 0.34                   |
| <b>Third Axis (Teaching Environment)</b> | score          | 34.87         | 4.75  | 34.65       | 4.91  | 0.16                   |
| <b>The questionnaire as a whole</b>      | score          | 160.50        | 23.94 | 158.50      | 23.68 | 0.29                   |

The Value of Tabulated (t) at (0.05) = 2

The results of table (9) show that there are statistically significant differences between the male and female average responses in the questionnaire of promoting the art education teacher-training program for sustainable development, where the value of (t) ranged from (0.16: 0.34). That confirms the statistically significant differences existed between the male and female average responses in the questionnaire of promoting the art education teachers' training program for sustainable development.



Shape (1) the significant differences between the male and female average responses in the questionnaire.

**Conclusion**

This study has implications for educational practices, especially to explore the extent of

promoting the art education teacher's preparing program for sustainable development from the perspective of practicum students in the Department of Art Education at King Faisal University, Saudi Arabia. The results of this study forward evidence that the art education teachers' training program promotes sustainable development from the practicum students' perspective (Mckeown, 2002).

This comes by the UNESCO sustainable development goal No. 4, which states: ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all (<https://en.unesco.org/sdgs>). This is further confirmed by the strategic objectives of King Faisal University in the field of community partnership, and considering education as a mechanism for national development in Saudi Arabia at the light of (Vision 2030) (<https://www.moe.gov.sa/ar/news/Pages/a-l-5976.aspx>).

According to the results, the researchers recommended developing the art education teachers' training programs to achieve sustainable development objectives in the Kingdom of Saudi Arabia.

### Abbreviations

**UNESCO:** is the United Nations Educational, Scientific and Cultural Organization, it is an agency of the United Nations (UN).

**Vision 2030:** is a plan to decrease Saudi Arabia's dependence on petrol, diversify its economy, and develop public service sectors, such as health, education, infrastructure, recreation, and tourism.

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### References

1. Badri, Malik (2000). *Contemplation: An Islamic Psycho-spiritual study*. (Trans.) Abdul Wahid Lu'Lu'a. Medinah Books, Kuala Lumpur.

2. Boden, M.A. (1998). "Creativity and artificial intelligence", *Artificial Intelligence*, No. 103, pp. 347-356. [https://doi.org/10.1016/S0004-3702\(98\)00055-1](https://doi.org/10.1016/S0004-3702(98)00055-1).
3. David Horth. (2014). *Innovation Leadership*, Center for Creative Leadership and Dan Buchner, Continuum) Center for Creative Leadership. All rights reserved, Washington.
4. Growth and Well-Being. (2015). *The Innovation Imperative: Contributing to Productivity*, OECD Publishing, Paris.
5. *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, a section for education for sustainable development. (2005). (ED/PEQ/ESD),75352 Paris 07 SP, France, Composed and printed in the workshops of UNESCO,
6. <https://unesdoc.unesco.org/ark:/48223/pf0000143370>
7. Hashim, R. and Hussien, S. (2003). *The Teaching of Thinking in Malaysia*. IIUM Research Centre: Malaysia.
8. Hawlader. (1995). Creative teaching-learning program. *AESEAP, Journal of Engineering Education* vol.25, No.1-2, p47-51.
9. Mckeown, Rosalyn, and Charles Hopkin. (2002). *Weaving Sustainability into Pre-Service Teacher Education*. In *Teaching Sustainability at Universities: Toward Greening the Curriculum*, Walter Leal Fihlo, ed. Lange Scientific, Germany.
10. Ojail. (2014). Mohammed Nasser Ojail. "Development of the training program of the art education teacher in the country of Kuwait in the light of the quality standards and accreditation" *Arab Journal of Social Sciences*. Vol.3, No. 6, Part 1, pp. 191-168.2014, vol. 3, no. 6, part 1, pp. 191-168 Print 1. Netherlands.

11. Shawky, Ismail. (2002). Introduction to Art Education. p35, print 2, Dar Al-Rifaa for publication and distribution, Riyadh.
12. Torrance. (1976). Education and creativity, in the creativity question edited by Rothenberg and C.R. Hausman, Duke University Press, N.C., p217-227. Durham, England.
13. UNECE (n.d.) ‘‘Good Practices’ in Education for Sustainable Development in the UNECE Region’, questionnaire, available:  
<http://www.unece.org/env/esd/inf.meeting.docs/Bureau/Good%20practices.templ.pdf>  
(Spring 2008).
14. UNESCO and Sustainable Development Goals (<https://en.unesco.org/sdgs>).
15. World Youth Report. (2005). Young people today and in 2015. United Nations.
16. <https://www.moe.gov.sa/ar/Pages/vision2030.aspx>