Do Early Warning Systems and Student Engagement Activities Reduce Dropout? Findings from the Four-Country SDPP Evaluation

School Dropout Prevention Summit 2015
Washington, DC
September 10, 2015
School Dropout Prevention Pilot Program

- **Five-year, four-country project**
  - Funded by USAID
  - Implemented in Cambodia, India, Tajikistan and Timor Leste
  - Led by Creative Associates, implemented with Mathematica, School-to-School and local partners—KAPE, CARE and QUEST

- Aimed at providing **evidence-based solutions to mitigate dropout** from primary and secondary school

- **Three-step applied research process**
  - Assess global evidence on drop-out prevention
  - Understand dropout in target countries
  - Design, implement, and rigorously evaluate interventions to reduce dropout in target countries
SDPP Implements and Tests Programs in Four Asian Countries

- Tajikistan
- India
- Cambodia
- Timor-Leste
Three Step Design Process

Step 1: Literature Review
- To avoid duplication of evaluated interventions and identify promising interventions
- Literature on proven dropout prevention intervention is scarce, particularly in developing countries
- Interventions focused on financial incentives to send and support child in school

Step 2: Trend Analysis:
- To identify target areas and groups for intervention in each country
- Based on secondary national data
Step 3: Situational Analysis: to understand factors and conditions affecting dropout

- “pull” factors (economic) predominated
- “push” factors (school experience) played a role
Early Warning Systems (EWS) implemented in all countries to:
- Identify at-risk students and monitor attendance, coursework and behavior
- Enhance capacity of schools to address at-risk student needs
- Create and strengthen partnerships between school, community and parents of at-risk student

Each EWS is unique to its country with:
- Customized predictors of dropout to identify students
- Tailored activities for first response and community engagement
- Four countries = four projects = four evaluations
### Scoring Sheet

<table>
<thead>
<tr>
<th>School:</th>
<th>Attendance</th>
<th>Early Departure</th>
<th>Course Performance</th>
<th>Work Obligations</th>
<th>Parent's Literacy</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher:</td>
<td>0</td>
<td>Attended 85% or more</td>
<td>0</td>
<td>Never leaves early</td>
<td>0</td>
<td>81% and above</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Attended between 71-84%</td>
<td>1</td>
<td>Leaves early 1-3 times</td>
<td>1</td>
<td>61-80%</td>
</tr>
<tr>
<td>SDFP #</td>
<td>2</td>
<td>Attended 70% or less days</td>
<td>2</td>
<td>Leaves early 4 times or more</td>
<td>2</td>
<td>50% or below</td>
</tr>
</tbody>
</table>

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**I’m strong. I go to school every day.**

**SDFP is a bridge to education.**

**Success for students who work hard.**

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**3 months attendance**

**Initial incentive**

**6 months attendance**
Student Engagement interventions to motivate attendance, improve engagement, build learning skills, and increase enjoyment and interest in schools

- Computer Labs and Computer Literacy: Cambodia
- Structured Recreational/Enrichment programs: India and Timor Leste
- After-school Tutoring program: Tajikistan
This presentation will…

- Describe the impact evaluation design used to estimate the impact of SDPP in all four countries.

- Present final results from the quantitative impact evaluation.

- Present beneficiary perspectives on the results from qualitative research study.
What are the impacts on outcomes the program was primarily intended to influence?

- Teacher behavior and attitudes
- Attitudes of at-risk students
- Student engagement
- School dropout

What are the impacts for students most at risk of dropping out of school?
Randomized Controlled Trials Give Rigorous Answers to Research Questions

Each school assigned RANDOMLY into one of two groups:
- Treatment group (will receive the treatment)
- Control group (will not receive the treatment)
## Evaluation Sample

<table>
<thead>
<tr>
<th>Country</th>
<th>Sample schools</th>
<th>Target grades</th>
<th>Student records</th>
<th>Surveyed at-risk students</th>
<th>Surveyed teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>322</td>
<td>7–9</td>
<td>192,012</td>
<td>18,907</td>
<td>6,041</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>165</td>
<td>9</td>
<td>16,653</td>
<td>4,673</td>
<td>1,841</td>
</tr>
<tr>
<td>India</td>
<td>220</td>
<td>5</td>
<td>40,254</td>
<td>9,932</td>
<td>1,182</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>190</td>
<td>4–6</td>
<td>37,861</td>
<td>7,387</td>
<td>1,444</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>897</strong></td>
<td><strong>4-9</strong></td>
<td><strong>286,780</strong></td>
<td><strong>40,899</strong></td>
<td><strong>10,508</strong></td>
</tr>
</tbody>
</table>
SDPP Theory of Change

- Student Attitudes and Aspirations
  - Performance
  - Behavior
  - Attendance
  - Dropout

- Teacher and Parent – Knowledge and Awareness
  - Teacher Prevention Practices and Support
  - Parent Support
Assessment of Effectiveness Compares Groups For Outcomes in Several Domains

- Teacher and administrator knowledge, attitudes, and practices
- Attitudes of at-risk students
- Engagement in school
- School dropout
Determine whether differences between SDPP and control groups are sufficiently large that it is unlikely that the difference is due to chance.

Impact estimates are described as statistically significant if there is less than a 5 percent probability that it is due to chance (and not to SDPP).

Impact estimates are described as marginally significant if the probability that it is due to chance (and not to the SDPP program) is between 5 and 10 percent.

In tables and figures, the statistically significant impacts at the 1 percent, 5 percent, and 10 percent levels are denoted with asterisks as ***, ** or *.
Impacts on Teacher and Administrator Practices and Attitudes
We examine teacher/administrator practices aimed at preventing dropout.

Teachers and administrators responded yes or no to each of 8 survey questions:
- recording daily attendance
- taking action when students are absent for more than 3 days
- giving weak students individual feedback, having regular meetings to support weak students
- having a plan to support weak students
- communicating with parents of weak students about their child’s schooling
- having regular meetings with weak students
- willing to come early or stay late to help weak students
SDPP Had a Positive Impact on Teacher Dropout Prevention Practices in Cambodia and Timor-Leste

***Difference from control group mean is statistically significant at the 1% level.

**Score on an eight-point scale**

- **Cambodia**: 6.86***, 6.83***, 5.94
- **India**: 7.45, 7.40
- **Tajikistan**: 7.70, 7.70
- **Timor-Leste**: 7.87***, 7.72
SDPP Improved Administrator Dropout Prevention Practices in Cambodia and Tajikistan

![Bar chart showing scores on an eight-point scale for Cambodia, India, Tajikistan, and Timor-Leste under different conditions.]

- **Cambodia**: 7.16***, 7.09***, 6.57
- **India**: 7.37, 7.25
- **Tajikistan**: 7.80**, 7.62
- **Timor-Leste**: 7.85, 7.74

***/**Difference from control group mean is statistically significant at the 1%/5% level.
Teacher and Administrator Sense of Self-Efficacy

- Teacher’s feeling that they have influence over the situation of at risk students.

- Teachers selected 1 of 5 answer choices on a scale from “Nothing” (no control) to “A Great Deal” (total control) for 12 survey questions.

- Examples:
  - “How much can you do to control disruptive behavior in the classroom?”
  - “How much can you do to get children to follow classroom rules?”
  - “How much can you assist families in helping their children do well in school?”
SDPP Improved Teachers’ Sense of Self-Efficacy in Cambodia and Timor-Leste

![Bar chart showing scores on a five-point scale for EWS only, EWS+Enrichment, and Control groups in Cambodia, India, Tajikistan, and Timor-Leste.](chart)

<table>
<thead>
<tr>
<th>Country</th>
<th>EWS only</th>
<th>EWS+Enrichment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>3.54</td>
<td>3.55*</td>
<td>3.50</td>
</tr>
<tr>
<td>India</td>
<td>4.76</td>
<td>4.76</td>
<td></td>
</tr>
<tr>
<td>Tajikistan</td>
<td>4.64</td>
<td>4.69</td>
<td></td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>4.16**</td>
<td>4.08</td>
<td></td>
</tr>
</tbody>
</table>

**/***Difference from control group mean is statistically significant at the 5%/10% level.
Teacher’s feeling that they are *part of the solution*.

Teachers selected 1 of 4 answer choices on a scale from “Strongly Disagree” to “Strongly Agree”.

5 survey questions:
- “Students at risk of dropping out of school should work harder”
- “At-risk students face too many challenges to succeed in school”
- “Students at risk of dropping out need more help than teachers have time or resources to provide”
- “If a student is at risk of dropping out, it is mainly the fault of the parent/guardian or family”
- “There is little that can be done by the teacher or school to help students who are at-risk of dropping out of school.”
SDPP Had a Positive Impact on Teachers’ Sense of Responsibility in Cambodia

***/** Difference from control group mean is statistically significant at the 1%/10% level.
Positive Impact on Administrators’ Sense of Responsibility in Cambodia EWS+C Schools

<table>
<thead>
<tr>
<th>Country</th>
<th>Score on a four-point scale</th>
<th>EWS only</th>
<th>EWS + enrichment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>3.37 3.42*** 3.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>2.11 2.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tajikistan</td>
<td>1.71 1.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>1.93 1.93</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***Difference from control group mean is statistically significant at the 1% level.
Impacts at Endline on At-Risk Students’ Attitudes
Students respond to questions measuring emotional, behavioral, and cognitive attitudes toward school, using 1 of 4 answer choices on a scale from “Strongly Disagree” to “Strongly Agree”.

- **Emotional Attitudes Toward School:** How does the student feel about school?
  - Based on responses to 6 questions, for example:
    - “School is a fun place to be”
    - “There are teachers I can talk to”

- **Cognitive Attitudes Toward School:** How does the student think about school?
  - Based on responses to 9 questions, for example:
    - “Doing homework helps me do well in school”
    - “I check my school work for mistakes”

- **Behavioral Attitudes Toward School:** How does the student act towards school?
  - Based on responses to 10 questions, for example:
    - “I arrive on time”
    - “I follow school rules”
SDPP Improved At-Risk Students’ Emotional Attitudes Toward School in Tajikistan and India

Difference from control group mean is statistically significant at the 1%/5% level.

***/***  Difference from control group mean is statistically significant at the 1%/5% level.

EWS only  EWS + enrichment  Control

***/***  Difference from control group mean is statistically significant at the 1%/5% level.
SDPP Did Not Affect At-Risk Students’ Cognitive Attitudes Toward School

Differences between treatment and control group means are not statistically significant.
SDPP Improved At-Risk Students’ Behavioral Attitudes Toward School in Timor-Leste

*** Difference from control group mean is statistically significant at the 1% level.

**Graphs:**
- Score on a four-point scale for Cambodia, Tajikistan, India, and Timor-Leste.
- Percentage of scale items with which students agreed for the same regions.

**Legend:**
- EWS only
- EWS + enrichment
- Control
Students respond to questions measuring their perceptions of their teachers and parents, using 1 of 4 answer choices on a scale from “Strongly Disagree” to “Strongly Agree”.

Perceptions of Teachers: What do students think of the support they receive from their teachers?
- Based on responses to 11 questions, for example:
  - “My teacher(s) care about how I am doing”
  - “My teacher(s) help me if I am having problems with a lesson”
  - “My teacher(s) talk(s) to me if I miss school or class”

Perceptions of Parents: What do students think of the support they receive from their parents?
- Based on responses to 11 questions, for example:
  - “My parents make sure I go to school every day”
  - “My parents attend school events”
  - “My parents try to support me with my studies”
SDPP Had a Positive Impact on At-Risk Students’ Perceptions of Teacher Support In Cambodia and India

### Score on a four-point scale

- **Cambodia**:
  - EWS only: 3.15***
  - EWS + enrichment: 3.11
  - Control: 3.05

- **Tajikistan**:
  - EWS only: 3.36
  - EWS + enrichment: 3.35

### Percentage of scale items with which student agreed

- **India**:
  - EWS only: 89.6***
  - EWS + enrichment: 87.2

- **Timor-Leste**:
  - EWS only: 80.7
  - EWS + enrichment: 79.7

*** Difference from control group mean is statistically significant at the 1% level.
SDPP Had a Positive Impact on At-Risk Students’ Perceptions of Parent Support in Cambodia and India

- **Cambodia**
  - EWS only: 3.38
  - EWS + enrichment: 3.39
  - Control: 3.32

- **Tajikistan**
  - EWS only: 3.51
  - EWS + enrichment: 3.51
  - Control: 3.25

- **India**
  - EWS only: 92.1
  - EWS + enrichment: 89.0
  - Control: 86.4

- **Timor-Leste**
  - EWS only: 86.6
  - EWS + enrichment: 86.6
  - Control: 86.6

***/*** Difference from control group mean is statistically significant at the 1%/5% level.
Impacts at Endline on Student Attendance and Academic Performance
SDPP Improved Attendance Among Students Overall and At-risk in Some Countries

**Difference from control group mean is statistically significant at the 1%/5%/10% level.**
**Difference from control group mean is statistically significant at the 5% level.**
Impacts at Endline on Student Dropout
SDPP Reduced Dropout in Cambodia

**/*** Differences from control group mean is statistically significant at the 1%/5%/10% level.
**SDPP Improved Grade Progression in the EWS+Computers Group in Cambodia**

* Difference between treatment and control group means is significant at the 10% level.

<table>
<thead>
<tr>
<th>Country</th>
<th>EWS only</th>
<th>EWS + enrichment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>62.3</td>
<td>63.3*</td>
<td>61.5</td>
</tr>
<tr>
<td>India</td>
<td>85.4</td>
<td>85.1</td>
<td></td>
</tr>
<tr>
<td>Tajikistan</td>
<td>79.7</td>
<td>77.9</td>
<td></td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>80.0</td>
<td>78.3</td>
<td></td>
</tr>
</tbody>
</table>

* Difference between treatment and control group means is significant at the 10% level.
SDPP Improved Between-Grade Dropout for Not-At-Risk Students in Tajikistan

![Bar chart showing progression of students in Tajikistan]

- **All Students**: 20.2 (EWS+Enrichment) vs. 22.1 (Control)
- **At-Risk Students**: 25.5 (EWS+Enrichment) vs. 27.1 (Control)
- **Not-At-Risk Students**: 13.3 (EWS+Enrichment) vs. 15.6 (Control)

* Difference between treatment and control group means is significant at the 10% level.
Summary of Findings

- Attendance
- Behavior
- Performance
- Dropout
- Student Attitudes and Aspirations
- Parent Support
- Teacher Prevention Practices and Support
- Teacher and Parent – Knowledge and Awareness

Teacher and Parent – Knowledge and Awareness
Impacts in Context

- **Duration of Exposure to SDPP:**
  - Only a year in India and Tajikistan; closer to two years in Timor Leste and Cambodia

- **Enforcement of Compulsory Education in India and Tajikistan:**
  - Concurrent reductions in dropout due in these two countries may have made it harder for SDPP to have impacts

- **Inconsistent Implementation of SDPP in Timor Leste:**
  - Especially for EWS communications with parents/follow-up actions

- **Complexity of Factors Related to Dropout:**
  - SDPP doesn’t address all of them (particularly economic motivations)
SDPP Successfully Achieved Its Goal of Reducing Dropout and Dropout Related Behaviors

- A high level of dropout and low levels of prevention practices provide the ideal context for impact
  - SDPP reduced dropout and improved teacher dropout prevention practices in Cambodia, the country with the highest dropout rate and lowest teacher prevention practices.

- The value-added of an ICT intervention is not apparent.
  - Computer training combined with an EWS did not produce important impacts beyond those for EWS alone in Cambodia.

- SDPP improved important intermediate outcomes such as student attitudes and attendance in Tajikistan, India and Timor-Leste, through the EWS combined with enrichment activities with recreational elements.
Obrigadu, धन्यवाद , មស៊ីុស, Tashakur!
EXTRA SLIDES
Impacts on Dropout in Cambodia: What Does This Mean?

- SDPP served about 45,000 students in each of the treatment groups in Cambodia
  - In the absence of SDPP, about 18,500 students (41%) would have dropped out
  - SDPP kept about 2,655 (5.9%) of these students in school in EWS schools and about 1,980 (4.4%) of these students in school in EWS+Computer schools

- SDPP served about 8,200 at-risk students in the EWS group
  - In the absence of SDPP, about 4,400 (54%) of these at-risk students would have dropped out
  - SDPP kept about 500 (11%) of these students in school in the EWS group
Summary of Findings Related to Teacher and Administrator Practices

- SDPP had a positive impact on dropout prevention practices for teachers and administrators in Cambodia, for teachers in Timor-Leste, and for administrators in Tajikistan.

- Teacher and administrator dropout prevention practices were high in India, Tajikistan, and Timor-Leste in SDPP and control schools.

- SDPP improved teachers’ and administrators’ sense of self-efficacy and responsibility in some countries.
Summary of Findings Related to At-risk Student Attitudes

- SDPP had a positive impact on at-risk students’ emotional attitudes toward school in Tajikistan and India.
- SDPP had a positive impact on at-risk students’ behavioral attitudes toward school in Timor-Leste.
- SDPP did not affect at-risk students’ cognitive attitudes toward school in any country.
- SDPP improved at-risk students’ perceptions of parent and teacher support in Cambodia and India.
Summary of Findings Related to Student Attendance and Dropout

- SDPP improved attendance in India, Tajikistan, and Timor-Leste.
- SDPP reduced dropout for students overall in Cambodia, in both the EWS+Computers group and the EWS group. The program also reduced dropout among at-risk students in the EWS group.
- There was a small improvement in grade progression in Cambodia in the EWS+Computers group.
The school year in Cambodia runs October to June, in India April to March, in Tajikistan it runs September to May, and in Timor-Leste January to November.

T = teacher and school administrator training begins; E = EWS intervention rolled out to students; A = additional enrichment intervention rolled out to students; X = end of activities in schools.
SDPP Improved At-Risk Students’ Perceptions of Computer Training In Cambodia, for EWS+Computers Students

** Difference from control group mean is statistically significant at the 5% level.
++Difference between the EWS-only and EWS + enrichment group means is statistically significant at the 5% level.
SDPP Did Not Affect Language Performance in Any Country

*Difference from control group mean is statistically significant at the 10% level.*
SDPP Did Not Affect Behavior in Any Country

*Difference from control group mean is statistically significant at the 10% level.
Teachers’ Sense of Self Efficacy vs. Sense of Responsibility in Cambodia

***/*Difference from control group mean is statistically significant at the 1%/10% level.

***
# Impacts on Teacher Dropout Prevention Practices by Subgroup

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>India</th>
<th>Tajikistan</th>
<th>Timor-Leste</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EWS only</td>
<td>EWS + Enrichment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teacher gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>+++</td>
<td>+++</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Male</td>
<td>+++</td>
<td>+++</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Teacher full-time status</strong></td>
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<td>Full-time</td>
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<td>+++</td>
<td>+</td>
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<tr>
<td>Not full-time</td>
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<tr>
<td><strong>School percentage at-risk</strong></td>
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<tr>
<td>High</td>
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<tr>
<td>Low</td>
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<td><strong>School location</strong></td>
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<td>Remote</td>
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<tr>
<td>Not remote</td>
<td>+++</td>
<td>+++</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

+ + +/- +/- Statistically significant positive impact at the .01/.05/.10 level.
— — —/—/—/— Statistically significant negative impact at the .01/.05/.10 level.
Subgroup Impacts on Teacher Dropout Prevention Practices

**Cambodia**

- Female: 1.06***
- Male: 0.93***
- Full-time: 0.83***
- Not full-time: 0.87***
- High % At-risk: 1.00***
- Low % At-risk: 0.93***
- Remote schools: 0.96***
- Not remote schools: 0.88***

**India**

- Female: -0.08
- Male: 0.15
- Full-time: 0.39*
- Not full-time: -0.05
- High % At-risk: 0.08
- Low % At-risk: 0.03
- Remote schools: -0.06
- Not remote schools: 0.16

- EWS only
- EWS+Enrichment

**USAID**

FROM THE AMERICAN PEOPLE
Subgroup Impacts on Teacher Dropout Prevention Practices

Tajikistan

- Female: 0.07
- Male: -0.03
- Full-time: 0.01
- Not full-time: -0.07
- High % At-risk: 0.03
- Low % At-risk: 0.03
- Remote schools: -0.02

Timor-Leste

- Female: 0.15
- Male: 0.15***
- Full-time: 0.14***
- Not full-time: 0.18
- High % At-risk: 0.18
- Low % At-risk: 0.18***
- Remote schools: 0.14**
- Not remote schools: 0.18*

EWS+Enrichment
Impact on Teacher Dropout Prevention Practices in India for Full Time Employees

Score on an eight-point scale

India Full Time Employees

- **EWS+Enrichment**
- **Control**

* Difference from control group mean is statistically significant at the 10% level.
## Impacts on Emotional Attitudes Toward School by Subgroup

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>India</th>
<th>Tajikistan</th>
<th>Timor-Leste</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>EWS only</td>
<td>EWS + Enrichment</td>
<td></td>
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<tr>
<td><strong>Student gender</strong></td>
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<tr>
<td>Females</td>
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<tr>
<td>Males</td>
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<td><strong>Student overage status</strong></td>
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<tr>
<td><strong>Student caste</strong></td>
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</table>

+ + +/- +/+ Statistically significant positive impact at the .01/.05/.10 level.
— — —/— —/— Statistically significant negative impact at the .01/.05/.10 level.
Subgroup Impacts on Emotional Attitudes Toward School

**Cambodia**

- **Female:** 0.01, 0.03, 0.04
- **Male:** 0.01, 0.03, 0.04
- **Overage:** 0.31, 0.31
- **Not overage:** 0.01, 0.01
- **High % At-risk:** 0.06, 0.03
- **Low % At-risk:** 0.00, 0.02
- **Remote schools:** 0.00
- **Not remote schools:** 0.03, 0.04

**Tajikistan**

- **Female:** 0.1***
- **Male:** 0.04
- **Overage:** 0.02
- **Not overage:** 0.07***
- **High % At-risk:** 0.08*
- **Low % At-risk:** 0.06*
- **Remote schools:** 0.04
- **Not remote schools:** 0.09***
Subgroup Impacts on Emotional Attitudes Toward School

**India**

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Improvement</th>
</tr>
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<tr>
<td>Female</td>
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**Timor-Leste**

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<td>Male</td>
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<tr>
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<tr>
<td>High % At-risk</td>
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Note: Improvements in percentage of scale items with which student agreed.
# Impacts on Cognitive Attitudes Toward School by Subgroup

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<tr>
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<td>Not remote</td>
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<td>○</td>
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</tbody>
</table>

+ + +/- +/+ Statistically significant positive impact at the .01/.05/.10 level.
— — ——/— —/— Statistically significant negative impact at the .01/.05/.10 level.
SDPP Improved At-Risk Students’ Cognitive Attitudes Toward School for Overage Students in Cambodia

Score on a four-point scale

<table>
<thead>
<tr>
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<th>EWS only</th>
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* Difference from control group mean is statistically significant at the 10% level.
### Impacts on Behavioral Attitudes Toward School by Subgroup

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<th>Timor-Leste</th>
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<tbody>
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<td></td>
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<tr>
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<tr>
<td>Males</td>
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<td>○</td>
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<td><strong>Student overage status</strong></td>
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<tr>
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<td><strong>School percentage at-risk</strong></td>
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<tr>
<td>High percent at-risk</td>
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<td>++</td>
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</tr>
</tbody>
</table>

+ + +/- +/- Statistically significant positive impact at the .01/.05/.10 level.
— — —/— —/— Statistically significant negative impact at the .01/.05/.10 level.
Subgroup Impacts on Behavioral Attitudes Toward School

**Cambodia**
- Female: 0.07 (EWS only), 0.04 (EWS+Enrichment)
- Male: -0.03, 0.03
- Overage: 0.09 (EWS only), 0.09 (EWS+Enrichment)
- Not overage: 0.02, 0.01
- High % At-risk: 0.03, 0.02
- Low % At-risk: 0.04, 0.01
- Remote schools: 0.01, 0.01
- Not remote schools: 0

**Tajikistan**
- Female: 0.01
- Male: -0.02
- Overage: 0.09
- Not overage: -0.01
- High % At-risk: 0.09**
- Low % At-risk: -0.05
- Remote schools: -0.01
- Not remote schools: 0.01

Improvements on a four-point scale:
- **EWS only**
- **EWS+Enrichment**
Subgroup Impacts on Behavioral Attitudes Toward School

India

Timor-Leste

Female  Male  Not low caste  Low caste  Overage  Not overage  High % At-risk  Low % At-risk  Remote schools  Not remote schools

Improvements in percentage of scale items with which student agreed

EWS+Enrichment
SDPP Improved Behavioral Attitudes Toward School for Students in Schools with a High Percentage of At-Risk Students in Tajikistan

**Difference from control group mean is statistically significant at the 5% level.**
## Impacts on Attendance by Subgroup

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<td><strong>Student gender</strong></td>
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<tr>
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<td>+++</td>
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<tr>
<td><strong>Student caste</strong></td>
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<tr>
<td><strong>School location</strong></td>
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<td>○</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>

+ +/+/+ +/+ Statistically significant positive impact at the .01/.05/.10 level.
— —/—/— —/— Statistically significant negative impact at the .01/.05/.10 level.
Subgroup Impacts on Attendance

Cambodia

Improvements in percentage of days attended

- Female: EWS only -0.6, EWS+Enrichment 0.1
  - Male: EWS only -1.2, EWS+Enrichment -0.2
  - Overage: EWS only -0.9, EWS+Enrichment 0.3
  - Not overage: EWS only -1.6, EWS+Enrichment 0.0
  - High % At-risk: EWS only -0.8, EWS+Enrichment 0.2
  - Low % At-risk: EWS only -0.6, EWS+Enrichment 0.0
  - Remote schools: EWS only -1.2, EWS+Enrichment -0.6
  - Not remote schools: EWS only -0.3

India

Improvements in percentage of days attended

- Female: EWS+Enrichment 1.7***
  - Male: EWS+Enrichment 1.7**
  - Low caste: EWS+Enrichment 2.5***
  - Not low caste: EWS+Enrichment 1.4**
  - Overage: EWS+Enrichment 2.1**
  - Not overage: EWS+Enrichment 1.6***
  - High % At-risk: EWS+Enrichment 2.7***
  - Low % At-risk: EWS+Enrichment 1.3
  - Remote schools: EWS+Enrichment 2.2**
  - Not remote schools: EWS+Enrichment -0.3
Subgroup Impacts on Attendance

**Tajikistan**

- Female: 1.1**
- Male: 0.6
- Overage: 2.1
- Not overage: 0.8*
- High % At-risk: 1.3**
- Low % At-risk: 0.3
- Remote schools: 0.3
- Not remote schools: 1.3*

**Timor-Leste**

- Female: 1.7**
- Male: 1.7**
- Overage: 2.3**
- Not overage: 1.7**
- High % At-risk: 1.1
- Low % At-risk: 2.1**
- Remote schools: 1.6*
- Not remote schools: 1.9
## Impacts on Dropout by Subgroup

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</table>

+ + ++ +/- +/+ Statistically significant positive impact at the .01/.05/.10 level.
— — —/— —/— Statistically significant negative impact at the .01/.05/.10 level.
Subgroup Impacts on Dropout

**Cambodia**

- Female: -2.1*  
- Male: -2.7**  
- Overage: -3.5  
- Not overage: -2.2  
- High % At-risk: -2.5**  
- Low % At-risk: -2.0*  
- Remote schools: -2.8**  
- Not remote schools: -3.3**

**India**

- Female: -0.6  
- Male: 0.6  
- Low caste: 0.4  
- Not low caste: 0.0  
- Overage: -0.1  
- Not overage: -2.0**  
- High % At-risk: 3.8***  
- Low % At-risk: 0.0  
- Remote schools: -0.6  
- Not remote schools: 0.7

Legend:
- EWS only
- EWS+Enrichment
Subgroup Impacts on Dropout

Tajikistan

-0.4 0.7 0.6 0.3 0.1 -0.3 0.6
Female Male Overage Not overage High % At-risk Low % At-risk Remote schools Not remote schools

Timor-Leste

0.6 1.0 1.5 3.9** 1.4 -1.0
Female Male Overage Not overage High % At-risk Low % At-risk Remote schools Not remote schools

**Statistically significant at the 0.01 level.
SDPP Reduced Dropout for Students in Schools with a Low Percentage of At-Risk Students in India

**SDPP Reduced Dropout for Students in Schools with a Low Percentage of At-Risk Students in India**

---

**India Schools with a Low Percentage of At-Risk Students**

- **EWS+Enrichment**: 7.3**
- **Control**: 9.3

*** Difference from control group mean is statistically significant at the 1% level.

---

**USAID**

**From the American People**
### Impacts on Daily Attendance: What does this mean?

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>Tajikistan</th>
<th>Timor-Leste</th>
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<tbody>
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<td>225</td>
<td>198</td>
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### Impacts on Dropout in Cambodia: What Does This Mean?

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<tr>
<th></th>
<th>Number (%) of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students overall</strong></td>
<td></td>
</tr>
<tr>
<td>Number of Students in SDPP Schools</td>
<td>45,000</td>
</tr>
<tr>
<td>% Dropping Out in Absence of SDPP</td>
<td>41%</td>
</tr>
<tr>
<td>Number of Students Dropping Out in Absence of SDPP</td>
<td>18,500</td>
</tr>
<tr>
<td>Number of Students that SDPP Kept in School</td>
<td>4635</td>
</tr>
<tr>
<td><strong>At risk students</strong></td>
<td></td>
</tr>
<tr>
<td>Number of At-Risk Students in SDPP Schools</td>
<td>24,600</td>
</tr>
<tr>
<td>% At-Risk Students Dropping Out in Absence of SDPP</td>
<td>54%</td>
</tr>
<tr>
<td>Number of At-Risk Students Dropping Out in Absence of SDPP</td>
<td>13,200</td>
</tr>
<tr>
<td>Number of At-Risk Students that SDPP Kept in School</td>
<td>2,700</td>
</tr>
</tbody>
</table>
SDPP Did Not Affect Administrators’ Sense of Self-Efficacy

Differences between treatment and control group means are not statistically significant.
Teachers’ Sense of Self Efficacy vs. Sense of Responsibility in India, Tajikistan and Timor-Leste

**Difference from control group mean is statistically significant at the 5% level.**