TEACHER'S GUIDELINES

FOUNDATION PROGRAMME FOR LITERACY
NUMERACY AND SKILLS

VOCAL MUSIC

GRADE 9

TITLE OF CARD : DIGITAL TECHNOLOGY

TEACHER'S CARD 9

MOE
MAHATMA GANDHI INSTITUTE
2025

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GRADE 9

TEACHER'S GUIDELINES

CARD 9

Title of Card: Digital Technology

GUIDE TO EDUCATORS

Title of Card: Digital Technology

Competency 5:

Performing & Skills

Element 3:

Use digital tools for practice and self- recording.

Performance Criteria:

- **Level 1:**

Use apps for musical note/ rhythm cycle recognition.

- **Level 2:**

Record, evaluate, and present performance digitally.

Range: Tanpura apps, percussion instrument loops, AI assisted pitch apps.

Purpose of Activity:

- To help students use digital technology to improve their vocal practice.
- To develop students' ability to record , listen, and evaluate their own singing.
- To encourage independent learning and self- reflection in music practice.
- To introduce students to simple music and recording application used by musicians.

Resources and materials:

- Teacher may devise their own resource materials or use anyone from the list:
- Smartphones or tablets
- Earphones or headphones
- Recording and music apps such as
- BandlLab
- Smule
- Tanpura droid
- Metronome Beats

Learning Outcomes:

At the end of the lesson, students will be able to:

- Use digital device (phone, tablet, computer) to record their own singing
- Use simple digital tools to support practice such as a tanpura or metronome app.
- Listen to their own recording and identify strenghs and areas of improvement.
- Demonstrate basic digital literacy in music practice.

Teaching trajectories/ Implementation guidelines

Introduction - Use digital tools for practice and self- recording

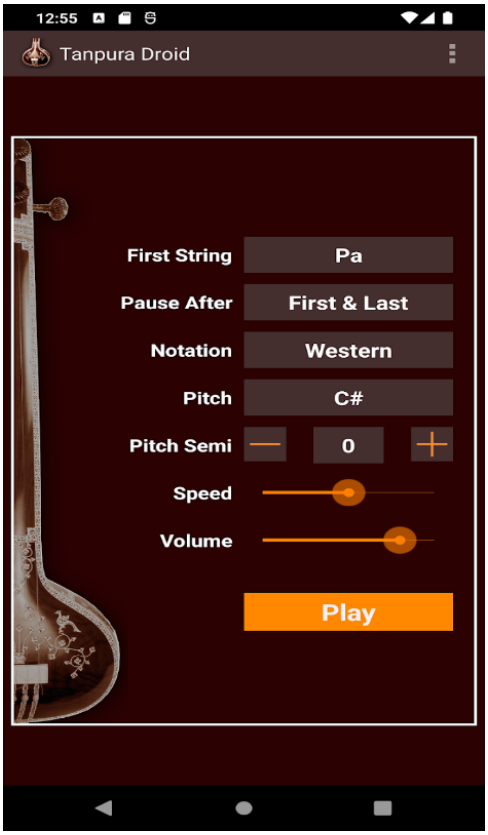
A digital tool in music is any hardware or software used to create, produce, record, perform, or learn music, transforming sound into digital data. These technologies, including Digital Audio Workstations (DAWs) (e.g., Ableton Live), virtual instruments, and mobile apps, allow for precise editing, mixing, and composing, often enabling independent "bedroom producers" to create professional-grade audio.

Key examples and types of digital music tools include:

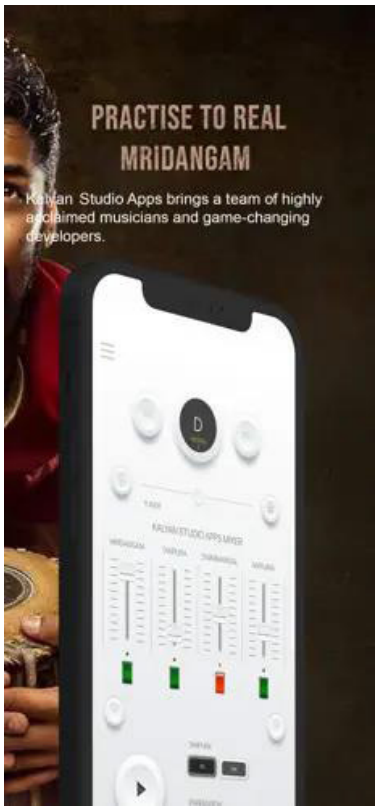
- **DAWs (Digital Audio Workstations)**: Software for recording, editing, and mixing, such as Ableton Live, Logic Pro, or Pro Tools.
- **Virtual Instruments and Plugins (VSTs)**: Software that replicates physical instruments or creates new sounds, such as synthesizers and samplers.
- **MIDI (Musical Instrument Digital Interface)**: A protocol connecting instruments and computers to control sound.
- **Mobile Apps and Educational Tools:** Software for learning, notation, or composition, such as forScore or MuseScore.

Digital tools for Indian music—spanning Hindustani and Carnatic traditions—have transformed practice and recording by enabling precise tuning, rhythm tracking, and self-analysis. Key tools include electronic/app-based Tanpuras for drone, Tabla/Mridangam apps for rhythm, and DAWs (Digital Audio Workstations) for self-recording and analysis. These technologies allow for digital notation, visualization of raga patterns, and remote learning, supplementing traditional methods.

Drone and Pitch Reference: Digital Tanpuras (e.g., SwarSandesh, iTanpura) provide essential, customizable drones for pitch accuracy.



Rhythm Accompaniment: Apps like SwarShala or Tabla Studio provide authentic Tabla and Mridangam accompaniment, allowing tempo adjustments for practice.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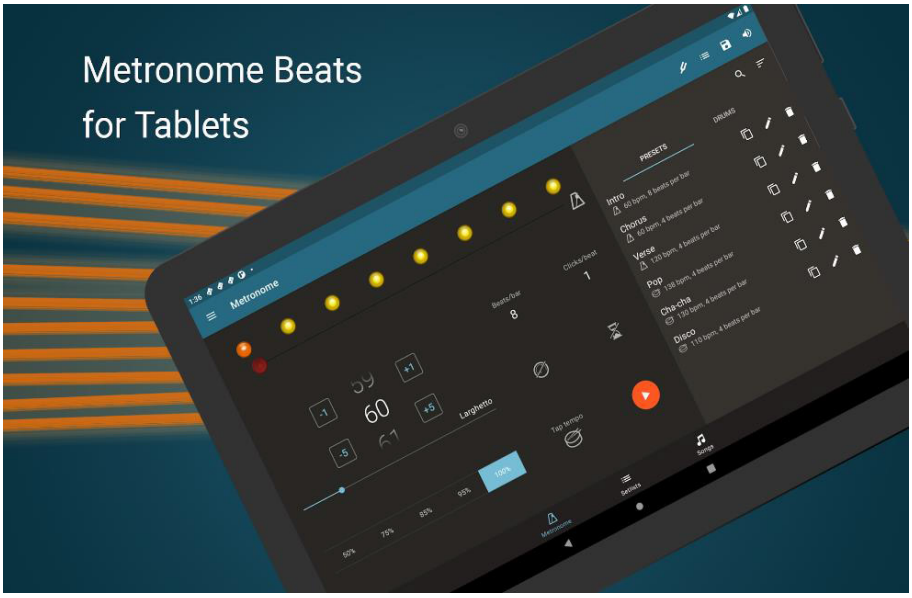
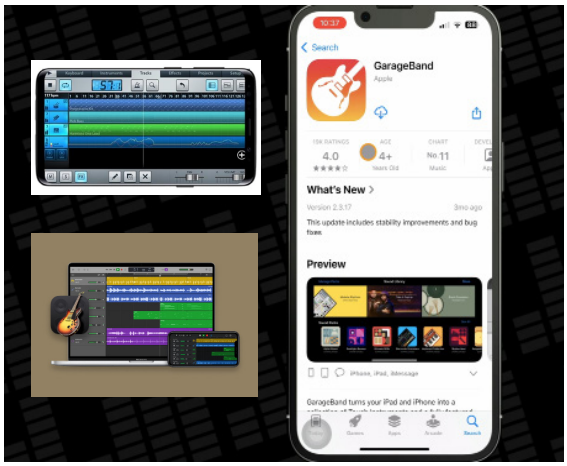

Metronome Beats
for Tablets

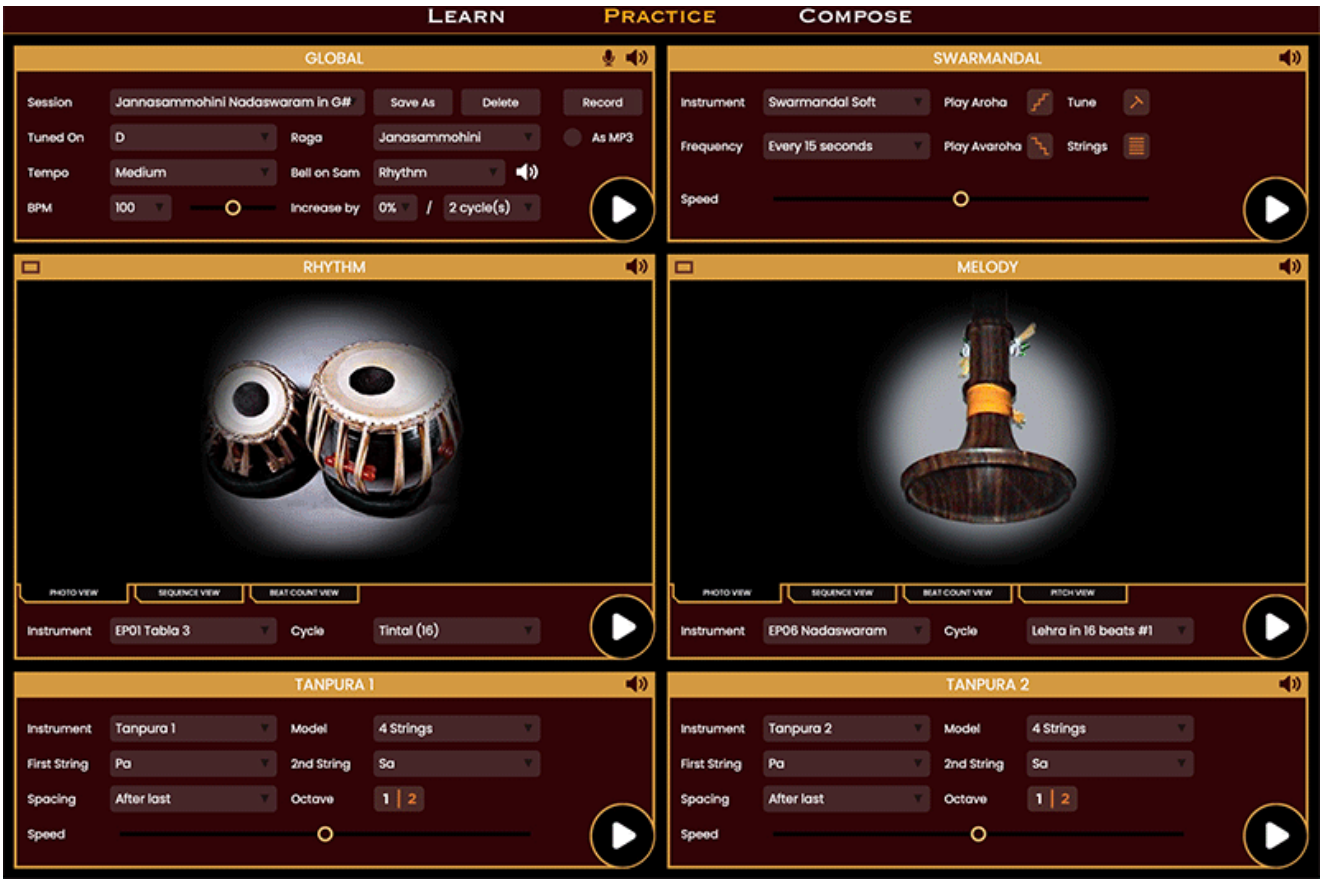
Self-Recording & Analysis: Using DAWs (e.g., Audacity, GarageBand, Pro Tools) allows musicians to record, mix, and listen back to their performances to correct pitch and rhythmic errors.



Performance Visualization: Software is used to visualize raga structures, fingering, and microtonal variations, aiding in technical improvement.

Learning Platforms: Online platforms offer access to tutorials, notation software, and archival recordings for study.

Swara shala



Impact on Practice and Performance

- **Improved Accuracy:** Digital tools help in fine-tuning and maintaining steady tempo (tala).
- **Accessibility:** Technology has made Indian classical music more accessible globally, offering resources to students outside the traditional guru-shishya model.
- **Digital Preservation:** Audio/video recordings are used to archive performances and study techniques of maestros.

- **Creative Innovation:** Artists are using technology to blend traditional Indian music with other genres, enhancing production capabilities.

- **Sensor Technology:** Specialized sensors on traditional instruments (Sitar, Tabla) are being used to convert acoustic performances into digital signals, enabling real-time analysis and synthesis.

ACTIVITY 1

Record and Improve

Student to practice a short vocal exercise or song and record it using their phone..

Purpose:

- To help students use digital tools to record their singing and improve through self – listening.

Learning outcomes

Students will be able to:

- Record their singing using a mobile device
- Listen critically to their own voice
- Identify strength and areas of improvement

Resource Materials

- Smartphones or tablets
- Earphones
- Recording apps such as BandLab or Smule
- Notebook/ Worksheet

- **Procedure**
- Teacher demonstrates how to record a short vocal phrase.
- Students practice a short song or vocal exercise
- Students record their singing using the recording app.
- They listen to their recording using earphones
- Students play their recording and teacher gives feedback. On pitch accuracy, rhythm and expression.
- Students record a second improved version after feedback
- Students compare both versions and discuss
- Which version is better
- What improved

Assessment:

Formative (Class Participation, Oral questioning, worksheet)
Summative: Listening identification

Assessment Rubric

Criteria	Basic	Intermediate	Proficient
Use of Digital tool	Unable to use app.	Uses app with some help.	Uses recording app confidently and independently.
Vocal Performance	Many errors.	Some mistakes in pitch or rhythm.	Accurate pitch, rhythm and clear expression.
Listening skills	Unable to reflect.	Identifies some areas of improvement.	Clearly identifies strengths and weaknesses.
Participation	Little participation.	Some participation.	Very active and engaged.

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