Innovative Teaching Methods for Special Needs Students in Fine Arts: A Case Study at Yarmouk University

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Abstract

This study aims to achieve specific goals and objectives related to the use of modern technologies and music programs on computers. It also seeks to explain the concept of teaching these programs from a musical perspective, particularly in relation to Arabic music, for students with special needs. Additionally, this study works to raise awareness about the importance of utilizing music programs and the necessity of their integration into educational institutions. It presents a contemporary educational method and curriculum for teaching music via computer, which is considered one of the most effective means of education. The focus is on highlighting its significance and actual application, alongside theoretical and practical performance materials.

The study sample consisted of several special needs students who have been enrolled in the music major for over a year. Practical and analytical approaches were employed through follow-up and experimentation.

The study found that it is possible to engage individuals with special needs within computerized music programs through practical experiments and assessments of their psychological states. It concluded with positive results for students with special needs at Yarmouk University, Faculty of Fine Arts, Department of Music. The study recommends developing a specialized curriculum for students with special needs and providing dedicated laboratories and teaching staff for their education.

Keywords: music, musical programs, people with special needs.

أساليب تدريس مبتكرة لطلاب ذوي الاحتياجات الخاصة في كلية الفنون الجميلة، دراسة حالة بجامعة اليرموك

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الملخص

تهدف هذه الدراسة المتواضعة إلى تحقيق أهداف وغايات تتعلق باستخدام التقنيات الحديثة والبرامج الموسيقية على أجهزة الكمبيوتر. كما يسعى إلى شرح مفهوم تدريس هذه البرامج من منظور موسيقي، خاصة فيما يتعلق بالمويسقى العربية، للطلاب ذوي الاحتياجات الخاصة، بالإضافة إلى ذلك، تعمل هذه الدراسة على زيادة الوعي بأهمية الاستفادة من البرامج الموسيقية وضرورة دمجها في المؤسسات التعليمية. وتقدم الدراسة منهجاً تعليمياً معاصراً ومنهجاً لتدريس الموسيقى عبر الحاسوب، والذي يعتبر أحد أكثر وسائل التعليم فعالية، مع التركيز على إبراز أهميته وتطبيقه الفعلي، إلى جانب مواد الأداء النظرية والعملية. تكونت عينة الدراسة من العديد من الطلاب ذوي الاحتياجات الخاصة الذين تم تسجيلهم في تخصص الموسيقى لأكثر من عام. تم استخدام مناهج عملية وتحليلة من خلال المتابعة والتجريب.

وتوصلت الدراسة إلى أمكانية دمج الأفراد ذوي الاحتياجات الخاصة ضمن برانامج الموسيقى المحوسبة من خلال التجارب العملية وتقييم حالاتهم النفسية. وخلصت إلى نتائج إيجابية للطلاب ذوي الاحتياجات الخاصة في جامعة اليرموك، كلية الفنون الجميلة، قسم الموسيقى. وتوصي الدراسة بتطوير منهج دراسي متخصص للطلاب ذوي الاحتياجات الخاصة وتوفير مختبرات وهيئة تدريسية متخصصة لتعليمهم.

الكلمات الدالة: الموسيقى، البرامج الموسيقية، الاشخاص ذوي الاحتياجات الخاصة.

Study Population:

The study population consisted of music major students with special needs, who were closely monitored in both practical and theoretical teaching. The study aimed to track their progress in music programs such as MuseScore 4, Sibelius 6, and Finale 7. The study sample pimarliy included students admitted between the academic years of 2014 and 2020.

Study Problem:

The study problem focuses on the availability of music education programs and curricula designed for students with special needs, including advanced and computerized scientific programs. Although the number of students admitted to this major is limited, it remains essential to develop and provide such programs and curricula, along with qualified educators to teach them. Accordingly, this study seeks to emphasize the importance of addressing the unique educational needs of this special group which requires dedicated care and sustained effort.

Study Questions:

Given the significance of the topic, this study seeks to answer the following questions:

1. Are there students with special needs enrolled in the Music department at Yarmouk University?
2. Are there curricula and programs specifically designed for students with special needs in the Music department at Yarmouk University?

Study Objectives:

This study aims to leverage advancements in educational techniques and technology, particularly those emerging from the communication revolution, to enhance educational quality and update academic curricula accordingly. Its primary goal is to improve the scientific and technical proficiency of current and future generations through the teaching of computerized theoretical and practical music. Ultimaltely, this study seeks to demonstrate the possibility and feasibility of effectively teaching students with special needs in the Music department athe Faculty of Fine Arts, Yarmouk University.

Study Limits:

This study focuses on a specific cohort of students with a special need in the Music department, namely those who are admitted between the academic years 2014 and 2024. The participants include two blind students with musical backgrounds from the Aidoon village near the city of Irbid. Their curriculum included theortical lessons alongside practical piano training and instruction in computer-based music software, The study also encompasses a student who uses a wheelchair and canes and was trained on the qanun (a traditional Arabic musical instrument), as well as a hearing-impaired student who was classified a part of the special needs group.

Study Significance:

The significance of this study can be summarized as follows:

1. The ability for teaching theoretical and realistic track in pc laboratories.
2. The feasibility of facilitating speak and direct communication among the teacher and all taking part college students via a device connected thru a data projection device.
3. The development of curricula or music applications that align with advancements in statistics technology, highlighting key scientific applications that decorate the educational system and selling their usage.
4. The activation of teaching era to improve the instructional process.
5. The enhancement of institutional relationships within the area of track with diverse instructional establishments, fostering cultural exchange and contributing to the elevation of students' cognitive degrees.

Study Methodology:

The study was conducted over several academic semesters within the field of music education. A key focus of the research was the variation in students’ abilities across both

musical performance and the use of music software. Some students demonstrated strong musical talent and instrumental performance while also achieving commendable results in computer-based music programs, whereas others excelled in using computers but struggled to comprehend and apply musical concepts effectively.

Although the music curriculum at Yarmouk University includes alternative programs for students in the Department of Music, there remains a limited interest in studying music through computer-based methods. This lack of demand may be attributed to students' apprehension toward using technology or their focus on achieving "good" grades rather than recognizing the long-term benefits that proficiency in these mustic program can offer.

To address this issue, the researchers consulted several graduates from the Music department who had pursued careers in computer -based music composition. In addition, the researchers were engaged with several MA students in the field who expressed the desire to find advanced music courses and programs to improve their music knowledge. Given the low number of students with special requirements, the researchers used practical and analytical methods, focusing on the students with special requirements. The researchers applied the experimental, analytical method in the study. This approach included presenting the idea of notation or listening to what was noted. The primary student depended on hearing skills instead of visual recognition of music signal. Therefore, since the program included the performance shortcuts, which memorized by the student, he was better equipped to work to achieve his goals, like all other normal students.

Study Features:

Music helps students understand complex musical features, making them more accessible. This allows students to listen to important musicians and their compositions and check the distribution of music. In addition, this includes harmony and analysis of counterpoints science. In addition, the study learns students how to create music features presented in video files, which are usually referred to as a video clip. It also streamlines the process of music notation, especially when connecting your computer to a musical instrument, so that students can identify and correct errors. These programs facilitate input of audio formats, such as WAV files, allow students to easily and effectively edit, paste, repeat or change the sound.

Advanced techniques can transmit music and other sounds with remarkable accuracy on the Internet. There is the possibility of transferring and introducing the music heritage and the different music methods to other countries. It also allows connections with special educational institutions in the field of music and establishes collaborative relationships with musicians. In addition, students can store high accuracy music features and clarity in various forms that can do computer process.

Results:

The results of this study can be summarized as follows:

1. Expanding the scope of music education at both national and international level to include extensive spectators, as this education method can be implemented in different institutions, including the Ministry of Education, the Education Centers, societies and institutions specialized in music.
2. Learn music students about music software and keep them updated on the latest developments in these programs.
3. Equipment A large number of students who want to study music with advanced courses that match contemporary practice.
4. To create job opportunities for graduates in studios, satellite stations, TV and broadcasting stations, which will help reduce unemployment in local communities.
5. Increase educational and technical skills to individuals after completion of educational stages.

6. Use the latest programs and technologies in educational technology, which improves the efficiency and speed of information distribution in educational results.
7. The facility for the exchange of technical results between students and various educational institutions.
8. There is an opportunity for mutual agreements to move and exchange programs through Eastern and Western music courses and the Internet.

To address the questions in the study, many students with special requirements were admitted to the Music department. Some of these students are blind, while others use wheelchairs for mobility. There were taught and graduated as he adjusted through special educational methods. Although there was some sympathy with other students, these people excelled in both practical and educational aspects.

Previous Studies:

Arabic Studies:

1. Study by Zaytoun, Muna Mustafa (2024): (Effectiveness of using the McCarthy model (MAT 4) in developing certain musical skills and achievement motivation among kindergarten children studying according to Method 2.0). The purpose of the study is to develop an inspiration for specific music skills and performance in kindergarten, who use the 2.0 course through the Macarthi model (Mat4). Research used an experimental method for two groups, consisting of 10 male and female babies and 10 in the control group in the experimental group. Research equipment included an observation card for music skills and a scale to measure Achievement inspiration. The results indicated the effectiveness of the McCarthy model with its four dimensions -with the four dimensions, the crystallization of a concept, active experiment and concrete experiences -as well as specific music skills such as Solfege, taste, innovation, singing and accompanying performance inspiration, as well as indication of inspiration.

The researcher recommended organizing training courses for female kindergarten teachers on how to implement the McCarthi model in teaching, as well as the general motivation between these teachers and parents, especially awareness of the importance of inspiration, and emphasized their active role in the learning process. In addition, the importance of providing a suitable school climate was emphasized to promote high levels of high levels of protest motivation among students, especially kindergarten children. The researcher recommended organizing training courses for female kindergarten teachers on how to implement the McCarthi model in teaching, as well as the general motivation between these teachers and parents, especially awareness of the importance of motivation, and emphasized their active role in the achievement motivations process. In addition, the importance of providing a suitable school climate was emphasized to promote high levels of high levels of performance motivation among pupils, especially kindergarten children. The researcher also suggested teaching McCarthi models for students in educational colleges and special education programs, as well as training them on the application during the training period. In addition, he proposed to conduct equal studies in different stages of education and among the specific categories of people with special requirements. She suggested performance inspiration and music skills in these people and discovered ways to examine the effectiveness of alternative teaching methods and programs that can help develop performance motivation and music skills in kindergarten children and other stages of education. Finally, the researcher suggested studying the skills required by female kindergarten teachers to effectively promote music skills and performance motivations among the students. This study is in accordance with our current research on samples of individuals with special requirements; However, it differs in its attention to the inclusion of programs and modern technologies.

2. Study of Abel Fattah Ahmad, Lamia'a (2023): (Proposed Musical Program for Preparing Disabled Students of the Faculty of Science and Rehabilitation to Interact with Autistic Individuals).

The autistic category is at the forefront of special needs populations and presents a significant social challenge, as children in this group often struggle to adapt socially and behave appropriately in various social situations. This study aligns with our current research regarding educational program ideas and follow-up; however, it differs in its specific programs and use of modern technologies, as well as the targeted category.

3. Study of Hammad, Suzan Abbas Mohammad (2023): (*Study of the Impact of Using Music as an Educational Tool in Teaching Art Education on Perception and Creativity Among Early-Stage Students in the Irbid District Directorate).*

This study examines the effect of using music as an educational tool in art education, focusing on perception and creativity among the first stage students in the Irbid District Directorate. Research included 25 male and female teachers and 1,200 male and female students.

In order to achieve the goals of the study, a mixed method approach was used, which combines quantitative data analysis with specific data collection techniques. Questionnaires were distributed to 25 teachers to gather their views on the use of music in art education.

In order to assess the overall agreement between the participants on the effect of music as an educational equipment, data was collected using statistical measures and standard deviations analyzed using statistical measures. The average score for evaluation of teachers related to students' awareness and creativity was 3.67.

The results indicated that the use of music as a teaching method in art education affects the level of consciousness and creativity in the first -step students positively. The standard deviation for the evaluation of teachers was found to be 0.90, suggesting variation in their opinion on the effectiveness of music as an educational tool.

The research method included a specially designed questionnaire to assess the consciousness and creativity of the students. the appropriate research tools were used for data collection and analysis, then with the SPSS program, used to calculate standard deviations and analyze results.

Based on these findings, the researcher recommends increasing the use of music as an educational tool to teach art education in early stages, as it can increase students' awareness and creativity. In addition, the researcher proposes to provide ongoing training and help to students to improve the effectiveness of music in the education process. This study is in accordance with our current research when it comes to assessing the level of creativity among students with special requirements, but varies in technical programs used in our current study.

Foreign Studies:

1. Mark Lucas's study (2020): (The Power of Music for Children with Special Needs. This research reveals the positive effects of music on learning, especially for children struggling in traditional educational methods), It identifies a direct relationship between music and specific skill development in the following Area:

A. Song: Communication and speech skills.
B. Rhythm: Motor improves and refines.
C. Remember the lyrics of the song: AIDS in better storage of academic material.
D. Listening to music: Increases the concentration of students in the classroom.

Music benefits both students and teachers, affecting behavior and interaction, especially for students with special demands. Music texts and neuro-intelligent programs can deeply affect the lives of children with such needs. Our music teachers are dedicated to children to help children remove anxiety, discomfort and related challenges. This study is in accordance with our current research on target groups and programs, although it varies in the the mean and technological programs.

2. Study by Rosie Rusthon, Lila Kossyvaki, and Emmanouela Terlektsi: (*Music-based interventions for people with profound and multiple learning difficulties: A systematic*

review of the literature), (National Library of Medicine, 2023 Jun; 27(2): 370–387). This study aimed to:

A. Identify peer-reviewed studies and describe the characteristics of evidence-based music activities used with individuals with profound and multiple learning disabilities.
B. Evaluate and analyze the effectiveness of these music-based interventions and identify gaps in current research.

A systematic search conducted in April 2021 identified seven peer-reviewed studies that included music-based interventions with at least one participant with profound and multiple learning disabilities.

The results showed that the interventions varied in frequency, duration, and content, with most (n=6) documenting improvements in participants' social skills. These interventions were primarily conducted (n=6) by facilitators with musical experience. The diverse nature of the reviewed studies highlights the need for broader and enhanced research within this population. This study aligns with ours, but it differs in terms of the study sample and targeted category.

3. study Noor lila Ahmed, (2023) (Utilizing Japanese Community Engagement: Understanding Malaysian traditional music therapy for children with special Needs), This study suggests an intervention treatment relating to the dances and songs of "Dikir Barat" and "Kuda Kepang" and utilizes the distinctive methods of Malay traditional performance. Children with specific difficulties will benefit from the therapy's emphasis on audience perception skills and socialization, The audience for this study, which comprised students and people with special needs, was polled using a survey questionnaire that was provided as part of a special concert. The descriptive analysis of the 5-point Likert scale survey's 20 items yielded the proportion of each item. As a result, it has been found that shows, particularly those that incorporate the performing arts of singing, dancing, and acting, greatly affect and have an impact on groups with special needs. This study adds to the body of knowledge by demonstrating how conventional music therapy can encourage children with special needs to become more actively involved in their own lives as well as that of their community.

Introduction:

The computer and its applications have become integral to modern life. The use of computer-based information technology has permeated every aspect of daily living, changing various facets of life in record time. The distance between humans and information is gradually diminishing, now measured in mere minutes and seconds. Consequently, it has become essential for any community that seeks to keep pace with the information age to educate its generations in computer literacy and technology. This is particularly crucial for those who have been deprived of the opportunities that Almighty Allah has bestowed upon humanity. The computer stands as one of the most significant scientific inventions from the past century, and a state's development in the early twenty-first century is increasingly assessed by its level of computer use[1].

Accordingly, certain countries set strategic informative plans to keep up with this development, such as:

1. Make a computer a basic component of education courses. However, the implementation of these schemes varies from the state to the state. In the extent of music composition, it has become possible to produce non-relent noises through electronic systems that produce vibrations outside the boundaries of human hearing. This technique can cause noise mixed with thunder or other sounds. As a result, this music includes the sound of collision with stones, collapse of mountains, crash of train cars and falling rain as well as other similar, imaginative Seems like at the moment, the general trend is transferring informatics to focus on integrating IT-based instructions into the curriculum.as well as other similar, imaginative Seems like at the moment, the general trend is transferring informatics to focus on integrating IT-based instructions into the curriculum.

2. Nowadays, it is possible to get the necessary information directly, and e-books have become available with new educational programs, where Multimedia is known. However, some musicians are against the use of computerized technologies and programs in advanced music, especially those who are experts in the performance techniques in western or eastern classical music. This was observed by a number of colleagues who noticed our attempts to introduce these techniques and programs to the educational plan of the MA students in Yarmouk University. The aim of this initiative is to include these subjects as part of the basic and compulsory courses for MA students studying in music, especially for people with special requirements, such as visually or physical loss.

Therefore, the purpose of this study is to clarify the ability to use modern techniques to improve the education process, especially when it comes to performing aspects, such as playing musical instruments. It wants to take advantage of technological progress in order to effectively contribute to the inclusive development process based on cognitive economy. It is necessary to develop educational methods and technologies and improve modernization education consequences and to strengthen worthy, creative individuals in the cognitive economy under the direction of advanced countries, to strengthen creative individuals, which facilitate the transfer of this knowledge to future generations.

As for the new addition of this study, it is developing the teaching methods and modern educational means through the use of computer, especially in the performance courses (playing on the musical instrument). This study came based on our Jordanian experiment in teaching music and computer curricula within three elective courses, which were offered by Music department in the Faculty of Fine Arts, Yarmouk University, which is deemed a modest experience in music teaching through computer. we relied on a number of musical programs used in the modern musical production and notation, such as (Sonar, Sebilues, Cakewalk, and Finale)

we sincerely hope to combine efforts to build musical programs specific to Arabic music, which we can deal with in terms of the specificity of Arabic music, its scales and rhythms, with all the details. This future vision of future Arabic specificity can be easily applied if we combine the efforts of the creative musicians and programmers. I believe that this will be soon realized God Willing. These programs and curricula contribute to the improvement and development of the computerized music education curricula for the disabled students or those with special needs.

The subject dealt with important psychological and sensory aspects for students with disabilities at the beginning of your university trip, especially in programs that require performance or practical skills. These students often face significant psychological and sensory challenges that can affect their educational and social experiences.

1. Feelings of Isolation and Withdrawal:

When students with disabilities first enter university, especially at the start of their studies, they may feel isolated and disconnected from their peers. This feeling may come from various factors, such as limited interaction or lack of social involvement. Students can see their environment as a "dark room", where the sound they hear does not affect them, which increases the feeling of separation from the university community.

It is important to bring to light some of the points which compound this isolation. The nature of computer work itself is one of them; working with music software is, by its very nature, an isolating task. The student wears headphones, gazes at a monitor, and enters his or her own private universe. Though this intense concentration is necessary for creativity, it necessarily removes the student, both physically and sensually, from the world immediately around him or her.

In addition, there are large gaps between "performance" and "production." In music, there tends to be an unwritten culture that implicitly values live performance more. As a result, a student working on computer-based music might feel that their work is

"invisible" or "less valuable" since they are not physically on a stage. This reduces the potential for social appreciation and peer recognition.

To remedy this, solutions need to be introduced. The computer is not the issue, but its integration into the curriculum. We need to turn the computer from an "isolated environment" into a "bridge for communication" via asynchronous collaborative projects. Rather than having each student complete a project from beginning to end alone, computer assignments can be crafted to necessitate collaboration, thus redefining ensemble playing for the digital age. This can function as follows:

Student A could begin by creating a simple rhythm track, then email the file to Student B, who needs to add a bass line. Student B then emails it to Student C, who adds a vocal melody or a lead on a virtual instrument. This immediately breaks the isolation cycle, as it forces students to listen to and build on each other's efforts. It creates a sense of group achievement for all students, including those with special needs, without the stress of being in the same physical space.

The computer studio can be rearranged into a more interactive space by setting aside time for listening sessions and positive criticism. By scheduling habitual periods in class, students can display their work-in-progress on a visible, shared screen. The goal here is not evaluation; rather, it is centered on sharing and receiving commentary from both classmates and the instructor. As a result, it provides an avenue for students to showcase their work and receive instant appreciation. Therefore, the role of the instructor shifts from just teaching techniques to designing social-musical situations.

2. Result competence and fear:

In subjects that require artistic performance, such as graphic design, music and theater, students may experience fear and concern about challenges they want to face, especially at the beginning of their studies. In this context, faculty members' role is important to help students remove this fear by providing psychological support to provide continuous encouragement to students, create self -confidence and promote positive interaction in the university's environment.

The fear of comparison is inevitable in any artistic field. For students with special needs, this is compounded by a constant fear that their work will be judged through the "lens of their disability"—either with pity or with doubt. This is in addition to the fear of a public "technical failure." In digital music, there's always the risk of something going wrong during a presentation: the software freezes, the audio cuts out, or a cable comes loose. This technical anxiety adds another layer of stress for students with disabilities, who may already feel like they don't belong and that their presence is merely a courtesy or an exception. This anxiety can be especially overwhelming for a student who already struggles with handling sudden problems under pressure.

Another factor is the "illusion of the final product." Students with special needs often see their peers' polished final projects without seeing the long hours of trial, error, and failure that came before. This can make them afraid to show their own work if it's incomplete or less than perfect.

This is where the instructor's role becomes critical: to shift the focus from the "product" to the "process." One way to do this is by requiring students to keep a project journal. In it, they document their initial ideas, the challenges they faced, the solutions they tried (even the ones that failed), and the moments they felt inspired or frustrated. This changes the evaluation criteria. "Effort," "learning," and "growth" become a significant part of the final course grade, not just the quality of the end result.

In addition, we can dedicate time for students to share their "best mistake of the week" and what they learned from it. This normalizes the idea that mistakes are not just acceptable, but are a welcome and necessary part of the learning process.

We put this into practice with a low-stakes, "quick-start" project. Students were asked to create a 30-second piece of music using only three sounds, all within a single class

period. This task was successfully completed by all students, including one who is blind. Our goal was to build their confidence before they tackled a larger project and to allow them to get familiar with the tools and make mistakes in a low-pressure environment.

Finally, when a student—especially one with special needs—mastered a particular technique, we asked them to explain it to the class. This simple action created a powerful role reversal. Instead of being a receiver of help, the student became a source of knowledge, which dramatically boosted their self-efficacy and transformed how their peers viewed them.

3. Teacher's role in psychological and social support:

Teachers play an important role in creating a non-stretch and accessory learning environment. Eventually, teachers can help students create the confidence needed to improve their skills to ignore more complex tasks and mistakes than simple. In addition, the students encourage to interact with each other and participate in academic and social activities, promote the relationship between brotherhood and nourish the feeling of belonging to the department.

We feel the role of the instructor is to be an experience designer, not merely an information provider. An instructor has to deliberately design learning activities that promote interaction and collaboration. The reason is that a positive environment does not occur by chance; it is a product of intentional design.

How a teacher owns up to their own errors, discusses difficulties, and gives criticism all provide a model that students will emulate. If a teacher is vulnerable and understanding, students are much more likely to feel secure enough to be vulnerable as well.

A teacher should act as a bridge instead of an obstruction. Their work goes beyond the evaluation of the competencies of individuals; it involves the creation of connections between learners and between the learners and the subject matter. This requires one to have increased sensitivity to the words used. For example, the word "talent" might be harmful because it suggests that ability is inborn and fixed. Such suggestions can discourage people who feel they lack them. Instead, it is best to use words like "skill," "effort," "growth," and "practice."

This principle is also applicable to how assignments are presented. Instead of saying, "Your assignment is to write a whole piece of music," a teacher can say, "Your assignment is to investigate a particular technique." This slight change removes the huge pressure to create perfection and focuses instead on learning and experimentation.

In addition, when there are group projects, the roles must not be left up to chance. Specific roles such as "Sound Engineer," "Lead Composer," "Project Coordinator," or "Rhythm Specialist" must be assigned by the instructor. This will provide every student, even the most reluctant, with a particular responsibility and a sense of significance within the group.

4. Social integration through group activities:

Participation in music or dramatic groups contributes significantly to the development of a sense of connection and collaboration between the students. When students feel that they are part of a group that works together to achieve a common goal, it improves their spirit and inspires them to their best performance. These activities give disabled students an opportunity to recognize their importance in the team, promote their morality and contribute to their educational and social success.

Having a common objective is the hidden ingredient that makes a group of people into a team. In music, that common objective might be scoring a student film or writing a piece for an interdepartmental university class. The sense of responsibility to others is a much stronger impetus than any personal motivation.

To accomplish this, one must overcome the perception of 'students simply need to "accept" students with special needs.' The aim is to create real interdependence, such that

the group recognizes the legitimate necessity for that student's special strengths. If the group becomes aware that their colleague is a master of sound design or harmonic composition, the person moves from being merely accepted to being vital to the success of the group as a whole. That is the impact we are sincerely trying to create.

It also teaches them important life skills such as working under a time constraint, communicating, resolving conflict, accepting constructive criticism, and appreciating the input of others. As explained before, providing specific roles can be a powerful way of doing so. By assigning the student with special needs a "Rhythm Engineer," "Harmony Expert," or "Lead Composer" role, we can ensure them of their cooperative role in the group.

More generally, collaborations with other film, design, or drama university departments can be incredibly beneficial. For instance, a group may create the musical accompaniment to a short film made by cinema students. This activity gives their work a tangible purpose beyond the departmental environment and makes it more applicable to students with special needs in the broader university environment. The student views their music as being part of an overall work of art that will be shared publicly. In addition, this collaboration can be at the level of producing the music for the final gallery showings of visual art and design students so that they are able to contribute back to the celebratory events of fellow students and have a strong sense of belonging and pride in the group.

5. A Flexible, Customized Curriculum: From One-Size-Fits-All to Multiple Paths:

Traditional curriculums tend to be a one-size-fits-all, straight-line sequence in which all learners must master the same skills, in the same sequence, at the same pace. This can be rigorously limiting for students with disabilities who might possess outstanding strengths or must learn differently. By the use of computer-based technology, however, there is the possibility for unparalleled methodological flexibility.

Project-based learning is a good case. Rather than a group of unrelated technical exercises, the course might be organized around large creative projects. Within a project, learners may select to work on the aspects that intrigue them and at which they are proficient. In a songwriting project, for example, one student can work on sound design, another on lyric writing, and another on harmonic structure. They are all being taught, but through various avenues that lead to one, common objective.

Empowerment through choice must also be present. The course needs to offer students real choices, not only of the type of project, but also of the equipment used. A student may find one certain DAW more comfortable due to its interface, whereas another will be better suited to use a particular MIDI controller. Choice makes the student an active participant in their own learning rather than a passive recipient of information. Choice gives autonomy, respects the uniqueness of individuals, reduces anxiety, and promotes confidence.

Finally, the course must include experiential professional skills directly relevant to the digital music industry, such as elementary knowledge of internet music distribution and intellectual property rights. That way, their education is directly transferable to their future jobs and instills a sense of direction, especially since these jobs do not necessarily rely on traditional physical concerts.

6. Rethinking Assessment: From Judging Performance to Valuing Growth:

Standard arts assessment procedures, generally involving a single culminating performance assessment, can become a major source of stress and seldom truly show a student's actual growth, especially for students who do face some special challenges. The inclusion of technology allows for the incorporation of more comprehensive and empathetic approaches to assessing.

This calls for ongoing, multi-lateral evaluation. Rather than basing grades on a term project alone, grades must be earned through a body of work that is built up during the

semester. This body of work would consist of completed work, but also drafts, failed experiments, project journals, and constructive criticism from other members of the team.

Some of that evaluation must be developmentally oriented as well, measuring how far that student has traveled in relation to their own starting point, not necessarily relative to everyone else in the class or compared to a predetermined standard. This approach acknowledges personal effort and respects the progress that each student has made, so it is more fair and motivating to all concerned.

We should also enable varied modes of submission. Permit the students to submit their work and reflections in varying forms. Some may want to write a report, while some will make a video documenting their process or a presentation. This disables barriers on the basis of certain skills (such as lengthy academic writing) and enables students to present themselves in the manner they feel most at ease with.

7. Constructing Artistic Identity: More Than Technical Skills:

Finally, tertiary creative arts study is not only about the transmission of technical proficiency to students for a career. The ultimate aim is enabling them to establish their artist persona and position themselves within the broader creative society. People with special needs students experience it as two-stage identity formation because they have to overcome stereotypes and societal expectations.

The dialogue must change from "What can you do?" to "Who are you as an artist?" How can your life experience as a person—also the experience of having a disability—be a source of inspiration and creative strength, instead of something to conceal?

The academic institution must consciously expose students to professional People with special needs artists who are already successful professionals. They can do this through workshops, guest lectures, or mentoring programs. Being exposed to these successful role models who have taken the same journey is incredibly empowering. It proves to the student that there is a place for them in this world and they can be successful too. It makes a mere aspiration a reality.

The program not only instructs students in the craft of music composition, but also how to document their artistic endeavors, negotiate for accommodations, and assert their rights as artists. Through this means, they learn important skills that will benefit them far beyond graduation, as they transition from being recipients of assistance to being active agents and advocates for themselves and others.

Essentially, the path we have outlined represents a journey:

A. It starts with diagnosing the root issues of fear and isolation.
B. It moves to direct, practical solutions involving the instructor and collaborative activities.
C. It then expands to structural changes in the curriculum and assessment.
D. Finally, it leads to the deeper philosophical aim of education: identity construction and the fostering of true empowerment.

The study highlights psychological and social challenges students with special demands face, especially in academic surroundings focused on competence from music performance. An initial assessment made with these students revealed many manifestations of fear and anxiety affecting their educational and social experiences. Below are the details of these challenges:

Fear of the Music Performance Specialization

Students experience significant concern about music performance skills, especially for the fear of using musical instruments and making frequent performance errors.

For them, there is a hidden fear that any ghastly performance or error will only confirm the negative stereotype available for people who already are about the competence of people with special needs. For them, every mistake is a "proof" to others that they can't, and this is enormous pressure on all the work that they have done.

We also dread the fact that this pressure may result in loss of passion. A student may have entered this field out of very strong love for music, but fear of always psychological tension and failure may convert it passion into a source of pain and anxiety.

It aggravates by incessant, unavoidable comparison. They see their friends advancing rapidly, their own lagging slowly or being a double job, and a painful feeling of subordinatedness which doesn't wish to do them in front of anyone. And it is notable that they quote the fear of acting or act differently. Many students with special needs look at views from teachers and classmates with sympathy rather than respect. This can cause them to refuse assistance or accommodation merely because they are afraid of being treated as a "special case".

Weak Performance and Hesitance in Problem-Solving

Students demonstrate normal weaknesses by performing and noticeable hesitation when facing problems, highlighting the skills to solve the problem and immediately need to develop self -confidence.

Music performance at the same time requires processing of many cognitive and motor functions, such as noting, active hearing, maintaining rhythmic accuracy, expressing artistic expression and performing fine motor movements. For a student with learning or processing difficulties, this high cognitive load can lead to a complete 'cold' response. This experience of cold, for its part, can be an important source of concern for later performances and create a debilitating cycle.

Fear of Interacting with Music department Peers

Students experience fear when interacting with their peers, which often leads to isolation and introversion. They often prefer to sit alone, reflect the inner feeling of discomfort and lack of belonging.

This fear only exceeds social shame; It lies in a complex set of perceptions and experiences. The conversation of the conversation should not be done wrong as simple introvertity. Instead, it forms a complex sexual mechanism that arises from several factors: fear of highlighting vulnerability, expectation of mercy or misunderstanding, an alleged difference with peers, and the desire to avoid the exhausting strain with constant self -existing.

As a result, the task of a student's "sitting alone" should not be interpreted as a passive return position. In fact, this is an active, self -protective decision made to navigate the environment that the student considers poorly equipped for his complete understanding or accommodation.

Fear of the Teacher

From the first day of the classroom, students express fear and concern about their teachers, which adversely affects their ability to participate and participate in the education process.

When taking up the fear of a teacher, it is important to identify that it is not a simple fear of authority, but a complex, versatile concern. This concern lies in many different concerns: Fear of a certain decision on someone's ability, fear of revealing someone's alleged disability for a specialist, someone's specific needs will be misunderstood, and fear of being regarded as a burden on the education process. This analysis emphasizes why the teacher's sympathy initiative to demonstrate and establish a secure synergy is important to eliminate this cycle of fear and strengthen the student effectively.

Anxiety about Examination Committees

Significant anxiety arises during exams assessed by committees composed of faculty members. This anxiety manifests in physical symptoms such as trembling hands and body, intense stress and fear.

The anxiety surrounding examination juries transcends conventional test-related stress; This represents the culmination of existing anxiety for a student. This state is inspired by the intensive investigation of a judging panel, a number of assistants, a public

and documented failure, and the notion that someone's personal reference and history are ignored. Severe physiological symptoms that can be displayed are not a sign of weakness or lack of preparation, but a natural physical reaction to a malignant psychological threat, where the student's entire identity is evaluated at stake. This outlines the important need to assess such evaluation methods in favor of more human and holistic approaches.

Feelings of Inadequacy Due to Physical Disabilities

Students with physical disability often feel inadequate than their peers without disabled people, increase their psychological stress and reduce self -confidence.

When coping with the feeling of inadequacy, one must identify it as more than a social comparison. It is a strong and complex emotion that harkens back to the realization of an unattainable ideal, which elevation daily, constant wrestle with his tools and movingly divergences between artistic desire and physical capacity. This mood is not an aftermath; It is the prime cause of the psychological crisis and loss of confidence, This reality highlights the serious nature of interventions based on creating their own efficacy and restoring norms to succeed.

Existing concern for a professional future: "Is there any place for me?"

To conclude on this point serves to illustrate the way in which these initial anxieties add up to an underlying existential fear about the vocational fate of the student. This is not just skill -oriented; It is tied to the social and artistic context with deep issues of identity, status and so forth. It is a product of the normalization of negative educational experience, industry requirement phobias and a specific lack of reliable exemplars. It is aimed at putting the responsibility of higher education onto wider shoulders than current training. It will also play students to equip hope, tools and strategic contours required to build a successful and durable professional future for themselves.

Importance of Psychological and Social Support

The study emphasizes the importance of giving students broader psychological and social support, not only to help them overcome the fear, but also to enable them to achieve education success and skill in an inclusive environment. Such support may include:

1. **Psychological Counseling Sessions:** to reduce anxiety and increase confidence.

Psychological counseling services should target specific anxiety for performance under being culturally able to have questions about disability and identity. The support should not be limited to individual sessions, but must expand to involve colleague support groups, which are important to reduce insulation. Seriously, the final purpose must be student power, they must be equipped with equipment for self -infusion. As a result, the role of the counseling only exceeds the reduction in anxiety; It aims to promote the confidence and skills needed for long -term success in an inclusive and durable environment.

2. Training Programs: To improve performance skills and problems in solving problems.

In the context of "training programs", it is necessary that they are specially designed to overcome traditional practice. They should focus on adaptive performance training that adapts physical requirements, promotes creative and technical skills in problem solving, defining performance through Low-risk trials and providing practical advice from experienced doctors. This approach not only improves performance skills, but also self -confidence and flexibility ahead of the challenges.

3. **Creating an Inclusive Environment:** to promote positive interaction between colleagues and teachers.

The creation of an inclusive environment requires an active and intentional approach, which is only above good intentions. This should be a shared responsibility that is embraced by the entire community. Positive interactions should be systematically constructed through the offer of curriculum design, awareness and sensitivity training for

both the faculty and students, and most importantly, the celebration of diversity as a creative property instead of a barrier. Such an environment not only reduces fear, but also cultivates fruitful grounds, which all students can experience and experience the real feeling of belonging.

4. Workshops for Faculty: To educate employees on how to handle these students with sensitivity and sympathy.

Workshops should be practical and action -oriented, not just an appeal for sympathy. They are bound to equip the faculty with tangible educational equipment and introduce them to the principles of the universal learning design (UDL) for the active design of the inclusive course. It is important that these workshops must include experienced simulation and authentic students' testimony to convert the theoretical understanding of an applied sensitivity that replaces daily classrooms. As a result, these workshops are not just training; They represent a basic investment through the branch culture.

5. Offers and adaptation of assistant technology as fundamental rights:

Although we have focused on computer -based music software as a primary tool, the efficiency is randomly on the student's ability to interface. Real inclusion requires offers and adaptation of a wide selection of assistant technologies, These technologies act as a bridge between the students and the software, and transform the computer into a real forces potential tools. Such techniques include, but it is not limited, the keyboard that can be played with one hand, or which can be activated by screen extension programs for movement or blow, or even by tracking the movement to the eye, or using text-to-speech and vice versa, and the use of students with visual impairments.

6. Reorganization assessment policy for flexibility and equity

We have previously addressed the "anxiety of examination juries". A systemic solution to this problem is not only to provide psychological help to the student, but basically changes the species of the studies themselves. Stiff and precious academic policies often make the most important obstacle to success for disabled students. Therefore, it is compulsory to restructure these guidelines

This comprehensive framework thus addresses:

A. Psychological support through counseling.
B. Practical support through training programs.
C. Social support through an inclusive environment.
D. Human support through faculty workshops.
E. Technical support through assistive technology.
F. Structural support through equitable assessment policies.

These efforts can significantly increase students' educational and social experiences, affect their achievements and integration and the spirit of the related positively.

The results of the preliminary study for students with special requirements detected significantly positive changes, reflecting the success of the efforts to support both psychologically and academic. The findings can be summarized as follows:

1. Psychological Stability and Composure

Students demonstrated psychological stability and composition in their performance, with no signs of stress or fear.

This mental balance became now not characterized through the mere absence of fear, but rather by using the presence of focus and a state of creative immersion referred to as the 'Flow State.' Students transitioned from a country of hyper-self-cognizance and tension about judgment to one in all deep immersion within the innovative process itself. Consequently, their performances began to reflect no longer best technical talent however also expressive authenticity, as they possessed the requisite psychological safety to carry their emotions via their music.

2. Proficiency in Musical Instruments.

The students became skilled in using musical instruments, delivering distinguished performances freeing up from problems that previously prevented their progress.

Instrumental mastery not only represented the improvement of the skills, but also made a fundamental change to the student's relationship with their instruments. The instrument developed in the expansion of a creative partner and their artistic voice through a resistant means of conflict. Able to integrate supportive technology and adapted software, the students did not struggle anymore against their equipment; Instead, they began to use them with flow to detect and solve complex music problems.

3. Interaction and Collaboration with Peers

Promoting a help environment and productive collaborative environment was observed significant development in the interaction between students and their colleagues in the department.

The evolution in interaction transcended superficial engagement. A clear change in the dynamics of the team was observed, where students with special requirements were no longer considered a passive recipient of assistance, but as significant contributors and domain -specific experts (eg in sound design or digital events). The collaboration was based on mutual respect and mutual dependence on skills, effective in destroying isolation and promoting real collegiality.

4. Overcoming Teacher Anxiety

The students overcame their fear of teachers thanks to consistent of continuous encouragement and emphasized their roles and the importance of strong performance, which promoted their morale and confidence.

The student-teacher relationship underwent a significant change, which develops from a dynamic for fear of the authority for cooperative mentorship cooperation. The instructor was no longer considered assistant, but was not considered a guide during the learning journey as a colleague and a guide. As a result, students began to seek creative response and shared their challenges clearly, completely cognitive that shared purposes were their artistic development, not just their summative assessment.

5. Confidence in Dealing with Examination Committees

Repeated interactions with exam committees regularly reduced students' worry. Supportive practices and non-stop encouragement caused substantive enhancements of their psychological and educational stages.

Competent of flexible policy and a growth-oriented focus, examination juries ceased to represent an existential threat of an existence and instead became opportunities for artistic discourse and progress. The students exceeded one of an open commitment from a defensive currency, cognitive that the role of a jury was to provide valuable feedback instead of presenting a definitive verdict.

6. Boosted Self-Confidence and Academic Performance

The effective outcomes done through the students better their self-confidence and strengthened their sense of importance inside the institution, leading to tremendous enhancements in their performance and academic standing.

The students' self -concept developed; They stop defying through disabilities or alleged deficit lenses. Instead, he began to identify himself as musicians, producers and colleagues. This identification change represents the most durable and significant results, as it equipps them with the psychological flexibility and self -efficiency required to meet future challenges, both within the academic institution and beyond.

Analysis and Recommendations

These findings spotlight the importance of targeted psychological and social support for college students, which positively affects their performance and conduct. Based on this revel in, the subsequent recommendations are made:

At the student level (individual support):

1. Continuing Psychological Support: Focus on sustaining Focus on maintaining psychological and social support, including consulting sessions and positive reinforcement.
2. Community and professional connection: Establish a mentoring program that combines students with artists and professionals with disabled people in the creative industry.

At the teacher and class level (learning environment):

1. Creating an Inclusive Educational Environment: Promote Naturally promote interaction and collaboration between all students to integrate those with special requirements.
2. Training for Faculty Members: Organize workshops for Organize workshops for the faculty on effective methods to contact students with special requirements.

At the department and policy level (structural support):

1. Curriculum: Integration Continuous for Universal Design (UDL) principles for learning in course design.
2. Assessment: Follow flexible evaluation policy that focuses on profits and development rather than direct performance alone.
3. Technology and resources: Establish an adaptive creative laboratory and benefit an annual budget to upgrade supportive technology.
4. Monitoring Performance: To ensure continuous improvement, track students' educational and social progress continuously and address any challenge that may arise.

This successful experience acts as a model that can be adopted to support different groups of students with special requirements.

Participation shall include all members of society, including special requirements. From our educational experience in this field, we have seen that some individuals in this category have a deep ability for intensive sensitivity and music observation.

Development of Computer-Based Music Education:

Since the beginning of modern times, humanity has wanted to highlight nature's mysteries and exploit this knowledge for its own control. Every day of acquiring new energy - the energy that does not know the border or obstacles, he has succeeded in launching technological progress in a way far beyond imagination. (Al-Shorbanji,1996, p.159).

Teaching meaningful music at the elementary level enhances life, and it is invaluable in stimulating creative thinking in enhancing resilience and adaptability. In this regard, Wajeeh Al-Shorbaji says that we have to reconsider the applied methods of the educational process, because it became one of the greatest industries, and has to synthesize new methods and technologies, and resort to all the rational organization and procedural research to increase the return of the educational process. (Al-Shorbaji, 2003, op cit, p. 162).

In light of the communication revolution and the emergence of special satellite channels, including the media and new education channels, we observe a decent leap that crosses the obstacles to consciousness and knowledge. This progress is without obligation to a single teaching method that is passed through generations or dependence on chronic appliances and methods. Instead, modern approaches that resonated with the realities of our Arab communities and respect their traditions and values. In order to keep up with the developed landscape in performance, theoretical technologies and their applications, it is necessary to remain up to date on progress in all scientific domains. To achieve this assignment requires a global discovery for innovations in technology and effective communication with educational centers and institutions worldwide.

At the beginning of our discussion on the levels of technological development in song and their impact, we need to spotlight the effectiveness of this technology and its impact

on music tune. We will pass the earliest stages of technological development and start with the primary level of musical notation the usage of computers.

This first degree substantially progressed the high-quality of musical writing, which had previously been performed manually or on typewriters in particular designed for music, just like typing in Arabic or different languages.

Figure (1): Melotyp Typewriter specially designed for musical notation. Manufactured in Arko Factory in Frankfurt in 1936.

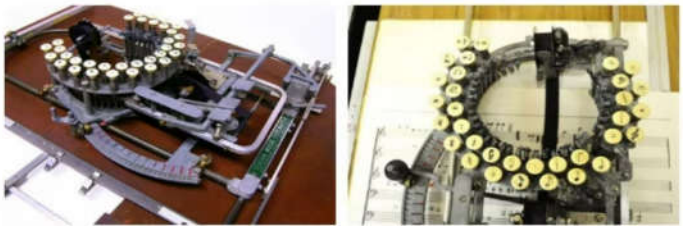

Fig. (2): (Keaton) Typewriting Machine; developed and consists of 33 buttons or keys, designed by Robert H Keaton in 1955

This technique helped to create the printed practical consequences accurately and clearly, while saving time and effort for the user, as well as improving the aesthetics that the musician has achieved. Significant growth occurred in 1988 when IBM created an electric musical typewriter, which facilitates the performance speed and improved overall results.

Fig. (3) Typewriter made by IMB Company in 1988

One disadvantage of this machine is that when a music note is written, it cannot be replaced or correct; Instead, the paper should be replaced and the whole side was rebuilt. It remained so, remained to the emergence of the Atari program in the early 1990s, which allowed users to edit the text and the correct paragraph before they state the final print command.

Unfortunately, many musicians are resistant to the concept of "technology" and reject any new development introduced to music. This answer is not new; Throughout history, there are always people against change. Sometimes this resistance to confrontation increases to clash point. We can observe the development of music through Baroque, romantic, classic and other eras, that contributed to the development of each musical art form.

In the Arab world, the first use of music software began as remarkably with the introduction of the common program named “studio program” around 1994, with limited abilities and a file size of no more than 1.5 MB. The program faced many technical challenges and obstacles. Thereafter more advanced software appeared, which deals with

some obstacles that users face. However, many musicians opposed the integration of technology into music, and with a categorical rejection of its use, citing the lack of emotional depth in electronic compositions.

Today, electronic media have become essential in the process of musical composition, as composers use them to test their notes and explore different instrument arrangements. Electronic technology facilitates the creative process, enhancing the overall musical experience. It continuously introduces innovations that bring recorded music closer to the quality of live performances in concert halls. We have even reached a point where computer programs can play instruments directly, effectively transforming the computer into a personal musician that automatically performs chosen pieces by moving the fingers over the piano keyboard with unseen precision.

Benefits of Music Programs Used by MIDI Systems:

Modern music programs users develop the ability to do:

1. Check the theoretical, historical and technical approaches required to create and perform music.
2. Use the basic principles of music theory and its principles.
3. Use standard equipment and applications for the production of industry music and multimedia.
4. Organize and print music works.
5. Enter Midi-based music phrases or pieces and change them.
6. Use a microphone and work on the Wave system.
7. Transfer produced musical work to multiple formats.

Computer-Based Music Education at Yarmouk University

This study depends on the practical application of different teaching and learning methods, and performs several practical experiments (performance) in computerized teaching laboratories at Yarmouk University. Experiments included practical lectures aimed at teaching concerts as a method of teaching music programs through computers. These experiments were performed with students of the second, third and fourth year, which gave their feedback the necessary comments and instructions. The teaching took place in the data laboratory, an environment that is familiar with the students. These performance experiments were implemented to avoid expected technical damage during the instructions.

Computer -controlled music teaching programs were developed based on the choice of music applications designed to serve students. Their goals focus on many big points:

1. Explain the concepts of music forms, rhythms and speeds.
2. Explains the concept of music scales and keys used for all musical instruments.
3. To clarify the principles and rules of music theory.
4. Use rules and principles of harmony.
5. To simplify the rules and principles of counterpoint.
6. To implement rules and practice for music composition.
7. Benefit from explaining the rules of the orchestra and instruments sciences.
8. Benefit and understand the rules of music production, including sound effects, recording techniques and conversion to different computer systems and concepts.

Effect of the Use of Musical Programs on Students with Special Needs:

In the computer labs course and compulsory and alternative courses of the Department of Music at tat Yarmouk University, the researchers observed considerable commitment among the students. He performed high levels of interaction with materials, which was clear in their communication with the researchers outside the lecture and sometimes beyond planned working hours. This commitment is reflected in their inquiry about specific icons, how to use some codes and how to get special applications. Therefore, music educators must be resourceful in gaining insight into the skills, strategies, and

understandings that accompany the experience of teaching a student with special needs. (Alice , Ryan, 2020. P1)

These comments outlined the importance of these programs and boundaries for the students' interaction with them. There is a study looking at the music learning strategy implemented at TK Hj. Isriati Baiturrahman 2 Semarang is carried out with the process of seeing, imitating, and finding. The strategy is to know the condition of children, especially children with special needs. (Aliffiya, Alfine, 2023, 7).

There is a study or article published by Jean B. Crockett , In the Music Teachers Magazine looking in the legal aspects of teaching students with disabilities in the context of music education, topics promoting students' achievement through the law of each student who succeeds, and protecting individual access to the music curriculum (Jean B. Crockett, 2017).

In addition, it is remarkable that many graduates in the Music department have set up center or smaller studios at home, and work with music production - whether they are making songs or audio tracks for local films and episodes. Some of these graduates, who have special requirements, have converted this work into a source of income.

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