i3 and the Arts: Arts Achieve and Arts 4 Learning
An innovative research-based literacy program, proven to be effective in helping students develop and improve important skills in reading and writing through integration of the arts.
**Program: Beaverton Arts for Learning (A4L) Lessons Project Logic Model**

**Situation:**
- Developed and tested A4L Lessons Units 1-5
- Theory: How People Learn
- Model: IDEA
- Partner expertise: Young Audiences, Inc., YAO, UW, Beaverton SD, & WestEd
- BSD: time in school day; staff training; district data

**Inputs**
- Development and testing of Lessons Unit 6; refine Units 1-5 re: applications to BSD writing & ELL
- Refinement of Comprehensive Cross Unit Assessment (CCU)
- Professional Development (PD) teaching artists --1 full day
- PD classroom teachers --1 full day/Unit fall 2011 & spring 2012 --1 full day PD teachers new to A4L years 2 & 3 ---School-based: 2 PLC sessions per Unit
- Differentiated teacher support ---1/2 day for those new to their grade
- Ongoing teacher support—TOSA; 48 Lead Teachers during PLC sessions

**Outputs**
- A4L Lessons completed to include BSD writing & ELL enhancement; CCU assessment revised
- High fidelity & quality Residency delivered by teaching artists
- High fidelity and quality implementation of A4L Lessons Units by classroom teachers

**Activities**
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**Participation**
- High level of student engagement in literacy lessons in and through the arts
- Increased literacy and life skills as assessed by the CCU

**Outcomes**
- Increase student achievement---OAKS Reading Test
- Increased student achievement---OAKS Writing Test
- District Adoption Dissemination (reports of findings; journal publications)

**Short**
- Increased literacy and life skills as assessed by the CCU

**Medium**
- Increased student achievement---OAKS Writing Test

**Long**
- 1. Close achievement gaps in reading: ELL, students disabilities, low SES, minorities by 40% from baseline
- 2. Increase percent students meeting CCR Benchmark standards to 80% at grade 3; 88% at grades 4 & 5
- 3. Increase the percent of 4th-grade students meeting the state writing achievement standards to 75% from baseline

**Assumptions:** BSD support and commitment to the arts for all students; BSD Strategic Plan Literacy Initiative

**External Factors:** Adequate district resources for full program implementation; availability of teaching artists
Formative and summative components & multi-method approach

Formative evaluation
- To inform the further development of the A4L Lessons, professional development model, & enhance program outcomes
- Date to be collected and analyzed include:
  - Student achievement data (annual)
  - Classroom observations (annual)
  - Online teacher survey including A4L Lessons implementation log (biannual)
  - PD participant surveys & ratings of PD sessions (biannual)

Summative evaluation
- A three-year, cluster-randomized trial in 32 elementary schools in the Beaverton School District (OR)
  - 16 schools randomly assigned to the treatment and control conditions
  - Grades 3-5
- Primary outcomes of interest:
  - Student achievement as measured on the Oregon Assessment of Knowledge and Skills (OAKS) Reading and Writing Tests
  - Student literacy and life skills as assessed by the Comprehensive Cross Unit (CCU) Assessment developed by researchers at the University of Washington
- Embedded case study: to tell the story behind the numbers
Guiding Research Questions

1. What is the impact of A4L on students’ reading and writing achievement as measured by the Oregon Assessment of Knowledge and Skills (OAKS) and the CCU?

2. Do the impacts of A4L on students’ reading and writing achievement vary by students’ ELL status, below grade level reading status, or eligibility for free or reduced-price meals?

3. What is the A4L program model as it is being implemented under i3?

4. To what extent has the implementation of the A4L program model been achieved with fidelity to the model?

5. What factors facilitate or constrain model adoption and sustainability?
Research Results
2006 – 2012 School Year

- **Arts for Learning Works**
  - A4L improves student literacy learning, across grades and reading levels
  - National studies conducted by WestEd for 5 consecutive years showed a reliable pattern of statistically significant gains in literacy learning

- **Effectiveness of A4L Lessons increased with greater “Strength of Treatment”**
  - Extending a Unit with a Residency, or receiving more Units, contributes to greater gains

- **Students Reading Below Grade Level made statistically significant literacy gains**, including Title 1 & English Language Learners

- **A4L Lessons teaches 21st Century Learning and Life Skills**

- **Students Showed Engagement & Interest in A4L Lessons**

- **Students liked A4L more than regular reading lessons, say it was easier while making significantly greater gains in literacy**
Arts for Learning Lessons

*Research Studies & Reports*

Fall 2006

Fall 2007 – Spring 2008

Fall 2008 – Spring 2009

Fall 2009 – Spring 2010

Fall 2010 – Spring 2011

Fall 2011 – Spring 2012

Fall 2012 – Spring 2013  In Progress

* Conducted by WestEd & University of Washington with coordination from National Young Audiences and YA Affiliate Sites and Partnering Universities and School Districts
Lead Partner
Studio in a School

Independent Evaluator
Metis Associates

In Partnership with
NYC DOE Office of Arts and Special Projects

ArtsConnection

Cooper-Hewitt National Design Museum

92nd Street Y, Harkness Ctr for Dance
Dance Education Lab (DEL)

Weill Music Institute at Carnegie Hall

developed under a grant from the
U.S. Department of Education
Investing in Innovation (i3) Program
Arts Achieve Goals

• Goal 1: To improve student achievement in the arts through the development and implementation of balanced (formative and summative) arts assessments that are aligned to high arts content and academic achievement standards

• Goal 2: To translate the standards and information from assessments into classroom practices that support improved arts achievement for all students

• Goal 3: To promote innovations in student and teacher access to content and assessment feedback through the use of technology
Examples of Technology in Practice

• Teachers reflect on their new technology and share initial ideas for incorporating technology in their classrooms
High school students used the app Explain Everything to make comments and share feedback directly on to student work. Digital notes can be shared and stored for review.
Using an iPad, a student takes a photo of a peer’s work while recording their answers to inquiry and reflection questions provided by their teacher.
Students use the iPad app Tenuto to test their accuracy of note recognition
A music student uses the iPad to arrange duets for their main instrument and another instrument in a different clef.
Technology in Assessment Process

• A teacher or peer can record feedback for a student directly onto their work using the iPad
• Students have a record of comments they can look back on
• Archive of work over time that allows student and teacher to chart progress
• This process of providing feedback in the formative assessment practice be used over and over
Arts Achieve Goals

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Professional Development/Support
- Annual Kick-Offs
- Ongoing Assessment Retreats
- On-site Consultancies
- School-Level Teams
- Inter-Visitations

Resources
- Cache of Blueprint-aligned units of study
- Links to websites and other sources to support instructional and assessment practices
- Data from the Benchmark Arts Assessments
- Technology for instruction and assessment
- Ning, technology platform to enable communication and sharing

Intermediate Outcomes

School-Wide Outcomes
- Arts Instructional Hours: Hours in targeted arts discipline increase

Classroom Instruction
- Balanced Assessment (formative and summative assessment)
- Curriculum Content
- Curriculum Sequence
- Technology

Short-Term/Long-Term Outcomes

Student Outcomes

Arts Achievement
- Arts Content Knowledge
- Arts Performance Skills

Arts Engagement
- Interest
- Enjoyment
- Engagement outside of school
- Awareness of connections
- Sense of success

Common Core Capacities
- Independence
- Strong content knowledge
- Respond to varying demands of audience, task, purpose, and discipline
- Comprehend as well as critique
- Value evidence

ELA and Math Achievement
- NYS ELA and Math learning standards

Writing Skills
- Use of arts vocabulary
- Use of appropriate ELA conventions
Measuring the Impact of Arts Achieve

• Experimental Design
  – Schools were **randomly assigned** into the treatment or control group by school level and arts discipline.
  – 81 study schools
    • 46 treatment schools
    • 35 control schools
  • The experimental design allows for comparisons of outcomes in schools that participate compared to those schools that do not participate.

<table>
<thead>
<tr>
<th>Arts Achieve Activities</th>
<th>Treatment Schools</th>
<th>Control Schools</th>
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<tbody>
<tr>
<td>Benchmark Assessments (pre/post each year)</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Annual Kick-Offs</td>
<td>Yes</td>
<td>No</td>
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<td>Assessment Retreats</td>
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<td>No</td>
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<tr>
<td>On-Site Coaching/Consultancies</td>
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<td>No</td>
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<td>School Teams</td>
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<td>No</td>
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<td>Inter-Visitations</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Resources (e.g., Blueprint-aligned units, sources to support instructional and assessment practices, and technology platform)</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Surveys (pre/post each year)</td>
<td>Yes</td>
<td>Yes</td>
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### Analysis of Covariance (ANCOVA) Results: Students’ Pre/Post Arts Achievement

<table>
<thead>
<tr>
<th>Study Group</th>
<th>Total N</th>
<th>Pre</th>
<th>Post</th>
<th>Mean Difference</th>
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<th>Effect Size</th>
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<tr>
<td></td>
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<td>Mean Score (SD)</td>
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<tr>
<td>Treatment</td>
<td>1,466</td>
<td>53.45 (15.50)</td>
<td>63.11 (15.58)</td>
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<td>13.03</td>
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<td>Control</td>
<td>1,411</td>
<td>55.03 (16.93)</td>
<td>61.93 (16.96)</td>
<td>6.90</td>
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During the 2011-12 program Year, arts teachers reported improved knowledge and skills:

• 58% of arts teachers reported more confidence in teaching elements of the Blueprint.

• 74% report using more formative assessment strategies.

• 82% have better understanding of arts needs at their school.
Arts Achieve Art Specialists Reported Increased Technology Usage in Their Practice:
Do you use technology in your instruction or assessment of your students?

![Pie chart showing technology usage in Fall 2011 and Spring 2012]

- Fall 2011:
  - Yes, 56%
  - No, 44%

- Spring 2012:
  - Yes, 82%
  - No, 18%

Among the 82% of art specialists who reported using technology, 66% reported using iPads and 45% reported using video cameras.
Teachers reflect on their new technology and share initial ideas for incorporating technology in their classrooms

http://www.youtube.com/watch?v=v8Dv_sPfK_E