## Gender and Persistence in School:

 First results of a longitudinal study of $6^{\text {th }}$ grade Cambodian studentsJames Williams<br>Visiting Professor, CICE, Hiroshima<br>University

## Larger project - Retention study

Title
Staying in School: A Longitudinal Mixed Methods Study of Transition, Drop out, and Retention-From Primary to Secondary School in Cambodia
For many individuals and for the nation, challenge of:
Persistence through lower secondary to upper secondary school
Home
Royal University of Phnom Penh
Support
Japan Society for the Promotion of Science
Supported by researchers from
Sophia University (Tokyo), George Washington University (US), University of Kassel (Germany)

## Overall plan

## Longitudinal

- From last term of $6^{\text {th }}$ grade (end of primary) to beginning of grade 10 (entrance to upper secondary) school, if on time
- Once to twice/year

Surveys of

- Students \& parents
- Dropouts
- Teachers
- School directors

Narrative interviews with students \& parents Test
Student attendance and grades
Analysis of EMIS
4 IRBS! Researchers in 4 countries!!

## Implementation

10 schools in one province, 2-3 hours from Phnom Penh Purposively sampled:

3 "urban"
4 rural
3 remote
Within each category, we sought a mix of high and low dropout schools All available, assenting/consenting $6^{\text {th }}$ graders and their parents, teachers, school directors at each school

1 narrative interview parent-child pair per school
Final sample
219 students ( +219 parents) for surveys - all oral
10 students +10 parents for narrative interviews - oral
10 teachers - written
10 school directors - written

## Status of research

$1^{\text {st }}$ data collection June 2011
End of primary school
Baseline
Follow up
December 2011, June 2012
Persistence decision: Enrolled in school? Repeating? Dropout? First results
Exploratory
Caveats
An early piece
Mistakes are mine, not co-researchers'
Complete follow-up in December 2012

## Extensive baseline surveys Students

Educational History
School supplies
Private Tutoring
Private School Experience
External Support
Activities Outside School
Child Resources
Social Capital
Educational Âspirations
Perception of School Quality

## Student baseline surveys (cont)

Perception of Transition Process<br>Career Aspirations<br>Current Work Life<br>Self-evaluation<br>Characterization of Current Education

## Baseline surveys Parents

Background information on student's family Additional support for student's education Parent expectation re change in living standard Family wealth (including housing and books in home) Parent's activities with student Parental involvement in school
Parent's social capital

## Parents' baseline

Community security
Student's health
Parent perception of student's attitude toward school
Parent perception of financial burden School cost
Level of education required for parent's job Parent's educational aspirations for student Parent's perception of school quality Parent's stance of transition decision Parent's perception of and information on ISS choice

## More parents' baseline

18. Parent's perception of student probability of success in ISS
19. Reasons for stopping child's education

## Teacher \& Director Baseline

Teacher

1. Student grade average
2. Student absences
3. Teacher expectation of student's education potential
Director
4. Basic information on school
5. Director's perception of student dropout
6. School resources
7. Student tracking
8. School climate I
9. School climate II
10. Director perception of parental participation
11. Director background information

## Today, two short stories

Overall persistence and drop out Gender

Caveat: Somewhat descriptive yet

## Hopes and reality

In June ' 11 , most primary students said they wanted to continue their schooling:

- Yes 96\%
- Unsure 3\%
- No 1\%

Most students wanted to finish at least upper secondary school. \% desiring to finish:

- Lower secondary school 14
- Upper secondary school 43
- University 43

But by Jun '12, 27\% had dropped out

## Overall dropout rates and education of parents

|  | Overall <br> \% of <br> Students | \% among <br> students whose <br> parents had no <br> education | \%mong <br> students whose <br> parents had <br> completed <br> lower secondary <br> certificate or <br> more |
| :--- | :---: | :---: | :---: |
| Dropped out <br> between Jun 11 <br> and Dec ll | 4 | 7 | 0 |
| Dropped out <br> between Dec l1 <br> and Jun l2 | 23 | 26 | 30 |
| Still Enrolled in <br> School | 73 | 67 | 100 |

## Promotion status by primary school of origin

| Primary <br> School of <br> Origin: <br> School No. | \% Who <br> Dropped Out <br> before ISS <br> (Jun-Dec 11) | \% Who <br> Dropped Out <br> in 7 $\mathbf{7}^{\text {th }}$ grade <br> (De 11-Jun12) | \% Who are <br> Still in School | TOTATI |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 0 | 11 | 89 | 100 |
| 2 | 3 | 23 | 73 | 100 |
| 3 | 0 | 30 | 70 | 100 |
| 4 | 7 | 21 | 71 | 100 |
| 5 | 0 | 13 | 88 | 100 |
| 6 | 7 | 27 | 67 | 100 |
| 7 | 0 | 25 | 75 | 100 |
| 8 | 0 | 0 | 100 | 100 |
| 9 | 0 | 40 | 60 | 100 |
| 10 | 21 | 26 | 53 | 100 |
| 11 | 0 | 34 | 66 | 100 |

## Promotion status by lower secondary school

| Destination <br> Secondary <br> School : <br> School Number | \% Dropped Out <br> in $7^{\text {th }}$ Grade <br> (Dec 11 - Jun 12) | \% Still in <br> School | HOHATI |
| :---: | :---: | :---: | :---: |
| 2 | 0 | 100 | 1002.5 |
| 1 | 11 | 89 | 1004.0 |
| 6 | 16 | 84 | 1002.1 |
| 10 | 10 | 80 | 1002.2 |
| 4 | 21 | 79 | 1002.2 |
| 7 | 23 | 77 | 1002.1 |
| 9 | 25 | 75 | 1002.5 |
| 3 | 34 | 66 | 1002.0 |
| 5 | 40 | 60 | 1001.8 |
| 8 | 40 | 60 | 1003.8 |

## Grades and attendance are associated with persistence

|  | Students Who Dropped Out before IISS (Jun-Dec 11) | Students Who Dropped Out in $7^{\text {th }}$ grade (Dec 11-Jun12) | Students Who are Enrolled in ISSS School | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| Grades $1^{\text {st }}$ <br> term , Gr6 <br> (hi=good) | 6.4 | 6.5 | 7.1 | 6.9** |
| Grades $2^{\text {nd }}$ term | 6.6 | 6.2 | 7.0 | 6.8** |
| Absences ${ }^{\text {st }}$ term , Gr 6 (lo=good) | 1.0 | 1.2 | 0.8 | 0.9* |
| Absences $2^{\text {nd }}$ term | 2.2 | 2.5 | 0.9 | 1.3*** |
| Final class rank, Gr6 (lo=good) | 15.9 | 19.2 | 14.9 | 15.9~ |

## Family SES is (sometimes) associated with persistence

|  | Students Who Dropped Out before ISSS (Jun-Dec 11) | Students Who Dropped Out in $7^{\text {th }}$ grade (Dec 11-Junl2) | Students Who are Enrolled in ISS School | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| Average number of bathrooms | 0.13 | 0.09 | 0.27 | 0.22~ |
| Average number of bicycles | 1.13 | 1.11 | 1.48 | 1.39* |
| \% without television | 38 | 46 | 35 | 37 |
| \% without motorbike | 63 | 47 | 48 | 48 |

## Students' intentions seem to make a difference

| Continue with next grade (end Gr 6) | Students Who Dropped Out before ISS (Jun-Dec 11) | Students Who Dropped Out in $7^{\text {th }}$ grade (Dec 11-Jun12) | Students Who are Enrolled in ISS School | TOTAT |
| :---: | :---: | :---: | :---: | :---: |
| Will not continue | 0 | 50 | 50 | 100 |
| Don't know | 33 | 17 | 50 | 100 |
| Will continue | 3 | 23 | 75 | 100 |
| TOTAL | 4 | 23 | 74 | 100 |

## Parents' career aspirations for kids appear important

| How much ed need to do job want kid to do at 30? (asked parents) | Students Who <br> Dropped Out before ISS (Jun-Dec 11) | Students Who Dropped Out in $7^{\text {th }}$ grade (Dec 11-Jun12) | Students Who are Enrolled in ISS School | TOTAT** |
| :---: | :---: | :---: | :---: | :---: |
| Don't know | 4 | 21 | 75 | 100 |
| Lower secondary | 5 | 43 | 52 | 100 |
| Upper secondary or more | 3 | 19 | 78 | 100 |

## Expectations of significant others seem to make a difference

| What ed expectations of family advisor? | Students Who Dropped Out before ISSS (Jun-Dec 11) | Students Who Dropped Out in $7^{\text {th }}$ grade (Dec 11-Jun12) | Students Who are Enrolled in IISS School | TOTATL** |
| :---: | :---: | :---: | :---: | :---: |
| Don't know | 5 | 19 | 76 | 100 |
| Lower secondary | 8 | 46 | 46 | 100 |
| Upper secondary or more | 3 | 18 | 79 | 100 |

## Parents know where children will end up, but desire more

| Level of education (1-4, 4 university) | Students Who <br> Dropped Out before ISS (Jun-Dec 11) | Students Who Dropped Out in $7^{\text {th }}$ grade (Dec 11-Jun12) | Students Who are Enrolled in ISS School | TOTAT |
| :---: | :---: | :---: | :---: | :---: |
| Parent's desire for child | 3.62 | 3.42 | 3.48 | 3.48 |
| Parent expects child to achieve | 2.14 | 2.75 | 2.94 | 2.87** |

## Many things surprisingly seem not to affect persistence

Frequency of parents' conversations with teachers
Frequency of parents' assistance with homework
Whether study receives private tutoring or not
Whether student has someone to help them Time spent on chores, tv, homework, with friends
Students who persist are more critical of their teachers and schools
etc

## Patterns

Dropout is worse in ISS $1^{\text {st }}$ yr than between primary \& LSS Extremely wide variation across schools in dropout/persistence of students. Why? Parents' education does not differ significantly across primary schools but it does across ISSs
Students' aspirations and parents' expectations appear important in predicting persistence
What's difference between students who drop out before starting LSS and those who drop out during LSS?
Little variation in parent desires
Parents know where kids will end up Policy implications...?

## Gender \& Persistence

1 initial slice, of many possible Allows portrayal of data
Explores differences by gender
Researchers can then see if these differences
change over time
Descriptive
Four types of things to notice

- Subtle differences that may, or may not, grow
- No differences where one might expect them
- Overall levels
- Then, how things change


## Gender differences

Generally modest at this point Little statistical significance to differences There are patterns...
But

- Chance?
- Too small a sample to pick up differences?
- Too soon for differences to appear?
- Gender differences are not salient in Cambodia
- Something else, perhaps or not, in combination with gender, e.g., SES
- Reading tea leaves?


## Promotion status by gender

|  |  |  |  |
| :--- | :---: | :---: | :---: |
| Dropped out | Male | Female | Overall |
| Between June <br> 2011 and <br> December 2011 | 1.2 | 6.0 | 4.0 |
| Between <br> December 2011 <br> and June 2012 | 24.1 | 22.4 | 23.1 |
| Still in school in <br> June 2012 | 74.7 | 71.6 | 72.9 |
| TOTAL | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

## STUDENIS' SURVEY

## Gender differences? (student survey)

## School history

- No statistical differences or discernible patterns in: Attendance at preschool; Age of primary entry, Repetition
- Girls are less likely boys to have missed school for $2+$ months (58\% girls, never; 42\% boys) School supplies:
- Girls are more likely than boys to:
- Almost always bring pencil, notebook, text to class (58\% vs 42\%)
- Come to class with homework done (63\% vs 37\%)
- Come to class with food \& drink or money (55\% vs 45\%)
- But none of these results are statistically significant


## Gender \& after school

After school tutoring

- Essentially same (39\% girls take classes, $41 \%$ boys)
- Hours (7.2 for girls, 7.9 for boys)

Similar \% enroll in other schools (16\% vs 14\%)
Use of after-school time

|  | Girls | Boys |
| :--- | ---: | :---: |
| Games | 55 | 49 (minutes/day) |
| Friends | 45 | 45 |
| Chores | 142 | 134 |
| Homework | 73 | 61 |

## Gender \& child resources

|  | Cirls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% Like to read <br> very much <br> (+ refers to more <br> desirable value) | $46+$ | 39 | 43 |
| \% having a place <br> to study in home <br> (highlighted are <br> statistically <br> significant) | 39 |  |  |
| \% having light | 70 | $53+$ | 45 |
| \% having books | 23 |  |  |
| \% having <br> computer | 2 | $24+$ | 23 |
| \% having someone <br> to turn to for help | 65 | 61 | 2 |

## Gender \& social capital

|  | Cirls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% whose father <br> thinks continuing <br> school is most <br> important after <br> primary school | $99+$ | 95 | 97 |
| \% .... mother | 95 | $98+$ | 96 |
| \% .... grandparent | $90+$ | 86 | 88 |
| \% .... teacher | 89 | $94+$ | 92 |
| \% who have a few <br> or no friends who <br> have dropped out | $85+$ | 79 | 82 |
| \% .... who will <br> look for job <br> immediately after <br> primary | $47+$ | 53 | 51 |

## Gender \& educational aspirations

|  | Cirls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% who feel <br> aspire only to <br> complete <br> primary <br> education | $0+$ | $0+$ | $0+$ |
| \% .... Lower <br> secondary | $16+$ | $11+$ | 14 |
| \% .... Upper <br> secondary | 43 | 44 | 43 |
| \% ... University | 41 | 45 | 43 |

## Gender \& perception of school quality

|  | Girls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% strongly agree <br> "Teachers are <br> competent" | $55+$ | 53 | 54 |
| \% ...."Happy <br> with teaching at <br> my school" | $47+$ | 40 | 44 |
| \% ...."Satisfied <br> with the <br> discipline" | $47+$ | 44 | 46 |
| \% ...."Happy <br> with other <br> students" | 35 | 34 | 35 |
| \% .... "Feel safe <br> at school" | 47 | $53+$ | 50 |

## Gender \& self-concept, attitudes to school

|  | Cirls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| Like to learn in <br> school: \% who <br> completely or <br> somewhat agree | $\mathbf{8 1 . 2}$ | $\mathbf{9 2 . 7 +}$ | 89.5 |
| Students in class <br> help each other: <br> \% who <br> completely or <br> somewhat agree | $\mathbf{7 5 . 4}$ |  | $80.7+$ |
| \% of students who <br> agree teachers are <br> generally friendly | 85.8 |  | $\mathbf{8 1 . 6}$ |
| \% of students who <br> feel school is <br> cheerful most of <br> the time | 47.2 |  | 89.0 |

## PARENIS SURVEY

## Gender \& parental involvement

|  | Cirls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% every day or <br> almost: Parent <br> talks to student <br> about school | 21 |  |  |
| \% .... Parent helps <br> student with study: | 14 | $37+$ | 27 |
| \% .... Parent talks <br> to student about <br> future or job | 19 | $20+$ | 16 |
| \% .... Parent <br> volunteers physical | $9+$ | $28+$ | 23 |
| \% .... Parent <br> offers training | $8+$ | 6 | 8 |
| \% ... Parent meets <br> teacher | 9 | $16+$ | $\mathbf{5}$ |

## Gender \& Parental perceptions of children and school

|  | Cirls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% Yes, very much <br> to: Child likes <br> going to school | $73+$ | 59 | 67 |
| \% Yes, very much <br> to: Child works <br> hard | 72 | 67 | 70 |
| \% Yes, very much <br> to: Child likes <br> learning | 88 | 88 | 88 |

## Gender \& financial burden

|  | Girls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% parents who <br> say 6 <br> sch <br> srader's <br> financial burden |  |  |  |
| \% .... 7-9th <br> graders' <br> schooling is/will <br> be great financial <br> burden | 47 | 26 | 27 |
| Daily pocket <br> money (riels) | 46 |  |  |
| School fees for <br> $2010 / 11 ~ s c h o o l ~$ <br> year | $\mathbf{9 8 0}$ |  |  |

## Gender \& school costs <br> (weird numbers)

|  | Girls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| Amount spent on <br> tutoring since <br> beginning of year | 198 | 190 | 195 |
| .... Lessons at <br> other schools | 2,677 | 5,494 | 3,915 |
| .... For transport | 6,882 | 6,977 | 6,923 |
| ...Textbooks and <br> supplies | 70,436 | 43,140 | 58,461 |
| .... Uniforms | 230,204 | 66,352 | 159,268 |
| .... Remedial <br> support | 6,140 | 2,442 | 4,430 |
| _.. Gifts for <br> teachers, director, <br> to school | 17,297 | 3,914 | 11,545 |

## Gender \& parental aspirations

|  | Girls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| Ed desired for <br> child | 3.49 <br> (between upper <br> secondary and <br> university) | 3.59 | 3.53 |
| Ed expect for <br> child | 2.99 <br> (upper <br> secondary=3.0) | 2.99 | 2.99 |
| Minimum ed for <br> job your child <br> should have at 30 | 3.41 |  | 3.47 |
| \% very bothered <br> if child achieves <br> less than parent | 27.0 | $36.6+$ | 3.44 |

## Gender \& Parental expectations

|  | Girls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% of parents who <br> say there are no <br> job opportunities <br> (or don't know) in <br> their <br> communities re <br> their children / \% <br> some <br> opportunities | 76.0 | 79.1 | 77.3 |
| Few <br> opportunities | 18.2 |  |  |
| Many or some <br> opportunities | 5.8 | 12.8 | 15.0 |

## Gender \& Parental decision-making

|  | Girls | Boys | Overall |
| :--- | :---: | :---: | :---: |
| \% who say family <br> decides if child <br> continues <br> schooling | $37+$ | 27 | 33 |
| \% who say school <br> decides if child <br> continues <br> schooling | 63 |  |  |
| \% who say they <br> are aware of costs <br> of continuing <br> child's ed | $53+$ | 67 |  |
| \% who feel their <br> child is likely or <br> very likely to <br> complete grade 9 |  |  |  |

## So far...

Given a purposive rather than random sample... Relatively few gender differences were identified.
Why?
There are few/none?

- There are few yet?
- We are looking in the wrong place?

However, there were patterns, which we hypothesize will deepen over time, as children age, as opportunity and direct costs increase, and as schooling becomes more difficult Will be important to watch if and how these factors and perceptions change...

## Patterns

1: Overall, surprisingly few differences, consistently few
2: On average, boys claim a greater share of resources (i.e., get more stuff) than girls
3: Girls seem to have an easier time in school and to like it better
4. Still expectations are higher for boys' educational futures
5. Girls do drop out more frequently than boys, and their odds of dropping out are considerably higher
6. Children whose parents have not completed primary school are at greatest risk

## End of the beginning

Questions, Comments, Suggestions, Discussion?

