

PART 1: Getting Started

Before you begin an initiative to report on arts education data your state's education data systems already contain, you need to plan carefully. You won't know what data you need before you've carefully defined your goals for the initiative. Even if you have well-defined goals, it will do you little good to request data if you aren't prepared to analyze them.

Part 1 of the toolkit will help you consider all the steps of a state education data initiative in advance and then marshal the capacity, partners and resources to do the work. This section presents seven steps you should carefully consider as you get started:

1. [Define Your Goals](#)
2. [Identify the Data You Need](#)
3. [Understand Your Policy Environment](#)
4. [Understand Your Capacity](#)
5. [Identify Your Partners](#)
6. [Make the Case for Your Work](#)
7. [Plan Ahead](#)

You don't need to follow the steps in this exact order, but you should not give any of them short shrift, because the success of your initiative will depend on the strength of your plans.

These tools will help you in your work:

- [Tool A: Finding State and Local Arts Education Organizations](#)
- [Tool B: Worksheet: Project Planning and Self-Assessment](#)
- [Tool C: Key Audiences](#)
- [Tool D: Suggested Arts Data Talking Points](#)
- [Tool E: Tips for Speaking With Leaders About Arts Education Data](#)

1. Define Your Goals

Before you begin looking for data, work with other key stakeholders in your state to define the goals that data will help you achieve. Specifically, what questions can data help you answer to reach those goals? Only then can you start understanding what data you need.

Gather stakeholders to discuss common goals.

Consider inviting diverse audiences, including parent leaders, arts education advocates, educators and state policy leaders, among others. Broad goals for discussion may include:



- Ensuring access to arts classes in schools.
- Promoting robust participation in arts classes.
- Ensuring that schools have enough qualified arts teachers.
- Ensuring that students have strong arts education pathways from early education through high school and beyond.
- Fostering investment in arts education.
- Supporting the quality of arts education.

You and your fellow stakeholders may of course identify other goals. The process of arriving at common goals is a critical first step in your effort, because it will help you ensure that your data initiative addresses priorities that are widely shared across your state.

Consider what questions you need to answer to pursue your goals.

Goals should raise questions: How far are you from achieving them? What stands in the way? Which shortcomings require the most attention? By considering such questions, you can begin to identify what answers you lack, and therefore what data you need to collect. Your questions should focus on identifying the information you need to take action toward realizing your goals.

Here are some examples of questions that accompany the goals above:

ENSURING ACCESS TO ARTS CLASSES IN SCHOOLS: Who has access to arts education? To which arts disciplines? Are there gaps in access by race, geography, socioeconomic status or other factors?

PROMOTING ROBUST PARTICIPATION IN ARTS CLASSES: Who takes arts classes? In which arts disciplines? Are there gender, racial, geographic, socioeconomic or other gaps in participation?

ENSURING ADEQUATE SUPPLY OF ARTS TEACHERS: How many arts teachers are there in schools? In what disciplines? Are there gaps in access to those teachers by location or type of school? By race, ethnicity or socioeconomic status? What percentage of arts teachers are certified? What qualifications do they have?

ENSURING STRONG PATHWAYS FROM EARLY EDUCATION TO HIGH SCHOOL AND BEYOND: Do school districts offer arts courses throughout the K-12 continuum, so that students who take arts courses in elementary school can continue in middle and high school? To what extent are these pathways available in all disciplines? Are there differences by race, geography, socioeconomic status or other factors?

FOSTERING INVESTMENT IN ARTS EDUCATION: How much state or local money is invested in school arts programs? Do schools have adequate arts facilities? Is there enough investment to support arts facilities, arts equipment and materials, arts educators or performances?

SUPPORTING QUALITY IN ARTS EDUCATION: Does arts instruction measure up to accepted standards for quality?



TIMELY TIP

For a helpful explanation of arts education metrics see “[Using State Data Systems to Report Information on Arts Education](#),” a report by Education Commission of the States and the National Endowment for the Arts.

Spend time with stakeholders to formulate the questions you need to answer. (For a more detailed list of possible questions, see [Tool E](#) in Part 2.)

2. Identify the Data You Need

It is now time to determine which sources of data can help you answer your questions. All states have systems to collect and report on education data, including data on K-12 arts education. As you consider your goals and questions, begin to identify data sources that can help you find answers. Bear in mind that your state might not yet collect all the data to answer your questions.

List what data you think you will need.

For example, you can identify what data you need to address the goals listed earlier:

ENSURING ACCESS TO ARTS COURSES. You will need data on arts courses offered in each district and school.

PROMOTING PARTICIPATION IN ARTS EDUCATION. You will need data on students enrolled in arts courses in each district and school, compared to total enrollments in all courses.

ENSURING ADEQUATE SUPPLY OF ARTS TEACHERS. You will need data on teachers and the subjects they are assigned to teach, by district and school. You may also need data on the courses they teach and other factors, like their education background or certification status.

ENSURING STRONG PATHWAYS IN ARTS EDUCATION. You will need data on arts courses offered by school and district, as well as data on district feeder patterns, or the sequence of schools students typically attend as they move from elementary to middle to high schools within set school attendance boundaries.

FOSTERING INVESTMENT IN ARTS EDUCATION. You will need data on school and district budgets broken out by program area. You may also need school facilities data that specify arts facilities.

SUPPORTING QUALITY IN ARTS EDUCATION. You will need data describing the quality of arts instruction. You may also need data on students’ performance in arts courses.

Explore your state’s data system.

To figure out what data are available in your state:

REVIEW INFORMATION ON THE AVAILABILITY OF ARTS EDUCATION DATA IN YOUR STATE.

According to a [50-State Comparison of Arts Education Data Collection and Reporting](#) released by the National Endowment for the Arts and Education Commission of the States, 44 states appear to collect



data on enrollment in arts courses, but only 13 states report on those data. All but three states appear to collect data on numbers of teachers assigned to arts courses, but only 15 states publish that information.

REVIEW YOUR STATE'S DATA DICTIONARIES. Most states provide data dictionaries with detailed information on each respective collection system they operate or for all their data systems taken together. (Education Commission of the States' 50-State Comparison of Statewide Longitudinal Data Systems includes [links](#) to each state's data dictionary.) The dictionaries are inventories of specific education data elements housed in their systems and often include information on the offices responsible for collecting and maintaining the data. Consult your state education agency website to check for information on education data and file locations.

TALK TO DATA MANAGERS IN YOUR STATE AGENCIES TO EXPLORE WHAT DATA THEY COLLECT. Begin with data managers in your state education agency, because they are most likely to work with the data systems you need. They may direct you to other agencies that have oversight over data systems or responsibility for conducting data analysis.

CONSIDER SOURCES OF DATA BEYOND STATE EDUCATION DATA SYSTEMS. For example, some arts education happens outside of school programs, in programs such as the 21st Century Community Learning Centers. Key personnel in such programs might know about data sources that fly under the radar.



STUMBLING BLOCK

State education agencies often collect data to respond to regulatory or administrative reporting requirements or local policy initiatives. As a result, they may never have intended much of the data they collect for public release. Moreover, even data they routinely collect may be housed in disparate offices or agency divisions. In such cases, it is not unusual for data files managed by one office to be formatted differently from files in the other, causing challenges in merging data sources. Data managers in the state education agency often have strategies for addressing this challenge, such as using unique identifiers for schools, teachers or students that can help them link different data sets.

Be realistic about the data you probably won't find.

Prepare yourself and your allies for at least some disappointment. You will have trouble finding sources of data to answer some of your most pressing questions. As the [50-State Comparison of Arts Education Data Collection and Reporting](#) notes, most states collect data on access, participation and arts teachers. More sophisticated analysis of existing data can reveal information about arts education pathways.

By contrast, statewide data on arts investments can be scarce, and statewide data on the quality of arts instruction will probably be even more elusive.

AS YOU CONSIDER YOUR DATA SOURCES:

Keep a running task list of metrics for which data are available, metrics for which they aren't, and still others for which data are available but imperfect. Keeping tabs on these data observations can be essential for updating your goals and organizing your questions.

Look for proxy measures. Data on teacher certification and university training can be a stand-in for the quality of instruction, for example — far from perfect, but better than nothing.

Keep your eyes and ears open for new sources of data. For example, [new federal requirements affecting collection and reporting of financial data](#) may promote better information on arts investments in coming years.

As you dig deeper into your project, you may find yourself uncovering new data resources. Remember to keep a disciplined focus on the specific goals of the project to avoid pursuing data for their own sake. Data are useful only insofar as they support wise decision-making.

3. Understand Your Policy Environment

Gauge the education policy environment in your state to identify factors that could advance or impede an arts education data initiative. You may be able to take advantage of a favorable environment or anticipate challenges.

FOR EXAMPLE:

- Are there other statewide arts education initiatives that can advance your work? Describing how arts education data can inform or support these other initiatives can help you gain allies. [Tool A](#) offers a list of arts education organizations whose state affiliates may have connections to such initiatives.
- Are there influential champions who can help — like governors, governors' spouses or their staff, chief state school officers, parent leaders, teacher or administrator associations or state arts agencies?
- Is there interest in your state in [expanded measures of school quality](#) as required by the federal Every Student Succeeds Act? If so, arts data can provide alternative measures of school improvement to balance attention to high stakes assessments.
- Are there state policies, such as those requiring universal access to arts education, that arts education data could support? Public reporting on such data could confirm if schools and districts are meeting the goals set in those policies and raise public awareness of where they fall short.



TIMELY TIP

Check out the Arts Education Partnership's [ArtScan](#), a policy clearinghouse that offers information about arts education policies in every U.S. state and the District of Columbia.

To ensure that your arts data initiative responds to your state's policy environment:

Make a list of your state's arts education initiatives, arts education champions and relevant state arts education policies.

Document the specific issues in your state's policy environment that could advance or impede arts education data initiatives.



TIMELY TIP (CONT'D)

Consult “[Artscan at a Glance](#),” a two-page summary of state arts education policies in all 50 states and the District of Columbia, compiled by the Arts Education Partnership.

Visit [Part 5](#) of this toolkit for guidance on strategies and resources for engaging the public in arts data projects.

4. Understand Your Capacity

State arts education data initiatives are within reach even for small organizations with small budgets. That said, anyone who wishes to undertake one should start with a clear sense of the resources, knowledge, skills and time it takes to finish the work. If you are not skilled or experienced in data analysis or reporting, you will probably need partners or vendors who are.

You don’t need to identify every specific skill and resource you need at the very outset of your initiative, because your data analysis and reporting needs will become clearer as you pursue the project. That said, you should not begin a project without a broad sense of the expertise and skills the project will demand. These include:

PROJECT MANAGEMENT. Data projects require sustained attention and management. In rare cases, the complete project timeline might span just a few weeks, but it’s far more likely to take months or years. You will need a point person who can establish and oversee project budgets, establish timelines, assign tasks, coordinate meetings and other communications among cooperating offices, and raise funding, if necessary.

The person leading the project will also need to navigate regulatory and bureaucratic challenges that often arise in partnerships with state agencies. It is critical, for example, that the project manager study data privacy regulations including FERPA and state-level privacy laws. Every education data initiative will have to navigate privacy issues. (For more on data privacy, see Parts 2 and 3 of this toolkit.)

TECHNICAL WRITING. Even if your project staff have substantial experience writing reports and proposals, they may lack the technical writing skills required to write about data and research. Different stages of the effort will require clear, precise and compelling writing about data or research methodologies for project narratives, funding requests, data requests, summary reports for sponsoring organizations or public release, clear and accurate chart titles, or descriptions of data visualizations that make information accessible to the public.

DATA LITERACY. Most arts education data initiatives do not require very sophisticated statistical analysis, and they often don’t require mathematical skills beyond arithmetic. Still, you will need people with the skills to manage data files, use large spreadsheets or statistical software, analyze data and interpret results as accurately as possible. The initiative will also require people with the skills and expertise to determine if data from state agencies are complete, accurate and consistent in how variables are reported and formatted for analysis and reporting.

DATA VISUALIZATION/DESIGN. Data visualization platforms like Tableau, Power BI and Domo have made it much easier and cheaper to visualize large amounts of data in an online interactive format. Even so, an arts education data initiative will require the capacity to present a large amount of information to the public in a clear and compelling manner — whether through interactive websites, reports, white papers, public presentations or static infographics.

Planning for this stage should start early, because decisions about how to report the data will affect what data you need and how you analyze it. If you feel that interactive maps are an effective way to help your audiences make comparisons among school districts or schools, for example, you will need to ask your state education agency whether it can supply geographic information on school district boundaries. You will need people with visual design skills to work with data analysts on presenting information as effectively as possible. (For more about reporting on arts education data, see Part 4 of this toolkit.)

WEB DEVELOPMENT. Custom websites offer more flexibility to tailor the user interface and visualizations to your and your audience’s needs — and to tell the story you most want to tell. Yet they are much more expensive and require much more expertise than standard data visualization platforms. If you aim to create a custom website, you will probably need to contract for web development and hosting services.

Vendors typically charge a one-time set-up fee to program and implement a site, then a lower ongoing service fee to maintain and update the data as needed. You may also need someone with expertise on how to prepare data files for websites and data visualization platforms.

Using the planning worksheet ([Tool B](#)), conduct a self-assessment of your organization’s capacity to undertake this project.

5. Identify Your Partners

Partners can bring useful background experience, new constituencies and fresh perspectives, along with networking contacts and useful skills and resources. The types of partners will likely vary from one state to another, but you may find yourself working with a combination of these partners:

STATE EDUCATION AGENCIES. Your SEA may be the most useful organization to approach first, given its role in collecting and managing state education data. You may explore if the SEA is open to officially leading the project. Some agencies might consider including the results of an arts education data initiative in school report cards or elsewhere on their websites. In that case, you and other project partners can serve as an advisory task force to guide the agency’s decisions.

Be aware, however, that SEAs are typically bound by extensive responsibilities, including mandated reporting and compliance requirements, that consume their staff time and budgets. If so, consider seeking the agency’s endorsement of the project rather than expecting it to contribute extensive time or resources. You will probably need them to provide the necessary arts education data files, if they house them, or to help you secure files from other agencies. (See Part 2 of this toolkit for more information.)



STATE ARTS AGENCIES. Every state and U.S. jurisdiction has a [state arts agency](#) that aims to foster the arts and cultural participation. These agencies typically include arts education among their areas of focus, and most employ at least one staff member who oversees arts education efforts. Agency staff who are eager for data to inform their efforts could be willing partners in a state arts education data initiative. Some work closely with staff at their state’s education agency to advance arts education.

State arts agency staff seldom have direct access to education data. Most have to make formal data requests to review state education data, and few have in-house capacity for rigorous data analysis. State arts agencies may have some funds to support data analysis, but most reserve the lion’s share of their funding for [grants](#) that support artists, arts education projects, nonprofit organizations and community efforts.

NONPROFIT PARTNERS. Establishing partnerships with nonprofit organizations can lend your project credibility, expertise and public recognition. Such partners may also help you deepen your ties with your SEA. Some, such as Parent Teacher Associations or state affiliates of professional associations for arts educators, may help share information with their own public constituencies. Others may have inhouse expertise they can lend the project.

Be aware, however, that many nonprofits have small budgets and may lack staff with the time and expertise your project demands. You may be able to engage several nonprofits in your arts education data initiative, defining roles that take advantage of each organization’s specific capacities.

UNIVERSITY PARTNERS. Universities often employ people with expertise in analyzing and presenting data, including faculty, graduate students and technical staff, some of whom may be eager to participate. Often, these faculty, students or staff have access to statistical software and other tools for data analysis and reporting. Your partner organizations may have contacts at universities, and some universities already collaborate with state agencies on education data and research — see, for example, [Tennessee](#).

Of course, universities typically expect external funding to support staff time for external projects. One alternative to a formal university partnership is to invite university experts to join an advisory task force or technical review committee to guide the project. Some universities encourage faculty to take such public service roles.

FOR-PROFIT PARTNERS/VENDORS. For-profit vendors can often serve as the most straightforward vehicle to gain the capacity to do the work, if you can pay for them. It is generally easier to hold a paid vendor than a volunteer partner accountable for results. You can have significant control over the timeline and approach to the work, and you can demand quality as defined in the scope of your contract.

Also, be aware that even the best vendors will require management and support. You may have to run interference with state agencies or ensure that your vendor receives the data and support it needs to be effective and meet deadlines.

As you consider your partners:

- Discuss the data project with your SEA early on to explore a collaboration — will the SEA provide analysis as well as data files? (See Part 2 of this toolkit to learn about data requests. See Part 3 to learn about what data analysis entails.)

- Undertake informal inquiries by phone or email to seek out possible partners or interested stakeholders. (See Tool A for a partial directory of state arts education organizations you could consider as partners in your effort.)
- Review your list of partners to identify what capacity they bring to the table. Be honest in your assessments. It's better to acknowledge — and attempt to fill — gaps in capacity early, before they stop your project cold. (The worksheet in Tool B includes questions to help you review your and your partners' capacity.)

6. Make the Case for Your Work

As you make your case, there are key communications aspects to consider.

First, let's begin with your audience. It will be worthwhile to understand how much your potential partners or other stakeholders know about arts education data in the state, and where they stand on issues such as arts education and data.

For example, a state superintendent might be interested in how reporting on arts education data might support the state's broader education goals, while a chief information officer might be more interested in whether the state has the capacity to process the data request, or where that request might fit in the hierarchy of other needs. (The table in [Tool C](#) provides an overview of the role of key audiences and their possible areas of interest.)

Once you know who you will be meeting with and what their priorities are, you can map out the key points to discuss. ([Tool D](#) includes key messages you can use in these meetings.)

As you speak with these potential partners, consider making the case for the power of data to support better decision-making.

FOR EXAMPLE:

- Policymakers can use this information to track the impact of state policies to boost access to arts education. (For an overview of those policies, see ArtScan, a searchable, up-to-date clearinghouse of state arts education policies maintained by the Arts Education Partnership.)
- District and school leaders can use this information to explore the ways in which resources can be directed to schools that lack robust arts education programs to address inequities in access to or participation in arts courses.
- Parents and students can use arts education data to find schools or programs whose arts offerings best suit their interests.

After you select your audiences and complete your talking points, please review [Tool E](#), which includes additional tips for speaking effectively with leaders about arts education data.



TIMELY TIP

For more ideas on how to make the case for data, see the Data Quality Campaign's [infographics and videos](#) describing the benefits of education data. For another resource outlining the importance of education data, explore the "[Guide to Taking Action with Education Data](#)," a publication of the [National Forum on Education Statistics](#).

7. Plan Ahead

As you plan your initiative, it's helpful to review the major project milestones in advance. It won't do you much good to get data from a state agency, for example, if you haven't planned for how to analyze and visualize them.

This toolkit addresses major stages of an arts education data initiative. In addition to this planning guide, it offers sections on:

- Making Effective Data Requests (Part 2)
- Processing the Data (Part 3)
- Reporting on the Data (Part 4)
- Using the Data to Promote Better Decision-Making (Part 5)

Take some time before you start your initiative to review these sections and understand the full scope of your effort. In addition, complete the worksheet in [Tool B](#), which will help you assess your capacity to tackle each of the milestones.

Summary

Deliberate goal-setting, outreach to partners, self-assessment and planning will pay off in the long run. If you skip these steps, you may find yourself halfway through the project without the partners or capacity to keep going.

NATIONAL ENDOWMENT FOR THE ARTS



Established by Congress in 1965, the National Endowment for the Arts is the independent federal agency whose funding and support gives Americans the opportunity to participate in the arts, exercise their imaginations and develop their creative capacities. Through partnerships with state arts agencies, local leaders, other federal agencies and the philanthropic sector, the Arts Endowment supports arts learning, affirms and celebrates America's rich and diverse cultural heritage, and extends its work to promote equal access to the arts in every community across America. Visit arts.gov to learn more.

EDUCATION COMMISSION OF THE STATES



Education Commission of the States was created by states, for states, in 1965. It conducts comprehensive research, delivers evidence-based reports, provides expert counsel and convenes state leaders on the full spectrum of education policy issues, from early learning through the workforce. It is the only state-focused national organization to bring together governors, legislators, and K-12 and higher education chiefs, as well as other state education leaders. Learn more at ecs.org.