Tūtū and Me: A Model for Enhancing Children’s School Readiness
Results from a Longitudinal Study

ALISON MASUTANI,
PARTNERS IN DEVELOPMENT FOUNDATION
TONI PORTER,
EARLY CARE AND EDUCATION CONSULTING
Why Tūtū and Me?

What does Tūtū and Me look like?

What did we find in the longitudinal study?

What are the implications for engaging families in your community?
Partners In Development Foundation

10 programs serving children, caregivers and families

3 Areas of Focus:
- Education
- Social Services
- Environment
Why?

Native Hawaiian families are in Crisis
generational Poverty

Unemployment or underemployment

Low Levels of Education

Incarceration

Unstable Housing

2001: 40% not ready for kindergarten, some two years behind

More than half did not have formal preschool exposure
Tutu and Me Traveling Preschool

- Family Child Interaction Learning Program
- Teaching team members are local to the area served
- Curricula is sensitive to NH culture; uses songs, language, stories
- Teaching strategies incorporate NH values; e.g. no placing blame on families for children’s failures, engaging families in children’s education, individualizing instruction
Tūtū and Me Traveling Preschool:

- 4 member teaching teams across 5 islands;
- Targets Native Hawaiian parents and grandparents in low income/high risk communities;
- Program is two hours/day, two days/week for 10 months;
- Vans carry teaching materials and transform community centers, schools, churches into rich learning environments with 20 activity centers;
- Children and caregivers engage in learning activities, staff model interactions;
- 2 minute Tūtū Talks and Caregiver Resource Center for additional information, individual consultations; take-home activities;
- Model is able to serve 50 children and 50 caregivers at a time. 4,377 children and their caregivers served in the 2015-2016 school year.
Tūtū and Me Traveling Preschool Components

First Circle
Activity Centers
Clean-up
Second Circle

Curriculum organized around learning themes and monthly Hawaiian values

Book Bags
Backpacks
Monthly Activity Calendar
Caregiver Resources

Child Assessments and Referrals

Tūtū Talks
Tūtū Resource Center
Hawaiian Values

- aloha
- mālama
- poʻokela
- lōkahi
- pono
“I remember her saying, ‘Hey, that’s what my daddy says. We have one of those at my house, or my tūtū says that.’ They’re so shocked when they can identify with something close to their own life. It made her feel important as part of the community and relevant to what’s going on. She dances hula now and wants to play the ukulele. It really was exciting for her.”

“We live in Hawai‘i and it’s a beautiful culture, and the way of life here and culture is different, especially in the rural area where we are, and it’s a very important thing. Social integration, especially for somebody like us—we have no Hawaiian and not that much exposure to it.”

From the caregivers:

“I loved [the Hawaiian culture]. I grew up here and I didn’t have that in school. It’s a great foundation for any kind of growing up and cultural interaction here. Those values are really promoted and explained in a way that it’s not only Hawaiian if we speak about responsibility or harmony it goes beyond the Hawaiian culture. It’s beneficial for kids of all backgrounds—the best of Hawaiian culture and in sensory ways, the things we eat. The language emphasis also is interesting—the kids need that understanding that there’s different ways to say things that was really positive.”
Longitudinal Study Research Questions

What are the characteristics of the children, parents, and caregivers who participate in Tūtū and Me?

What effects, if any, does participation in Tūtū and Me have on children’s school readiness?

Are these effects sustained in the early elementary years?
Study Design

Multi-method, multi-source

4 intervals:
- T1: fall 2008
- T2: spring 2009
- T3: spring 2010
- T4: spring 2011

K, 1st grade, 2nd grade, 3rd grade

Child assessments:
- PPVT (T1-4)
- WJ-R Tests 4 and 10 (T1-4)
- CBCL (T1-4)
- DECA (T1-4)

Report card data (K, 1, 2, 3)

Parent survey (T1), Family life changes survey (T 2-4)

Parent interview (K)
Sample

Cohort:
All children born between January 1 and December 31, 2005

Time 1: October/November 2008: 137
Time 2: May/June 2009: 93
Time 3: May/June 2010: 73
Time 4: May/June, 2011: 42
K-2: 27
K-3: 13*

* Preliminary data
Child Characteristics: T1

40 Native Hawaiian

Hawaiian spoken at home:
  ◦ Keiki at home: 10% (n=51)
  ◦ Adult to keiki: 20% (n=51)
  ◦ Keiki to adult: 10% (n=51)

Mean Duration in Tūtū and Me: 15.7 months
Caregiver Characteristics (T1)

Relationship to child: 74% parents, 19% tūtū, 8% other

Age: 45% between 30 and 39; 22% between 40 and 49 (n=92)

Gender: 82% female (n=92)

Ethnicity: 35% Native Hawaiian; 31% Caucasian; 13% Filipino (n=91)

Education: 23% 4-year college degree; 22% some college; 22% high school degree (n=91)

Income: 16% between $60,000 and $69,000; 13% between $50,000 and $59,000; 38.6% less than $50,000 (n=88)
T1-T4 Findings

PPVT: improvements in receptive language T1-T3 (stanine)

WJR: improvements in language comprehension and math T1-T4 (age equivalent/grade equivalent)

CBCL: decreases in developmental problems T1-T2, T1-T3, T1-T4, ADHD and oppositional behaviors T1-T3

DECA: improvements in self control T1-T3, T1-T4, decreases in behavioral concerns T1-T4
Findings: T1-T3: Native Hawaiian Keiki (n=40)

PPVT-III: Significant improvements in receptive language abilities: (Stanine & Percentile)

WJR-R: Significant improvements in math abilities: Sec. 4 Age & Grade Equivalent; Sec. 10 Age Equivalent & Grade Equivalent

CBCL: Significant decrease in anxiety, developmental and behavioral problems

DECA: Significant improvements in self-control; significant decrease in behavioral concerns
# General Learning Outcomes: Definitions

<table>
<thead>
<tr>
<th>GLO</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Self-directed learner</td>
<td>The ability to be responsible for one’s own learning</td>
</tr>
<tr>
<td>2: Community contributor</td>
<td>The understanding that it is essential for human beings to work together</td>
</tr>
<tr>
<td>3: Complex thinker</td>
<td>The ability to demonstrate critical thinking and problem-solving strategies</td>
</tr>
<tr>
<td>4: Quality producer</td>
<td>The ability to recognize and produce quality performance and products</td>
</tr>
<tr>
<td>5: Effective communicator</td>
<td>The ability to communicate effectively</td>
</tr>
<tr>
<td>6: Effective and ethical technology user</td>
<td>The ability to use a variety of technologies effectively and ethically.</td>
</tr>
</tbody>
</table>
GLO 2: Community Contributor
GLO 4: Quality Producer

![Bar graph showing the quality producer for Kindergarten, 1st Grade, 2nd Grade, and 3rd Grade. The graph compares the number of times tasks are usually and consistently completed. For Kindergarten, 1st Grade, and 2nd Grade, consistently completing tasks decreases as grade increases. For 3rd Grade, usually completing tasks is slightly higher than consistently completing tasks.]
GLO 5: Effective Communicator

<table>
<thead>
<tr>
<th>Grade</th>
<th>Usually</th>
<th>Consistently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>1st Grade</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>2nd Grade</td>
<td>90</td>
<td>50</td>
</tr>
<tr>
<td>3rd Grade</td>
<td>100</td>
<td>80</td>
</tr>
</tbody>
</table>
### Subject s: Content Areas

<table>
<thead>
<tr>
<th>Subject</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Arts:</td>
<td>Reading, Writing, Speaking and Listening, Language</td>
</tr>
<tr>
<td>Mathematics:</td>
<td>Operations and algebraic thinking, Numbers and Operations in base 10,</td>
</tr>
<tr>
<td></td>
<td>Measurement and data, Geometry, (3rd grade: fractions)</td>
</tr>
<tr>
<td>Science:</td>
<td>The scientific process, Life and environmental science, Physical,</td>
</tr>
<tr>
<td></td>
<td>earth and space sciences</td>
</tr>
<tr>
<td>Social Studies:</td>
<td>History, Political science/civics, Cultural anthropology, Geography,</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
</tr>
<tr>
<td>Health:</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>World Languages</td>
<td></td>
</tr>
<tr>
<td>Career and Technical</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
</tbody>
</table>
Subject: Language Arts

![Bar chart showing proficiency and excellence in Language Arts across Kindergarten, 1st Grade, 2nd Grade, and 3rd Grade.

- Kindergarten: Meets with proficiency at 60%, Excellence at 40%
- 1st Grade: Meets with proficiency at 80%, Excellence at 20%
- 2nd Grade: Meets with proficiency at 100%, Excellence at 0%
- 3rd Grade: Meets with proficiency at 80%, Excellence at 20%]
Subject: Math

- Kindergarten
- 1st Grade
- 2nd grade
- 3rd grade

- Meets w/ proficiency
- Excellence
Subject: Science

![Bar chart showing science proficiency by grade level.](image-url)
Subject: Social Studies

The bar chart shows the performance of students in Social Studies from Kindergarten to 3rd grade. The chart indicates the percentage of students who meet proficiency and those who exceed excellence. The data suggests a steady improvement from kindergarten to 3rd grade.
### Tutu and Me 3rd Grade Proficiency Comparisons

<table>
<thead>
<tr>
<th>Subject</th>
<th>Tutu and Me % Proficient</th>
<th>Statewide Average 2013-2014</th>
<th>Tutu and Me Keiki School Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>86%</td>
<td>65%</td>
<td>69%</td>
</tr>
<tr>
<td>Math</td>
<td>86%</td>
<td>63%</td>
<td>73%</td>
</tr>
<tr>
<td>Science</td>
<td>92%</td>
<td>53%</td>
<td>66%</td>
</tr>
</tbody>
</table>
The majority:

- Usually/consistently meet learning goals
- Demonstrate acceptable or excellent achievement of content area benchmarks

Native Hawaiian children generally perform at the same levels as their non-Native Hawaiian peers.
MAHALO!!!!!

Alison Masutani, Partners in Development Foundation
Email: amasutani@pidfoundation.org
Toni B. Porter, Early Care and Education Consulting
Email: tonibporter@gmail.com