INTRODUCTION

In our teaching career we come across different types of students with different IQ levels: intelligent, average or even below average. Often, we also come across children with various learning disabilities or even children who are late bloomers or slow learners. These children find it difficult to excel in their academic performance even after putting in sufficient efforts.

As an academician and a psychology teacher for grades XI and XII, I have tried various techniques to help out such students such as repetition, learning by rote, writing down the learning material over and over again. While trying out such techniques, I discovered that some students either had an attention span which was too short or some students had learning disabilities or some others were late bloomers. I began trying out novel ways of helping these children such as singing motivating songs to boost them and taught them to recite the “Om” to relax and improve their concentration.

Now let us understand what do mean by a “disability” and what are the different types of disabilities.

WHAT IS A DISABILITY?
A disability is defined as “a state that could obstruct the mental, sensory or mobility functions of a person, in order to perform a certain task or activity as any other normal individual would.”

CAUSES OF DISABILITIES.
Accident, trauma, hereditary factors or disease which may restrict the mental processes, senses or mobility of a person are some of the causes of disabilities.

TYPES OF DISABILITIES.
1) **Physical:** It hinders an individual’s mobility or dexterity.

2) **Intellectual:** It obstructs the various mental functions of an individual. Eg. Down’s syndrome.

3) **Psychiatric:** It affects a individual’s thought processes.

4) **Sensory:** It obstructs a individual’s ability to hear or see.

5) **Neurological:** It leads to a loss of some bodily or mental functions which include certain sensory input problems.

6) Disabilities could be caused by certain organisms that are capable of causing diseases in the body.

7) **Learning Disabilities:** It refers to children who have difficulties learning and performing various skill – related activities.

Now let us view the different types of learning disabilities.

**TYPES OF LEARNING DISABILITIES.**

1) **Dysgraphia**

   It refers to children who have difficulty in mastering handwriting and written language. Children with this disability are likely to have ongoing problems with fine motor skills needed to learn handwriting and may have problems making connections between verbal and written language. It results in difficulties with neat, accurate and consistent handwriting and the organization of written words, sentences and stories. Such children can benefit by use of computer to type written assignments.

2) **Dyslexia**
Dyslexia is one of the most common learning disabilities. Children with dyslexia have difficulty in reading words that sound similar, recognizing letter or word patterns, understanding vocabulary or achieving the reading level required at the given age. They have trouble forming connections between new vocabulary and past concepts or images.

3) **Auditory Processing Disorder**
Children with such a disorder cannot correctly process the meaning of words that they hear. He is unable to distinguish between sounds of different words properly due to auditory processing disorder children can have difficulty with basic language skills and comprehension as well as understanding difficulty in understanding spoken language.

4) **Dyscalculia**
Dyscalculia is a learning disability that affects the ability to understand basic mathematical concepts. Such children have trouble comprehending the logic behind concepts such as fractions, time, money, etc. At a later stage, they are unable to understand mathematical reasoning and word problems.

5) **Dyspraxia.**
Dyspraxia leads to the difficulty in handling fine motor skills. Such children have difficulty in eye-hand coordination, problems in balance and manual dexterity.

6) **Visual Processing Disorder.**
Visual Processing Disorder implies problems in interpreting visual information. They face difficulty in reading and understanding maps, charts, symbols, pictures, etc.

7) **Attention Deficit Disorder (ADD)/Attention Deficit Hyperactivity Disorder (ADHD)**
It is a disorder which makes it difficult for children to inhibit their spontaneous responses right from movement to speech and attentiveness. Such children are just unable to sit still, remain focused, follow simple instructions, stay organized or even complete their homework assignments.

HOW TO HELP CHILDREN WITH LEARNING DISABILITIES?
Using a telephone analogy, incorrect wiring in the brain upsets the normal communication process which creates problems in processing the information easily. If the communication service was down in a certain area of the city, the telephone company would handle the problem by simply re-wiring the connections. In a particular learning condition, the brain has the ability to reorganize itself and to format which facilitate the skills like reading and writing which had difficulty in using the old connection.

WHO IS A SLOW LEARNER?
A ‘slow learner’ or a so-called ‘late bloomer’ is difficult to identify since he/she appears similar to any other normal human being and can function normally under most of the normal situations. He/she has physical dexterity like any other normal individual, adequate memory and possesses common sense like any normal person. Thus it is difficult to understand how this child can be called as a ‘slow learner’. This child does not have the ability required to do school work.

A ‘slow learner’ is the one who needs more time than most others in order to understand an indubitable task such as reading or how to cook a particular dish or how to do some kind of work. They generally require more time to practice than any other average child.

Some common characteristics of a Slow Learner:
1) Their intelligence is 75%-90% of the average child.
2) Their reading comes a year later than other average children.
3) The rate at which they learn is 4/5 to 9/10 that of the normal rate.
4) Abstract thinking is highly problematic for a slow learner.
5) Their attention span is quite short.
6) A slow learner reacts quite slowly compared to an average child.
7) His/her self-expression is a quite awkward and self-esteem is found to be quite low.
8) Most of them generally score low on achievement tests.
9) They often score below the grade level.
10) They are prone to immature interpersonal relationships.
11) They have problems to follow multi-step directions.
12) They generally live in the present and do not have long-range goals.

**IDENTIFYING A SLOW LEARNER.**

Teachers should carefully observe the traits of the child who appears to be a slow learner. Specific tools could be used to identify a slow learner. These tools could be made by teachers themselves or could be commercially produced. These include tests, checklists and rating scales.

Genesee and Upshur (1996) stated that observation is the basic method in assessing human skills and behaviour, and thus is a useful strategy in identifying behavioural problems. In addition, much of the useful information can be obtained from interviewing parents, teachers, classmates and the students themselves.

Lescano (1995) suggests that their weakest skills are reading and writing. Many slow learners have problems in perception. They go for an overall comprehension and production of the information and tend to ignore the details. For instance the apostrophe or the plural forms may go unnoticed while reading. In the same way, some tend to omit forms of speech while writing or speaking.

**EFFECTIVE TEACHING TECHNIQUES FOR SLOW LEARNERS.**

Harmer (2001) states that students tend to learn faster if the teaching methods match their preferred learning styles. As the learning ability improves, so does the
self-esteem of the child also increase. This will have a further positive effect on learning. Those students who were previously bored with learning tend to be more interested once again.

Lescano (1995) suggests the following strategies to help slow learners:

1) They should be given suggestions daily.
2) Simple vocabulary should be used while giving any directions and instructions.
3) Multi-sensory promotes should be made available in order to elicit correct responses.
4) Try analyzing and breaking down the tasks that are difficult.
5) One must increase the time allotted to them for any given task.
6) Facilitate teacher questions, encourage group participation, as well as effective use of certain gestures.

A website for slow learners has further suggested some strategies for teaching slow learners:

1) Distractions should reduced by providing them a quiet and private place to work.
2) Emphasize on their strengths. Frequent praise and reinforcement should be used.
3) Make the lessons start for them.
4) Add a variety and novelty to the academic routine such as making use of games, puzzles and by applying various other techniques.
5) Make learning more fun and comfortable for them.
6) Allow the communication process between the teacher and the child to be more free.
7) Providing meaningful activities rather than abstract ones.
8) Encouraging the child to explore the areas of their interest. Career opportunities of the child often come from these interests.
According to Christiana Sayyah, repetition is another technique that can help a slow learner. The more you go over something, the more it will begin to make sense to a slow learner. The more a child hears something, the more likely they are to retain that information. Make use of rhythm as it helps in better recall. Songs are more fun for kids than simply reciting numbers, tellers or shapes. Congratulate the child on a job well done, after every correct answer.

According to Sheree Flanningan and Kelly Groth, simply place the right students together in pairs or group situations. Thus one can use ‘peer tutoring’ without drawing attention of the slow learner. Computers can be of great help in the classroom. Computers do not tire the child, making practice more effective and also fun. In giving instructions you should say the child’s name or touch the child before giving the direction. Once the student turns in the work or answers orally, provide them with immediate feedback.

Music has a wide scope. There are a lot many areas where music can help to bring in change in the life of a human being

**WHAT IS MUSIC?**

“Music” is present within each one of us and we just cannot be free from it even if we wish to do so. Music is present within us, around us. It is a gift of ‘Goddess Saraswati’ to the living organisms. There is music in the chirping of the birds, in the various animal sounds too. The sounds of the wind and the sea also play music. There is music in cry of the new-babies. The swaras: Sa, Re, Ga, Ma, Pe, Dha, Ni, Sa are all present within us. Yet very few of us are really lucky to either master or at least have some knowledge about this divine gift of the Goddess i.e. music.

Music can have a great impact on our moods. It makes you forget yourself. When at times, you are not able to achieve your targets and feel as if you are a failure in life, you just listen to some motivating songs with concentration. They will pep you up and just see how efficiently you will start working again. When you feel sad and
upset, listen to some sad song that actually brings tears in your eyes. They will give a vent to your emotions. They will make you feel lighter and gradually just bring you back to normal.

Music is an artistic form of auditory communication which involves instrumental or vocal tones in a properly structured manner. Music works as a life-management service. It helps to speed up reaction time, increases alertness, improves coordination between the mind and body and facilitates efficiency in perception and performance.

Music had helped Thomas Jetterson to write the ‘Declaration of Independence’. When he could not frame the right words for a certain part, he played his violin to get the words on to paper.

THE INDIAN ORIGIN OF MUSIC.
Since ancient times, music has been a part of the Indian culture. It is a very old part of Ayurveda which promotes a happy and a healthy life.

The rhythmic sounds found in the temple bells and ‘shsnkhas’ are also a form of music. They tend to destroy the bacteria and germs in the surroundings.

SCOPE OF MUSIC.
(1) Music helps to enhance self-esteem.

(2) It improves concentration on a certain task.

(3) It enhances academic performance.

(4) Autistic and retarded children respond very well to certain kinds of music.
(5) Playing music in the background, as we do some work, being unaware of the music itself, enables us to reduce stress and thus enhances our performance.

(6) Listening to the various sounds of nature like the waves of the ocean, the calmness of the deep forests can provide instant relief from stress.

(7) Music also enables us to regulate sleep cycle for insomnia patients.

(8) It helps to maintain sugar levels in the blood and thus control diabetes.

(9) Music aids to stabilize blood pressure and heart rate.

(10) Special pieces of music enable hens to lay more eggs.

(11) It aids cows to yield more milk.

(12) Research has proved that almost all types of music except for rock music facilitates the growth of plants.

(13) It can also be used to cure autism, dementia and Alzheimer's disease.

(14) Mentally retarded children show an improvement in academic performance, when exposed to music.

(15) Pregnant women when exposed to music develop a positive attitude and a relaxed mental state of mind. It also enables the mother to give birth to a brilliant child.

DIFFERENT TYPES OF MUSIC.
The different types of music are:-
1) **Classical Music:** Classical music needs skills like learning the various ragas and the ability to co-ordinate with the other musicians. This form of music requires specialized training.

2) **Rock Music:** In this form of music, vocals are accompanied by guitar, drums, bass, piano and saxophone for a deeper effect.

3) **Metal Music:** In metal music, the song’s melody depends on its structure.

4) **Hip-Hop Music:** This type of music is a result of the hip-hop culture. It makes use of instruments like guitar, violin, fiddle, piano, bass and drums. However, the bass is the main instrument.

5) **Trance Music:** This music is characterized by fast tempo and repetitious beats. This kind of music is often heard in discotheques and clubs.

6) **Jazz:** This music comprises of strong and complex rhythms. The main instruments used are cornet, trumpet or violin.

7) **Folk Music:** Folk music is handed down from generation to generation in every culture. It indicates social upheaval.

8) **Techno Music:** This is a form of electronic music. It is also known as ‘fusion music’. It has very fast beats.

9) **Opera Music:** Opera music is a combination of art and music that is generally witnessed in the theatres.

There are still more types of music such as **Celtic Music, Religious Music** and **Chamber Music**.
Sangeet to hailshwarshakti,
Hardhun main haikalakaarkibhakti,
Harswar main base Bhagwan,
Raagijosunaye “raag” madhur,
To rogiko mile aaraam.

-Mr Sorab Pavri

“Music is a divine tonic,
The portion of which can be consumed,
In joy, sorrow and even in panic.”

-Ms. Mahanaaz .M. Bomanjee

“Music washes away from the soul,
The dust of everyday life.”

-Berthold Auerbach

Concentration also plays an important role in our lives.

CONCENTRATION.
“Concentration” involves the focusing of the mind on one particular task in order to learn, think or complete the task and to create something new or novel and even for meditating.

Concentration, on academic study or playing pool involves focusing on the task at hand and to eliminate any form of distraction.

Concentration is a basically a kind of skill that can be learnt with practice. If it is mastered, it can drastically enhance the productivity and quality of work.

Concentration is a key to one’s success. The power of concentration is present within us, just waiting to be set free.
Research has proved certain techniques used to enhance concentration skills can facilitate performance on a task.

SCOPE OF CONCENTRATION.
(1) Concentration techniques help to concentrate on a task for a long time.
(2) It helps to improve recall.
(3) It helps to improve efficiency and enhance performance.

TECHNIQUES TO IMPROVE CONCENTRATION.
1) Concentration Techniques by Grec Frost.
   a) Stretch Your Limits.
      You may often tend to experience moments at work when your mind starts wandering and you are unable to focus steadily on a particular task. You feel, you just need a break. Instead of an immediate break, you should try and stretch your limits by pushing yourself to complete 15 more minutes at work before you take a break.

   b) Focus On One Thing At A Time.
      You might have seen horses have blinders. These blinders enable them to stare in one direction, you need to develop a mental equivalent to focus on the task at hand.

   c) It Is Ok To Take A Break.
No matter however good your concentration, one must take short breaks which will rejuvenate and enable you to take up more challenges after a short break.

d) Variety Is The Key.

Your mind needs novelty and variety to remain engaged and interested in the task at hand. If your mind is just concentrating on one particular task for the entire day or a long period of time, your attention is most likely to get wavered or reduced with the advancement of time. It is thus necessary to have a change in the activity after a certain duration of time.

2) Trataka Meditation by Anmol Mehta.

This technique is also called ‘CANDLE FLAME GAZINGTECHNIQUE’.

- You need to be seated in a relaxing position, with the spine straight.
- Place your hands in ‘Gyan Mudra’ (the tips of the thumb and the index finger touching each other). You need to rest your wrists on your knees. ‘Gyan Mudra’ helps in concentration.
- You must be sure that you are seated in a dark room without any breeze.
- Light a candle and keep it at your eye level, 3 feet away from you.
- Begin gazing at the candle flame constantly without blinking as long as you are comfortable.
When your eyes are tired, close them and then position the after-image of
the flame at the centre of your forehead (at the third-eye chakra).
As soon as the image fades completely, just open your eyes and again
begin to focus on the candle flame.
Repeat this cycle for 5-10 minutes.
Keep increasing the time limit by 5 minutes each time till you reach 20
minutes.

3) **Concentration Exercises by Auston Business School.**

**Exercise One.**
- You need to be seated in a comfortable position and remain still as long as
  you can.
- Increase the time limit from 5 minutes to 10 minutes and then 15 minutes.
- Do not strain yourself at all to keep still. Relax completely.

**Exercise Two.**
- Fill up a glass of water and hold it with your fingers, with one arm.
- Put this arm directly in front of you.
- Now fix your eyes upon the glass and try to keep the arm steady such that
  there is no movement at all.
- Do this first for 1 minute and then increase it to 5 minutes.
- Do this exercise first with one arm and then with the other.

4) **Eastern Techniques To Improve Concentration Power.**

a) **Focus On Breathing.**

This type of meditation focuses on breathing. It brings clarity to our thought
and helps self-discovery.
This kind of breathing exercise is called the ‘Anulom Vilom’.

b) **Focus On An Object In The Environment.**
This type of meditation helps the brain to become more aware of a single thought or object, facilitating the capacity to concentrate on a task at hand.

5) **Mind Exercises by Tamar Weinberg.**
- Practice in a completely isolated room.
- Either be seated on a chair or on the floor with your spine absolutely erect.
- Breathe deeply and relax your body.
- Lie down and thoroughly relax your muscles.
- Start concentrating within you, for instance, on your heart. Do not pay attention to anything else.
- Think how the heart pumps the blood to every part of the body.
- Try to visualize the blood leaving the reservoir and going down to the toes.
- Imagine another picture travelling down the arms to the tip of the fingers.
- After immense practice you can actually feel the blood passing through your system.

6) **Concentration Techniques by Remez Sasson.**
**Exercise One.**
Mentally count backwards from 100 to 1.

**Exercise Two.**
Mentally count backwards from 100 to 1, skipping each 3 numbers: 100, 97, 94, etc.

**Exercise Three.**
Take a fruit (an apple or an orange) and hold it in your hand. Examine it from all sides. Ignore all irrelevant thoughts entering into your mind. Examine and concentrate on the shape, smell, taste and sensation of the fruit as you hold it.
Exercise Four.
Imagine the fruit with closed eyes instead of looking at it. Visualize its shape, smell, taste and touch it in your imagination. Try visualizing a clear and well-defined image. If the imagine is blurred, open your eyes, look at the fruit for a short span of time and then again close your eyes and repeat the same exercise.

Exercise Five.
Try sitting idle, without any thoughts for at least 5 minutes.

7) The Brain Gym Exercises.
   a) Brain Buttons.
      ➢ Put one hand such that there is sufficient space between the thumb and the index finger.
      ➢ Place your index finger and thumb below the collar bone on each side of the sternum. Now, keep pressing lightly in a pulsing manner.
      ➢ At the same time, put the other hand in the navel area of the stomach.
      ➢ Gently press on these points for about 2 minutes.
      ➢ This exercise facilitates blood flow to the entire brain.
      ➢ The increased blood flow thus helps to enhance the concentration skills.

   b) Cross Crawl.
      ➢ Remain standing or be seated.
      ➢ Place your right hand across the body to the left knee as you raise it and the left hand across your right knee as if you were marching.
      ➢ This exercise helps to co-ordinate the right and the left brain by facilitating the flow of information between the 2 hemispheres, thus helping us to improve our concentration skills.
8) **Mudras To Improve Concentration.**

**The Power of Mudras.**

Mudras are basically non-verbal ways of communication and self-expression which include hand gestures and finger postures. Mudras are also considered to be the nature’s way of healing.

‘Mudra’ is one of the techniques that helps to enhance performance. The director (the Achaya) of the Vivekanand Yogashram in Delhi claims that there is a vast flow of energy passing through our hands. Each of our fingers represent one the five elements. The thumb is ‘agni’ or ‘fire’, the forefinger is ‘vayu’ or ‘air’, the middle-finger stands for ‘akash’ or ‘ether/sky’, the ring-finger is ‘prithvi’ or ‘earth’ and the little finger represents ‘jal’ or ‘water’. An imbalance in these elements is the root cause of all the ailments. This can be corrected with the help of ‘mudras’.

In another study, Ramesh Shah stated that there is no fixed or essential posture to practice ‘mudras’. They can be done by standing, sitting or even while walking.

**a) The Gyan /Om Mudra.**

- You must be seated with a straight back.
- Next, you need to create the sacred ‘Gyan/Om Mudra’ by joining the tips of the index finger and thumb of the same hand, the other three fingers being kept straight.
- Create the mudra with both your hands.
- The thumb is the gateway to ‘the divine will’ and the index finger is the ego.
- As you do this mudra, be sure that you are seated in a meditating position and chant ‘OM’.
b) **The Smiling Buddha Mudra.**

- Either be seated with crossed legs or on a straight backed chair.
- Bend the ring finger and little finger, pressing them down with the thumb.
- Keep the index and middle fingers straight and palms forward.
- Create the mudra with both your hands.
- Concentrate on the third-eye.
- Concentrate for about 10 minutes.

9) **Chakras and Concentration.**

We have 7 chakras in the body which are responsible to carry out certain functions. The ‘Agya Chakra’ or the ‘third-eye chakra’ is responsible for memory enhancement, creativity, higher spiritual intuition and development of psychic powers.

10) **The Sri Chakra and Concentration.**

This is another interesting technique to enhance the concentration power of the brain. The ‘Sri Chakra’ is an ancient Indian symbol consisting of a series of triangles cumulating in one singular triangle at the centre. There are 43 such triangles in all.

Concentration power can be enhanced by focusing at the central dot in the ‘Sri Chakra’, which is located in the central triangle of the ‘Sri Chakra’.
11) Visualization.

This concentration technique deals with actually seeing, visualizing or feeling a skill, performance or even an event in one’s mind, even before it is completed in reality. This inculcates a positive attitude, boosts the morale and thus enhances performance.

12) Sports and Concentration.

According to Cocke (2002), children who acquire physical activity training or participation in sports tend to show improved brain functions and nourishment, higher energy, concentration and self-esteem levels. All this, enhances cognitive learning processes.

STATEMENT OF THE PROBLEM.

To help the students to improve their academic performance by teaching them various concentration techniques and also teaching them to study with the help of tanpura music in the background in order to ameliorate their academic performance.

(Music:- Music is a form of art by arranging sounds in time, so as to generate a continuous, unified and evocative composition as through melody, harmony, rhythm and timbre.)
(Concentration:- Concentration is the ability to direct one’s thought processes in whatever direction one would intend to.)

(Concentration Techniques :- These are various methods that can enable us to improve our concentration on a particular task.)

OBJECTIVES OF THE STUDY.
These days children face so many distractions due to the mass media, influence of the west and various other factors. They are thus not able to concentrate well on their task or activity. This research study aims at helping the student community to excel in their academics though the medium of music and concentration. The following are the objectives of this research study:-

(a) To assist the students to obtain relaxation.

(b) To find out how music facilitates concentration.

(c) To understand how music helps increase the attention span of a student.

(d) To investigate how music improves the academic performance of a student.

(e) To examine how concentration techniques enhance academic performance.

(f) To evaluate how music and concentration improve the academic performance of students.