



The Nelson A. Rockefeller Center at Dartmouth College

The Center for Public Policy and the Social Sciences

## The Class of 1964 Policy Research Shop

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### VERMONT ARTS EDUCATION

*Assessment of the State of Art Education in Vermont schools*

Presented to the Vermont Arts Council

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## **EXECUTIVE SUMMARY**

This report will examine the feasibility of conducting a comprehensive assessment of the state of arts education in Vermont. Because data on arts programming are decentralized, we analyzed a representative sample of school districts, selected based on location and population factors. For this sample, we have collected available data on the arts curriculum and extracurricular offerings. Since community variables may affect the availability and quality of arts programs, we have conducted regression analysis to assess their impacts. The Vermont Arts Council hopes to use this information—both the gathered data and collection process—to create an online arts database similar to a preexisting program in the state of Oregon.

### **1. INTRODUCTION**

#### *1.1 Background Information*

Arts education courses and activities exist in varying conditions in the public and independent schools of Vermont; however, the fragmented nature of both school systems poses a serious challenge in executing any statewide assessment of the programs offered. While the state has curriculum mandates that require schools to offer some type of art course, how this guideline manifests itself in the classroom is largely unknown.

The model of the database the Vermont Arts Council would like to create is based on one created by the Oregon Arts Council. The Oregon model follows the blueprint of the National Core Arts Standards, breaking down art programming into five disciplines: dance, media, music, theater and visual arts. These categories will be used to highlight what is offered in schools. In addition to in-class materials, we also examined extracurricular offerings. A distinction will be made between courses and activities. In this project, extracurricular art programs are defined as after-school and non-credit awarding programs.

Currently, Vermont public schools are mandated by state guidelines to provide arts education for K-12 schooling. Although arts education may be offered at every tax-funded school, the extent and quality varies depending on the school district and potential community variables. 16 V.S.A. § 906 delineates the minimum course of study adapted to the ages and abilities of students. At the elementary level, each school offering grades K-6 must provide students with arts programs at least twice a week (or the equivalent thereof).<sup>1</sup> Upon entering middle school, schools are expected to provide students with half of a year of class in the arts. For high schools, the requirement is expanded to offering at least four years of study in the arts, with students needing only one year to graduate. In March of 2016, the Vermont Board of Education adopted the National Core Arts Standards (NCAS). The NCAS is a voluntary set of guidelines that supports educators in providing high quality arts education across the five categories previously



mentioned. These recently accepted guidelines will provide a future benchmark for Vermont to evaluate school arts education.

### 1.2 Vermont School System

This subsection will highlight the organization of the Vermont education system. Because the school system of Vermont is different from those of other states, we feel that this is an important aspect to be conscious of throughout future data collection and analyzation. In our sample, we examined public, independent, and supervisory unions. The concept of sending towns also plays a crucial role in how communities and the state navigate education through cost-effective measures. Thus, it is important to understand these key characteristics of the education system before delving into the collected data.

- *Public*: There are 250 public schools in the state of Vermont. Among them are 28 union high schools.<sup>2</sup> Union high schools are supported by towns that have separate school districts for elementary and middle school grades.
- *Independent*: Vermont has 126 independent schools. These schools are designated by the state as “recognized” or “approved.” Critically, independent schools are not required to meet many of the education requirements imposed on public schools by the state, including regulations on art classes.
- *Sending Town*: Towns without schools can send their students to institutions in neighboring towns through a process known as tuitioning. This process has been part of the state education system for over 140 years, and currently around 90 towns utilize it for at least one grade. It is also important to note that different laws apply to elementary (K-6) and secondary (7-12) tuitioning. Sending towns do not have as much leverage in advocating for certain curricular programming, such as arts education, because they pay tuition based on a state average.<sup>3</sup>
- *Supervisory Union*: There are currently 361 school districts in the state; 76 of those operate as supervisory unions. Supervisory unions are “administrative, planning, and educational service unit” consisting of two or more districts.<sup>4</sup> Typically, small schools and districts are combined for funding purposes.

### 1.3 Vermont Arts Standard Compared to Other States

Compared to the rest of the country, Vermont does *not* have:

- Art alternatives for high school graduation (19 out of 50 states do);
- Arts education requirement for state accreditation (17 out of 50 states do);
- State arts education grant program or school for arts (20 out of 50 states do);<sup>5</sup>
- And a survey for arts education.<sup>6</sup>

Vermont does have:

- Art as a core academic subject (28 out of 50 states do);
- Early childhood arts education standards (48 out of 50 states do);
- Elementary and secondary arts education standards (49 out of 50 states do);








- Arts education instructional requirement for elementary school (45 out of 50 states do);
- Arts education instructional requirement for middle school (45 out of 50 states do);
- Arts requirements for high school graduation (25 out of 50 states do);
- Arts education instructional requirement for high school (44 out of 50 states do);
- Licensure requirements for non-arts teachers (35 out of 50 states do);
- And licensure requirement for arts teachers (42 out of 50 states do).<sup>7</sup>

#### *1.4 Oregon Arts Database*

The Oregon Arts Commission created the database that the Vermont Art Council hopes to emulate. The commission serves as a division of the Oregon Business Development Department, and is funded in part by the Oregon legislature, the National Endowment for the Arts and the Oregon Cultural Trust, a funding source created by the state legislature. The database created by the commission is a statewide searchable directory that shows the availability of arts programs for each Oregon public school over the academic years 2009-2010 to 2014-2015.

Art offerings are broken into the five disciplines that mirror those of NCAS. Courses offered at the school are shown in color on the search display. While the database only contains information on public schools, the distinction is made on types of public school, with the choice categories being Alternative, Charter School, OSB/OSD, Regular, State Operated, and Youth Corrections. Figure 1 shows an example of the listing for Sam Barlow High School; the school offers classes in all disciplines except for dance.

SCHOOL NAME	ART DISCIPLINES AVAILABLE				
MULTNOMAH COUNTY Sam Barlow High School <i>Regular School</i>	 visual	 theatre	 music	 media	 dance

**Figure 1: Arts Courses Offered by School Search Results; Source: Oregon Arts Commission**

Viewers can search for individual schools, school districts or target specific disciplines. Under advanced search, the user can also find schools by county, zip code, school type, and/or school year. Figure 2 shows the display of the search engine on the website.



**Search by District:**

Enter the name of a school district

[See a list of all Oregon School Districts](#)

[Advanced Search](#)

and/or  Any Discipline  
 Dance  
 Media Arts  
 Music  
 Theatre  
 Visual

Figure 2: Oregon Arts Database Search Model; Source: Oregon Arts Commission

## 2. PURPOSE STATEMENT

There is no readily available database that categorizes and assesses the state of arts education in Vermont, and the decentralized nature of the school system makes it difficult to conduct statewide assessments. While there are many state and federal mandates regulating arts courses at the elementary, middle, and high school levels, the degree to which these regulations are followed is unclear. Our sponsor, the Vermont Arts Council, would like to know what exactly is being taught across the state when it comes to the arts.

Since art is often offered in the form of extracurricular activities, we also investigated the availability of these programs to students. Given the number of schools in the state, instead of conducting an in-depth study for every school, we have selected a sample of the schools and districts which are representative in terms of location and population. Through these districts, we hope to provide both a summary of arts education in Vermont and an assessment of the energy and work needed to gather information for all schools in the state. Our sample includes a balance of public, independent, and supervisory union schools/school districts. We aim to evaluate arts education at all three levels of education—elementary, middle, and high school—to gain a more complete understanding of the state of arts education in Vermont. Activities will be aggregated by the five categories noted previously. We will also pay attention to the ways that community variables correlate with the availability of a robust arts curriculum. With this information and an outline of how to gather further data for all schools, the Vermont Arts Council will have tools to create the desired arts education database for the state.

## 3. DATA COLLECTION

The following section summarizes how the data was collected in assessing the states of arts education in the state.



### 3.1 Data Sampling and Assessment

School districts from each of the fourteen counties in Vermont were analyzed. To create a fair assessment of the state of arts education in Vermont and to assess the timeline for creating an online arts database, we generated a representative sample by selecting one school district for counties with populations below 50,000 and two for those above that threshold. The eighteen selected districts—67 schools in total—and their respective counties are listed in Table 1.

County	Population	School Districts (schools)	County	Population	School Districts (schools)
Addison	37,035	Addison Central SU (10)	Lamoille	25,235	Stowe (3)
Bennington	36,317	SW Vermont SU (8)	Orange	28,899	Orange SW SU (5)
Caledonia	30,780	Washington NE SU (2)	Orleans	27,100	Orleans Central SU (8)
Chittenden	161,382	Burlington (9), Winooski (3)	Rutland	59,736	Rutland City (7), Rutland Central SU (4)
Essex	6,163	Town of Essex (3)	Washington	58,612	Berlin (4), Barre SU (4)
Franklin	48,799	Franklin NW SU (5)	Windham	43,386	Windham SE SU (10)
Grand Isle	6,681	Grand Isle SU (5)	Windsor	55,737	Windsor Central SU (6), Windsor SE SU (3)

**Table 1: Selected Counties and School Districts<sup>8</sup>**

To find out what classes and extracurricular programs are offered in each school, we first looked through school websites and course guides and then contacted school principals for any unavailable information. Then, middle and high schools are assigned a score in each category based on how many courses are offered and a composite “exposure rate” score by totaling the score under each category. Since elementary schools typically offer a general or sequential arts curriculum, they received a check mark for the categories that the class covers. For extracurricular programs, middle and high schools received a check





mark if they offer an afterschool program in that category. The tables for middle and high school course offerings, middle and high school extracurricular offerings, and elementary school course offerings are included in the Appendix.

We also collected information on community variables through the Vermont Agency of Education website. The factors that we are studying in this report are:

- Percentage of minority students, which shows racial diversity in the school. We have more information on specific racial and ethnic group make-ups but included the percentage of non-white students in the table below for simplicity;
- Student-teacher ratio (STR), which will help assess the quality of the school, since a smaller STR usually corresponds to higher student test scores;
- Percentage of students on free-and-reduced lunch (FRL), which can be indicative of the relative income of the district. A lower percentage may correspond to a district with higher family income, which may correlate to a richer school district and the ability to offer more arts courses and programs;
- Average teacher salary, which is a proxy measurement for school district budget;
- Student enrollment, which impacts what schools decide to offer in terms of classes and extracurricular programs since the marginal cost of offering another program is higher for a smaller school compared to a larger school.

### 3.2 Data Summary

From the 40 middle and high schools surveyed, the average composite score was 9.45, with a minimum score of one and a maximum score of 33. The distribution of composite score is shown in Figure 3. Most of the schools surveyed offered less than ten art classes.

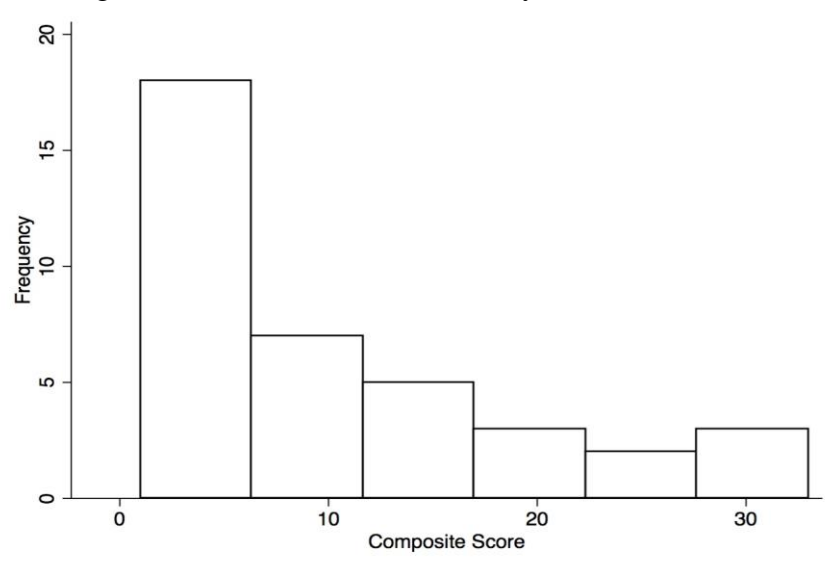


Figure 3: Distribution of Composite Scores for Vermont Middle and High Schools

Most middle and high schools—95 percent of them—offer courses in visual arts and





music, as shown in Figure 4. In comparison, approximately 43 percent of schools offer media, 13 percent offer theater, and ten percent offer dance.

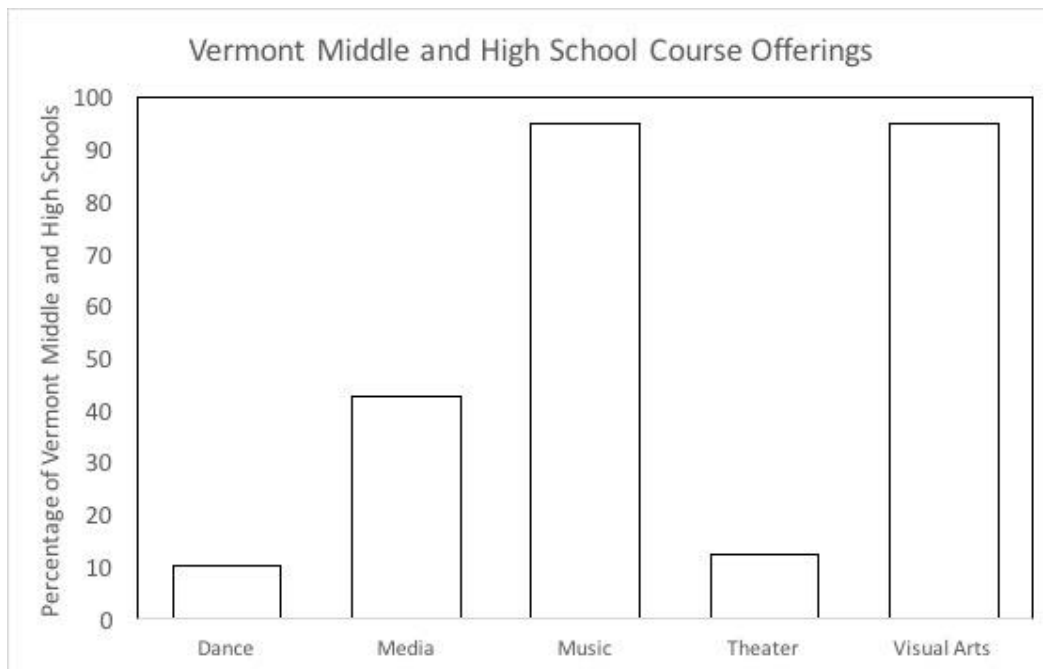


Figure 4: Vermont Middle and High School Course Offerings by Discipline

Extracurricular offerings in middle and high schools show a similar pattern. Approximately 80 percent of schools have music extracurricular programs, 33 percent have theater, 28 percent have visual arts, 13 percent have dance, and 13 percent have media. The percentage of classes offered in the five categories by the middle and high schools surveyed is shown in Figure 5.

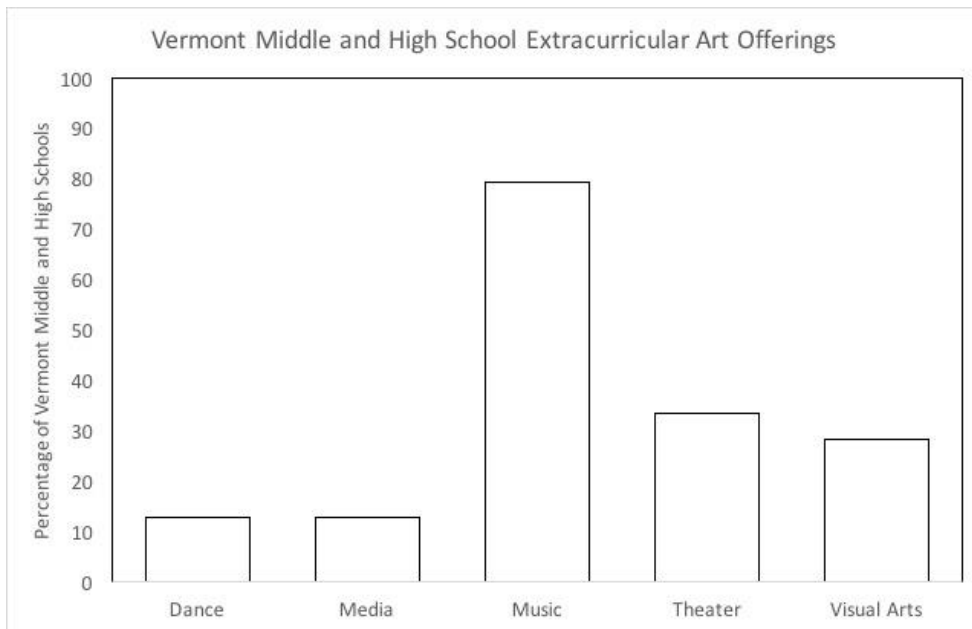


Figure 5: Vermont Middle and High School Extracurricular Art Offerings by Discipline

Of the 69 elementary schools surveyed, all provide instruction in visual arts. In addition, 95 percent of the schools offer classes in music, seven percent offer classes in media, four offer classes in theater, and three percent offer classes in dance. The percentage of classes offered in the five categories by elementary schools is shown in Figure 6.

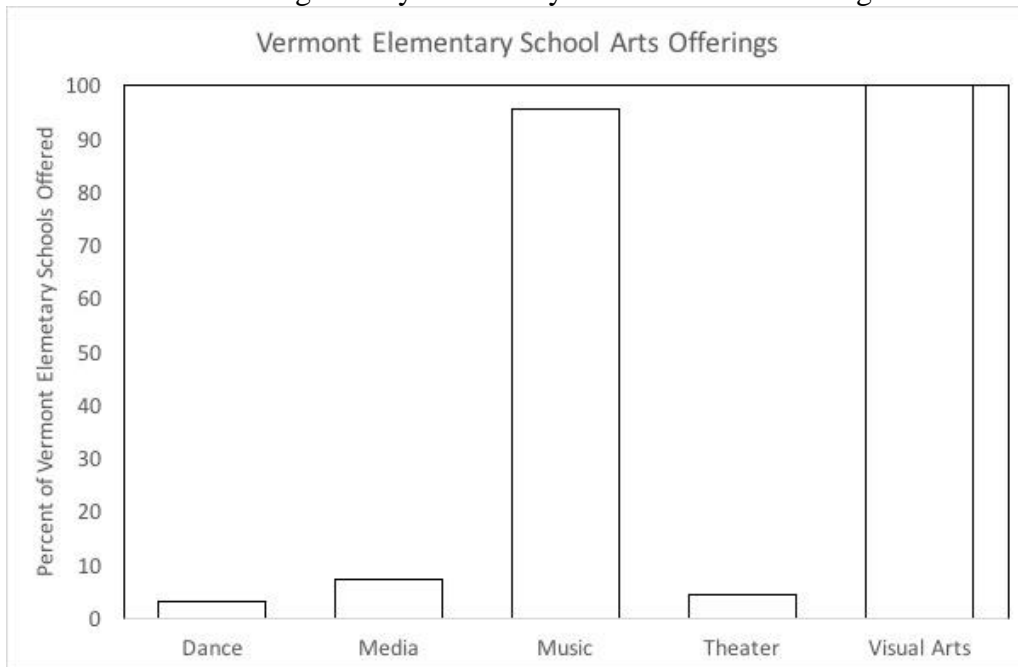


Figure 6: Vermont Elementary School Arts Course Offerings by Discipline



### *3.3 Data Collection Experience*

Given our experience collecting data for the representative sample, we believe that collecting data for all schools in Vermont would be time-consuming and difficult to execute. Each school website was designed differently, and the different layout meant that the information we were looking for were often found in obscure places. We spent approximately ten minutes on each school website before finding the course information we needed. In addition, for those schools that we could not locate the information, we emailed and called the principals and art teachers, which posed an additional challenge in terms of response rate and time.

In contrast to our method of data collection, the Oregon Arts Commission collected information through a collaboration with the Oregon Department of Education. The present database requires no input from the schools except for the information they submit to the Oregon Department of Education as part of funding requirements. Ms. Deborah Vaughn of the Oregon Arts Commission explained that they were advised against conducting a survey of the schools in the state because it would be a nearly impossible task in the state.

The Oregon arts database was developed through its website contract and was estimated to have taken approximately 150 to 200 hours initially. Updating the website for each school year takes approximately 65 hours per year. Of that, 40 hours are spent on scrubbing the data, or preparing it for upload. The data analyst requests the data from the Department of Education, scrubs the data, passes the data to website contractor, conduct a test upload, proof, and the final upload.

Quadrant Research is recreating the Oregon database nationwide, starting with New Jersey. The expanded database also includes summary statistic for the state and breaks down the percentage of schools enrolled, percentage of teachers assigned to each category, and the trend of change for each middle and high school. The team has also worked with arts agencies in Ohio, New Hampshire, and Wisconsin.

## **4. PRINCIPAL SURVEY**

In addition to the sampling and data collection process described above, this project also included a survey of principals from the sample of 94 Vermont elementary, middle, and high schools. Twenty-four principals responded to the survey. The survey included the following five questions:

1. In your district and/or union, are the arts considered key to a well-rounded education? If so, describe the role of the arts in preparing your students for graduation.
2. How would you rate the quality of arts education in your school in comparison to



- the other schools in Vermont? (1-10)
3. How would you rate the resources available to you to conduct arts education in your school?
  4. How could arts education be improved in your school?
  5. How could you make those improvements? What resources would you need?

In response to the first question, one respondent stated that, “allowing students to learn and express themselves through a variety of options supports students’ social, emotional, and academic growth. The arts have been shown to be a critical part of the whole child development.” This viewpoint was echoed by many of the respondents, several of whom also noted the various arts credit requirements in their schools. Overall, the respondents were unanimous in their belief that the arts are essential to both primary and secondary education.

Many respondents emphasized the value of arts education based on the many transferable skills that students gain. These skills included self-expression, fine motor skills, creative thinking, problem solving, effective communication, personal development, public speaking, performance, cultural understanding, curiosity, and civic engagement. Lastly, respondents also highlighted the unique ways in which their schools have incorporated the arts into students’ education. Examples include partnerships with the local youth theater, an annual artist-in-residence program, a teacher-family arts council, engineering design activities in STEM, arts-based after school clubs, digital media projects, and the incorporation of illustrations and dramatic presentations in a variety of classes.

The results of the second survey question are pictured directly below in Figure 7. As seen in the histogram, the majority of the respondents believed that the quality of arts education in their schools is better than that of other schools in Vermont.

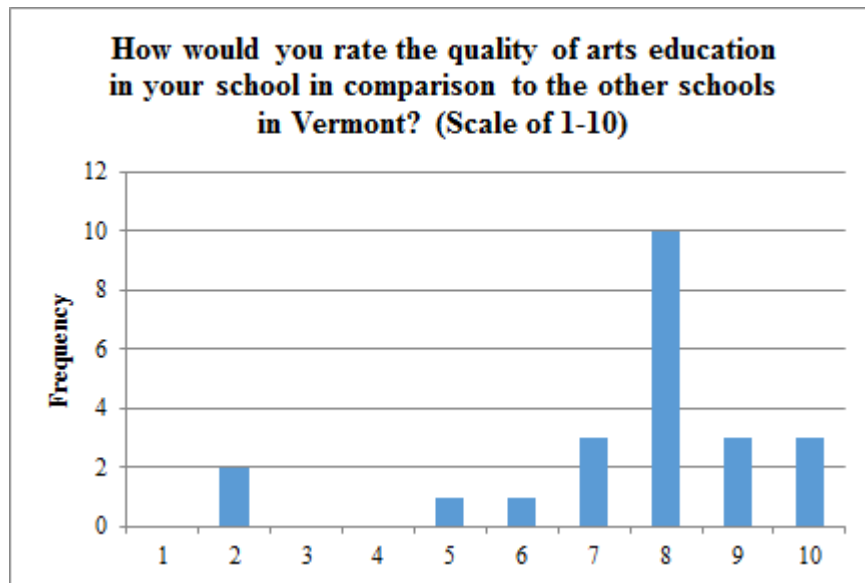


Figure 7: Response to Question 2 of the Qualitative Survey, N=23

The results of the third survey question are pictured in Figure 8. While many of the respondents provided favorable ratings (scores ranging from 6 to 10) for the resources available to conduct arts education in their schools, several respondents had suggestions for potential improvements.

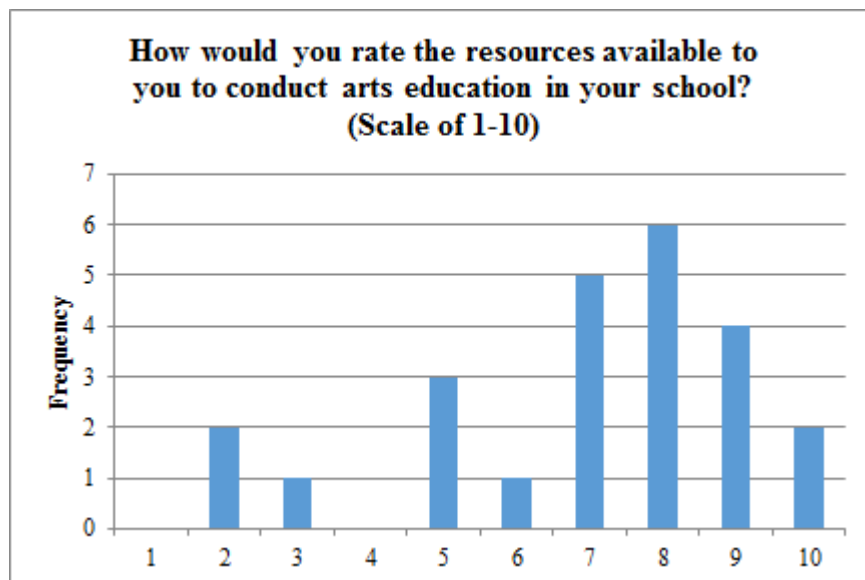


Figure 8: Response to Question 3 of the Qualitative Survey, N=24

In question 4, respondents were asked how arts education could be improved in their schools. A common response was the desire to expand the range of curricular and after-school arts opportunities in all areas, especially theater and dance, and provide more time



for arts classes. Respondents also noted the importance of incorporating more arts-based lessons in the language arts, math and content area curriculum. Specific ideas mentioned were professional development and training to help teachers create new ideas and lessons, increased flexibility and freedom to deviate from more prescriptive curricula, and more time for arts educators to collaborate with classroom teachers to increase arts integration into all learning environments. Several respondents also mentioned that their schools needed more supplies or teaching spaces for arts classes.

In question 5, respondents were asked what resources they would need to implement the types of changes described above. The most common and highly emphasized response was the need for additional funding. Each respondent had clear ideas for how to improve arts education in their school but was prevented from doing so due to budgetary constraints. Overall, the suggested uses for additional funding centered around the following themes.

According to the respondents, increased funding would allow schools that cannot currently afford arts teachers to hire more full time arts educators. Respondents from smaller schools in particular mentioned that they could not afford a full-time teacher. Instead, a full-time position was created by piecing together a few part time positions across smaller schools. This made it difficult to hire and retain quality teachers. These respondents emphasized that increased flexibility to share resources across smaller schools would help in addition to more funding. Respondents from other schools mentioned that they had great arts teachers in their areas and wish they had the resources to provide them with full time positions.

Several respondents mentioned that they would like to be able to offer students more arts classes than just once a week which would also require dedicating more time to arts education. By hiring more arts teachers using increased funding, respondents believed their schools would be better able to expand their offerings across a range of arts classes and days of the week. A few respondents also raised the possibility of using funding to create artist-in-residence opportunities to bring more local artists into schools. This type of program, in addition to creating after-school programs where students and community members could collaborate, would build a wider culture of art in the area. Increased funding would also allow schools to create spaces dedicated to arts classes. A few respondents mentioned that the current spaces used for arts classes were inadequate and one school described how art and music teachers taught in the school gym.

Another impediment to expanding arts education into other areas of the curriculum was the lack of planning time amongst arts teachers and general education classroom teachers. Two respondent suggested that facilitated planning meetings with stipends or other funding would spur more collaboration.



## 5. ESTIMATED CORRELATION OF COMMUNITY VARIABLES AND ARTS OFFERINGS

In addition to data on course offerings, we also collected information on community variables, which we used to perform simple regression analyses with composite score as the dependent variable. Although we were not able to generate a full model that includes all variables relevant to arts course offerings, we could make some interesting comparisons.

### 5.1 Enrollment

Student enrollment and composite score exhibit a positive relationship, as shown in Figure 9 (The relationship is significant at the 0.01 level). The higher the student enrollment, the higher the composite score of a school. The result is expected, since larger schools typically have more resources and therefore can offer more classes.

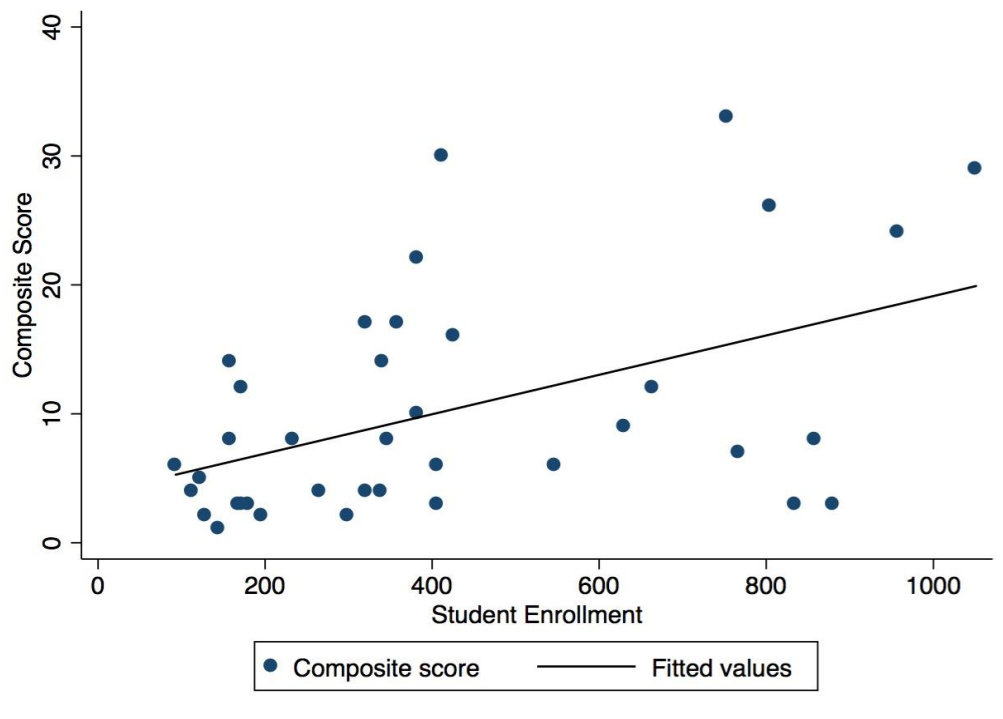


Figure 9: Relationship between Student Enrollment (independent variable) and Composite Score (dependent variable)





## 5.2 Free-and-Reduced Lunch

Contrary to our expectation, the percentage of students on free-and-reduced lunch and composite score do not show a strong, significant relationship, as shown in Figure 10. We expected the relationship to be strong and negative, since a higher percentage of program enrollment indicates less income in the region, leading to the school being able to offer less courses. The line of best fit is sloping downward as we expected, since free-and-reduced lunch participation is correlated with income and resource availability.

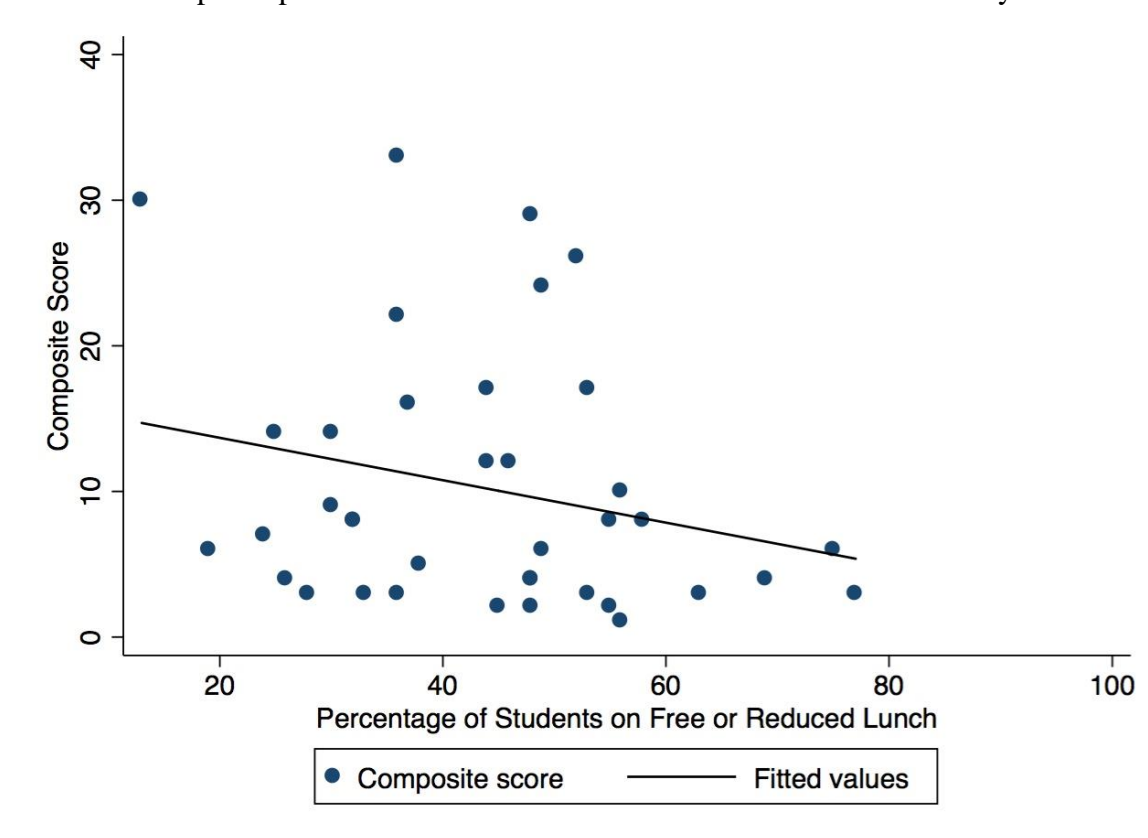


Figure 10: Relationship between Percentage of Students on FRL (independent variable) and Composite Score (dependent variable)

## 6. CONCLUSION

This research was designed to ascertain the state of arts education in tax-funded schools in Vermont through sampling districts from the fourteen counties in the state. We evaluated public and independent schools at the elementary, middle, and high school levels to determine the availability of arts classes and extracurricular activities offered, as well as the impact of community variables. This investigation also assessed the possibility and timeline of creating an online arts database for the state.

Through the project, we have discovered some areas that can be explored further. For



one, future reports can examine the accessibility of arts education—especially extracurricular programming—to students from different family income backgrounds. Availability of a program or course does not guarantee that students can participate, perhaps due to transportation arrangements or cost issues. One statistic that would be helpful in this evaluation is class enrollment, seeing the change in number of students participating in art classes. In addition, future surveys can assess the quality of arts education and its impact on students, perhaps through examining changes in graduation rates. In light of the role the arts play in the broader economic, educational, and social context of society, learning in what ways and to what extent art programs exist and impact students in Vermont schools is crucial to promoting better educational practices.



## REFERENCES

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<sup>1</sup> Vt. Code R.2120.8.9

<sup>2</sup> Gresser, Joseph (31 March 2010). Barton, Vermont: The Chronicle. p. 27.

<sup>3</sup> School Choice Vermont. The Legal Basics. <http://www.schoolchoicevermont.com/choice-in-vt.html>

<sup>4</sup> Vermont State Legislature. A Broad Overview of Current Education Governance. <http://legislature.vermont.gov/assets/Documents/2016/WorkGroups/House%20Education/Education%20Structure%20and%20Finance/W~Donna%20Russo-Savage~Broad%20Overview%20of%20Current%20Education%20Governance~1-15-2015.pdf>

<sup>5</sup> Education Commission of the States. State of the States 2016. <http://www.ecs.org/ec-content/uploads/2016-State-of-the-States-of-Art.pdf>

<sup>6</sup> Art Scan. Survey of Arts Education. <http://www.aep-arts.org/art-scan-state-report-page/?fiftystate=true&Fields=19%2C24%2C26%2C30&aeptitle=Surveys%20of%20Arts%20Education>

<sup>7</sup> Education Commission of the States. State of the States 2016. <http://www.ecs.org/ec-content/uploads/2016-State-of-the-States-of-Art.pdf>

<sup>8</sup> United States Census. Vermont Quick Facts. <http://www.census.gov/quickfacts/table/PST045215/50>