



Who gets heard *From the Top*? A longitudinal study of access and representation in elite youth classical music

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Abstract

This study examines two aspects of access and representation in elite youth classical music in the U.S. through a longitudinal analysis of National Public Radio's *From the Top* program from 2000 to 2025. First, by linking performers' hometowns to socioeconomic and demographic data from the U.S. Census and the American Community Survey, the study shows that performers' hometowns are consistently concentrated in highly educated and racially diverse communities. Newly appearing hometowns differ statistically significantly from returning hometowns on several measures. However, expansion into new communities does not fundamentally change the overall profile of representation. Second, repertoire analysis indicates statistically significant increases in works by living, female, and minority composers in recent years. At the same time, overall programming remains concentrated in works by a small set of well-known composers. Overall, these findings suggest that participation in elite youth classical music follows persistent patterns, even as diversity of representation has improved only modestly. To drive more meaningful change, shifting weight toward innovation-related dimensions may weaken the link between selection and elite, resource-intensive training. To this end, the study proposes a stylized, illustrative framework for future empirical evaluation of how changes in selection and programming practices might be associated with measurable changes in access, repertoire, and representation, including shifts toward participants from outside elite training pathways over time.

Keywords

From the Top, Youth classical music, Access, Representation, Longitudinal analysis, Selection processes, Socioeconomic inequality, Repertoire diversity, Institutional intervention, Stylized evaluation framework

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1. Introduction

Classical music in the United States is widely regarded as an elite cultural domain. Participation at high levels typically requires early exposure, substantial financial investment, access to specialized instruction, and sustained institutional support. These conditions are not evenly distributed across communities. As a result, opportunities to reach advanced levels of classical music training are shaped in part by broader socioeconomic factors.

In this environment, youth classical music programs play an important role. They identify, train, and showcase young musicians. Selection into nationally prominent youth platforms, such as National Public Radio's (NPR) *From the Top*, generally reflects years of prior training and achievement. For this reason, examining participation demographics in these programs can help evaluate how socioeconomic factors affect which students reach the advanced levels.

Representation in youth classical music has another dimension: the repertoire that is performed on stage. Historically, classical programming has centered on a relatively small group of well-known White, male, European composers. Works by living composers, women composers, and composers from racial and ethnic minority groups have been performed less often. Repertoire choices reflect broader cultural norms and training traditions. Examining repertoire alongside performer participation therefore offers a fuller picture of representation. It allows analysis not only of who appears on prominent stages, but also of whose music is heard.

Despite growing attention to diversity and inclusion in the arts, empirical evidence on these issues remains limited. In particular, there is little longitudinal, quantitative research examining who gains access to premier youth classical music platforms and what repertoire is performed within those settings.

This study addresses these gaps through an analysis of NPR's *From the Top*, a nationally syndicated public radio program that showcases the performances and personal stories of exceptional young classical musicians since 2000. The show is broadcast on more than 200 public radio stations nationwide and reaches ~ 350,000 listeners, in addition to online audiences. Each year, ~ 100 young performers are selected through an audition process and are offered professional recording sessions, mentorship, scholarships, and national broadcasts of their performances. In this way, the program serves as a premier platform that brings the next generation of classical musicians to a national audience.

Using more than two decades of program data of the show, this analysis links performers' hometowns to socioeconomic and demographic measures from the U.S. Census and the American Community Survey. It shows patterns of access and representation and tracks how those patterns change over time. By examining both performer participation and repertoire within a single institutional setting, the study provides new evidence on multiple dimensions of inclusion in youth classical music in the U.S. In addition to documenting these patterns, the study considers how selection and programming practices at an institutional level may influence observed outcomes. Building on the empirical results, it identifies a set of practical and testable

changes to *From the Top*'s selection and programming design that could be used to assess whether such practices improve patterns of access and representation over time.

2. Literature

2.1 Socioeconomic inequality and access in music education

Research on music education in the U.S. consistently shows that participation in instrumental and ensemble-based programs is unevenly distributed by socioeconomic background. Elpus and Abril document that high school ensemble participants are disproportionately White and come from households with higher parental education and income (1). Using a newer nationally representative cohort, Elpus and Abril replicate their earlier findings and show that these disparities vary by ensemble type, with socioeconomic and demographic imbalances driven primarily by instrumental ensembles, while choir participation more closely resembles the overall student population (2). DeLorenzo argues that the racial and ethnic underrepresentation of Black and Latino students in high school ensembles reflects longstanding inequalities in access to music education and related resources (3).

Enrollment disparities appear earlier in students' education as well. Focusing on middle school students in a low-income, ethnically diverse district, Alegrado and Winsler show that enrollment in elective music courses depends on factors such as family resources, early academic and developmental differences, and the availability of courses within schools (4). Based on national survey data, Parsad and Spiegelman find that schools serving lower-income

communities are less likely to offer instrumental music instruction and that access to arts education changed unevenly across districts (5).

Earlier quantitative studies similarly show that continuation and success in music education depend on a combination of socioeconomic factors, academic skills, and social support. Klinedinst finds that socioeconomic status is a strong predictor of retention among elementary instrumental students, even after accounting for musical aptitude and academic ability (6), while Corenblum and Marshall show that parental support, teacher encouragement, and students' expectations are closely associated with intentions to continue or discontinue music study (7). Albert concludes that disparities in instrumental music participation reflect cumulative barriers that operate across multiple stages of development rather than at a single point in time (8).

Studies examining the outcomes of music participation caution that observed benefits may not be directly caused by music activities, because as Costa-Giomi and Holochwost et al. point out, students who participate in music programs often differ systematically from non-participants even before enrollment, which means it is important to understand who gains access to music programs in the first place (9, 10).

More recent work places uneven access to classical music training within broader discussions of social context beyond economic barriers. Bull finds that middle- and upper-class norms shape what counts as "appropriate" behavior in classical music spaces (11). As a result, students from working-class

backgrounds may self-select out or feel out of place even when formal access exists. Trienekens et al. develop and apply a composite index that integrates family background, geography, access to networks, and cultural and social familiarity to assess how these barriers collectively shape which young musicians' talents remain hidden or gain access to high-level classical music training (12).

Barriers to access in early stages are found to persist into professional life, and therefore can have long-lasting consequences. Cox documents obstacles across education, employment, and leadership in the professional classical music sector (13). Cuyler et al. find persistent racial, ethnic, and gender disparities among musicians, conductors, and leadership in U.S. orchestras (14).

There are also studies examining efforts to broaden access through targeted programs and institutional redesign. At the elite youth level, Wolf et al. present longitudinal evidence from Carnegie Hall's National Youth Orchestra 2 (NYO2), documenting how a program explicitly designed around expanded outreach, financial support, and revised audition and selection practices enrolled participant cohorts that became more racially and ethnically diverse over time (15). However, Osborne et al. show that participation in El Sistema-inspired programs varies by school and length of involvement, highlighting that access to sustained music training remains uneven even within programs specifically designed to broaden participation among underserved youth (16).

Overall, the literature shows that access to advanced classical music training reflects

inequality that develops over time through differences in early exposure, family resources, institutional opportunity, class norms, and selection processes. However, most existing studies focus on enrollment, persistence, or outcomes within educational or larger ensemble contexts, rather than on who gains visibility on nationally prominent youth platforms focusing on solo and small-group chamber music performances.

2.2 Diversity in classical music repertoire

Alongside questions of access and participation, a separate body of literature examines which composers and works are performed on classical music stages. At the youth level, Pope provides a systematic analysis of repertoire performed by youth orchestras in the U.S. and shows that programming is heavily concentrated in the nineteenth-century canon, with limited inclusion of works by women composers (17). Zabalan analyzes data from the American String Teachers Association's National Orchestra Festival between 2004 and 2020 and finds persistent reliance on canonical European works across nearly two decades in a competitive youth ensemble context (18).

Professional orchestral programming has been examined more extensively through annual repertoire audits. Reports produced by the Institute for Composer Diversity document the composition of U.S. orchestral programming across recent seasons and show that, although the share of works by women and composers of color has increased modestly, the majority of programmed works continue to come from a narrow group of historically dominant composers (19-21). These reports provide season-by-season benchmarks that track changes over time while also highlighting the

continued concentration of repertoire. Using web-scraped concert programs from professional orchestras in Germany and the U.S., Radke et al. show that a small number of the most famous composers and works dominate performance frequency across seasons (22). Their analysis demonstrates that factors such as composer prestige, work age, and popularity are strongly associated with how often works are programmed, while newer and less-established works face substantial barriers to repeated performance.

Audits conducted by Donne Women in Music focus in particular on gender representation. Analyses of orchestral programming from the 2018–2019 and 2019–2020 seasons show that works by women accounted for only a small share of total works programmed, even when an increasing share of concerts included at least one work by a woman (23, 24). Extending the scope to global concert halls, the reports document similarly low levels of representation for women composers across large samples of orchestras worldwide, with only incremental change over time (25–27). Focusing on a major festival setting, Donne Women in Music analyzes the 2024 BBC Proms and shows that conclusions about gender representation depend on how performances are counted: while a considerable share of concerts included at least one work by a woman composer, works by women account for a smaller share of total pieces performed and an even smaller share of total performance time (28).

Taken together, the literature shows that repertoire diversity is another important part of representation in classical music. Prior work documents persistent focus on a narrow canon and slow diversification in both youth and

professional orchestras. At the same time, there is limited longitudinal evidence on how the repertoire performed by elite youth musicians evolves over time on platforms centered on solo and chamber music rather than those centered on large orchestra performances.

3. Data and Methods

3.1 Data sources and measurement

This study combines two types of data. First, *From the Top* program information for episodes from 2000 through mid-2025 was collected manually from the broadcast listings on the show's website. These data record performer names, hometowns and states, ages, instruments, performed works, composers, and dates of broadcast. Because both vocalists and instrumentalists are featured on the program, vocal performance was treated as an instrument category in the analysis. Second, socioeconomic and demographic measures at the geographic-unit level were obtained from U.S. Census Bureau data accessed through the IPUMS National Historical Geographic Information System (NHGIS) (29). For the years up to 2005, the 2000 decennial Census data were used. From 2006 onward, rolling five-year estimates from the American Community Survey (ACS) were used. These data became available after the ACS went into full implementation in 2005. Because Census geographic units are reported differently across states, “county-subdivision” level data were used for some states (e.g., the New England states, and certain Mid-Atlantic and Midwest states) and “place” level data were used for all other states.

For each geographic unit, socioeconomic conditions were measured using educational attainment (the share of adults with a bachelor's

degree or higher), median household income, poverty rate, and unemployment rate. Population composition was measured using percentages of White, Black, Latino, and Asian residents within each geographic unit. To allow comparison across geographic units and over time, for every geographic unit, each measure was converted into a percentile ranking relative to all other geographic units in the U.S. in that year. A percentile value of 50 represents a typical U.S. community in that year. Higher percentages for educational attainment and median household income indicate more socioeconomically advantaged communities. Poverty and unemployment percentiles were inverted so that higher values also indicated more advantaged local conditions. For racial and ethnic composition, higher percentiles indicated a larger share of that group in a community relative to other U.S. communities.

The analysis used two categories of observations. First, socioeconomic and demographic percentiles at the performer-hometown level were obtained by linking the reported hometown of each *From the Top* performer to a geographic unit in the Census/ACS data for the year in which the performer was featured on the program. Location names were standardized to ensure consistent matching across data sources. It is important to note that this study used data about performers' hometowns, not their individual family backgrounds. Therefore, the results describe the types of communities represented on *From the Top*, rather than the personal socioeconomic or racial/ethnic identities of the performers themselves.

Second, work-level observations captured the repertoire performed on the program. Composer

name spellings were standardized for consistency and additional information was obtained through online searches to indicate whether composers were living at the time of performance, whether they were women, and whether they belonged to racial or ethnic minority groups (i.e., someone who was non-White, or White but from a Latin American country based on biographical sources).

3.2 Analytical design

The analysis began with a series of descriptive comparisons that provided an overview of the patterns of access and representation on *From the Top* over the study period. To further assess changes over time, performers' hometowns were classified as "new" or "returning." A hometown was classified as new in a given year if it had not appeared on the program within the previous five years; otherwise, it was classified as returning. This five-year lookback period was used, because most musicians featured on the program fell within a five-year age span from ~14 to 18 years old. As a result, if a hometown did not appear for five consecutive years, this suggested that an entire cohort of local youth musicians may have passed through the relevant age range without appearing on the program. Analyses using this classification were limited to broadcasts from 2006 onward, when sufficient prior history was available to apply the lookback rule.

Changes in access and representation can differ across instruments. However, once the investigation focused on new performer hometowns, analyzing individual instruments was not practical because of the large number of distinct instruments and small sample sizes for many instruments. To address this, individual instruments were grouped into four broad

instrument families: piano, strings, woodwinds, and other instruments (including vocal, brass, percussion, and other less common instruments such as tin whistle). Even with this grouping, sample sizes remained limited in some years. To further improve sample sizes and reduce noise from year-to-year variations, the analysis of new hometowns was conducted based on comparisons across multiyear periods.

Repertoire analyses examined which types of composers were featured on the program. In particular, four aspects were investigated: whether performed works were concentrated among a small number of frequently featured composers, whether composers were living at the time of performance, whether composers were women, and whether composers belonged to racial or ethnic minority groups. To measure the concentration of repertoire, the twenty most frequently performed composers on *From the Top* over the full sample period were identified and listed in Appendix A. The analysis reported the share of performed works written by composers outside the Top-20 group and examined how that share changed over time.

3.3 Summary statistics

For the statistical measure in the analysis, three options were considered. First, simple means are easy to calculate and interpret, yet they are sensitive to extreme observations. Second, medians are also commonly used and are more robust to outliers, although they ignore the

information about the tails of the distribution. To balance these concerns, this analysis used a third option, winsorized means, which limit the influence of extreme values by capping observations in the two tails of the distribution rather than removing them (30). Values below the 5th and above the 95th percentile were set to the 5th and 95th percentile values respectively. This approach reduced sensitivity to outliers while preserving sample size and retaining information about the overall distribution.

4. Results

This section contains four parts. First, it documents overall program scope and hometowns' baseline characteristics. Second, it compares newly appearing and returning hometowns. Third, it examines instrument-specific differences among new hometowns. Finally, it analyzes repertoire concentration and diversity over time.

4.1 Dataset scope and baseline results

Figure 1 shows the annual number of U.S. performers whose hometowns were reported and the annual number of pieces performed for which composers were reported. There were more performers than pieces because a considerable share of repertoire was performed by small chamber ensembles. Although activity fluctuated from year to year, the average over 2000–2025 was ~ 100 performers and 90 pieces every year.

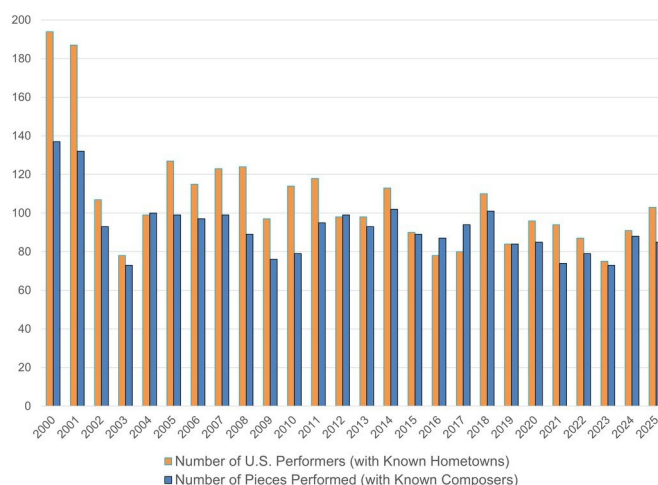


Figure 1. NPR's *From the Top* Performances (2000 – 2025)

Figure 2 presents the socioeconomic profile of performers' hometowns. College attainment percentiles remained consistently high, mostly in the mid- to high-80s throughout the period. Median household income percentiles began around the mid-20s in the early 2000s and gradually increased into the mid-40s by the early 2020s. Poverty and unemployment are shown using inverted percentiles, where higher values indicate lower poverty or unemployment

relative to the national median. Poverty percentiles remained mostly in the mid-50s to around 60, while inverted unemployment percentiles trended downward over time, ending near the low-40s by 2025. Overall, these measures indicate persistent concentration in highly educated communities, alongside gradual movement toward more typical income and labor-market conditions.

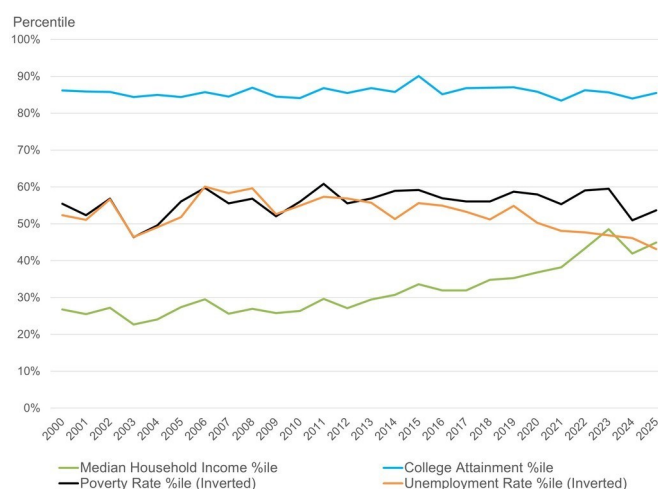


Figure 2. Winsorized averages of socioeconomic percentiles in performers' hometowns (2000 – 2025)

Table 1 reports t -tests comparing annual average socioeconomic percentiles to the national median (50th percentile). These tests indicate that performers' hometowns were statistically significantly different from a typical U.S. place across socioeconomic measures.

Table 1. Hometown socioeconomic percentiles: tests against the national median

Socioeconomic factors	Avg. annual winsorized avg.	Avg. - 50 th percentile	t-statistic	p-value
College attainment percentile	85.7%	35.7%	134.03	< 0.001
Median household income percentile	31.8%	-18.2%	-13.47	< 0.001
Poverty rate percentile (inverted)	55.8%	5.8%	8.83	< 0.001
Unemployment rate percentile (inverted)	52.5%	2.5%	2.87	0.0082

Figure 3 shows the racial/ethnic composition of performers' hometowns relative to national percentiles. Asian population percentiles remained very high (generally in the mid-80s to mid-90s). Latino percentiles remained above the national median (upper-50s to low-70s). Black percentiles were modestly above the national median (mid-50s to low-60s). White percentiles remained well below the national median (~ 20–30) and trended slightly downward. These percentiles indicate that performers' hometowns were disproportionately located in places with higher-than-typical Asian and Latino shares and lower-than-typical White shares.

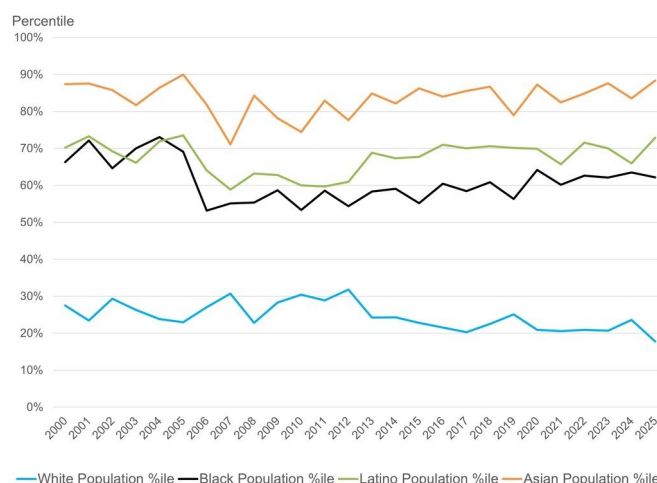


Figure 3. Winsorized averages of racial/ethnic population percentiles in performers' hometowns (2000 – 2025)

Table 2 reports t -tests comparing annual mean measures, performers' hometowns were racial/ethnic percentiles to the national median statistically significantly different from a typical U.S. place and indicates that, in terms of racial composition U.S. place.

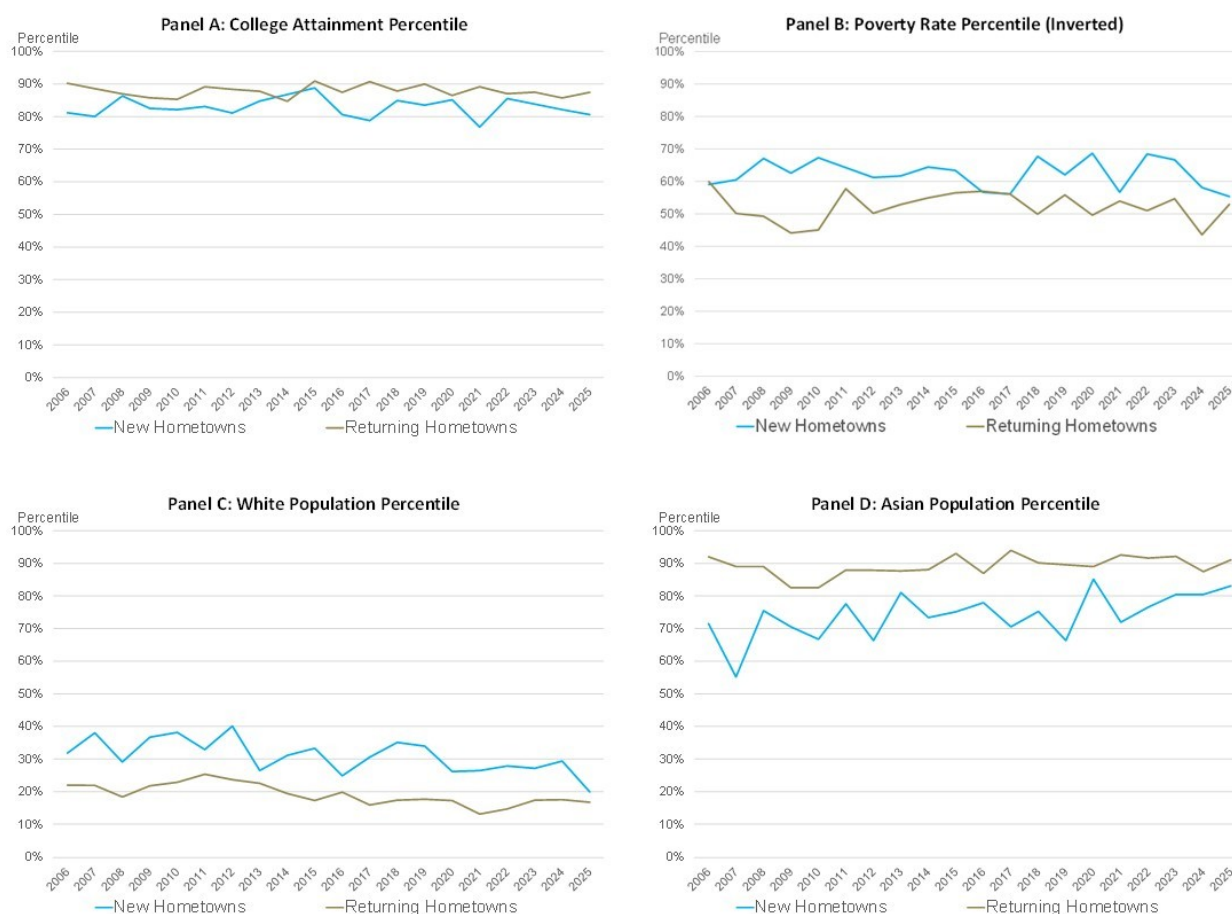
Table 2. Hometown racial/ethnic population percentiles: tests against the national median

Racial/ethnic composition measures	Avg. annual winsorized avg.	Avg. - 50 th percentile	t-statistic	p-value
White population percentile	24.5%	-25.5%	-34.97	< 0.001
Black population percentile	61.0%	11.0%	9.97	< 0.001
Latino population percentile	67.5%	17.5%	20.19	< 0.001
Asian population percentile	83.5%	33.5%	38.28	< 0.001

4.2 Entry versus persistence: new and returning hometowns

This subsection compares newly appearing and returning hometowns to assess whether expansion into new places changed the

socioeconomic and demographic profile of performers' communities. The classification of new versus returning hometowns is described in the prior section.

**Figure 4.** Winsorized averages of select metrics in new vs. returning hometowns (2006 – 2025)

In Figure 4, Panel A compares college attainment percentiles for newly appearing and returning hometowns. Both groups fell within a high range (~ the 80th to 90th percentiles), but new hometowns were typically a few points lower across most years. Panel B presents poverty percentiles (inverted) for new and returning hometowns. Both remained above the national median, indicating that performers generally came from lower-poverty communities than a typical U.S. place. Although the series fluctuated over time, new hometowns tended to be higher than returning hometowns. Panel C shows White population percentiles for new and returning hometowns. Newly appearing hometowns were somewhat more

White than returning hometowns, but both remained below the 50th percentile throughout the period, indicating that these hometowns tended to be more racially diverse than a typical U.S. place. The other three racial/ethnic groups exhibited the opposite pattern to White. For example, Panel D shows that newly appearing hometowns had lower shares of Asian populations than returning hometowns.

As shown in Table 3, across measures such as college education, poverty, White and Asian populations, newly appearing hometowns were significantly different from returning hometowns.

Table 3. Mean differences and *t*-tests for select metrics in new vs. returning hometowns

Socioeconomic and racial/ethnic measures	New hometown avg. of annual winsorized avg.	Returning hometown avg. of annual winsorized avg.	Difference (new – returning)	t-statistic	p-value
College attainment percentile	82.9%	87.8%	-4.9%	-6.41	< 0.001
Poverty rate percentile (inverted)	62.4%	52.3%	10.1%	7.15	< 0.001
White population percentile	31.0%	19.1%	11.8%	8.68	< 0.001
Asian population percentile	74.0%	89.2%	-15.2%	-8.83	< 0.001

Additional new-versus-returning comparisons for income, unemployment (inverted), Latino, and Black population percentiles are presented in Appendices B and C.

4.3 Instrument-level differences among new hometowns

Because access pathways may differ across instruments, this subsection examines whether newly appearing hometowns varied systematically by instrument group. Figure 5 reports comparisons by instrument group of two select metrics among new hometowns. Panel A

shows median income percentiles by instrument group among newly appearing hometowns. Median household income percentiles increased over time for all instrument groups. By 2021–2025, piano ranked highest, followed by strings, then woodwinds, and finally the “Other” category (including vocal, brass, percussion, and other less common instruments). Panel B presents Black population percentiles by instrument group. All groups trended upward over time, with the largest increase occurring in the “Other” category.

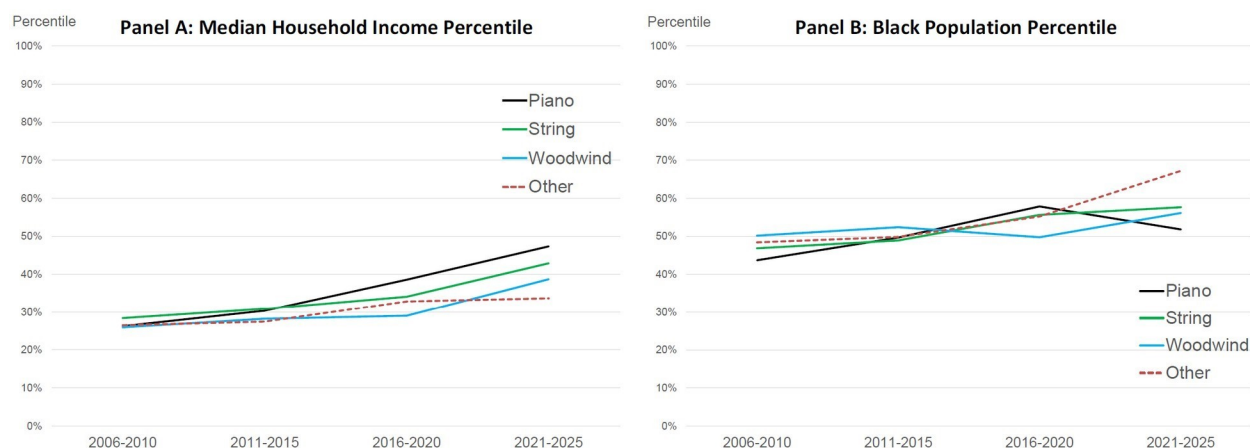


Figure 5. Winsorized averages of select metrics in new hometowns by instrument group (2006 – 2025)

ANOVA tests were performed to compare instrument groups among newly appearing hometowns. The F -statistics reported in Table 4 test whether the average percentile differed across the four instrument groups, controlling for differences across the multi-year periods. For median household income percentiles, differences across instrument groups did not meet the conventional 0.05 threshold but were significant at the 0.1 level. For Black population percentiles, differences across instrument groups were not significant.

Table 4. ANOVA tests for differences in select metrics across instrument groups in new hometowns

Socioeconomic and racial/ethnic measures	F(3,9)	p-value
Median household income percentile	3.64	0.0574
Black population percentile	0.83	0.5099

Additional instrument-level breakdowns for education, unemployment (inverted), poverty (inverted), and other racial percentiles are reported in Appendices D and E.

4.4 Repertoire concentration and diversity

Figure 6 contains four panels, each focusing on

one measure. All panels use 0–50% on the y-axis for scale consistency. Panel A shows the share of performed pieces by composers outside the Top 20. The share fluctuated between ~ 25% and 45%, with increases in certain years rather than a steady upward or downward trend.

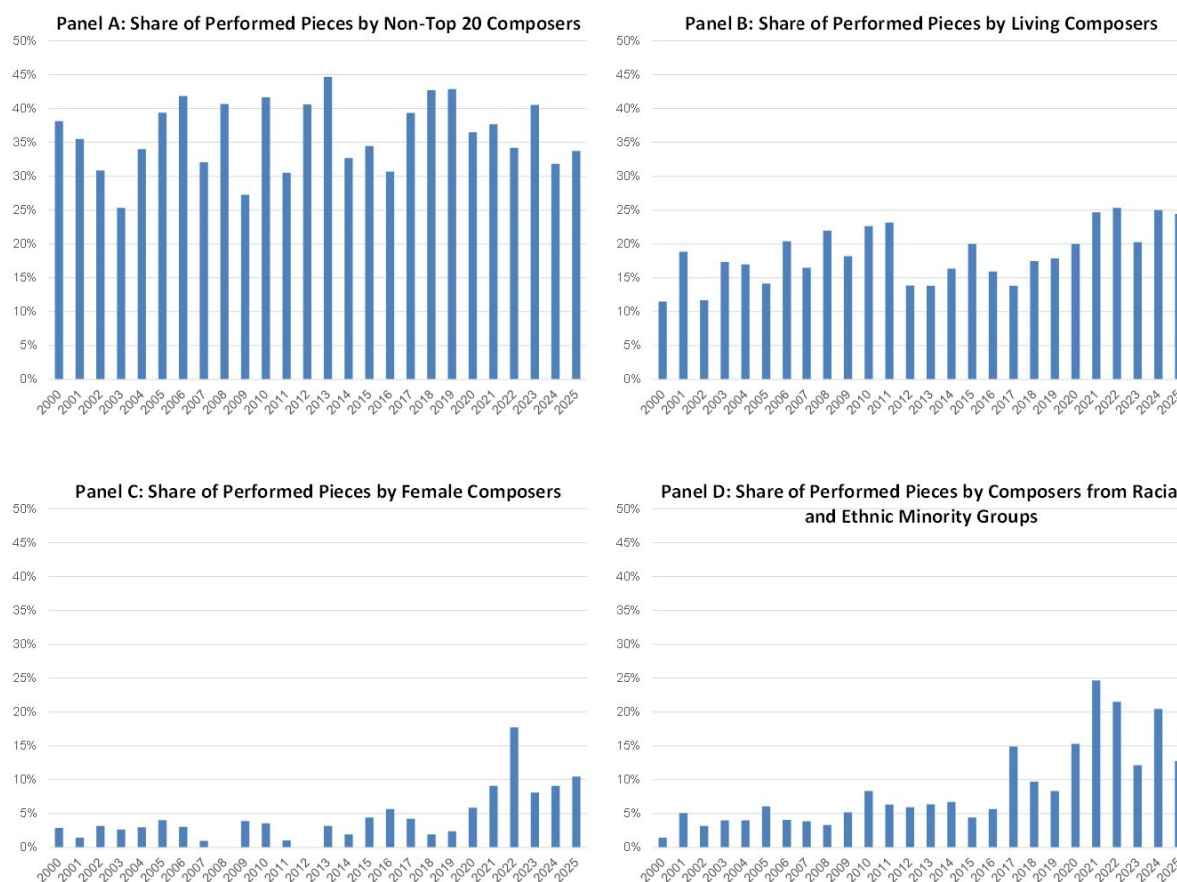


Figure 6. Repertoire concentration and diversity shares (2000 – 2025)

Panel B presents the share of works by living composers. This share rose from the low-teens in the early 2000s to the mid-20% range after 2020. Panel C shows the share of works by female composers. The share remained low through the 2000s and 2010s, then increased after 2020, peaking near 18% in 2022 and flattening ~ 10% by 2025. Panel D shows the share of works by composers from racial and ethnic minority groups. The share increased gradually through the 2010s and rose more sharply after 2017, peaking ~ 21–25% in 2021–

2022 and remaining above pre-2017 levels despite year-to-year variation.

Table 5 compares average repertoire shares between the early period (2000–2009) and the recent period (2016–2025). The shares of works by living composers, female composers, and composers from racial and ethnic minority groups were statistically higher in the recent period than in the early period. The share of works outside the Top 20 composers also increased between the two periods, although the increase was not statistically significant.

Table 5. Mean differences and *t*-tests for repertoire concentration and diversity shares between early period (2000-2009) and recent period (2016-2025)

Composer demographics	2016-2025 avg. of annual share	2000-2009 avg. of annual share	Difference (recent – early)	t-statistic	p-value
Non-top-20 composers	37.0%	34.5%	2.5%	1.11	0.2831
Living composers	20.5%	16.8%	3.7%	2.16	0.0448
Female composers	7.5%	2.5%	4.9%	3.26	0.0082
Racial/ethnic minority composers	14.6%	4.0%	10.5%	5.33	< 0.001

In summary, the results indicate that performers' hometowns were concentrated in highly educated communities and statistically significantly different from a typical U.S. place across most socioeconomic and racial composition measures. Although newly appearing hometowns differed from returning hometowns in several socioeconomic and demographic dimensions, the observed magnitude of differences suggests that expansion into new communities did not fundamentally change the overall profile of representation. Furthermore, instrument-group ANOVA results indicate that differences across instrument groups were limited and not statistically significant for most measures. Repertoire diversification was statistically higher in the recent period for living, female, and minority composers, while changes in concentration outside the Top 20 composers were more modest and not statistically significantly different.

5. Discussion

The findings show that patterns of access and representation in a nationally prominent youth classical music platform have both remained stable and have changed in certain ways over time. On the participation side, performers' hometowns remained concentrated in highly

educated communities. On the repertoire side, diversification has increased in several dimensions, though overall programming remained concentrated in works by a small set of well-known composers.

5.1 Socioeconomic and demographic characteristics of access

One stable pattern across the entire period was the consistently high college-attainment percentile of performers' hometowns. The average median household income percentile of performers' hometowns, by contrast, began below the national median and moved closer to it over time. The average percentiles of unemployment rates and poverty rates (both inverted) fluctuated slightly above the median for most of the period. Performers' hometowns were located in racially diverse communities relative to the national median. Asian and Latino population percentiles were consistently above the median, while White percentiles were below. Black population percentiles were modestly above the median and trended slightly upward over time.

These patterns appear to be consistent with some of the socioeconomic and demographic characteristics of U.S. metropolitan areas, such as higher educational attainment, lower poverty

but wider income inequality, and greater racial diversity (31-34). These areas also tend to have more abundant classical music resources (35), which may be associated with stronger youth classical music engagement.

The consistently high college-attainment percentiles observed in this study are consistent with prior research showing that students from higher socioeconomic backgrounds are more likely to enroll and stay in music programs. However, it is important to note that this study measured the socioeconomic features of performers' hometowns, not of individual families. Place-level measures capture the broader characteristics of communities, but they do not directly measure household resources or profiles. As a result, the findings should not be interpreted as direct evidence about the socioeconomic status of individual performers.

Prior research also documents racial and ethnic disparities in music participation, with Black and Hispanic students often underrepresented in school music ensembles. The present study, however, measured the racial and ethnic composition of performers' hometowns rather than that of the performers themselves. As a result, higher racial diversity at the community level does not necessarily imply similarly diversified representation among individual participants. Instead, it could indicate that elite performers on *From the Top* are often drawn from racially diverse metropolitan areas.

In addition, the hometown patterns seen on *From the Top* may be influenced by several factors: which students have had access to the training and resources needed to be competitive, which students chose to apply, and which students were ultimately selected. These factors

suggest that both system-wide differences and institutional-level selection practices may influence which performers and repertoire are chosen to be featured. Because this study did not include information about the applicant pool, it could not determine whether the results reflect broader access differences or the program's selection decisions.

5.2 Expansion and persistence

Newly appearing hometowns differed statistically significantly from returning hometowns on several measures, demonstrating the elite program's geographic broadening over time. However, these differences may only indicate small incremental changes rather than a shift into fundamentally different types of communities. Both groups remained concentrated in highly educated and racially diverse areas. Thus, expansion likely occurred within similar metropolitan areas rather than in fundamentally different or more disadvantaged communities.

This adds a geographic angle to the prior work on access barriers. While earlier studies document how socioeconomic and institutional factors influence youth music participation, the present analysis showed that at a national elite youth level, even as new communities entered the program, the overall profile of representation remained similar.

A fundamental change in representation at that level may take time, because participants typically have years of ongoing training and institutional support. Prior research shows that socioeconomic status and access to structured music programs are associated with continued participation in instrumental music. The persistent patterns observed here may reflect

differences in early access and training that affect which students later reach national performance platforms.

5.3 Instrument-level differences

At the instrument group level, descriptive results suggest that movement patterns differed across instruments, which could help programs think about where outreach might matter most for broadening access and representation. For example, median household income percentiles of newly appearing hometowns for “Other” instrument players were persistently lower than those for pianists, and in the 2021–2025 period, the average Black population percentile of new hometowns for “Other” instrument players was higher than that for pianists. This may suggest that efforts aimed at “Other” instruments could be one way to reach more lower-income or Black communities.

However, it is worth noting that ANOVA tests comparing instrument groups in newly appearing hometowns indicated that differences across instrument categories were not statistically significant for most measures. Thus, the observed differences should be interpreted with caution.

5.4 Repertoire concentration and diversification

Repertoire diversification has increased in recent years in several measurable ways. The shares of works by living composers, female composers, and composers from racial and ethnic minority groups were statistically higher in the 2016–2025 period than in 2000–2009. These gains are consistent with trends reported for professional orchestras, where works by historically underrepresented composers have featured more often.

However, overall concentration remained persistent. The share of works outside the Top 20 composers increased only modestly and was not statistically significantly different between the early and recent periods. This level of concentration is consistent with broader orchestral programming patterns found in prior research, which show that a relatively small group of canonical composers accounts for a large share of performed works. The results therefore suggest that on a prominent national stage for solo and chamber music performance, programs remained centered around works by a small set of well-known composers, even as diversity has improved modestly.

5.5 Implications for selection and programming

The persistent patterns of access and representation documented in this study may reflect not only system-wide differences in early exposure, training resources, and long-term support, but also the ways in which performers and repertoire are evaluated and selected at an institutional level. While upstream inequalities will take longer to change, more immediate adjustments can be made to an organization’s selection and programming practices. The findings of this study provide implications for such changes. This consideration is especially relevant at a time of institutional transition. In February 2026, *From the Top* announced that it was joining KERA, a public media organization based in North Texas, with the transition taking place during 2026 (36). Although the program’s national scope and core format are expected to remain in place, this type of organizational change creates an opportunity to review existing practices and consider possible adjustments. One broader step that could provide a foundation for such changes would be to adopt and publicly disclose multi-year targets related

to performer representation, repertoire diversity, and geographic reach, and report progress relative to those targets on a regular basis. This would make it possible to assess whether changes in selection and programming are associated with measurable differences in outcomes. The empirical measures developed in this study, including hometown percentiles and repertoire shares, provide a baseline against which such changes could be evaluated.

A first set of possible changes concerns access. One approach is to incorporate a form of contextual evaluation, in which achievement is considered relative to the level of opportunity available to the applicant. Under such an approach, a highly developed performance from a lower-opportunity setting would not be evaluated in exactly the same way as a similarly polished performance supported by extensive training resources. Instead, evaluators would take into account factors such as access to private instruction, selective ensembles, and other forms of musical support. The NYO2 program described earlier provides a useful example of this type of approach, as its selection process considers both audition results and indicators of what has been described as “musical capital” (15). In that setting, selected cohorts became more diverse along several dimensions, suggesting that multi-criteria evaluation can affect selection outcomes. In the present context, a similar approach could be implemented by adding a formal criterion for achievement relative to opportunity or by introducing a secondary review for applicants near the margin of selection. A direct way to evaluate such a change would be to examine whether the average socioeconomic percentile of selected performers’ hometowns declines, whether representation expands in the lower tail

of the distribution, and whether newly appearing hometowns begin to differ more substantially in socioeconomic indicators from returning ones.

A related approach would be to create a small track aimed at performers from communities with fewer opportunities for advanced training. The results of this study show that expansion into newly appearing hometowns has not, by itself, led to a large change in the overall profile of representation, which suggests that expansion alone may not be sufficient if it occurs within similar types of communities. A targeted pathway, such as an “emerging opportunity” or “regional spotlight” category, could be designed to reach places that have not historically been represented on the program. This idea is consistent with the NYO2 program design, which explicitly focuses on musicians from communities with more limited access to resources (15). The effects of such an approach could be evaluated using the same hometown-based measures developed in this study, including changes in average percentiles, the distribution of representation across the full range of communities, and the rate at which new hometowns with different socioeconomic profiles enter the program.

Another access-related change could expand *From the Top*’s existing Fellowship program by requiring Fellows to identify and collaborate with young musicians from underrepresented communities who have not been featured on the show. Fellows could be asked to post video recordings of these collaborations through *From the Top*’s digital series “Daily Joy,” which operates alongside the main broadcast in a more flexible format. Those identified collaborators could then automatically pass the initial stage of audition. This could expand the applicant pool

and create additional entry points for musicians who may be outside the program's usual networks. Over time, the effect could be assessed by examining whether a larger share of selected performers comes from newly appearing communities with lower socioeconomic percentiles.

A second set of possible changes concerns repertoire. The results show that the share of works by living, female, and minority composers has increased, while the overall concentration of repertoire among a small group of frequently performed composers has changed more modestly. This pattern suggests continued persistence of the canonical core. One way to address this would be to make repertoire choice a more explicit part of the evaluation process. For example, the selection rubric could assign weight to works by living composers, women composers, minority composers, or composers outside the most frequently performed group. While the program already provides resources that encourage exploration of a broader repertoire, formalizing this aspect as part of the selection process would create clearer incentives for applicants to expand their repertoire choices. The effects could be measured using the same indicators developed in this study, including changes in Top-20 concentration, the share of works by different composer groups, and the rate at which new composers appear on the program.

Another approach is inspired by competitions that require applicants to include at least one work by a composer from an underrepresented group (37). *From the Top* could adopt a similar requirement by asking applicants to submit multiple pieces, one of which must fall outside the canonical core. Even if that work is not

ultimately selected for the main broadcast performance, it would be guaranteed to be featured through the "Daily Joy" series. The expected effect would be an increase in the share of underrepresented composers. It could also have broader effects on performer representation if this requirement influences who chooses to apply to the program.

A further extension would be to create a more formal pathway for original compositions. Because the program already accepts composers as applicants, it is well positioned to expand this dimension. For example, a fixed number of places each season could be reserved for original works by young composers. This would increase the share of new works on the platform and could attract applicants with different profiles and training backgrounds than those associated with traditional solo performance. Similar approaches are used in some competitions whose designated repertoire includes contemporary or newly commissioned works (38). The effects could be evaluated through changes in the share of living composers and, potentially, shifts in the types of communities represented if training for composers tends to be less resource-intensive than training for solo performance. Relatedly, *From the Top* could also devote a portion of episodes each year to particular repertoire goals, such as programs featuring only living composers, women composers, or minority composers. The effect on repertoire diversity would be relatively predictable, as allocating a fixed number of programs to a given category would increase its share within the overall season.

To clarify how such changes could affect observed outcomes, it may be useful to consider a stylized and illustrative framework in which

the selection process is represented in simplified form as a scoring function that maps evaluation criteria into decisions (Appendix F). The specific form of *From the Top's* evaluation process is not publicly known, and this study does not observe applicant-level audition data. Accordingly, the framework introduced here is not intended to describe the program's actual rubric, but rather to organize assumptions about how different evaluation priorities could shape outcomes. It is also very important to emphasize that evaluation in classical music does not operate as a mechanical scoring system. In practice, selection relies on holistic judgment, standards for technical proficiency, and program-level considerations (such as repertoire balance, instrument mix, and broadcast format) that cannot be reduced to simple numeric components. The framework in Appendix F is therefore a simplified, illustrative tool for linking potential shifts in evaluation priorities to observable outcomes, and should be understood as heuristic rather than operational.

In a baseline formulation, such a scoring function can be thought of as placing weight on factors such as technical proficiency, artistic maturity, and alignment with commonly performed repertoire, which are often associated with access to sustained, resource-intensive training. Appendix F extends this baseline by introducing an augmented framework that includes additional dimensions related to repertoire choice, interpretive distinctiveness, and original or performer-created work. Within this stylized setting, increasing the relative weights assigned to these components may, under certain assumptions, reduce the extent to which selection outcomes are tied to factors correlated with long-term training resources and may broaden the range of applicant profiles.

Some components of this framework can be assessed through structured human evaluation, while others may be described using simple computational summaries of performances based on features that can be compared, in a simplified way, to reference recordings. These latter measures are best understood as descriptive tools that can inform evaluation rather than direct indicators of artistic value, and they are used here to illustrate how certain aspects of performance may be examined in a more consistent and reproducible way, while still relying on human judgment for interpretation.

Framed in this way, the formalization in Appendix F is intended to generate a set of testable predictions linking potential rubric changes to measurable shifts in repertoire and in the distribution of performers' backgrounds, as measured by the hometown-based indicators used in this study. This framework does not incorporate socioeconomic variables directly into the scoring function. Instead, such measures are used to evaluate whether and how different scoring structures are associated with changes in selection outcomes over time. It therefore provides a bridge between the descriptive findings reported here and a set of preliminary, empirically evaluable ideas for institutional experimentation.

Taken together, these suggestions illustrate how changes in selection and programming practices could be linked to measurable outcomes using the same variables developed in this study. The analysis presented here provides a baseline against which future adjustments could be evaluated. In that sense, the findings not only describe existing patterns, but also point to

practical ways in which those patterns might be evaluated and potentially changed over time.

6. Conclusion and perspective

This study showed that for elite youth classical music in the U.S., access and representation exhibited certain persistent patterns, even as diversity has improved in some areas. Performers' hometowns remained concentrated in highly educated communities. Expansion into newly appearing hometowns did not fundamentally change the profile of representation. At the same time, repertoire has diversified in recent years in terms of living, female, and minority composers, even though overall programming remained concentrated in works by well-known composers.

In addition to documenting these patterns, the study considered how selection and programming practices at an institutional level may influence observed outcomes. Building on

the empirical results, it identified a set of practical and testable changes to *From the Top's* selection and programming design and introduced a stylized, illustrative framework that could be used to assess whether such practices improve patterns of access and representation over time.

Moreover, future research could refine the geographic dimension of access by explicitly classifying hometowns by metropolitan status and examining whether expansion occurs within existing metropolitan areas or into new regions. Linking place-level measures to individual-level socioeconomic data would also clarify how household and community factors interact in shaping access to elite youth performance platforms. Finally, comparative studies across multiple youth ensembles could determine whether these patterns are unique to this program or characteristic of elite youth classical music more broadly.

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Appendix A. Top twenty most frequently performed composers on *From the Top* over the full sample period

Ranking	Composer
1	Frédéric Chopin
2	Ludwig van Beethoven
3	Johannes Brahms
4	Johann Sebastian Bach
5	Camille Saint-Saëns
6	Claude Debussy
7	Franz Liszt
8	Wolfgang Amadeus Mozart
9	Robert Schumann
10	Sergei Prokofiev
11	Maurice Ravel
12	Sergei Rachmaninoff
13	Dmitri Shostakovich
14	Pablo de Sarasate
15	Henryk Wieniawski
16	Felix Mendelssohn
17	Fritz Kreisler
18	Pyotr Ilyich Tchaikovsky
19	Antonín Dvořák
20	Franz Joseph Haydn

Appendix B. Additional new-versus-returning comparisons

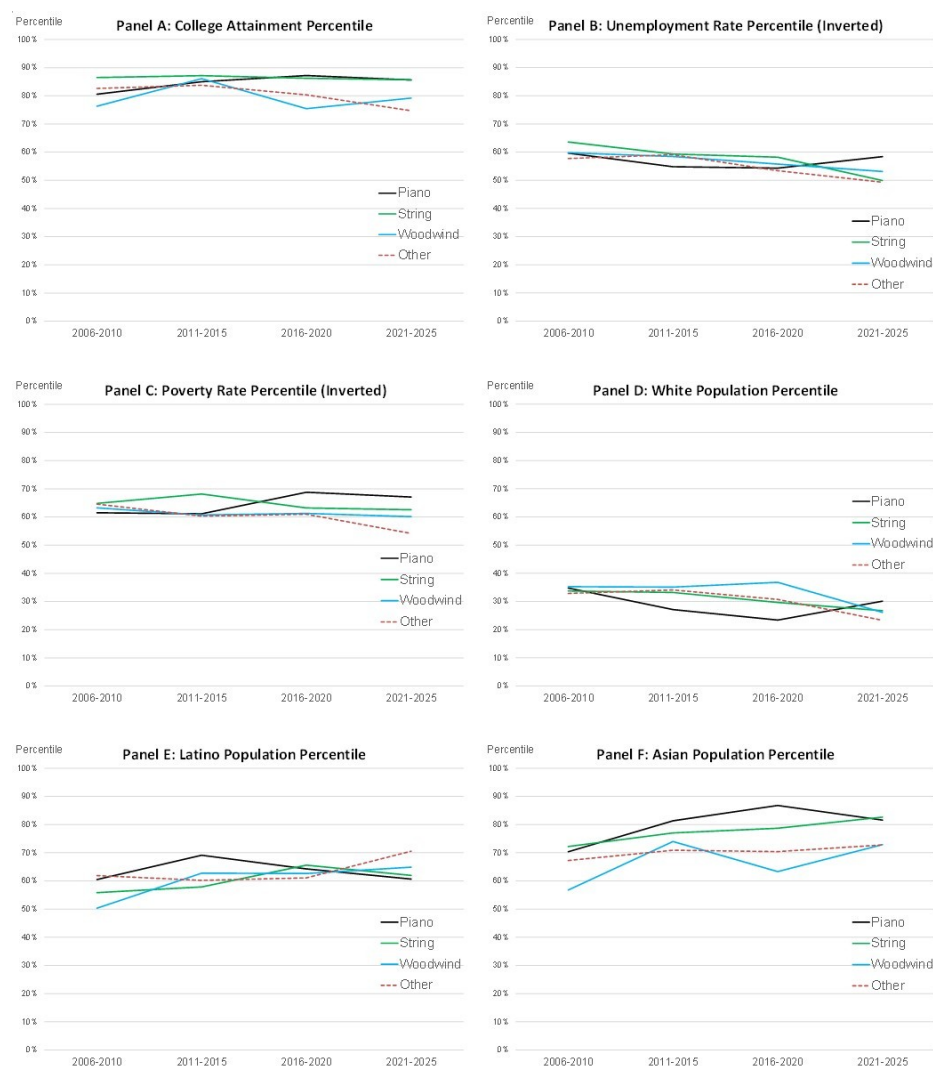


Appendix C

Table C1. Additional mean differences and *t*-tests in new vs. returning hometowns

Socioeconomic and racial/ethnic measures	New hometown avg. of annual winsorized avg.	Returning hometown avg. of annual winsorized avg.	Difference (new – returning)	t-statistic	p-value
Median household income percentile	33.5%	33.7%	-0.2%	-0.07	0.9416
Unemployment rate percentile (inverted)	56.3%	50.1%	6.1%	3.52	0.0012
Black population percentile	52.4%	63.6%	-11.3%	-6.79	< 0.001
Latino population percentile	62.0%	70.1%	-8.1%	-4.83	< 0.001

Appendix D. Additional instrument-level breakdowns in new hometowns



Appendix E

Table E1. Additional ANOVA tests for differences across instrument groups in new hometowns

Socioeconomic and racial/ethnic measures	F(3,9)	p-value
College attainment percentile	4.21	0.0405
Unemployment rate percentile (inverted)	0.66	0.5971
Poverty rate percentile (inverted)	1.86	0.2060
White population percentile	1.10	0.3984
Latino population percentile	0.74	0.5566
Asian population percentile	10.05	0.0031

Appendix F. A Stylized framework for rubric-based intervention

F1. Conceptual setup

The empirical results document persistent patterns in access and repertoire despite modest diversification. To provide a structured way of interpreting these findings, a stylized framework is considered, in which selection can be viewed as the outcome of an implicit scoring process applied to each applicant. This framework is not intended to describe the program's actual evaluation process, but rather to provide a simplified way for examining how different evaluation priorities could affect observed outcomes. It is also very important to emphasize that evaluation in classical music does not operate as a mechanical scoring system. In practice, selection relies on holistic judgment, standards for technical proficiency, and program-level considerations that cannot be reduced to simple numeric components. The framework is therefore intended as a simplified, illustrative tool, rather than as a new guideline for evaluation practice.

Let i index applicants and t index year. Selection can be represented, in this stylized framework, as determined by a latent (unobserved) score given by $Y_{it} = 1(S_{it} \geq k_t)$, where Y_{it} is an indicator equal to 1 if applicant i is selected in year t , and 0 otherwise, S_{it} is a latent (unobserved) score reflecting how applicant i in

year t is evaluated under the framework and k_t is a threshold that may vary across years and reflects the level required for selection in year t .

F2. Baseline scoring structure

In this stylized framework, a baseline scoring function $S_{it}^{(o)} = \alpha T_{it} + \beta M_{it} + \gamma R_{it} + \varepsilon_{it}$ can be written, where T_{it} is technical proficiency, M_{it} is artistic maturity, R_{it} is alignment with commonly performed repertoire and ε_{it} represents idiosyncratic evaluation factors. These components are intended as simplified representations of broad dimensions of evaluation for illustrative purposes. Under the assumption that technical proficiency, artistic maturity, and alignment with commonly performed repertoire are correlated with access to sustained, long-term, resource-intensive training, this baseline structure may favor applicants from such training environments.

F3. Innovation-augmented scoring model

To examine how alternative evaluation priorities could affect observed selection patterns, an augmented scoring function is introduced to extend the baseline formulation and incorporate additional dimensions, which are intended as simplified illustrative components to capture aspects of repertoire choice and musical interpretation that are not fully reflected in the baseline scoring. They should not be interpreted as precise or exhaustive representations of artistic evaluation. This function is given by

$$S_{it}^{(1)} = \alpha T_{it} + \beta M_{it} + \gamma R_{it} + \lambda_{RI} RI_{it} + \lambda_{CC} CC_{it} + \lambda_{IO} IO_{it} + \lambda_{PD} PD_{it} + \varepsilon_{it},$$

where RI_{it} is repertoire innovation capturing the extent to which a submission departs from commonly performed repertoire, CC_{it} is the creative contribution reflecting whether a

submission represents original or performer-created work (such as arrangements or adaptations), IO_{it} is the interpretive originality based on a structured human evaluation and

PD_{it} is a composite performance descriptor constructed from selected features (e.g., tempo variation, dynamics, articulation) relative to reference recordings.

The parameters λ_{RI} , λ_{CC} , λ_{IO} , and λ_{PD} govern the relative weight placed on these additional dimensions. In this stylized setting, these weights can be adjusted to represent different evaluation priorities, while the weights on baseline components may change accordingly.

F4. Illustrative ways to implement the new dimensions

F4.1 *Repertoire Innovation (RI)*

This component captures the extent to which a submission departs from commonly performed repertoire. A simple formulation is given by $RI_{it} = 1 - 1(\text{composer} \in \text{Top } 20)$, where $1(\cdot)$ is an indicator function equal to 1 if the condition holds and 0 otherwise. An extended formulation incorporating multiple repertoire-related attributes is given by

$$RI_{it}^* = \omega_1 1(\text{living}) + \omega_2 1(\text{female}) + \omega_3 1(\text{racial / ethnic minority})$$

where the weights $\omega_1, \omega_2, \omega_3$ reflect the relative emphasis placed on different repertoire diversity indicators, based on earlier discussions in this study.

This component captures whether a submission involves original or performer-created work (e.g., adaptations or arrangements) and distinguishes creative works from submissions that involve interpretation only. A simple formulation is given by

F4.2 *Creative Contribution (CC)*

$$CC_{it} = \phi_1 1(\text{original composition}) + \phi_2 1(\text{arrangement} \vee \text{adaptation})$$

F4.3 *Interpretive Originality (IO)*

This component assesses interpretive originality through structured human evaluation. Let r_{ij} denote the rating assigned by evaluator j to applicant i in year t . A simple aggregation is given by $IO_{it} = \frac{1}{J} \sum_{j=1}^J r_{ij}$, where J is the number of evaluators. Evaluators may be asked to assess phrasing, expressive character, and interpretive distinctiveness relative to the chosen repertoire. This component relies explicitly on human judgment, and the use of multiple evaluators is intended to limit the undue influence of individual preferences.

This component represents a composite measure of several performance features compared to reference recordings. These features are observable aspects of performance (e.g., tempo variation, dynamics, articulation) that can, in principle, be measured or extracted from audio recordings of performances. It is intended to complement the human evaluation-based interpretive originality assessment with a more consistent and reproducible descriptive benchmark, rather than to serve as a definite measure of artistic value. Furthermore, the usefulness of these variables also depends on the choice of reference recordings and feature definitions, and should therefore be interpreted with caution. An illustrative formulation can be

F4.4 *Performance Descriptor (PD)*

given by $PD_{it} = \frac{1}{K} \sum_{k=1}^K \left| \frac{x_{ik} - \mu_k^{(ref)}}{\sigma_k^{(ref)}} \right|$, where x_{ik} denotes feature k (e.g., tempo variation, dynamics, articulation) for applicant i , $\mu_k^{(ref)}$ denotes the mean of feature k in a set of reference recordings and $\sigma_k^{(ref)}$ denotes the standard deviation of k in the set of reference recordings.

F5. Interpretation, scope, and implications

The measures defined above are simplified and illustrative representations of selected aspects of repertoire choice and musical contribution. They combine observable characteristics with structured human evaluation to provide a transparent and reproducible framework.

In this context, the repertoire-based measure reflects programming choices, the interpretive component relies on human judgment, the creative contribution measure captures authorship, and the performance descriptor provides descriptive context based on observable features. These components are not intended to replace artistic evaluation, but to clarify how different evaluation priorities could be represented within a stylized scoring framework.

Under the assumption that baseline components (e.g., technical proficiency, artistic maturity, and familiarity with commonly performed repertoire) are correlated with access to sustained training resources—such as private instruction, specialized programs, and performance opportunities, which typically require substantial financial investment—reallocating weight toward innovation related dimensions has the potential to weaken this

linkage and disrupt the persistence of elite, resource-dependent selection patterns. In doing so, such a shift may broaden the range of competitive applicants and help move selection beyond the traditional elite mold that has historically shaped access to high-level youth classical music platforms.

F6. Testable hypotheses

The stylized framework generates a set of testable hypotheses linking changes in evaluation priorities to observable outcomes. The “pre” and “post” periods below refer to the periods before and after the introduction of revised evaluation criteria. H1 (Repertoire concentration): the average share of works by Top 20 composers is lower in the post period than in the pre period. H2 (Composer diversity): the average share of works by living or underrepresented composers is higher in the post period than in the pre period. H3 (Access distribution): the average socioeconomic characteristics of performers featured on the program, as measured by hometown-based indicators, are lower in the post period than in the pre period. H4 (Stylistic variance): the variation in selected performance features (e.g., tempo, phrasing, articulation) is greater in the post period than in the pre period.

F7. Empirical evaluation strategy

To empirically examine changes in evaluation priorities, the following specification can be used to compare outcomes before and after the introduction of the revised evaluation criteria, $Y_{it} = \beta_0 + \beta_1 Post_t + \beta_2 X_{it} + \varepsilon_{it}$, where Y_{it} represents an outcome of interest, such as repertoire composition, socioeconomic characteristics of performer hometowns, or descriptive and evaluation-based innovation

measures, $Post_t$ indicates periods after a change in evaluation criteria and X_{it} includes observable controls, such as applicant age, instrument category, or other available applicant or performance attributes.

F8. Apparent limitations

Several considerations accompany this stylized framework, some of which reflect features of the broader evaluation setting rather than the framework itself.

F8.1 Measurement challenges

Some components, particularly interpretive originality (*IO*) and creative contribution (*CC*), rely on human evaluation and may involve subjective judgment. Even the performance descriptor (*PD*), while based on observable features, provides only a partial representation of musical interpretation. This reflects the nature of musical interpretation, where some dimensions are not fully captured by purely quantitative measures.

F8.2 Strategic behavior

Applicants may adjust their submissions to align with the criteria emphasized in the evaluation framework without necessarily reflecting substantive changes in musical approach or creativity.

F8.3 Trade-offs

Increased emphasis on additional dimensions, such as repertoire breadth, interpretive originality, or creative contribution, may affect traditional evaluation standards, including technical proficiency, artistic maturity, and other well-established performance norms. However, the proposed rubric changes are designed as incremental additions to existing criteria and are intended to complement established performance standards.

F8.4 Identification constraints

Without applicant-level data, it is difficult to separate selection effects from changes in the applicant pool.

F9. Summary

This appendix presents a simplified and stylized framework for thinking about rubric design as an institutional mechanism through which evaluation priorities may shape observed outcomes of selection. By introducing additional dimensions related to repertoire, interpretation, and creative contribution, the framework provides a basis for generating testable predictions about how changes in evaluation priorities may be associated with patterns of access and repertoire in elite youth classical music. The framework is intended as an illustrative tool for organizing assumptions and guiding empirical analysis, rather than as a description of actual evaluation practices.