

Technology-Based Music Classes in High Schools in the United States

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ATMI 2010

Overview

Background
Methodology
Results
Implications

Limited 'Market Share'

High School Seniors Studying Music

1982 - 31%

2002 - 21%

What about the 'Other 80%'?

Edwards, N. (2006). *Non-traditional music students: A new population of music student for the 21st Century*. Unpublished research paper, Illinois State University.

Elpus, K. & Abril, C. (2010). *High school music students in the United States: A demographic profile*. Poster session, MENC National Conference, Anaheim, CA

Stewart, C. (1991). *Who takes music? Investigating access to high school music as a function of social and school factors*. (Doctoral Dissertation) Available from ProQuest Dissertations and Thesis Database. (UMI 9208660)

Technology-Based Music Classes (TBMC)

Reaching the Non-Traditional Music student
(NTM)

Attract / Motivate

Scaffolding / Differentiation

Meaningful Musical Engagement

MusicCreativity.org

Background

Prior Studies

New Jersey Survey

28% of NJ High Schools offer TBMCs

Dammers, R. (2009). A survey of technology-based music classes in New Jersey high schools.
Contributions to Music Education, 36(2), 25-44.

Creation of TBMC Case Study

Teacher initiated

Solved issues of:

Staffing, Space, Funding

Questions

To what extent do high schools in the United States offer technology-based music classes?

What is the nature of these classes?

Two surveys

High school principals

Music technology teachers

Survey One

Hybrid
Web/Paper

Sample

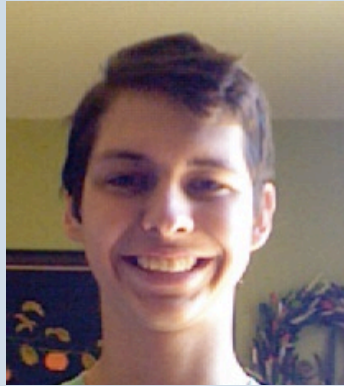
10 % of comprehensive public high school principals
($n=1830$)

Response

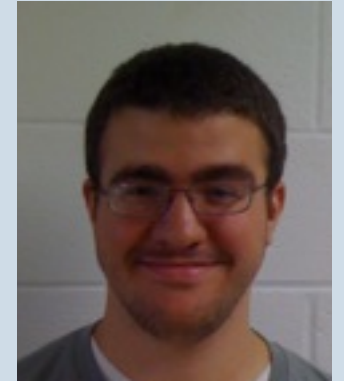
($n=528$)

29 %

Research Assistants



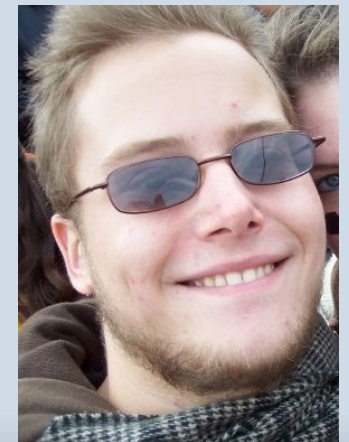
Andy Bohn



Matt Ercolani



Sam McLeod



Joe Straczynski

Survey Two

Online only

Sample

Music technology teachers ($n=74$)

Response

($n=29$)

37%

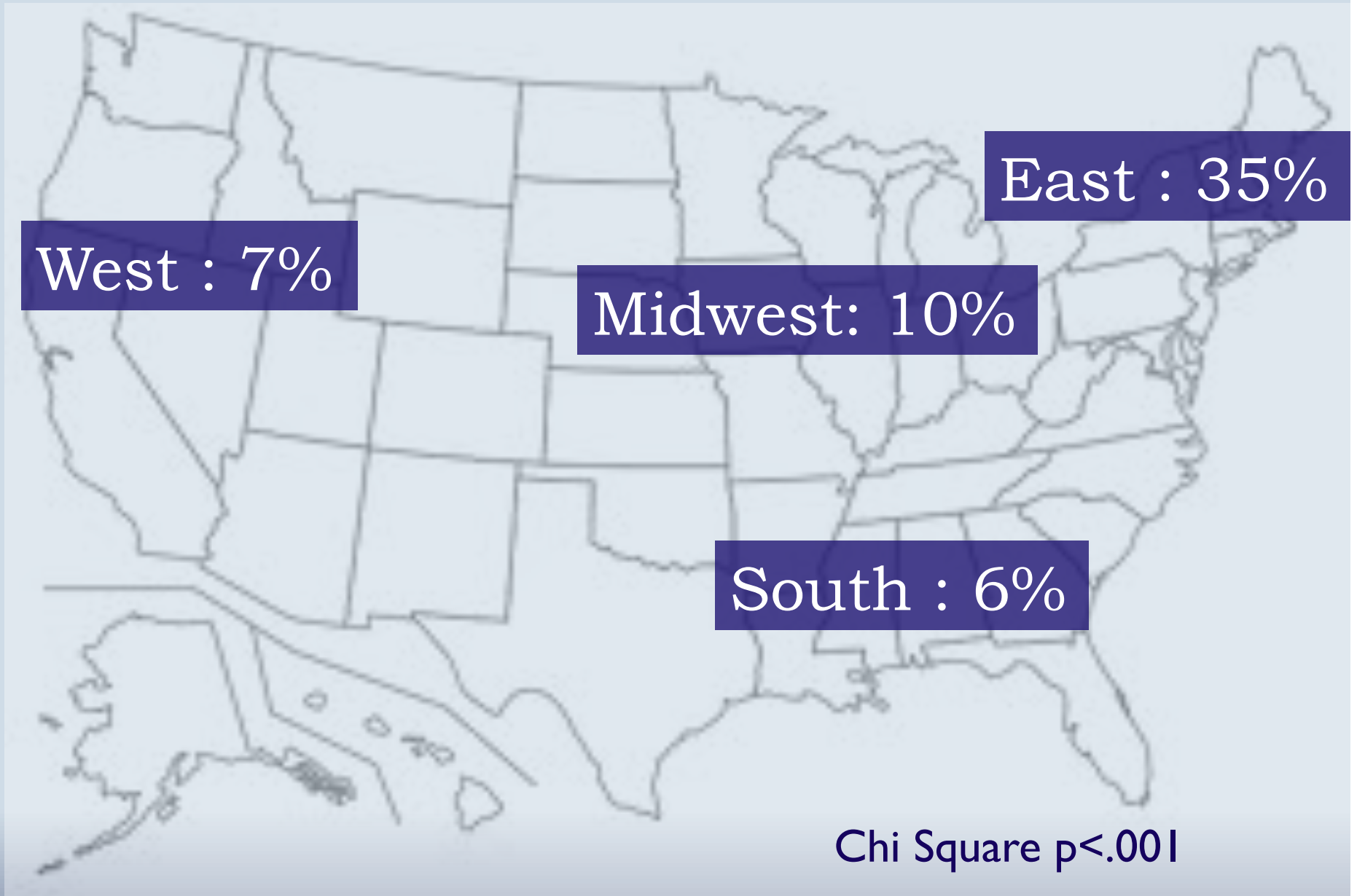
Extent of TBMCs

What percentage of comprehensive public high schools in United States offer technology-based music classes?

14%

Extent of TBMCs

Over 2500 High School
Technology-Based Music Classes



Extent of TBMC

Community Setting



City 17%



Town 11%



Suburb 28%



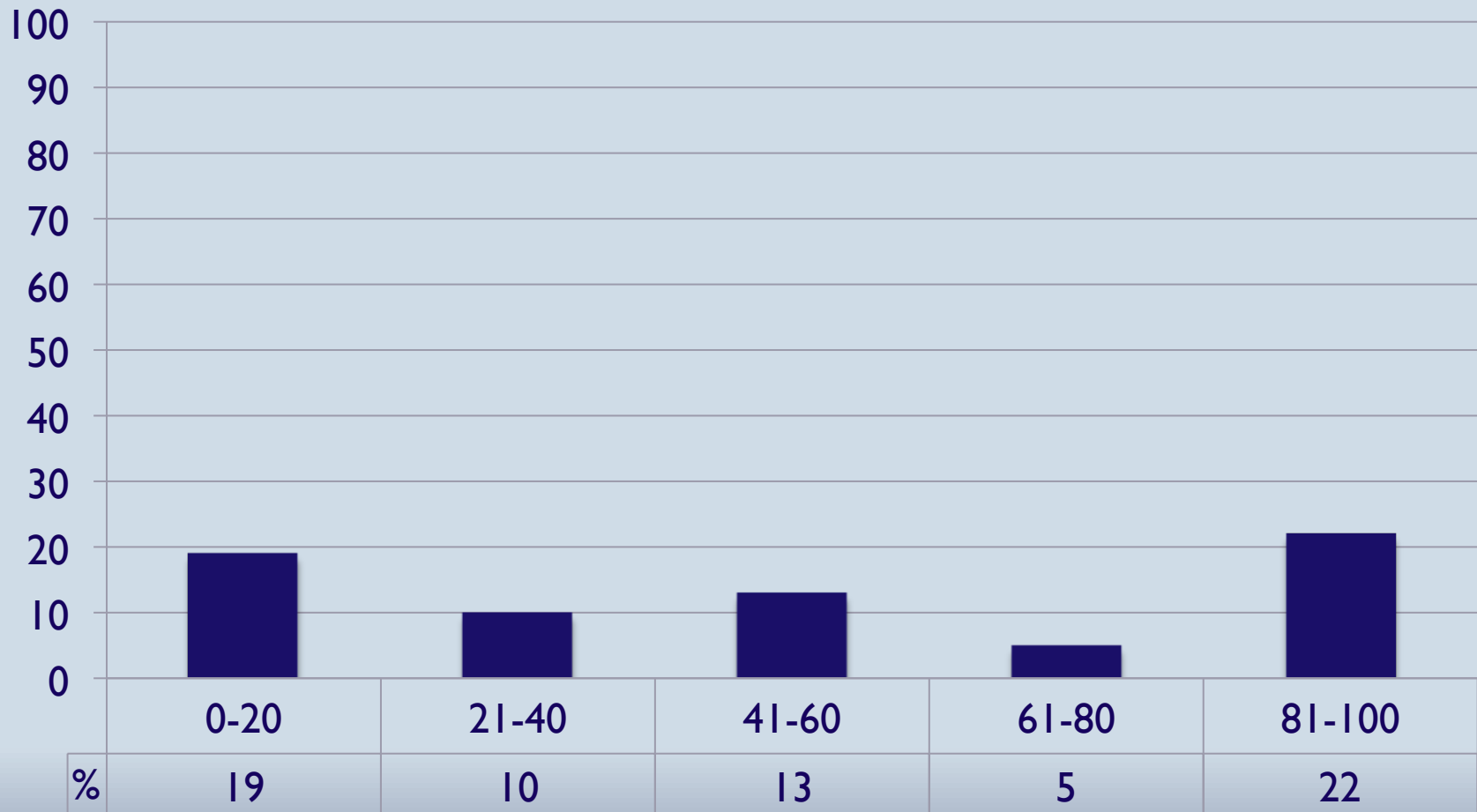
Rural 7%

Chi Square $p < .001$

Extent of TBMC

Socio-economic

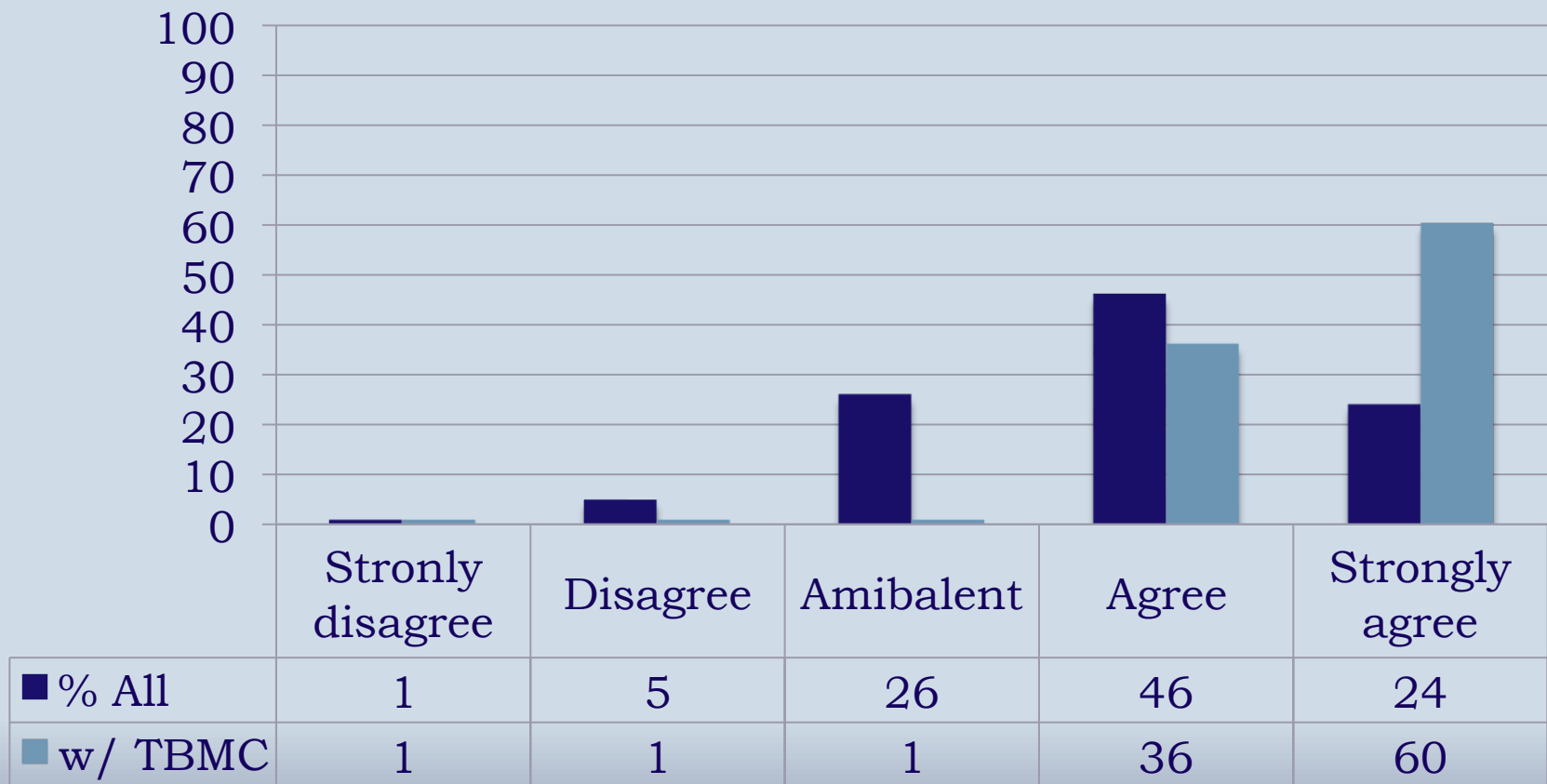
% of TBMCs by % Free and Reduced Lunch Students



Extent of TBMC

Administrators' Attitudes

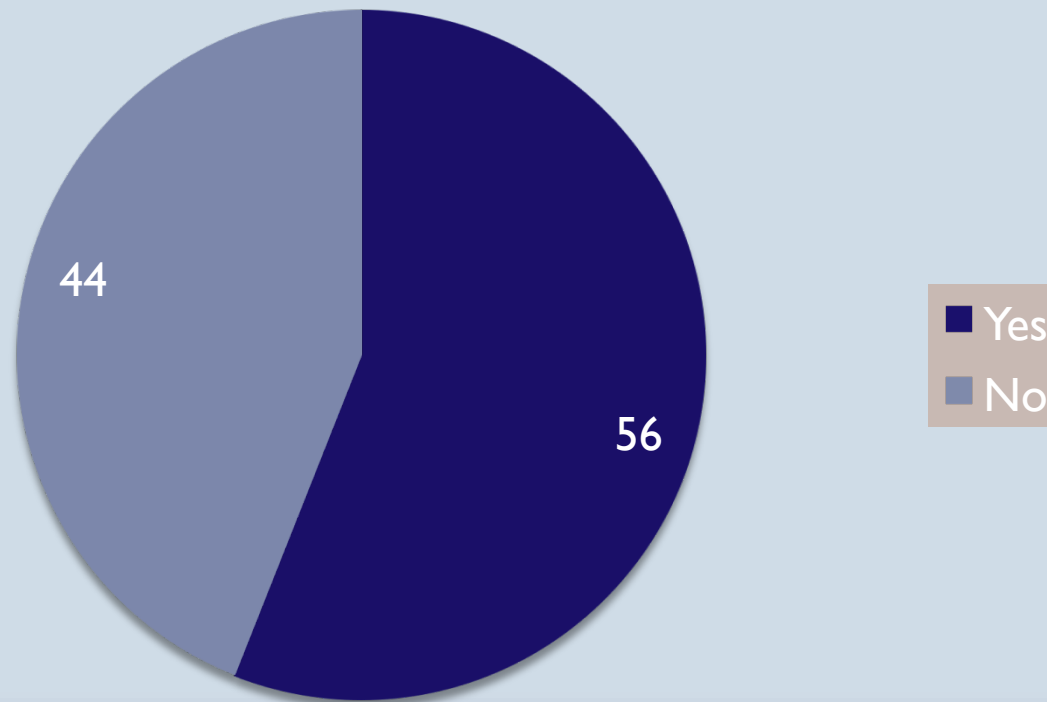
Technology-based music classes are/would be a valuable part of your school's offerings



Extent of TBMC

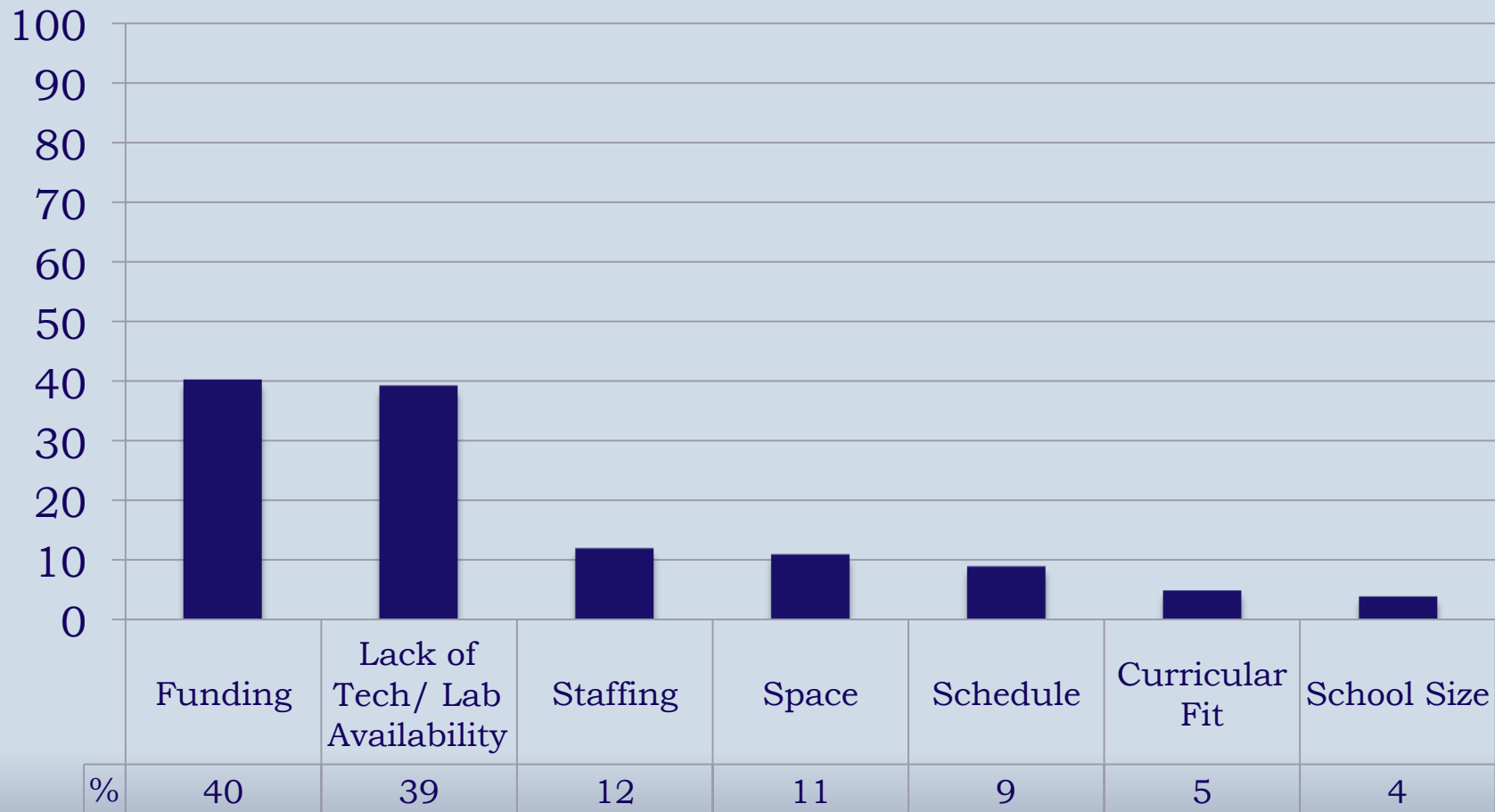
Feasibility

Would it be possible for your school to offer a technology-based music class?



Feasibility

Obstacles to Offering a TBMC



Extent of TBMC

Nature of TBMCs

Curricular Objectives

Students

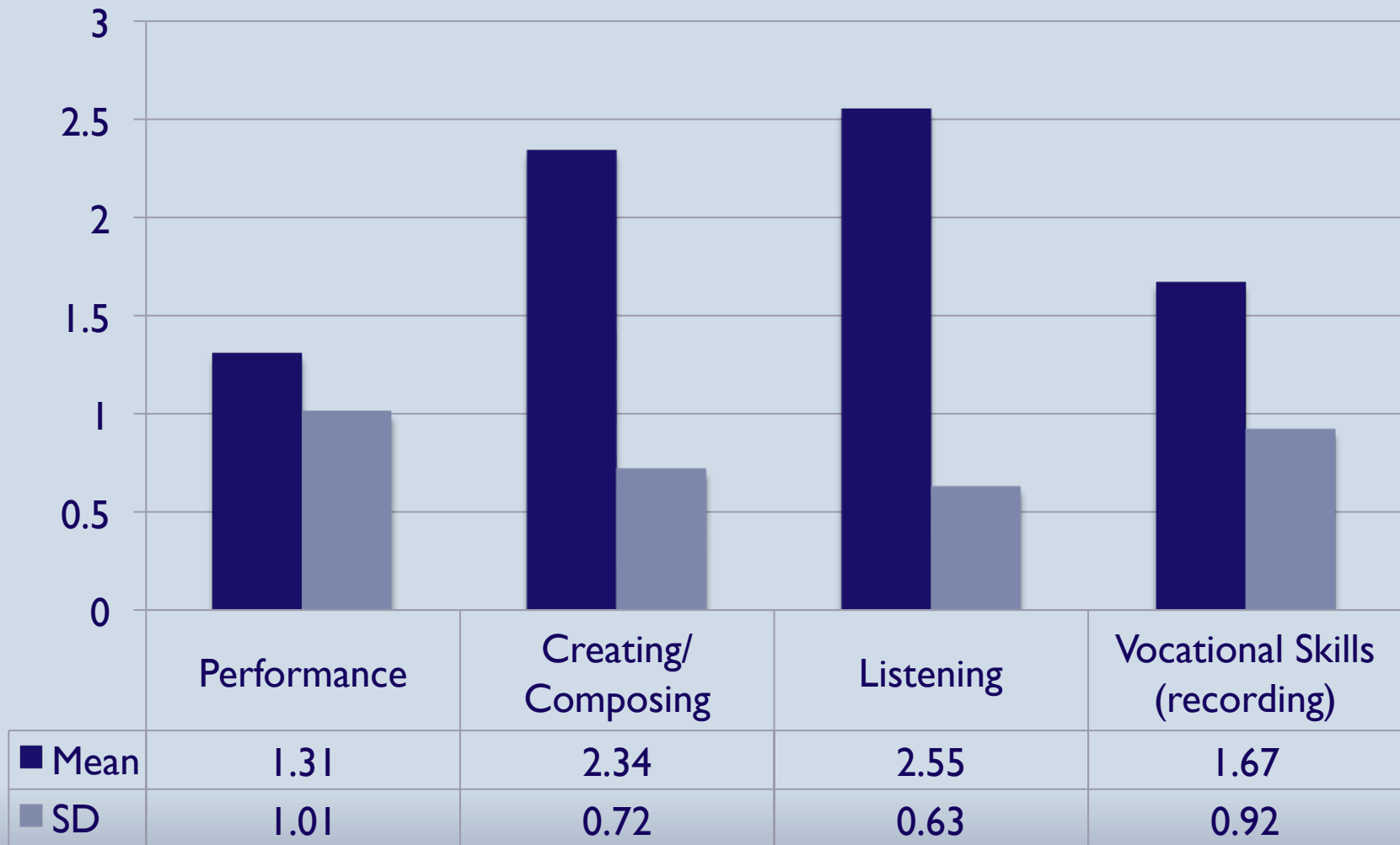
Teachers

Hardware/Software

History

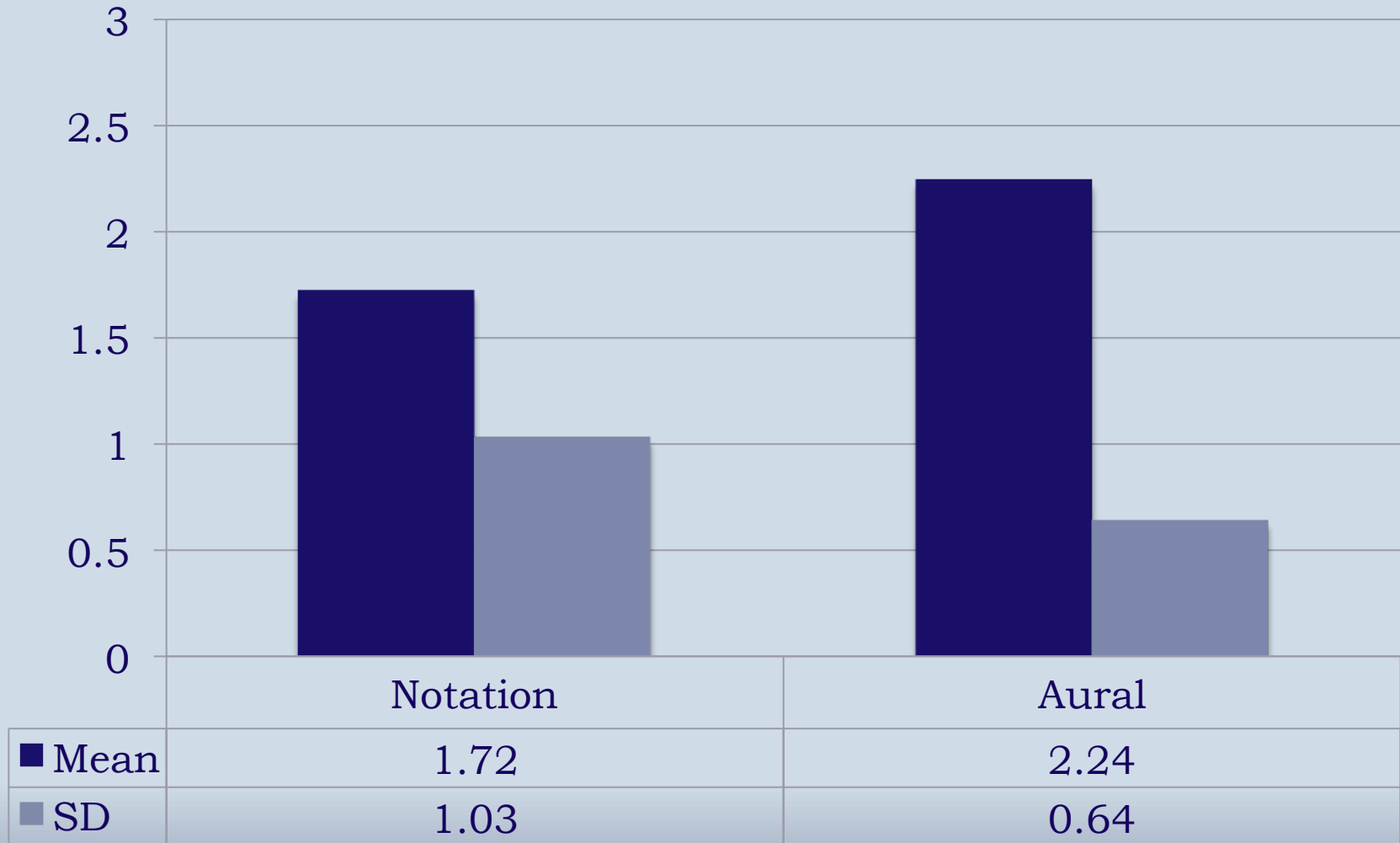
Support

Class Objectives



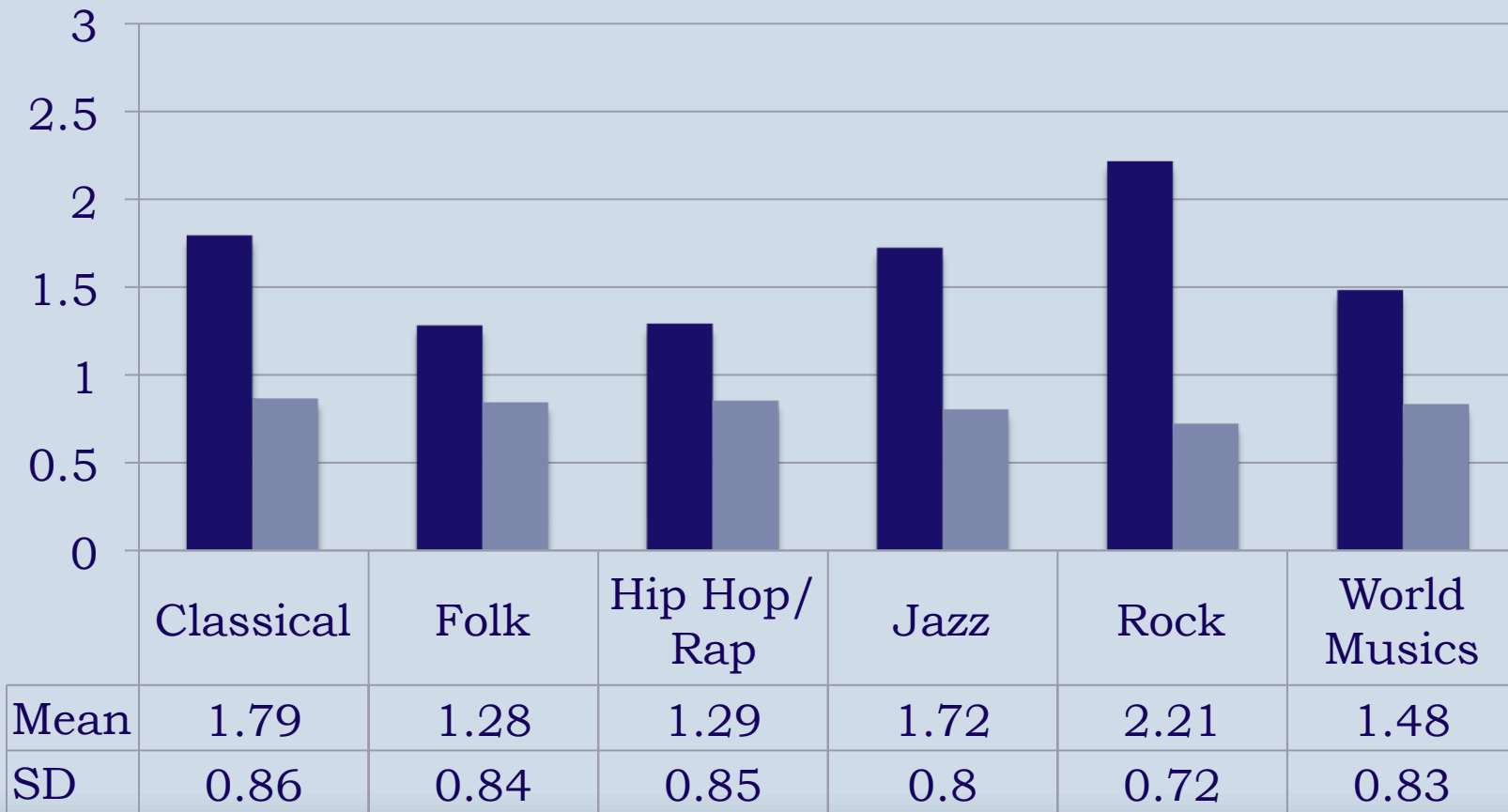
Nature of TBMCs

Role of Notation



Nature of TBMCs

Musical Styles



Nature of TBMCs

Class Size and Membership

Average Class: 16 students

sd=9

On average, 28% of TBMC students are
in band, choir, or orchestra

sd=33

Class Membership

89% of classes designed for
NTMs
(non-traditional music students)

Non-Traditional Music Students

Wide variety

Non-performers

Rock musicians

Special needs/ learning disabilities

Accurate reflection of student population

NTMs

The students in my music technology class are typically in 9th grade who play instruments like guitar, bass, drums, etc., but do not participate in band or chorus.

A student interested in music not necessarily from a choir or band standpoint.

Plays guitar, but does not read well. Have a strong love for pop and folk music. MOST are not in Band or Choir.

NTMs

Non-conformist. Some struggle with academics in other classes. Some struggle with behavior in other classes. Some are fine academically and behaviorally in their other classes.

One third have IEPs

Typical student in my class is quite varied - some music students, some urban kids who want to learn to create their own 'beats', and some students who desire to major in music industry related career

NTMs

21.5 % are of the lower economic indicator for my community (African American & Latino)
approximately 25% have a 504 or IEP (SpEd).
Approximately 30% never played an instrument or sang in a choir at all, another 65% used to play or sing at some point in a school ensemble but don't any more (of them it's 50-50 if they play a "rock band" instrument guitar, bass, keyboard or drums), approximately 5% currently sing or play in a school ensemble .

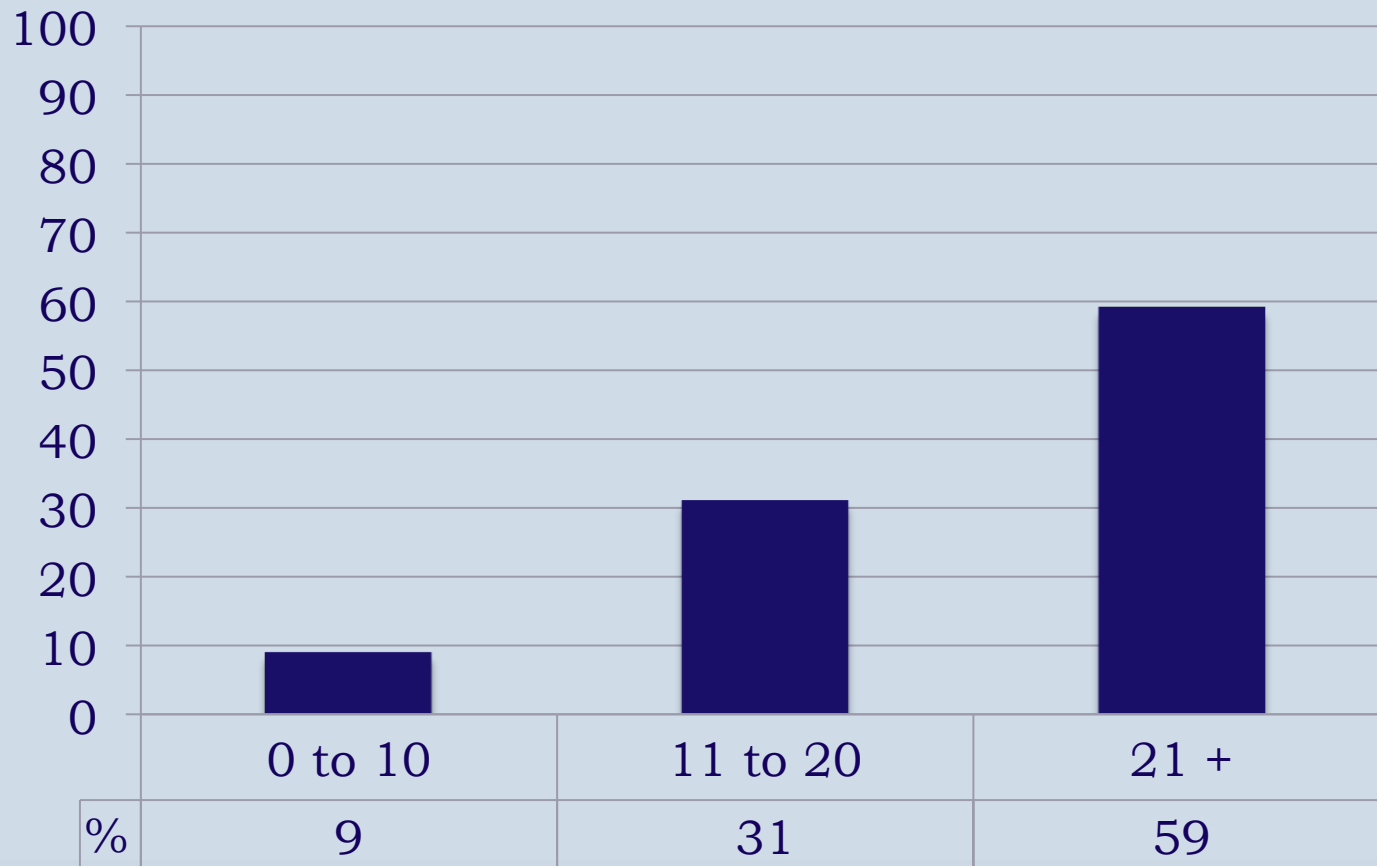
Wide Variety

All backgrounds. All musical tastes and levels of proficiency. Some students very proficient on instruments and in composing music. Others have no training at all.

There is no typical student in these classes. I have many different races, although it seems to attract more males than females there are females in the class. I get bright students, special needs students, athletes, non athletes, some music knowledge and no music knowledge.

Teacher Background

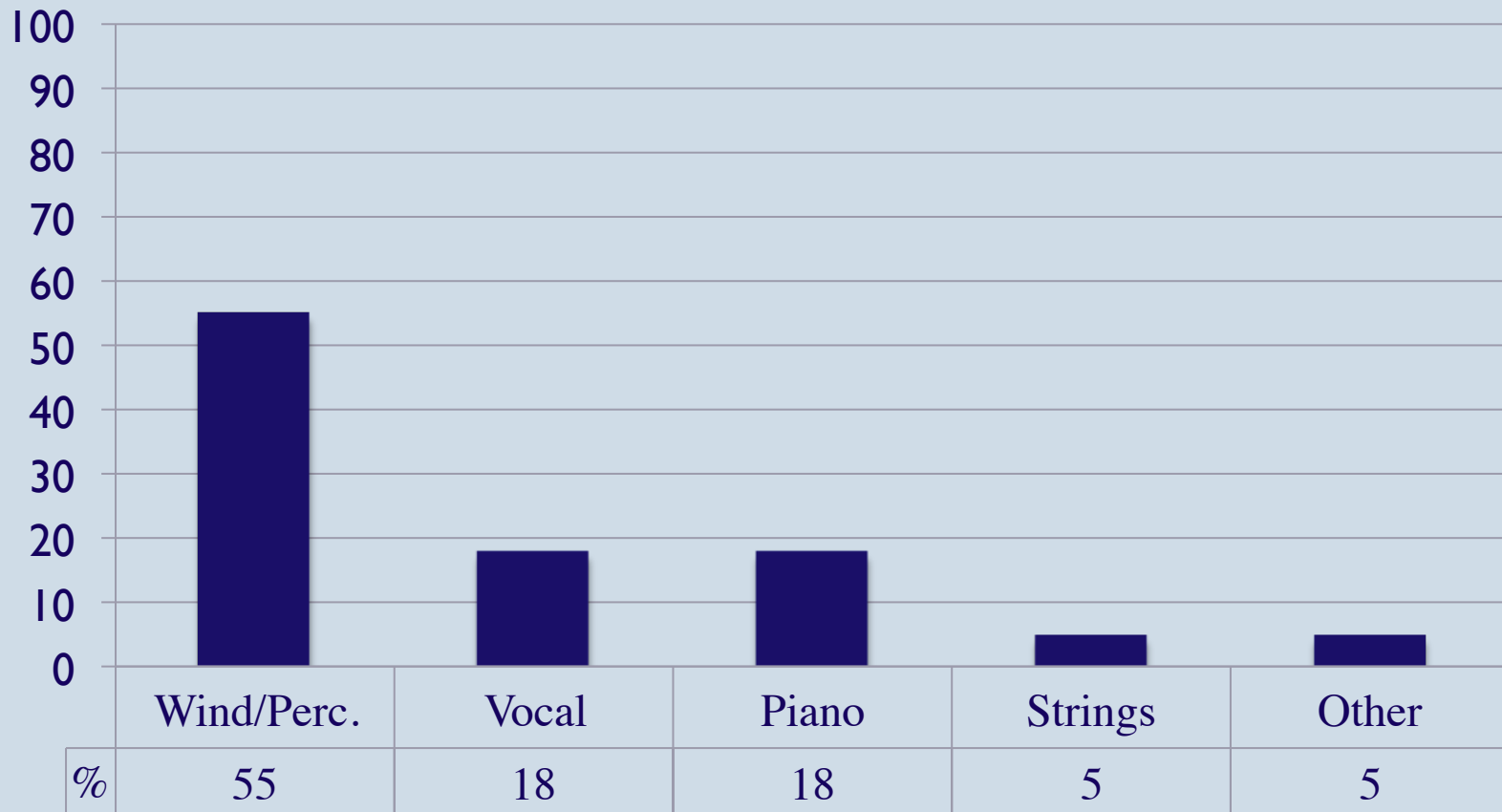
Years of Teaching



Nature of TBMCs

Teacher Background

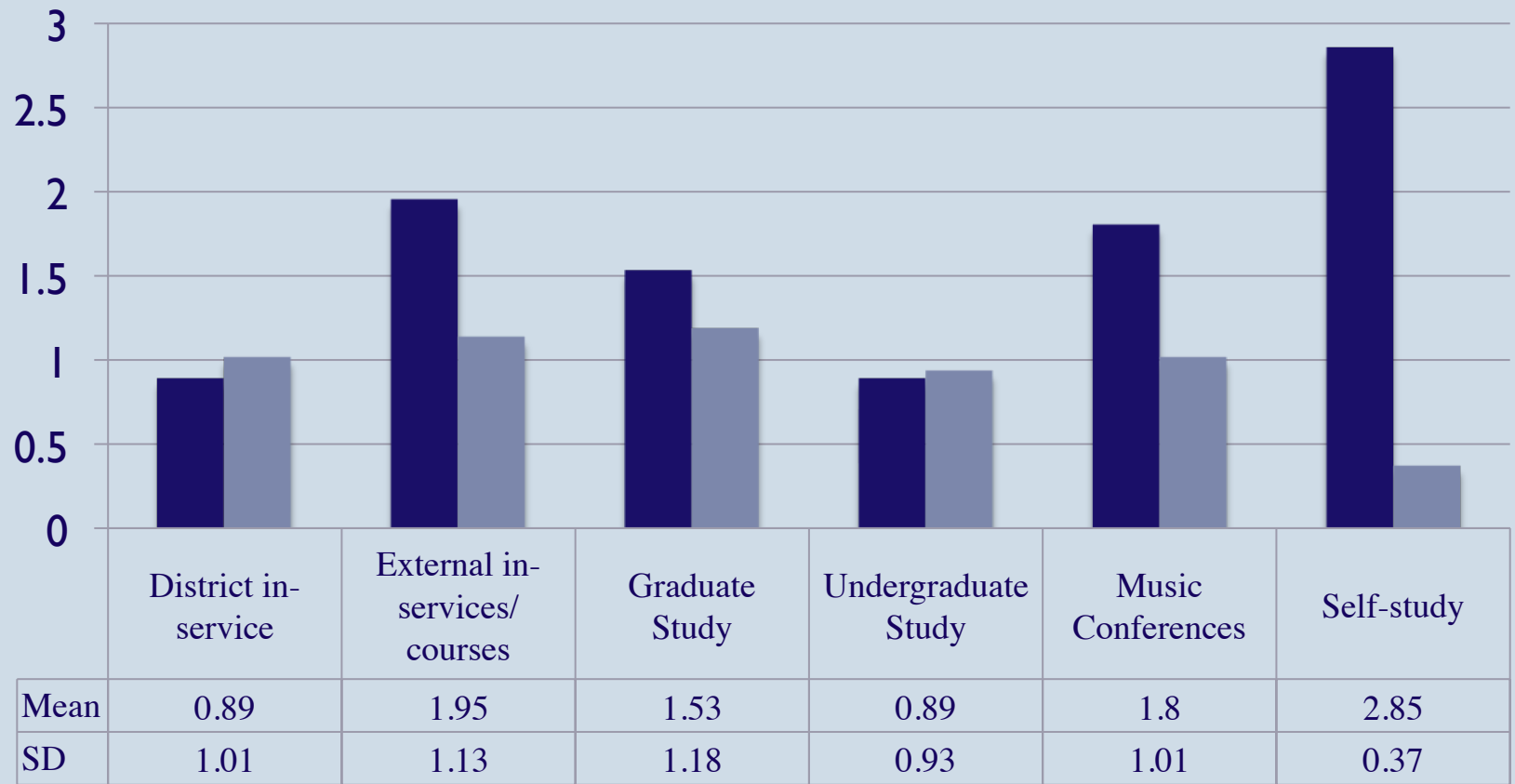
Performance Background



Nature of TBMCs

Teacher Background

Sources of Music Technology Learning



Hardware and Software

PC
23%



Mac
77%

Nature of TBMCs

Hardware



Desktops 82%

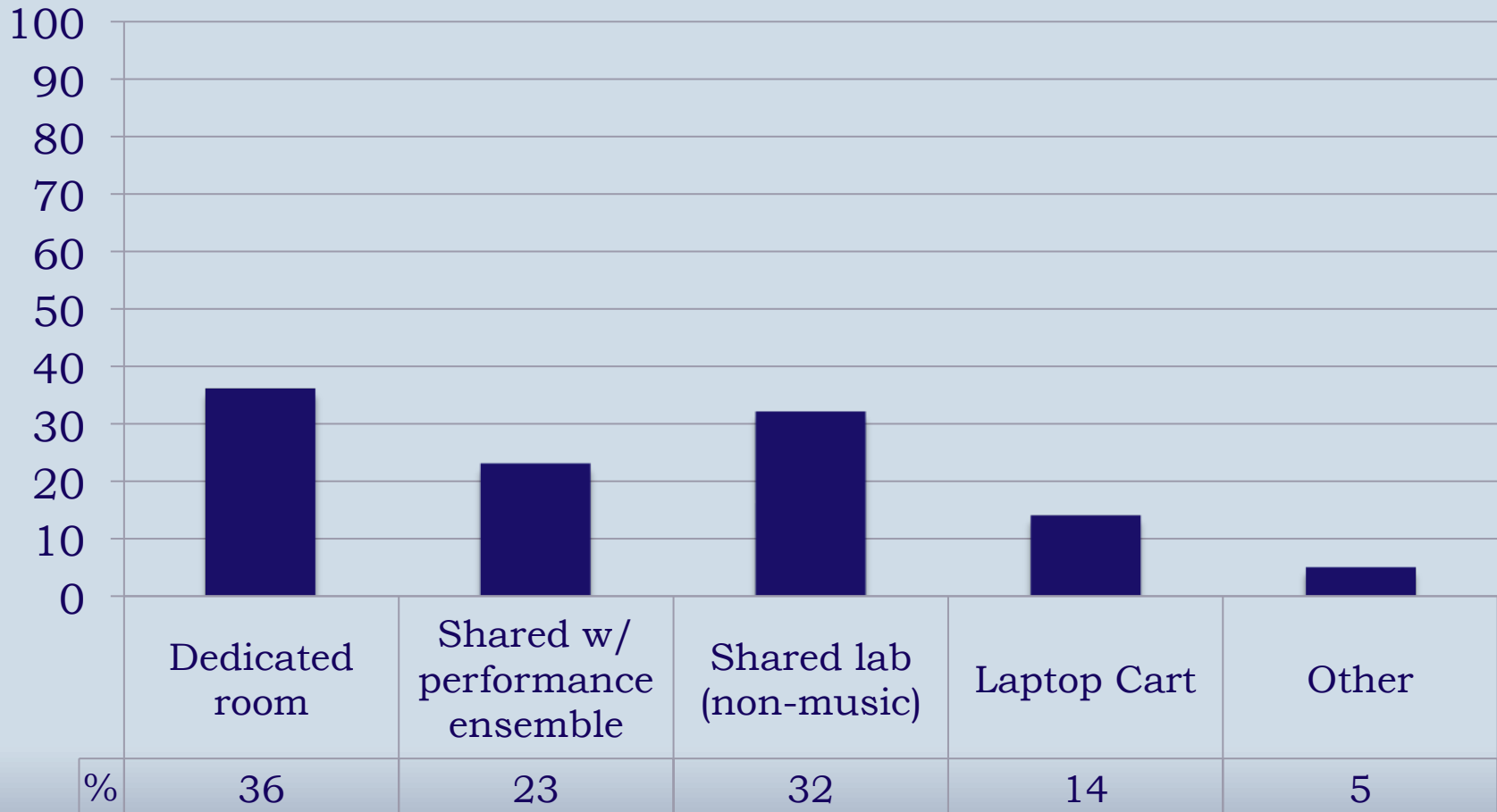


Laptops 32%

Nature of TBMCs

Class Space

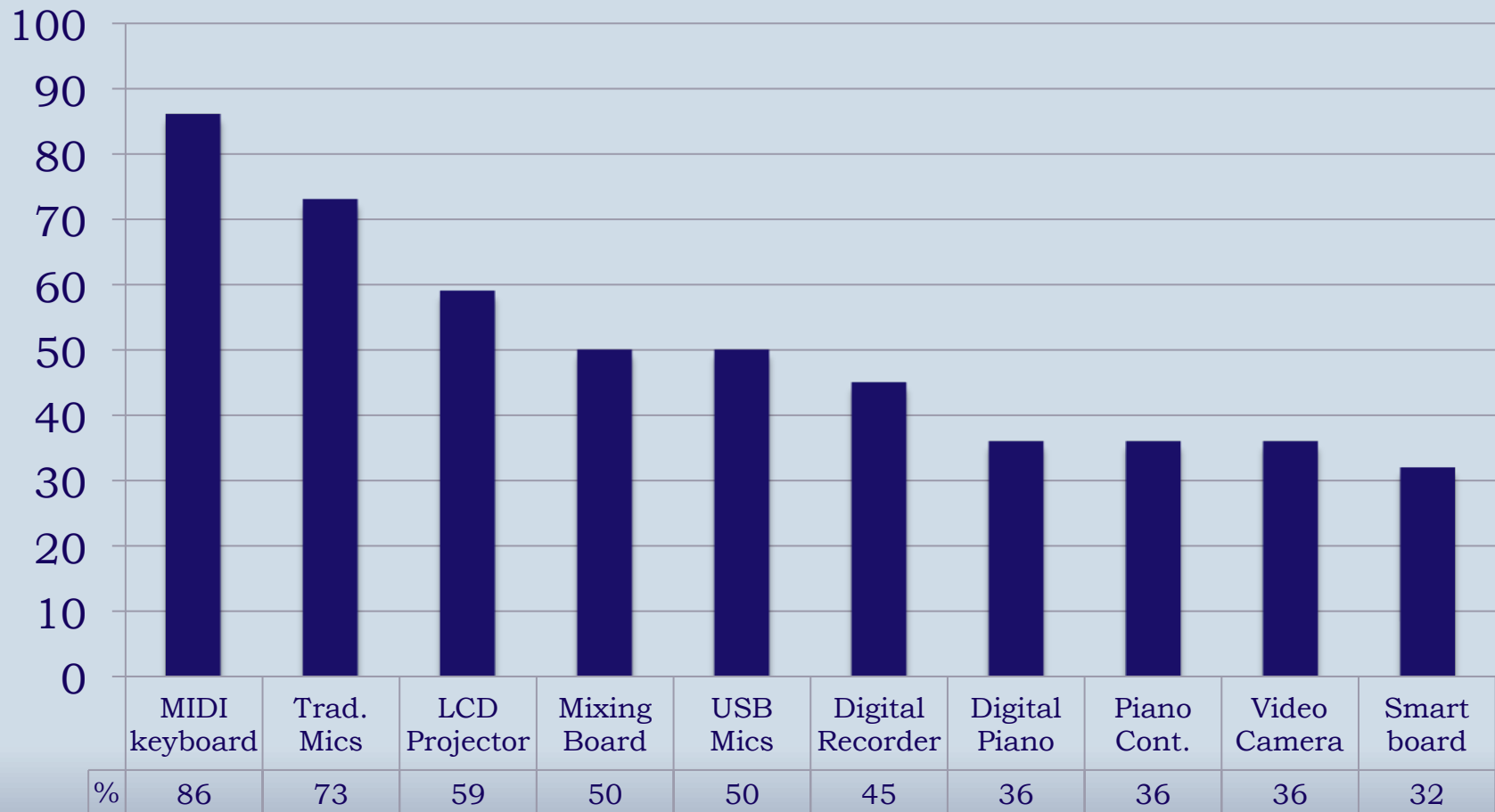
Type of Lab Space



Nature of TBMCs

Hardware

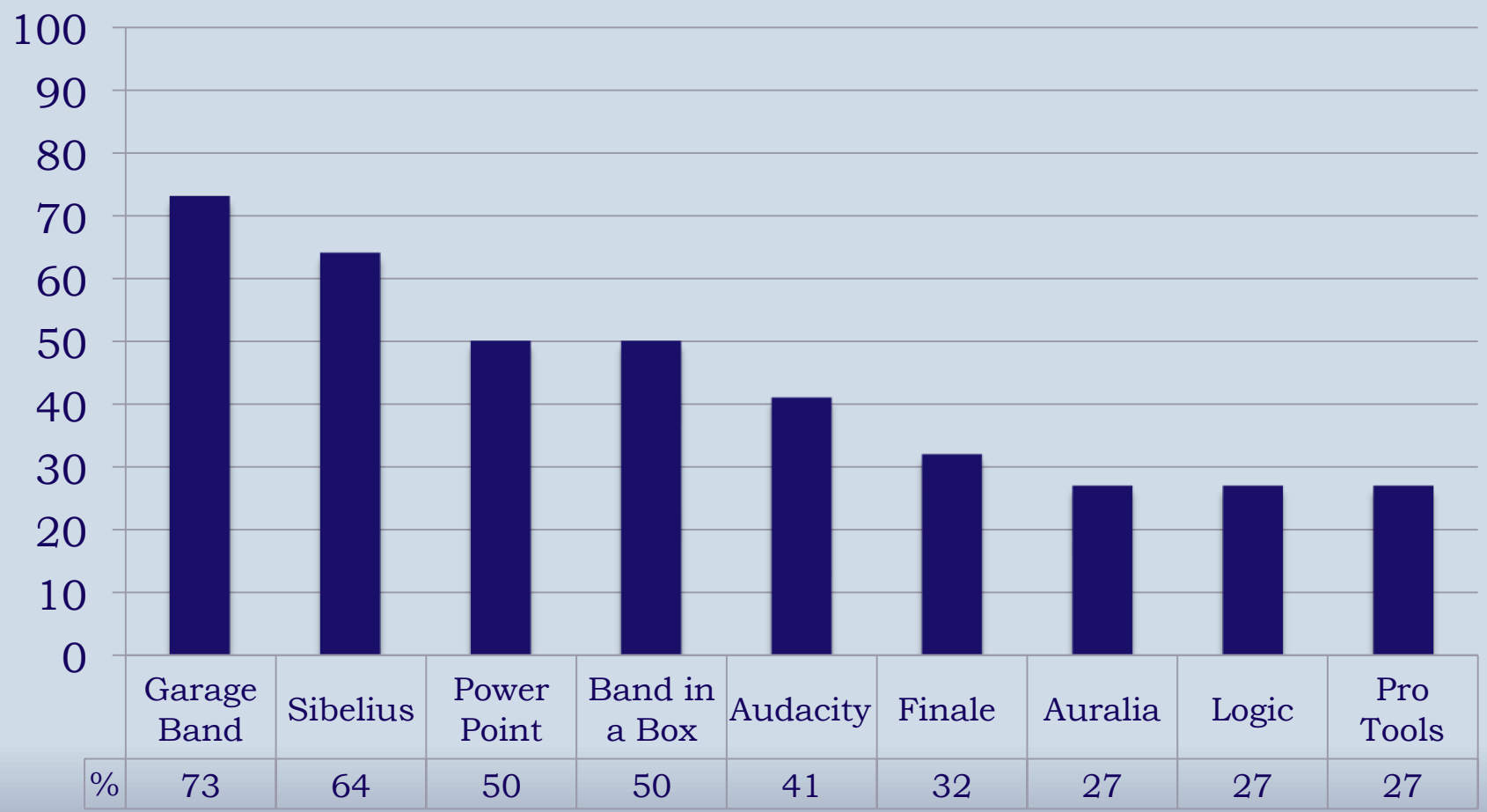
Equipment in Lab



Nature of TBMCs

Software

Software in Lab



Nature of TBMCs

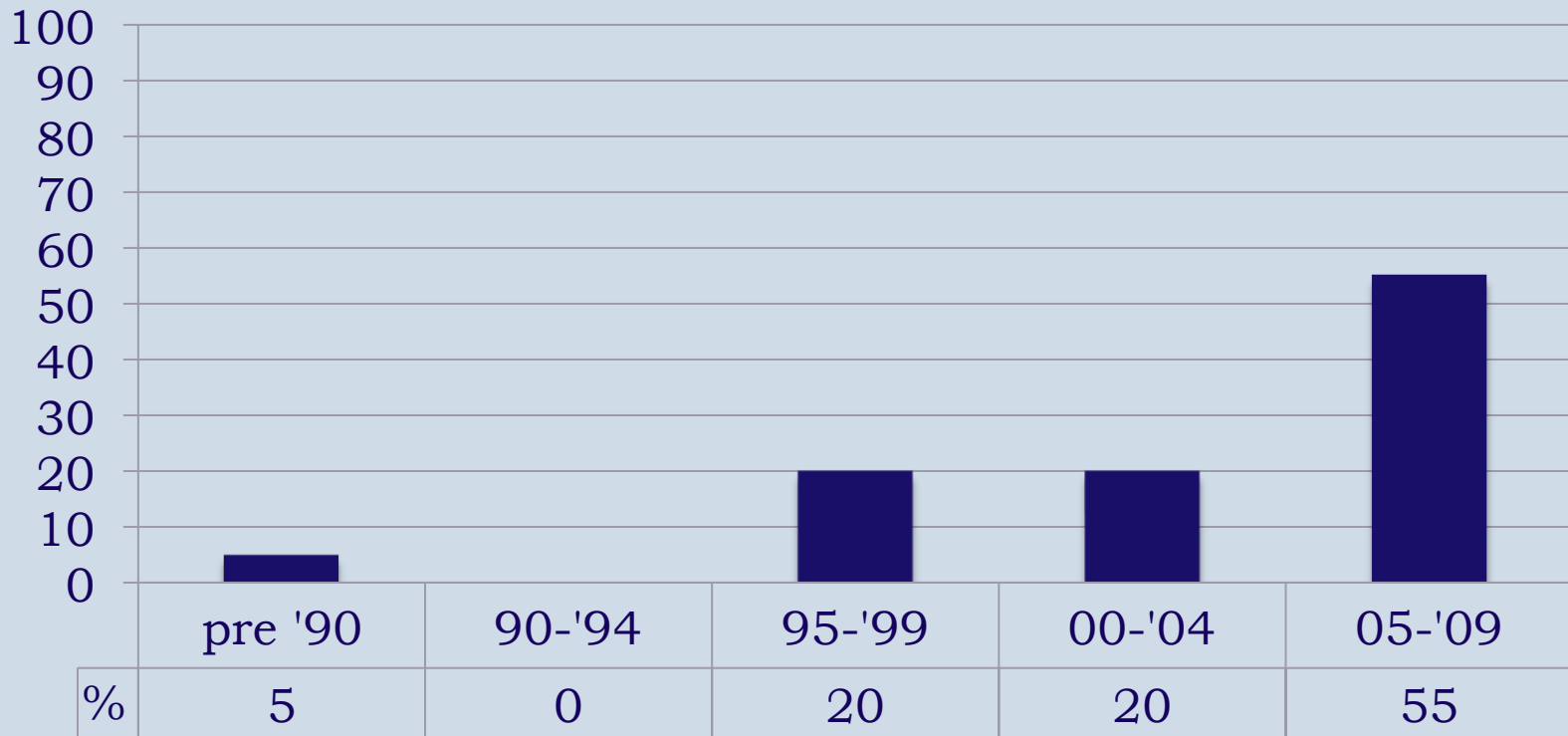
Course Age

Mean course age
7.6 years

$sd=8.9$

Trend in Class Establishment

Year of Course Founding



Nature of TBMCs

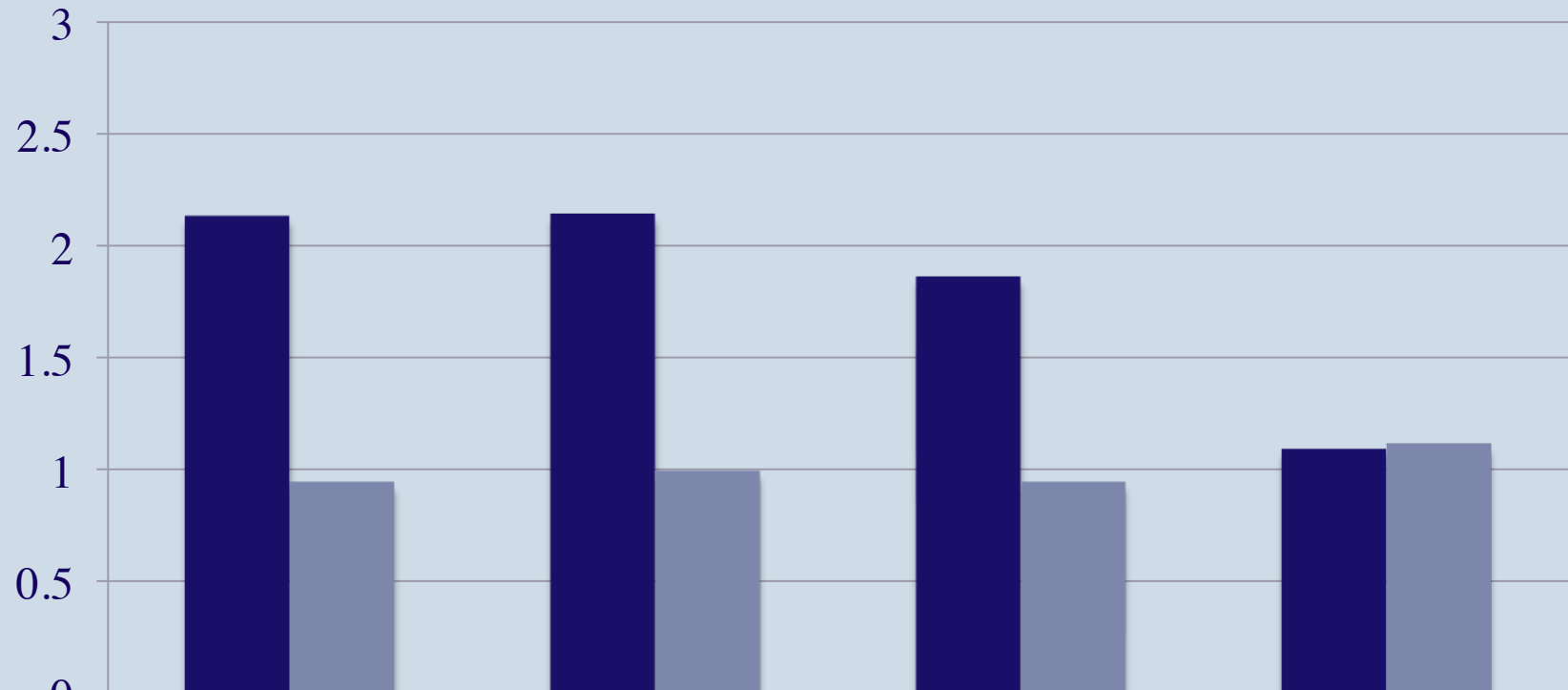
Class Characteristics

Teacher initiated and designed

Stand alone course (92%)

Middle school 'feeder' (19%)

District Support



	Hardware instillation/service	Software installation	Financial support	In-service training
Mean	2.13	2.14	1.86	1.09
SD	0.94	0.99	0.94	1.11

Nature of TBMCs

Financial Support

Varied widely

Grants

District funds

Music Department funds

Parent donations

Construction funds

Few stable line items

Summary and Implications

Band / Choir / Orchestra / Technology

Implications

Moment of Opportunity

Shape TBMCs from 'the ground floor'

Implications

Pedagogy

Methodologies

Philosophy

Collective Wisdom

Implications

Research

Best practices

Intersection of student and musical environment

Academic impact of TBMCs

Teacher education

Implications

Teacher Education

Pre-service teachers with:

Technology skills

Concern for the 'Other 80%'

Implications

Advocacy

Audience:

Music teachers

School technology specialists

Administrators

Highlighting student work

Implications

Questions and Comments

Implications