

# The Torrance Method of the Four Skills and its Role in Developing the Performance of Students of Music Colleges for Keyboard

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## Introduction

Developed countries have realized that their being in terms of progress and prosperity is the means of human capabilities to provide creativity in all its forms for the sake of educational efficiency, and taking into account the development of school curricula as a one of the main means for development. It has a positive impact on the education process, and it has become the responsibility of educational institutions to adopt and activate these strategies, especially those strategies that develop creative thinking Here the role of the teacher moves from a transmitter of knowledge to a guide to the student. The multiplicity of these ways to achieve educational objectives.( Retrieved ,2021)

Music education is one of the most important fields of education, due to the educational and artistic goals that musical educational activities achieve. And educational studies have proven the possibility of developing self-confidence by training students on different creativity methods and training them on different strategies to develop students performance in practical tests by developing their creativity, which has the greatest impact on raising the student's level to match the global level and even Complies with the conditions of work internally and externally.

(CaballoLL, O., : 2003)

Through this study, the researcher will focus on:

- Using the creative thinking strategy and revealing.
- Enhancing students self-confidence in performing the practical test of the practical harmonic course in particular.
- How to compose melodies in line with students' tendencies and abilities through what was studied in the bachelor's stage in the subject of harmony.

**Keywords:** Instructional Strategy ; Creative thinking ; Performance ; Creative Performance ; Harmony ; Keyboard ; Students ; Composition

## Problem and Significance

Music study in colleges and specialized institutes, which aims to prepare teachers for music education, depends on several study subjects, including theoretical and practical

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harmony. Students are subject to the practical exam and that performance lacks flexibility and fluency and is done in a rigid dynamic without paying attention to the creative side of the student, which gives rise to boredom, which has the greatest impact on the low evaluation of the student's performance during the test.

## **Importance**

- 1- Uncovering the creative potential of students.
- 2- Improving students' performance by training them on fluency Keyboard
- 3- Enhancing the creative thinking of the student through the use of the Torrance method of the four skills.

## **Objectives**

- Developing the students' playing performance in the Keyboard Exam
- Developing the creative side of students through the use of the Torrance method.
- Measuring the creativity of students.
- Developing the student's sense of self-confidence in the keyboard exam.

## **Research questions**

- 1- Could the playing performance of the students be improved in the keyboard exam?
- 2- How can the creative side of the student be developed through the use of the Torrance method?
- 3- How can students' creative originality be measured?
- 4- Did the students' self-confidence improve in the keyboard exam through the use of Torrance Method ?

## **Methodology**

This research is based on case study methodology .

## **Search tools**

- QR code setup program.
- Piano.
- computer music notation programs.

## **Sample**

- A selected sample of 15 compositions out of 30 compositions works for students of the fourth year, Faculty of Specific Education - Alexandria University - the academic year (2020/2021).

## **Literature Review**

"Using Imagination to Develop Music Education Skills and its Impact on Reducing Anxiety Among University Students.( Sadek, A.,and Sabry, A., : 1997).

This study aimed to identify the importance of developing musical education skills and their impact on learners, where imagination is used to reduce anxiety among university students, in order to contribute to achieving the integrated growth of the student in various physical, mental and social aspects.

This study agrees with the current study on the use of creative thinking to develop the musical skills of university students.

"Using an Electronic Score Card to Measure Creativity and Student Excellence in Practical Tests In this study,( Jrawan, and Abdel Rahman, F.,: 2022) the researcher dealt with the main characteristics of indicators of creativity and excellence in performance for the content of courses at the undergraduate level, and aims to highlight the importance of the electronic card as a tool for measuring creative and outstanding performance indicators for the content of the courses. Practical and applied.

This is consistent with the current research in that creativity plays an important role in the performance of undergraduate students, and attention should be paid to it and its measurement.

Developing the creative abilities of amateur children through piano compositions for ( Allam, A., : 2014)young children(music corner) in childhood|In this study, the researcher deal with the concept of creativity and the importance of creativity, as well as learning sound practices for developing a child's creativity.

This study agrees with the current study in dealing with the concept of creativity and the importance of creativity among students.

Dimensions of Musical"( Schiavio, A.,: 2020) This study aimed to lay the foundations for a creative framework by comparing creativity theories put forward previously in the musical fields to relieve individual and collective tension, by relying on creativity.

Which reveals a variety of new analytical resources for research and theory across different dimensions of (musical) creativity.

This is consistent with the study's objectives, which is to relieve stress. But it differs from the current study in that creativity relieves tension among students through the performance of the applied test.

"Creativity in the Music Classroom" (Bújez, A.,and Mohedo, M.,2014)

This study aims to provide students in music education (primary education) with different methodological strategies that enable them to learn in a more active and critical manner, while encouraging creative thinking in the teaching and learning processes of which they are the champions. Through an innovative methodological approach, we sought to help students create and develop their own code for musical writing, thus encouraging creativity, experimentation, and independent learning.

This study agrees with the current study in using a systematic strategy to encourage creative thinking in the teaching and learning processes through an innovative approach.

### **Theoretical Framework**

The researcher relies on the creative thinking strategy in preparing a training sessions based on the Torrance method for the four skills that include many skills to reach creative works by the student that help in improving the playing performance in the keyboard exam.

These skills are fluency the possibility of obtaining the largest possible number of music sentences, flexibility, which is the student's ability to produce the largest number of melodic ideas, and in a short time. As for the originality here, the unique, distinctive and innovative ideas and melodies that the student creates, and therefore it is called an original composition and finally Originality is concerned with generating unique, distinctive and innovative ideas and melodies.

Creative thinking skills can be developed among students by encouraging the Encouraging the student to consider thinking as a skill that can be practiced and to work on improving it. (Kammash, Y.,: 2018).

Creative thinking has stages until a complete composition is produced, which is at the beginning of preparation, that is, the student collects information about the musical composer to be composed. Then comes the stage of latency, in which the student's creative ideas ferment in order to show original ideas and confused ideas, which paves the way for the next step. The fourth is brightness, which is the removal of confused creative ideas and the manifestation of new thought far from distraction, so that the verification stage comes, which is the practical application to produce a distinctive creative work.

In order to achieve these stages, the teacher guides through activities and discussion to develop these skills in the student, taking into account encouraging the student to invent new ideas, investing those ideas, engaging the student's imagination, and accepting his views even if they differ from the teacher's opinions, providing a suitable.

### **International Programs For Teaching Creative Thinking**

**The Cort Thinking Program** This program is one of the modern programs for teaching thinking. This program is designed to allow students to completely break away from traditional thinking patterns to see things more broadly and clearly and to develop further in solving the problems they face. (Schiavio, A., : 2020).

**Program Hamilton** developed an independent curriculum for teaching higher-order thinking skills, especially creative thinking skills, to adult students and teachers.

**Purdue Creative thinking program** This program aims to develop creative abilities such as fluency, flexibility, originality, and both verbal and formal details among primary school students, and to support their positive attitudes towards creativity and creative thinking. This program includes (28) lessons recorded on cassette tapes, where students are exposed through these tapes to Creative thinking information.(James,:1977).

**Talents Unlimited Program** This program aims to teach creative thinking. The authors of this program believe that the child's skills must be developed in the areas of productive thinking, communication, prediction and decision-making.

**(CPS) Creative Problem Solving Program** This program aims to familiarize coaches and teachers with many useful tools and ideas, which facilitate the process of solving creative problems so that this process becomes more effective and enjoyable.

This program consists of three main components (understanding the problem - creating ideas - planning work).

The use of this program with individuals of different age levels, from childhood to youth. (Mahmoud, H., and Sabry, A.,: 2015).

**Creative Thinking and Technical** This program consists of two parts, and the first part needs 15 weeks, and this period is dedicated to training students on creative thinking skills from the first of the six Cort programs and adapting to the learning environment. The program includes broadcast tools connected to the computer. The second part is where students work on their original projects.(God,A.,: 2015)

**Thinking Hats Six** This method directs the person to think in one way and then asks him to switch to a different way, meaning that the person can wear any of the six colored hats, each of which represents a color of thinking. (Doyle.A.,:2018).

### **Implementation Procedures**

The strategy is applied by investing course vocabulary to develop learners' creative thinking skills through the use of Torrance's method.

It contains four skills for creative thinking (fluency, flexibility, originality and detail), which students are trained in using creative methods such as cross-ended questions, open-ended questions and brainstorming. For questions and situations posed

The teacher explains the idea of creative work, which is for the student to compose at least a non-compulsory music sentence as follows: (Al-Rabighi,K.,: 2013)

- 1- Simple music composition.
- 2- It consists of one or more music sentences, provided that any increase in melodic sentences is specific to the student's creativity.
- 3- The melody expresses what goes through the mind of the student and unleashes the student in artistic creativity.
- 4- This job has nothing to do with the exam score.
- 5- Work is not compulsory.

### **How to apply the Torrance Four Skills Program**

- 1- Fluency in creative thinking, which represents the quantitative aspect of creativity, where the student thinks about generating the largest number of ideas for musical composition to be implemented and what kind.
- 2- Flexibility: the ability to generate diverse ideas and switch from a certain type of thought to another when responding to a specific situation, that is, the ability to change

the state of mind by changing the situation, where flexibility represents the qualitative aspect of creativity.

Here, the student has settled on the type of composition, the number of parallel bars, the scale in which the melody is intended to be composed.

3- Originality: Excellence in thinking, scarcity and the ability to know unfamiliar ideas, and represents the aspect of excellence in creativity.

In this, the student tries to create an unfamiliar melody that is completely different from his peers, and the originality of the compositions was measured by making a questionnaire to measure the degree of originality graded from 1 to 5, and 1 is considered the lowest degree of originality and 5 is the highest degree of originality.

4-Details: in which the student prepares the final form of the melody.

The contents of the program and its procedural goals .

The method consists of five main stages

**1- The First Stage: The preparation and introduction to the method included one session.**

It aims to form positive relationships with students by achieving the following procedural goals

- Introduce students to the method, its importance and objectives.
- Introduce students to the definition of creative thinking.

**2-The second stage included 4 sessions, and aimed at developing students' fluency skills by achieving the following procedural goals.**

- To activate the student's imagination through the brainstorming strategy
- To choose multiple forms of the sentences and phrases to be composed.
- To express an idea without restriction.

**3-The third stage included 4 sessions, and aimed at developing students' flexibility skills by achieving the following procedural goals**

- To know the meaning of flexibility.
- To develop the student's imagination.
- To be free from restrictions that might hinder his thinking.

**4-The fourth stage included 4 sessions, and aimed at developing students' fluency skills by achieving the following procedural goals.**

- To produce a number of strange and unfamiliar melodies.
- To practice facing problems during the exercise.

**5-The fifth stage included (3) sessions, and aimed at developing the students' skill of detail by achieving the following procedural goals.**

- To develop students' attitude towards creative work and its practice by following the author's details.
- To add details to complete the musical melody, especially notation, expression, speed, scale, for the weight of the composition.

**The Analytical Section**

In the context of applying the Torrance method, 15 music tracks were selected by the researcher, to include all grade levels of students, out of 30 students who responded to compose from 50 students in the fourth year.

The students wrote pieces of music without paying attention to some musical expressive styles.

The researcher prepared 16 sessions to apply the Torrance method during the academic year 2020/2021, as previously detailed.

The originality, fluency and flexibility of the students' compositions were measured through 3 electronic questionnaires submitted to faculty members from various Egyptian universities specialized in music education. The researcher presented a statistical analysis of all expert scores for each piece.

The details of the students' writings were measured at the final examination , the researcher presented a separate statistical analysis to measure the details

The compositions have been attached to a QR code to make it easier for those who are reading the research, and listen to the compositions.

And the tunes were attached to a QR code by two steps.

- Uploading the Files to the media fire website.
- Generate QR codes through the QR Generator Program, And the tunes were either Video File on YouTube and Sound File.

## 1-SOUND OF SOUL

Ahmed Ramy.

- Genre : Soundtrack for a children's story *sound of soul* soundtrack for a children's story.

- G Major

- Bars: 16

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- The originality of work 94.1%

- The Fluency of work 100%

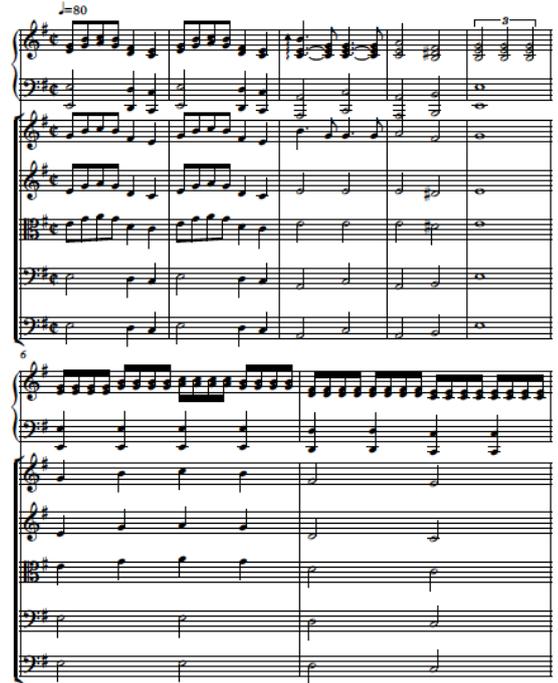
- The flexibility of work 88.2%

- The details of work 94.1%

## SOUND OF SOUL

Ahmed Ramy

$\text{♩} = 80$



The first system of the musical score consists of five staves. The top staff is the piano part, starting with a treble clef and a key signature of one sharp (F#). It features a melodic line with eighth and sixteenth notes, including a triplet of eighth notes marked with a '3' above it. The bottom four staves are for a string quartet (violin I, violin II, viola, and cello), each with its respective clef and the same key signature. The music is in a simple, rhythmic style.

6



The second system of the musical score consists of five staves. The piano part continues with a similar melodic line. The string quartet parts provide harmonic support with sustained notes and simple rhythmic patterns.

10



The third system of the musical score consists of five staves. The piano part features a more active melodic line with sixteenth notes. The string quartet parts continue with their harmonic accompaniment.

	
<p style="text-align: center;"><i>2-Ratatouille</i></p> <p>Salma Youssry  Genre : Musical soundtrack for a scene from a cartoon movie "<i>Ratatouille</i> "  D Major  - Bars : 8  - 3  - 4</p>  <ul style="list-style-type: none"> <li>- The originality of work 88%</li> <li>- The Fluency of work 82.4%</li> <li>- The flexibility of work 82.4%</li> <li>- The details of work 82.4%</li> </ul>	<p style="text-align: center;"><i>2-Ratatouille</i></p> <p>Moderato ♩ = 120</p> 

### 3-The Zoo

Viola Malik

Genre : A lyrical melodic work consisting of three melodies, the beginning melody of *The Zoo*, a melody for *Cheetah* and a melody for *The Ant*

C Major

- Bars :18

- 4

- 4



احنا الحيوانات نموت في الاحتفالات  
و رغم اننا بنحب بعضنا لكن بيننا اختلافات  
مخلوقتين من سنين و حاجات كثيرة فيها شاطرين  
يلا قولنا انت مين و شاطر في اية

### Cheetah

- c minor.

- Bars :12

- 4

- 4



انا الفهد السريع صيف خريف شتاء ربيع الآخر  
في ثانية اجري مسافة تقطعها انت في اسابيع  
سرعتي خيالية حاجة كدة من الاساطير  
لما تبجي تبص عليا تحسني باطير

### 3-The Zoo

Andante ♩ = 90



### Cheetah

Moderato ♩ = 120



<p style="text-align: center;"><i>The Ant</i></p> <ul style="list-style-type: none"> <li>- d minor.</li> <li>- Bars: 21</li> <li>- 4</li> <li>- 4</li> </ul>  <p style="text-align: right;">النملة</p> <p>انا النملة النملة صغيرة و عسولة حجمي صغرن جدا . بس عمري ما كنت كسولة باصحي الصبح بنشاط اعمل تمارين و حركات علشان اقدر اشيل اضعاف وزني حمولة انا النملة النملة و دي حاجة مش معقولة</p> <ul style="list-style-type: none"> <li>-The originality of work 82.3</li> <li>-The fluency of work 94.1%</li> <li>-The flexibility of work 82.4%</li> <li>-The details of work 88.3%</li> </ul>	<p style="text-align: center;"><i>The Ant</i></p> <p style="text-align: center;">Moderato <math>\text{♩} = 120</math></p> 
<p style="text-align: center;"><i>4- Beauty and the beast</i></p> <p>Narmean Gomaa</p> <p>Genre : Music soundtrack from the cartoon <i>The Princess and the Beast</i></p> <ul style="list-style-type: none"> <li>- C Major</li> <li>- Bars :12</li> <li>- <math>\frac{2}{4}</math></li> </ul>  <ul style="list-style-type: none"> <li>- The originality of work 82.3%</li> <li>- The Fluency of work 82.4%</li> <li>- The flexibility of work 82.4%</li> <li>- The details of work 94.1%</li> </ul>	<p style="text-align: center;"><i>4- Beauty and the beast</i></p> <p style="text-align: center;">Andante <math>\text{♩} = 90</math></p> 

<p style="text-align: center;"><i>5- Sleeping Princess</i></p> <p>Norhan Hesham</p> <p>Genre :Soundtrack from the cartoon <i>The Sleeping Princess</i></p> <ul style="list-style-type: none"> <li>- B b Major</li> <li>- Bars : 8</li> <li>- <math>\frac{4}{4}</math></li> <li>- </li> </ul> <ul style="list-style-type: none"> <li>- The originality of work 64.7%</li> <li>-The Fluency of work 82.4%</li> <li>-The flexibility of work 88.2%</li> <li>-The details of work 88.2%</li> </ul>	<p style="text-align: center;"><i>5- Sleeping Princess</i></p> <p style="text-align: center;">Andante ♩ = 90</p> 
<p style="text-align: center;"><i>6- Bad chick</i></p> <p>Ahmed Fadel</p> <p>Genre : A soundtrack for the story of <i>the bad chick</i></p> <ul style="list-style-type: none"> <li>- G Major</li> <li>- Bars : 8</li> <li>- <math>\frac{3}{4}</math></li> <li>- <math>\frac{4}{4}</math></li> <li>- </li> </ul> <ul style="list-style-type: none"> <li>-The originality of work 64.7%</li> <li>-The Fluency of work 75.5%</li> <li>-The flexibility of work 76.5%</li> <li>-The details of work 70%</li> </ul>	<p style="text-align: center;"><i>6- Bad chick</i></p> <p style="text-align: center;">Andante ♩ = 90</p> 
<p style="text-align: center;"><i>7-Shakespeare</i></p> <p>Nancy Ahmed</p> <p>Genre :A soundtrack for the story of <i>Shakespeare</i></p> <ul style="list-style-type: none"> <li>- C Major</li> <li>- Bars : 14</li> <li>- <math>\frac{2}{4}</math></li> <li>- <math>\frac{4}{4}</math></li> <li>- </li> </ul> <ul style="list-style-type: none"> <li>-The originality of work 70.5%</li> <li>-The Fluency of work 82.4%</li> </ul>	<p style="text-align: center;"><i>7-Shakespeare</i></p> <p style="text-align: center;">Andante ♩ = 90</p> 

<p>-The flexibility of work 82.4% -The details of work 88.3%</p>	
<p style="text-align: center;"><i>8-The girl in red</i></p> <p>May Abdeslam Genre : A soundtrack for the story of <i>The girl in red</i></p> <ul style="list-style-type: none"> <li>- C Major</li> <li>- Bars : 8</li> <li>- 4</li> <li>- 4</li> </ul>  <p>-The originality of work 76.5% -The Fluency of work 88.2% -The flexibility of work 70.6% -The details of work 70%</p>	<p style="text-align: center;"><i>8-The girl in red</i></p> <p style="text-align: center;">Andante ♩ = 90</p> 
<p style="text-align: center;"><i>9-Maymon Monkey</i></p> <p>Hagar khamis Genre : A soundtrack for the story of <i>Maymon Monkey</i></p> <ul style="list-style-type: none"> <li>- E b Major</li> <li>- Bars :14</li> <li>- 4</li> <li>- 4</li> </ul>  <p>-The originality of work 94.1% -The Fluency of work 94.1% -The flexibility of work 82.4% -The details of work 76.5%</p>	<p style="text-align: center;"><i>9-Maymon Monkey</i></p> <p style="text-align: center;">Andante ♩ = 90</p> 

<p style="text-align: center;"><i>10- Ugly Duck</i></p> <p>Yosef Taher</p> <ul style="list-style-type: none"> <li>- Genre : A soundtrack for the story of <i>Ugly Duck</i></li> <li>- quintuple scales</li> <li>- Bars : 12</li> <li>- 4</li> <li>- 4</li> </ul>  <ul style="list-style-type: none"> <li>-The originality of work 82.1%</li> <li>-The Fluency of work 94.1%</li> <li>-The flexibility of work 82.4%</li> <li>-The details of work 94%</li> </ul>	<p style="text-align: center;"><i>10- Ugly Duck</i></p> <p>Moderato ♩ = 120</p> 
<p style="text-align: center;"><i>11 - Sleeping beauty</i></p> <p>Ahmed saber</p> <p>Genre : A soundtrack for the story of <i>Sleeping beauty</i></p> <ul style="list-style-type: none"> <li>-B b Major</li> <li>-Bars : 8</li> <li>- 4</li> <li>- 4</li> </ul>  <ul style="list-style-type: none"> <li>-The originality of work 76.5%</li> <li>-The Fluency of work 94.1%</li> <li>-The flexibility of work 70.6%</li> <li>-The details of work 70%</li> </ul>	<p style="text-align: center;"><i>11 - Sleeping beauty</i></p> <p>Andante ♩ = 90</p> 

<p style="text-align: center;"><i>12- Clever chicken</i></p> <p>Dina Ali</p> <p>Genre : A soundtrack for the story of <i>Clever chicken</i></p> <ul style="list-style-type: none"> <li>- C Major</li> <li>- Bars : 8</li> <li>- 4</li> <li>- 4</li> </ul>  <p>-The originality of work 76.5%</p> <p>-The Fluency of work 88.2</p> <p>-The flexibility of work 76.5%</p> <p>-The details of work 76.5%</p>	<p style="text-align: center;"><i>12- Clever chicken</i></p> <p style="text-align: center;">Andante ♩ = 90</p> 
<p style="text-align: center;"><i>13-Cinderella</i></p> <p>Shreef Adel</p> <p>Genre : A soundtrack for the story of Cinderella</p> <ul style="list-style-type: none"> <li>- Bb Major</li> <li>- Bars : 8</li> <li>- 2</li> <li>- 4</li> </ul>  <p>-The originality of work is 82.3%</p> <p>-The Fluency of work 76.5 %</p> <p>-The flexibility of work 70.6%</p> <p>-The details of work 70%</p>	<p style="text-align: center;"><i>13-Cinderella</i></p> <p style="text-align: center;">Moderato ♩ = 120</p> 
<p style="text-align: center;"><i>14-Growing up together</i></p> <p>Sara Samy</p> <p>Genre :A soundtrack for the story of Growing up together</p> <ul style="list-style-type: none"> <li>- C Major</li> <li>- Bars : 8</li> <li>- 4</li> <li>- 4</li> </ul> 	<p style="text-align: center;"><i>14-Growing up together</i></p> <p style="text-align: center;">Moderato ♩ = 120</p> 

<ul style="list-style-type: none"> <li>-The originality of work is 88%</li> <li>-The Fluency of work 82.2 %</li> <li>-The flexibility of work 88.2%</li> <li>-The details of work 76.5%</li> </ul>	
<p style="text-align: center;"><i>15- The lion king</i></p> <p>Ahmed Mamdouh Genre : A soundtrack for the story of The lion king</p> <ul style="list-style-type: none"> <li>- C Major</li> <li>- Bars : 10</li> <li>- <math>\frac{2}{4}</math></li> <li>- </li> </ul> <ul style="list-style-type: none"> <li>-The originality of work is 76.5%</li> <li>-The Fluency of work 88.2 %</li> <li>-The flexibility of work 82.4%</li> <li>-The details of work 88.2%</li> </ul>	<p style="text-align: center;"><i>15- The lion king</i></p> <p style="text-align: center;">Andante ♩ = 90</p> 

### General Comment on Musical Compositions

The fifteen compositions demonstrated a balance of melodic skills appropriate for students' creativity, as these compositions are the students' first experience in attempting to compose simple musical or lyrical sentences.

- Integration and balance resulting in a spontaneous musical performance.

The lack of separation between self-awareness and performance in the practical test.

- Clarity of the goals of the musical pieces.

- Feedback became clear and immediate towards goal achievement, as students were able to discipline in their performance and play efficiently.

- Focus fully on performance and avoid any distractions.

- Students feel in control and avoid anxiety.

- Loss of self-awareness as the student and composer become one during fluency.

## Results

The students' performance in the keyboard test showed that improved significantly through the overall assessment of the exam.

Its impact was clear on the students who composed simple composition, through their original performance, and it also affected the students' self-confidence when they played those pieces that are the product of their creativity.

It aligns with the students' inclinations, even if they are simple. It had the greatest impact in developing students' performance and taking the test in a more skilled and professional way compared to students who were not trained.

Through the questionnaire that the researcher presented by Faculty members in the Colleges of Specific Education to measure the originality of the sample consisting of 15 composition out of 30 composition for fourth year students, and it was found that the rate of evaluation increased among students after following the Torrance method for four skills

**Table of the Percentage of Originality**

95% : 85%	85% : 75%	75% : 65%
<i>1-Sound Of Soul</i> <i>2-Ratatouille</i> <i>9-Maymon Monkey</i> <i>14-Growing up together</i>	<i>3-The Zoo</i> <i>4- Beauty and the beast</i> <i>10- Ugly Duck</i> <i>13-Cinderella</i> <i>8-The girl in red</i> <i>12- Clever chicken</i> <i>15- The lion king</i>	<i>7-Shakespeare</i> <i>5- Sleeping Princess</i> <i>6- Bad chick</i>

The following table shows the high percentage of originality among students, as it showed that 73.3% of students are distinguished by their outstanding originality composition.

**Table of the Percentage of fluency**

100% : 90%	90% : 80%	80% : 70%
<i>1-Sound Of Soul</i> <i>3-The Zoo</i> <i>5- Sleeping Princess</i> <i>9-Maymon Monkey</i> <i>10- Ugly Duck</i>	<i>2-Ratatouille</i> <i>4- Beauty and the beast</i> <i>7-Shakespeare</i> <i>8-The girl in red</i> <i>11 - Sleeping beauty</i> <i>12- Clever chicken</i> <i>14-Growing up together</i> <i>15- The lion king</i>	<i>6- Bad chick</i> <i>13-Cinderella</i>

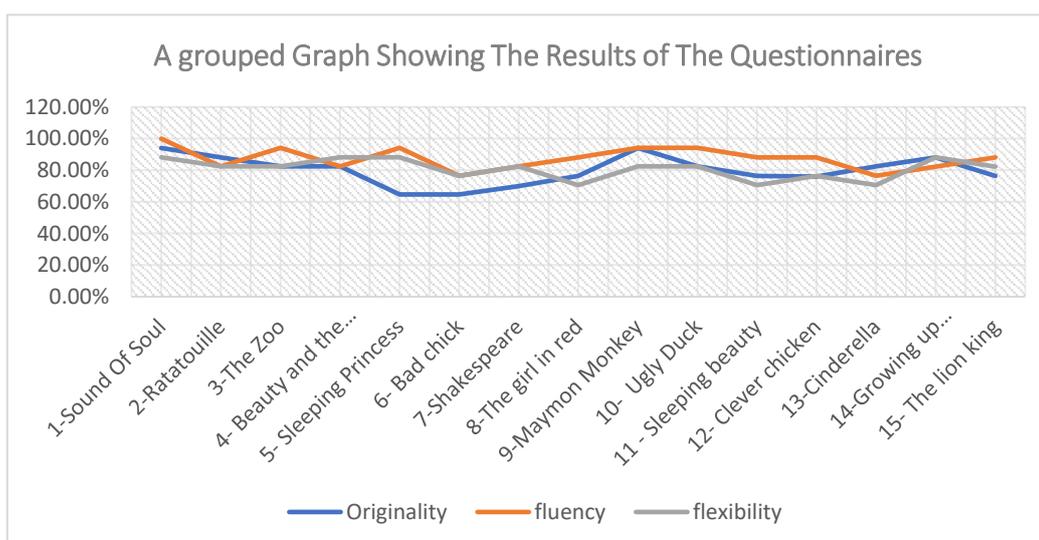
The following table shows the high percentage of fluency as it showed that 86% of students are fluency composition.

**Table of the Percentage of flexibility**

95% : 85%	85% : 75%	75% : 65%
1-Sound Of Soul	2-Ratatouille	8-The girl in red
4- Beauty and the beast	3-The Zoo	11 - Sleeping beauty
5- Sleeping Princess	6- Bad chick	13-Cinderella
7-Shakespeare	9-Maymon Monkey	
14-Growing up together	10- Ugly Duck	
15- The lion king	12- Clever chicken	

The following table shows the high percentage of flexibility among students, as it showed that 73.3% of students are flexible composition.

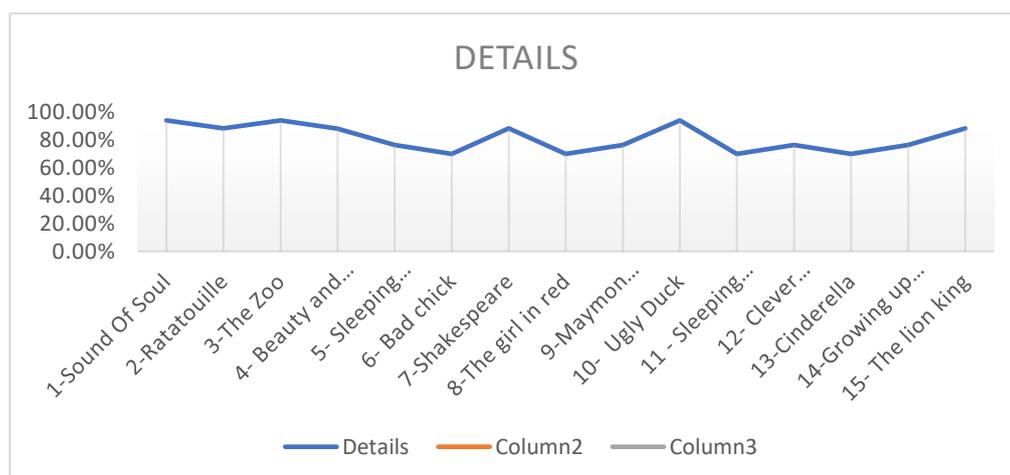
A grouped graph showing the results of the questionnaires



**Table of the Percentage of Details**

100%:90%	90%:80%	80%:70%	70%:60%
1-Sound Of Soul	2-Ratatouille	8-The girl in red	6- Bad chick
3-The Zoo	4- Beauty and the beast	9-Maymon Monkey	13-Cinderella
10- Ugly Duck	7-Shakespeare	12- Clever chicken	11- Sleeping beauty
	15- The lion king	14-Growing up together	
	5- Sleeping Princes		

The following table shows the assessment of the students' skill of details, which was monitored in the exam, it reached 73.3%, it indicates a high level of details



## Conclusion

This study describes a sample of the creative work of fourth-year students in the field of Music Education, after using the creative thinking strategy to develop students' simple formation and develop self-confidence during the performance test for the harmony subject, which had a clear impact on the performance of students who composed simple creative compositions.

The results proved that the study had a great impact on the test performance in a more professional and self-confident manner compared to the students who did not compose a melody.

By applying this strategy in a way that enables the student to melody that help him improve his performance in the practical test of the harmony subject and in line with his tendencies and trends, he will have achieved the characteristics and skills of creative thinking through the use of the Torrance method for the four skills

Therefore, the musical educational process must be developed and attention should be paid to the creative side of the student as well as the academic side.

## Declaration of conflict of interest

The author declares that there is no potential conflict of interest regarding the research, authorship and/or publication of this article.

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\* The researcher is providing a transliteration of the Arabic references used then a translation to it

## Abstract

### **The Torrance Method of the Four Skills and it's Role in Developing the Performance of Students of Music Colleges for Keyboard**

**Doaa Ahmed Khamis Mohamed\***

The creative thinking strategy is one of the latest strategies that appeared in the twenty-first century, which had the greatest impact in the field of education, so the researcher was interested in using that strategy in qualitative education, especially that music education is the basis of creativity (Abu Al-Nasr, N., 2014)

The aim of the research was to shed light on the creative thinking strategy through the use of Torrance's method of the four skills in developing the abilities of the musically specialized student to develop his creativity, which affects the development of his performing abilities and enhances self-confidence by encouraging students to compose music. Through what has been studied in the subject of harmony.

The researcher used the case study by method and the research included the theoretical framework and included a simplified explanation of some programs that used the creative thinking strategy.

Then the applied framework included fifteen musical pieces, fifteen students of different academic levels. The results.

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## ملخص البحث

### طريقة تورانس للمهارات الأربعة ودورها في تطوير أداء طلاب الكليات الموسيقية لمادة هارموني العملي

تعد استراتيجية التفكير الإبداعي من أحدث الاستراتيجيات التي ظهرت في القرن الواحد والعشرون والتي كان لها أكبر الأثر في مجال التعليم ، لذلك اهتمت الباحثة باستخدام احد طرق استراتيجية التفكير الإبداعي و هي طريقة تورانس للمهارات الأربعة في التعليم النوعي ، خاصة ان التعليم الموسيقي هو أساس الابداع .

و قد هدف تلك الدراسة الي التطرق الي استراتيجية التفكير الإبداعي و استخدام طريقة تورانس للمهارات الأربعة " الطلاقة و المرونة و الاصاله والتفاصيل " لتنمية قدرات الطالب المتخصص موسيقياً و تنمية الابداع لديه و مما له أكبر الأثر في تنمية قدراته الادائية العزفية و تعزيز الثقة بالنفس ، ذلك من خلال تشجيع الطلاب على تأليف مؤلفة مستخدما المهارات الأربعة .

و قد استخدمت الباحثة منهج دراسة الحالة و قد اشتمل البحث على الاطار النظري و التطبيقي ، الذي اشتمل على خمسة عشر مؤلفة موسيقية من اصل ٣٠ مؤلفة لطلاب الفرقة الرابعة ، هذا و قد جاءت النتائج مجيبة على أسئلة البحث ، ثم اختتمت الباحثة المراجع العربية و الأجنبية و ملخص البحث باللغة العربية و الإنجليزية .