# Refined Details and Mindset in String Pedagogy:

## **Practical Techniques for Violin Ensembles**

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#### **Core Ideas**

- 1. Simplify the complex
- 2. Think in reverse (backward design)
- 3. Focus on essentials

### Introduction

### Question 1: Can We Practice the Violin Without the Violin?

## Why it works

- Reduces overload: no intonation, no sound, no bow pressure.
- Students focus on movement, coordination, mental imagery.

#### **Evidence**

### Dr. Gabrielle Wulf (UNLV):

External focus + imagery → better accuracy, retention, movement quality.

### **Judd & Thorndike imagery studies:**

Mental practice improves performance 20–30%.

### Richardson Free-Throw Study (1967):

Imagery-only group → 23% improvement

Physical practice group → 24%

No-practice group → **0%** 

 $\rightarrow$  Practicing without the violin is an evidence-based shortcut. Perfect for full-group, noise-free training.

# Part 1. Violin Holding & Left-Hand Training

#### **Posture**

- Natural spine curves
- Head centered (≈8–12 lbs) → relaxed muscles
- ullet When head shifts, tension increases ullet posture & bow problems

## Question 2: Is holding a violin a natural body position, or is it awkward?

Game 1 : 1–2–3 Freeze (Violin Hold)

**Game 2** — Tiger's Paws (Finger Shape)

Game 3 — Finger Bowing Game (1–4)

**Game 4** — Finger Target Game

Game 5 — Grab-Release Game

\*Recommended Exercise: Henry Schradieck, School of Violin Technics, Op. 1 No. 1

**Shifting** 

Game 6 — In- and- Out

## Part 2: Bow Technique

Question 3: Who Is Holding the Bow?

**Game 7 — Weight Transfer Game** 

Game 8 — Jellyfish Game

**Game 9 — Spider-Legs Game** 

Game 10 — Seesaw (pinky)

Game 11 — Pinky-Balance Game

**Game 12 — Double-Circle Retake Game** 

Game 13 — Air Bow Path (Positions 1–2–3)

**Game 14 — Butterfly Game** 

Game 15 — Dotted Rhythm Bow Game

Recommended Exercise: Simon Fischer — Warming Up for Violin

(Advanced but full of ideas; take the parts as needed)

## **Part 3: About the Mindset**

Question 4: Can Every Child Learn? — And What Makes It Possible?

Method 1: Key Missing Element: Kaizen (改善)

## Forgetting Curve (Ebbinghaus)

We forget **70%** of new information in 24 hours without repetition.

→ Children succeed when small things are repeated often.

Solution: Kaizen inside rehearsal

# Method 2: Teaching for Understanding & Backward Design (TfU & UbD)

TfU (Harvard Project Zero) — Four Questions

- 1. What should students understand?
- 2. What thinking shows that understanding?
- 3. What performances demonstrate it?
- 4. How do we support it?

## **UbD** (Wiggins & McTighe)

Start from the desired outcome

Work backwards

## Question 5: What matters most in violin education?

### For example:

\*Multisensory learning (hearing, touch, balance, memory)

#### Research Evidence

### NIH-supported USC studies:

Musical training strengthens networks for language, attention, and executive function.

### **NEA reports:**

Music improves focus, language development, visuospatial reasoning.

## **NSF** studies on jazz improvisers:

Show specific brain patterns linked to creativity.

### **Everyone Can Participate (Dong Grand Song Model)**

Comparison: Dong Ethnic Grand Song Choir vs. String Orchestra

Category	Dong Grand Song Choir	String Orchestra
Participation	Everyone sings at their own level	Students play parts matched to level
Texture	Simple + complex lines layered together	Simplified + advanced parts coexist
Performer Role	Every voice is essential	Every part contributes to ensemble
Philosophy	Inclusive; participation over perfection	Inclusive; growth and teamwork focused

<sup>\*\*</sup>Creativity

# Question 6: How to Be Irreplaceable in the Age of Al

## Harvard (Kegan):

"People grow through relationship—not information."

## **Stanford (Darling-Hammond):**

"Learning happens through connectedness, trust, belonging."

### **OECD Future-Skill List:**

empathy, creativity, collaboration, judgment, emotional connection

## Coda

We are not just teaching instruments.

We are shaping memories, community, and children's lives.