

Survey of Elementary Music Teachers' Teaching Approach, Instructional Goals, and Classroom Space

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The Third Teacher in Elementary General Music Classrooms

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Introduction

The Physical Environment in Education Research

General education: room arrangement and teacher beliefs/practices, examples:

- Desk arrangement is driven by academic outcomes and classroom management (Gremmen et al., 2016)
- Teacher-directed instruction often paired with rows and less attention to space; student-centered instruction often paired with clusters and more attention to space (Martin, 2002)

Music education research on physical space is limited:

- Ensemble seating arrangements (Roseth, 2020, 2024a, 2025; Yi, 2023)
- Acoustics of ensemble spacing (Daugherty, 1999, 2003; Ekholm, 2000; Silvey et al., 2018)
- Accounting for entire classroom space rare: well-being correlates with positive perceptions of the classroom space (Roseth, 2024b)

Introduction

What Students Want

Hanson (2023): 180 third graders in 4 schools drew their "actual" and "ideal" music classes

- Actual classrooms depicted as passive, teacher-directed, seated, traditional (whiteboard, teacher's desk), emphasis on notation, solfège, singing
- Ideal classrooms depicted as active and colorful, with iPads, dancing, games, peer interaction, stations, student choice
- The students' "ideal" rooms closely match the principles of the *third teacher*

Framework

The Third Teacher: Overview

From the Reggio Emilia approach (Fraser, 2012; Strong-Wilson & Ellis, 2007)

- 1st teacher: caretakers, 2nd teacher: classroom teacher, 3rd teacher: the environment itself
- The classroom is an intentionally designed, dynamic co-instructor in knowledge construction
- Little empirical work (Ismail & Zulkurnain, 2019; Miller, 2019), and none in music education
- Bond (2013, 2015): materials support agency, but teachers struggle with access vs. noise

Framework

The Third Teacher: Eight Principles (Fraser, 2012)

Aesthetics: pleasant, orderly, inviting space

Active learning: choice, exploration, hands-on materials

Collaboration: with peers, teacher, families, community

Transparency: natural light, and learning made visible

Bringing the outdoors in: natural materials; family and community represented

Flexibility: space and materials used in new ways

Relationships: space supports connection among all occupants

Reciprocity: the room is responsive to children, parents, community

Method

Purpose and Research Questions

Examine relationships among teaching approach, instructional goals, and physical space (the *third teacher*) and establish the reliability of a new *Third Teacher in General Music* (TTGM) measure, including:

1. To what extent, and in what ways, is the third teacher present in elementary general music classrooms?
2. What relationships exist among approach, goals, and the third teacher?
3. How do teachers describe their environment in relation to approach and goals?

Method

Measures: Approach and Goals

Six approaches: American Eurhythmics, Dalcroze, Kodály, Modern Band, Music Learning Theory, Orff Schulwerk

- Pedagogical influence: *Not at all* (1) to 5 *Completely* (5); $\alpha = .68$
- Pedagogical training: levels/certificates, professional development, and coursework, each yes/no, giving a composite of 0–3 per approach; $\alpha = .72$

Elementary Music Goals Survey (EMGS; Abril & Gault, 2005): 18 items, 6-point scale

- EFA, 3 cross-loading items removed, leaving 15 items and 4 factors, 50.4% variance
- Interdisciplinary (24%, $\alpha = .85$), Musical (13%, $\alpha = .75$), Sensitivity (9%, $\alpha = .76$), Recreation (5%, $\alpha = .67$); overall $\alpha = .78$

Method

Measures: TTGM and Open-Ended Item

Third Teacher in General Music (TTGM)

- 16 researcher-written items, 2 per principle; *Never* (1) to *Always* (5); $\alpha = .90$
- e.g., "Classroom displays and materials are arranged neatly and attractively" (Aesthetics)
- Pilot with ~20 elementary music specialists

Open-ended: "How do your approach to teaching, instructional goals, and the physical classroom space influence one another when teaching elementary general music?"

Method

Analyzing the Open-Ended Responses

Step 1: Structural topic modeling (STM; Roberts et al., 2014), R package *stm*

- 156 responses
- Models with $K = 3-8$ topics compared on held-out likelihood, semantic coherence, exclusivity, residuals; 5 topics selected
- Topics labeled from FREX words and exemplar quotes
- TTGM score entered as component of analysis

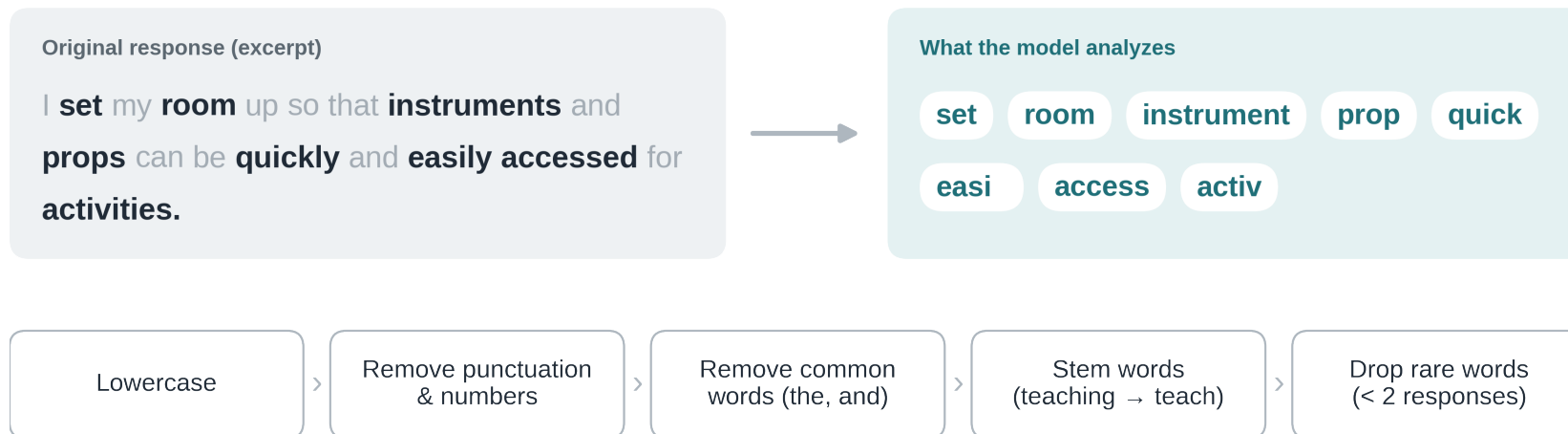
Step 2: Qualitative coding (Saldaña, 2016) of the lowest and highest TTGM quartiles

- Cycle 1: structural codes (intentional design / constraint); Cycle 2: descriptive codes

Method

How STM Works

1 Turn each response into words the model can count



Method

How STM Works

2 Find words that tend to appear together: these groups are topics

Topic 2

board access activ
percuss open easi allow
easi movement instrument

Label:

Open, accessible space

Topic 3

don't size influenc orff
also think like explor way
share

Label:

Space as a constraint

Topic 1

everyth sure post
alway new kid time bring
know bulletin

Label:

Intentional design

Method

How STM Works

3 Each response is a mix of topics

■ T1 Intentional design ■ T2 Open, accessible space ■ T3 Space as a constraint ■ T4 Aligning approach & space ■ T5 Practical workarounds

“...instruments and props can be quickly and easily accessed for activities.”



“The biggest challenge I face is space.”



“...student artwork on the walls, updated personal photos to allow students to get to know me...”



**All 156 responses
(estimated prevalence)**



Method

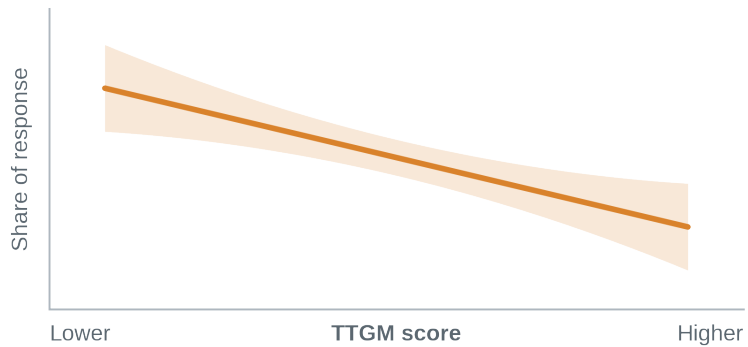
How STM Works

4 Test whether the topic mix shifts with TTGM scores

Topic 3: Space as a constraint

$\beta = -0.005$, $SE = 0.002$, $p = .002$

Higher scorers wrote less about constraints



Topic 1: Intentional design

$\beta = 0.003$, $SE = 0.002$, $p = .035$

Higher scorers wrote more about intentional design



Method

Distribution and Sample

NAfME Survey Assistance Program, to members self-reporting elementary teaching

- Approximately 7,920 invitations sent (February 2026); 4,400 opened; open for 4 weeks

$N = 206$ usable responses (5% of those who opened)

- 82% women, 16% men, 2% non-binary; 90% white; 59% master's degree
- 15 years ($SD = 10.07$) of teaching experience
- 93% teach mainly in a dedicated music classroom

Results: Presence of the Third Teacher

The Eight Principles

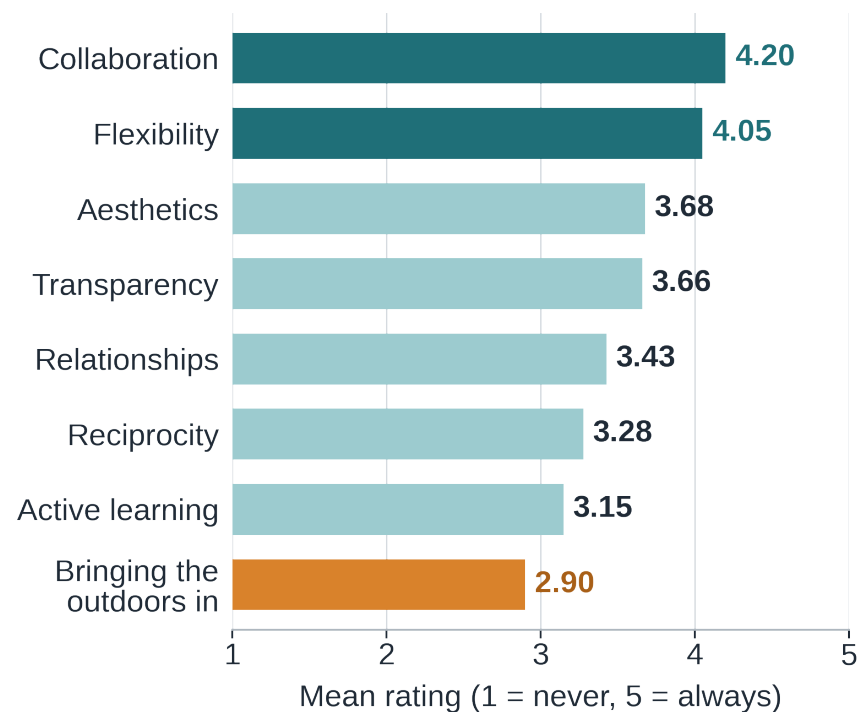
TTGM $M = 56.65$ ($SD = 11.17$), possible range 16–80

Top items emphasize physical arrangement:

- Open layout and sightlines ($M = 4.54$), collaborative seating (4.39), neat materials (4.15), flexible seating (4.10)

Bottom items emphasize making people and learning visible:

- Family and community contributions visible (2.60), student work displayed (2.77), natural and community elements (2.78), stations to explore (2.79)



Results: Approach, Goals, Third Teacher

Predictors of the Third Teacher

Predictors that entered (stepwise)

Sensitivity goals

EMGS subscale

$$\beta = .35$$

$$B = 7.12, SE = 1.50, p < .001$$

Orff Schulwerk

Pedagogical influence

$$\beta = .21$$

$$B = 2.09, SE = 0.75, p = .006$$

Did not enter the model

5 other approach-influence scores, 6 training scores,
3 other goal subscales

Outcome

TTGM score

Third Teacher in
General Music

$$F(2, 149) = 20.63, p < .001$$

$$R = .46, \text{adjusted } R^2 = .21$$

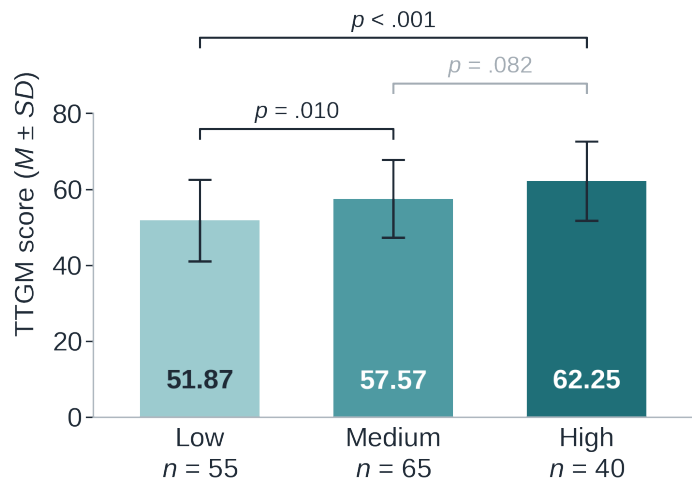
$$n = 152$$

Results: Approach, Goals, Third Teacher

Pedagogical Influence and Training

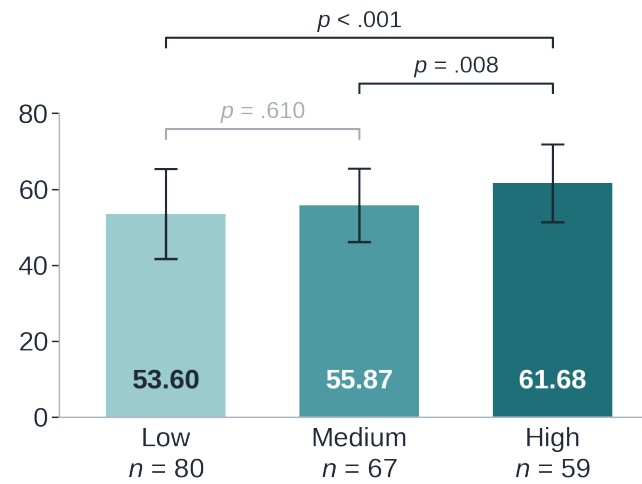
Pedagogical influence

$F(2, 157) = 11.74, p < .001, \eta^2 = .13$



Pedagogical training

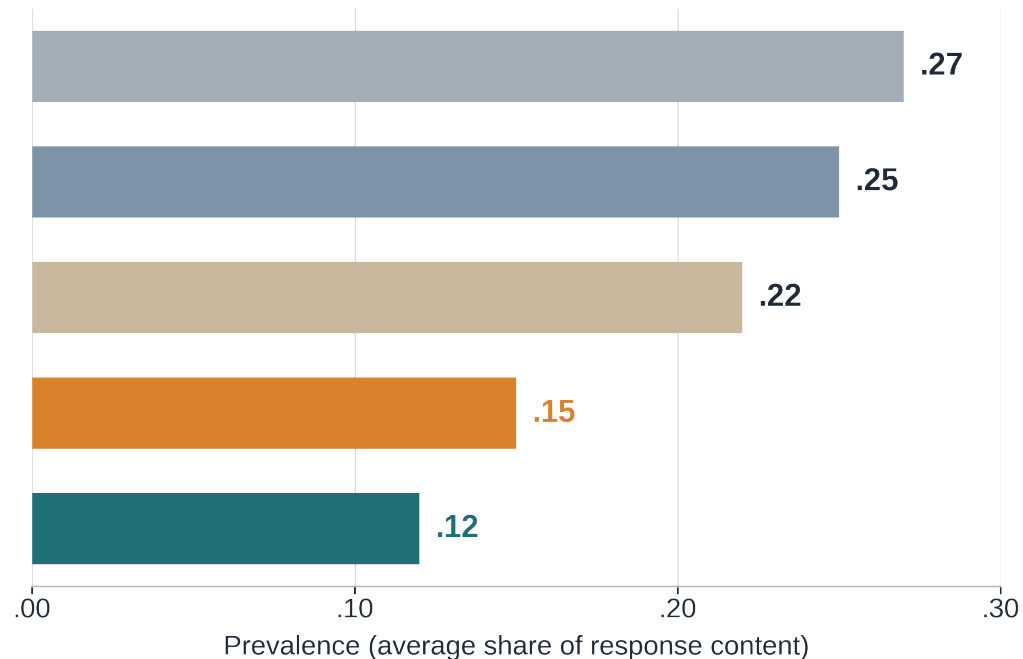
$F(2, 203) = 9.90, p < .001, \eta^2 = .09$



Results: Classroom Descriptions

STM Analysis: Five Topics in Teachers' Explanations

- Topic 4**
Intentionally Aligning Teaching Approach, Goals, and Physical Space
- Topic 2**
Enabling Movement and Instrument Activities Through Open and Accessible Physical Space
- Topic 5**
Navigating Spatial Limitations Through Practical Workarounds
- Topic 3**
Experiencing Physical Space as a Constraint on Pedagogy and Goals
- Topic 1**
Designing an Intentional, Relational, and Inspirational Classroom Environment



Results: Classroom Descriptions

Constraints and Intentional Design

STM analysis and TTGM score relationships:

- Teachers with lower TTGM scores use more of their responses to describe “space as a constraint” (Topic 3; $\beta = -0.005$, $SE = 0.002$, $p = .002$)
- Teachers with higher TTGM scores use more of their responses to describe “intentional design” (Topic 1; $\beta = 0.003$, $SE = 0.002$, $p = .035$)
- Other topics (2, 4, 5) discussed equally at all TTGM levels

Coding of the extreme quartiles (57 low, 55 high; 71 codable; 187 excerpts):

- Constraints: 46 excerpts from low scorers vs. 5 from high scorers
- 18 of the 46 were about classroom type (push-in, carts, non-music rooms); also room size and general layout
- Intentional Design: Both groups designed walls and storage; only high scorers described whole-room design

Discussion

Visible and Invisible

Teachers primarily invest in arrangement: flexibility, collaboration, order

Less visible: students' work, families, community, the natural world

These less visible aspects of the classroom have implications for:

- Hidden and null curriculum (Knapp, 2021): absence signals whose knowledge "counts"
- Culturally responsive teaching (Kang & Lee, 2025)
- Place-conscious education (Gruenewald, 2003; Schaller, 2019): disconnecting the room from its community is itself a choice

Discussion

Goals, Approach, and Constraints

Teachers who prioritize self-expression, musical sensitivity, and culture may see the room as a tool for those goals

Orff Schulwerk's exploratory philosophy (accessible instruments, movement space) may carry over into room design

More pedagogical influence and training overall tend to improve third teacher engagement

Constraints: some are very real (carts, push-in), but some low third teacher scorers may face the same constraints as high scorers but have less clarity on how to work around them

Discussion

Takeaways

Make people visible, not just furniture

- Display student work, family music traditions, and local musicians

Let your goals shape your room

- If expression and culture matter to you, open space for movement and keep instruments within students' reach

Use training as a chance to rethink your space

- Teachers with more pedagogical influence and training reported stronger third teacher

Design the whole room, not just the walls

- Consider seating, sightlines, movement paths; engage with the *third teacher* to support learning goals

Start small, and ask for support

- Change one area at a time, and seek help from colleagues, mentors, and administrators; intentional design is hard

Build space design into teacher prep and PD

- The physical environment is part of how we teach, so it belongs in methods courses and professional development

Discussion

Limitations and Future Research

5% response rate; nonresponse and self-selection bias; self-report only

Future directions:

- Expand the TTGM into subscales for each principle
- Gather student perceptions through the third teacher lens
- Use photographs, interviews, and independent coders to separate fixed constraints from perceived ones

Thank you!

Questions?

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