The Beverley Taylor Sorenson Arts Learning Program (BTS Arts) provides arts-integrated instruction to elementary students across the state of Utah. One goal of BTS Arts is to improve student outcomes, including in areas of language arts, social studies, mathematics, and science (BTS Handbook, 2023). In September 2023, the University of Utah was awarded a grant from the Utah State Board of Education (USBE) to study the implementation practices, outcomes, and barriers to participation in BTS Arts. The research study was conducted by researchers from the Utah Education Policy Center (UEPC) in collaboration with staff from the College of Fine Arts (CFA), the Sorenson Impact Institute (SII) and the USBE. This executive summary brief is designed to provide a concise summary of the full report, which is available on https://uepc.utah.edu.

### Effective Practices

**Methods for Effective Practices**

- The level of implementation of BTS Arts programming was measured using Annual Assurance Surveys administered by SII to BTS Arts educators and principals at participating BTS Arts schools in 2021 to 2023.

- Surveys asked about several aspects of implementation, including:
  - the number of hours per week that students were exposed to BTS Arts instruction.
  - the degree to which classroom teachers participated during BTS Arts instruction.

- Responses were collected from between 347 and 409 schools per year, usually with at least one response by a principal and at least one response by a BTS Arts educator per school.

- School-level ratings were joined to school-level average scores on end-of-year assessments of language, math, and science as well as school-level rates of chronic absenteeism (missing 10% or more of possible school days).

**The level of implementation of BTS Arts integration across schools was strong in some areas, but showed room for improvement in others.**

- Most schools reported that all students at the school had access to BTS Arts, but 38-51% of schools reported that students had fewer than 30 minutes of BTS Arts instruction per week.

- Collaboration between BTS Arts educators and classroom teachers was strong for beginning-of-year sharing of curriculum maps, but weak for regular meetings (only 26-34% of schools reported regular meetings) or classroom teacher participation during arts instruction (only 4-5% of schools reported co-teaching and 51-64% reported that the classroom teacher was absent during arts instruction).
For every year that a school participated in BTS Arts, the school’s average scores on math, reading, and science assessments increased between 0.023 and 0.027 standard deviations on the student level assessment scale.

- This increase was statistically significant at p < .001, but is modest in size.

- School differences in the level of specific implementations (e.g., hours per week of BTS Arts exposure) did not significantly explain school differences in average assessment scores.

- The analysis of student attendance was compromised by a statewide surge in the rate of chronic absenteeism from 2021-2023.

### Standard Deviation Increases in Assessment Scores per Year of Participation

<table>
<thead>
<tr>
<th>Subject</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>0.027 SD</td>
</tr>
<tr>
<td>Reading</td>
<td>0.023 SD</td>
</tr>
<tr>
<td>Science</td>
<td>0.025 SD</td>
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</tbody>
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### Barriers to Participation

The top 5 barriers to participation in BTS Arts are presented below. Major barriers involved funding/budget constraints, notably the inability to offer full-time employment to BTS Arts teachers, and additional burdens on classroom teacher time.

- Differences were observed among schools in the severity of the barriers (e.g., Title 1 schools saw the full-time employment issue as especially important). These differences are described in detail in the full report.

- While 77% of respondents reported they would be unlikely to apply to the BTS Arts program if these barriers remained, 52% indicated that their likelihood of applying would change “to a large extent” if barriers were overcome.

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**Methods for Barriers to Participation**

- The UEPC developed a Barriers Survey designed to capture the breadth and severity of barriers to schools’ participation in BTS Arts.

- Development of this survey was informed by discussions with university personnel who work closely with BTS Arts outreach, a review of the literature, and seven interviews with LEA- and school-level personnel in non-participating districts.

- The survey was completed by 17 district- or LEA-level staff and 57 school principals at institutions that were not currently participating in BTS Arts.