



All Children Reading – Asia (ACR-Asia)

# All Children Reading – Cambodia

Student Performance in Early Literacy:

Baseline Report

October 2, 2018

This publication was prepared for review by the United States Agency for International Development. It was prepared by Joseph DeStefano, Jennifer Pressley, and Simon King of RTI International.

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### Student Performance in Early Literacy: Baseline Report

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Prepared for  
Mitch Kirby USAID/Asia Bureau, Senior Education Advisor  
1300 Pennsylvania Ave, NW Washington, DC 20523

And

USAID / Cambodia Mission, Education Team

Prepared by  
Joseph DeStefano, Jennifer Pressley, and Simon King  
RTI International  
3040 Cornwallis Road  
Research Triangle Park, NC 27709-0155  
Tel: (919) 541-6000

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# Acronyms

EGRA	Early Grade Reading Assessment
GPE-3	Global Partnership for Education—third grant
MoEYS	Ministry of Education, Youth and Sport
NGO	nongovernmental organization
USAID	US Agency for International Development

# 1. Background

All Children Reading–Cambodia is designed to support the Cambodian Ministry of Education, Youth and Sport (MoEYS) in developing and piloting a national early grade reading program. The project has helped the MoEYS update the curriculum and materials for grade 1 instruction in Khmer literacy and helped develop supplemental materials for use in upper pre-school. Based on plans negotiated between the MoEYS, USAID, and the agencies managing the Global Partnership for Education’s third grant (GPE-3) to Cambodia, the improvements to grade 1 and upper pre-school instruction will be piloted beginning in two provinces at the start of the 2018–19 school year. USAID is supporting implementation in Kampong Thom Province, and GPE-3 funding will support implementation in Siem Reap Province. The intention of all parties is to rigorously monitor, evaluate, and learn from the implementation of the national program in these two provinces to inform plans for scaling up improvements in early grade teaching and learning to the whole country.

To maximize the opportunity to learn from the pilot phase, the MoEYS and its partners decided that three different approaches to supporting implementation of the national early grade learning program would be piloted simultaneously. In Siem Reap, the GPE-3 program will support the rollout of the national program for both math and Khmer literacy at the same time, beginning with grade 1 in the 2018–19 school year. In Kampong Thom, Khmer literacy will be rolled out first in grade 1 in the 2018–19 school year, with math to follow the subsequent year. In addition to this difference in the planned implementation for the two provinces, Siem Reap will implement an approach to teacher support based on the use of school-based senior mentors who will interact with teachers roughly six times during the school year.<sup>1</sup> Kampong Thom will implement that same model of support in two districts, but will also implement a model of more intensive teacher support/coaching in the other six districts. **Exhibit 1** below summarizes the differences in the interventions in Kampong Thom (Interventions A and B) and in Siem Reap (Intervention C).

**Exhibit 1: Comparison groups included in the evaluation design for the pilot implementation of the national early grade learning program**

	Control	USAID-Funded		GPE-3 Funded
		Intervention A	Intervention B	Intervention C
Location	Battambang	Kampong Thom (6 districts)	Kampong Thom (2 districts)	Siem Reap (all districts)
Upper Pre-school	No	Yes	No	No
Textbooks	Existing books	Existing books	Existing books	Existing books
Teacher Activity Guide	No	Provided for reading and math	Provided for reading and math	Provided for reading and math
Supplementary Materials	No	Provided	Provided	Provided
Training	No	Staggered, Khmer in year 1 and math in year 2	Staggered, Khmer in year 1 and math in year 2	Khmer and math together beginning in year 1
Coaching/ Mentoring	No	Twice per month NGO supplementing districts	Six visits per year from senior mentor	Six visits per year from senior mentor

<sup>1</sup> This is the expectation, but at the time of this writing the plans for mentoring were still being developed

The USAID-supported intervention in Kampong Thom “A” also includes support to upper pre-school. Supplementary materials and training for pre-school teachers will support improvements in pre-literacy skill development. This baseline study therefore also looks at performance of students in upper pre-school within the six districts included in Kampong Thom Intervention A to then compare their performance to that of students in upper pre-school in the control province of Battambang.

The baseline survey of student performance was designed to enable comparison across the groups shown in **Exhibit 2** prior to the implementation of the national early learning program and then again at future points—as explained in Section 2 of this report. Following discussion of the survey design and methodology, Section 3 presents the instruments that were used to collect information on student performance and on each school’s context, and Section 4 presents the study findings. Section 5 presents the authors’ conclusions.

## 2. Design of the Study

The study was designed to answer a simple set of questions.

- How do students perform in upper pre-school and Grade 1 on basic pre-literacy and early literacy skills?
- In what ways do those levels of performance differ for boys and girls?
- Are there differences in the performance of students in each of the four comparison groups?
- What are some defining characteristics of the schools included in the study?
- Are there differences in those characteristics across the four comparison groups?

To answer these questions data were collected from schools in each of the four comparison groups. The sample was drawn to have adequate numbers of students in upper pre-school and grade 1 in each of the comparison groups.

**Exhibit 2: Sample design**

Treatment Arm	Total Population of Schools	Sample Number of Schools		Students per Grade, per School		Sample Number of Students	
		w/Pre-school	w/o Pre-school	Pre-school	Grade 1	Pre-school	Grade 1
Kampong Thom Intervention A	395						
Baray	88						
Santuk	68						
Krong Steung Sen	28	28	42	8	8	224	560
Kampong Svay	74						
Stong	80						
Sandan	57						
Kampong Thom Intervention B	86						
Prasat Balang	44						
Prasat Sambo	42		70		8		560
Siem Reap Intervention C	501						
All districts	501		70		8		560
Battambang Control	631						
All districts	631	28	42	8	8	224	560
<b>Total Sample</b>		<b>56</b>	<b>224</b>			<b>448</b>	<b>2,240</b>

Schools were selected randomly within each comparison group from lists provided by the Provincial Offices of Education. Within schools, equal numbers of boys and girls were selected randomly in the respective grades.

Day-to-day changes in field data collection meant that the actual sample of schools differed slightly from the design presented above. However, enough schools and students were included to enable statistically valid representation of each province and for each comparison group level and to assure sufficient statistical power when comparing data on student performance across the four groups.<sup>2</sup> The final sample included 269 schools and a total of 2,146 grade 1 and 380 upper pre-school students.<sup>3</sup> **Exhibit 3** shows the final numbers for each comparison group.

**Exhibit 3: Final sample numbers**

	Schools		Students	
	w/Pre-school	Total	Pre-school	Grade 1
Kampong Thom Intervention A	22	64	167	515
Kampong Thom Intervention B		80		632
Siem Reap Intervention C		58		468
Battambang Control	27	67	213	531
	54	269	380	2,146

For cluster designs such as this the variability across schools is essentially what increases the sample size. We use a measure called the intra-cluster correlation (ICC) to determine the ratio of variability explained across and within schools. The closer to zero the ICC is, the less variability exists in student achievement across schools. We found the intra-cluster correlation for our sample was just 0.07, much lower than the estimated 0.20 used for sample calculations. This low variability of scores across schools indicates the final sample has sufficient power to compare provinces, and to compare the intervention groups to the control group.

### 3. Survey Instruments

Three types of data were collected for this baseline study. Upper pre-school students were assessed on a set of pre-literacy skills. Grade 1 students were evaluated on their early literacy skills using a version of the Early Grade Reading Assessment (EGRA) adapted specifically for use for the impact evaluation of the pilot program in Cambodia. In addition, a school survey gathered information about the resources available at each school. The justification for and details of each of the three survey instruments are discussed below. All the instruments are included in **Annex 1** of this report.

<sup>2</sup> The sample was drawn to have a large enough number of schools and students within each province and treatment arm, including the control group, to ensure that variations in student performance across the groups can be detected at a 95% confidence interval of  $\pm 2.5\%$ . Given the number of schools and students in the concerned provinces, the desired confidence interval can be attained with 60 schools, and 8 students per grade, per school. In addition, USAID guidelines require that the control and treatment groups are adjusted to be fully comparable. Thus we oversampled in all groups by 10 schools. The study aimed to have 70 schools and 8 students per grade, per school for each treatment arm. Sampling was done in two-stages. Schools were selected at random within each group proportional to their size (number of students) and then in each sampled school, 8 students were selected at random per grade.

<sup>3</sup> These numbers reflect the balanced sample, after having excluded certain data points to maximize comparability across the groups. See Section 4.3 for discussion of the balancing methodology.

### **3.1 Pre-literacy assessment for upper pre-school students**

Three tasks were taken from an assessment already adapted for Cambodia and for the upper pre-school age group and translated into Khmer (the IDELA<sup>4</sup> instrument). Three emergent literacy tasks from that assessment were used to measure children's pre-literacy skills—expressive vocabulary, letter name identification, and listening comprehension. The tasks taken from IDELA were pre-tested during the enumerator training. These tasks measured pre-literacy skills that support the development of reading ability.

The expressive vocabulary task assessed oral language skills through the naming of items in categories. Students were asked to name as many foods, then as many animals, as they could, with a maximum of 20 items for each category.

The letter name task measured alphabetic knowledge through the identification of the 20 most common consonants. Only knowledge of consonants was tested because the pre-school curriculum in place during the study included only 30 of the more common consonants and no vowels. The test presented letters to students in a grid, in which the letters were ordered according to the frequency of their use—with the most common in the first row (and then randomly within rows, as per the IDELA guidelines).

The listening comprehension task assessed narrative comprehension and recall. A brief story was read aloud to the student, then the student answered five questions about the story. The questions required both explicit and inferential comprehension. These three tasks are widely used in global child-direct assessments of learning.

### **3.2 Early Grade Reading Assessment for grade 1 students**

EGRA is a widely used measure of early literacy skills that has been adapted for use in numerous languages and countries. MoEYS and several nongovernmental organizations (NGOs) in Cambodia have used different versions of a Khmer EGRA. Based on work done over the previous year, MoEYS developed a draft of a harmonized EGRA instrument. That version of the EGRA was the basis for this assessment with some minor, but important modifications. The test evaluated students' ability to identify letters, to read familiar words in isolation, to read a short passage fluently, and to understand that passage.

Letters were presented for identification to students in three different ways. First, the test presented students a group of 100 letters (including all types—regular consonant, consonant subscript symbols, dependent vowels, and independent vowels) in random order. These were all letters that students were expected to learn by the end of grade 1. Measures of how accurately (the percentage of letters correctly identified) and how fluently (the number of letters correctly identified per minute) students performed this task indicate whether students were developing this basic skill and whether they could automatically apply it. Both accuracy and fluency in letter naming are important predictors of later reading ability.

At the request of MoEYS, students were tested on the simpler versions of consonants and dependent vowels separately. Again, accuracy and fluency scores provided insight into how well and how automatically children were learning these two groups of letters. (By testing them separately, MoEYS was hoping to identify areas of strength and weakness in terms of teaching and learning of these important foundational skills.) This test was timed to give fluency data, but students were encouraged to complete all the items to obtain data on accuracy for all of the letters.

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<sup>4</sup> Pisani, Borisova, & Dowd (2017). International development and early learning assessment: Technical working paper. Washington DC: Save the Children.

Following the letter identification tasks, children had to read a list of 50 familiar vocabulary words. This subtest, which was also timed, provided information about whether children could read words accurately as well as whether they could do so automatically. Work done on developing the harmonized EGRA included an analysis of grade 1 level text to identify frequently used words within the grade 1-3 textbooks. Following piloting of that instrument and based on subsequent feedback from MoEYS colleagues, the list was modified to more accurately reflect words that should be familiar to grade 1 students.

Finally, students were given a short story (61 words) to read aloud, with the assessor marking which words the child read correctly and which they read incorrectly. The story was selected from among those developed and piloted for the harmonized EGRA. Children could read for 3 minutes, with the assessor noting the place in the passage they reached at 1 minute (to calculate the oral reading fluency measure of words correctly read per minute). If the child could not read any of the first 7 words in the passage, they were told to discontinue the test (and were given a score of zero words read). After 3 minutes, the child had to answer 5 comprehension questions concerning the story.

### 3.3 School survey

In addition to the assessments of student basic pre-literacy and literacy skills mentioned above, the survey gathered information about the conditions of each school, including basic data on the size of the school, the number of grades offered, enrollment in grades 1–3, the number of teaching staff in grades 1–3, and whether those staff had training related to the teaching of Khmer literacy. Data collectors also determined whether each school had certain resources like student books, a library, and basic infrastructure (toilets, electricity, water). This approach aligns the baseline with international assessments (such as TIMSS) where more objective measures of resource availability at the school level are used instead of student accounts of resources available at home (collecting information about which we were concerned about measurement error, given the young age of the students). These data were used to ensure that the different comparison groups were balanced in terms of the types of school environments present in each intervention group and in the control province. In addition, analysis of the baseline results looked to determine whether any of these school characteristics was associated with higher or lower levels of basic reading performance.

## 4. Findings

This section of the report presents the findings from the survey, showing the overall levels of performance. In addition, data for each of the comparison groups relevant for the study are shown so that we can confirm the comparability of student performance at baseline and therefore for subsequent comparisons at midline and endline of the pilot implementation phase of the national early grade learning program.

### 4.1 Pre-school

Students at the end of upper pre-school appeared to be developing Khmer expressive vocabulary and listening comprehension but were limited in identifying the set of letters included in the upper pre-school curriculum. **Exhibit 4** below shows very low percentages of students who could not answer any items correctly (scoring zero) on the subtests for expressive vocabulary (less than 1%) and for listening comprehension (5.0%). This is not surprising since Khmer is the home language of almost all students in the concerned provinces. Zero scores for letter identification were higher. Since learning their letters is directly dependent on instruction during the

school year, it should be of some concern that 20% of the children were not able to identify any letters after 7 months of upper pre-school.

**Exhibit 4: Percent of upper pre-school students scoring no items correct on each pre-reading subtest**

Subtest	Percent Scoring Zero
Expressive vocabulary	0.7%
Identifying letters	20.7%
Listening comprehension	5.0%

**Exhibit 5** below shows the mean scores for students on each of the upper pre-school subtests. On average students could name about 10 types of food and different animals and could answer more than half of the questions posed after listening to a story. Of more concern is that overall, they could only identify on average roughly 5 or 6 (28.3%) of the 20 common consonants. This indicates that most children were not learning their letters as expected.

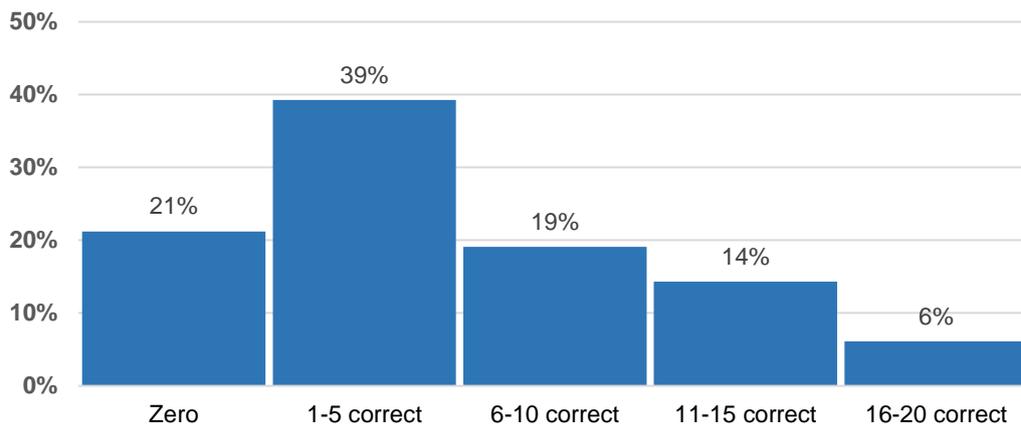
**Exhibit 5: Mean scores of upper pre-school students on each pre-reading subtest**

Subtest	Mean Scores	Confidence Interval
Expressive vocabulary (number of items named – maximum of 40))	10.3	[±1]
Identifying letters (mean percent correct of attempted)	28.3%	[±4.7]
Listening comprehension (mean number correct out of 5 items)	2.9	[±.2]

Analysis of scores for boys and girls revealed no statistically significant differences in mean scores or in zero scores. This indicates that in upper pre-school, boys and girls were developing the same levels of competency in the three skill areas tested.

Given the low level of performance on letter identification, additional analysis will help to further understand the range of learning that was (or was not) occurring in upper pre-school in the provinces included in this study. **Exhibit 6** below shows the percentage of students correctly identifying different numbers of letters out of the 20 consonants they were shown. Very few were able to correctly identify most of the letters—only 20% could identify more than 11 of the 20, and 60% could identify only 5 or fewer.

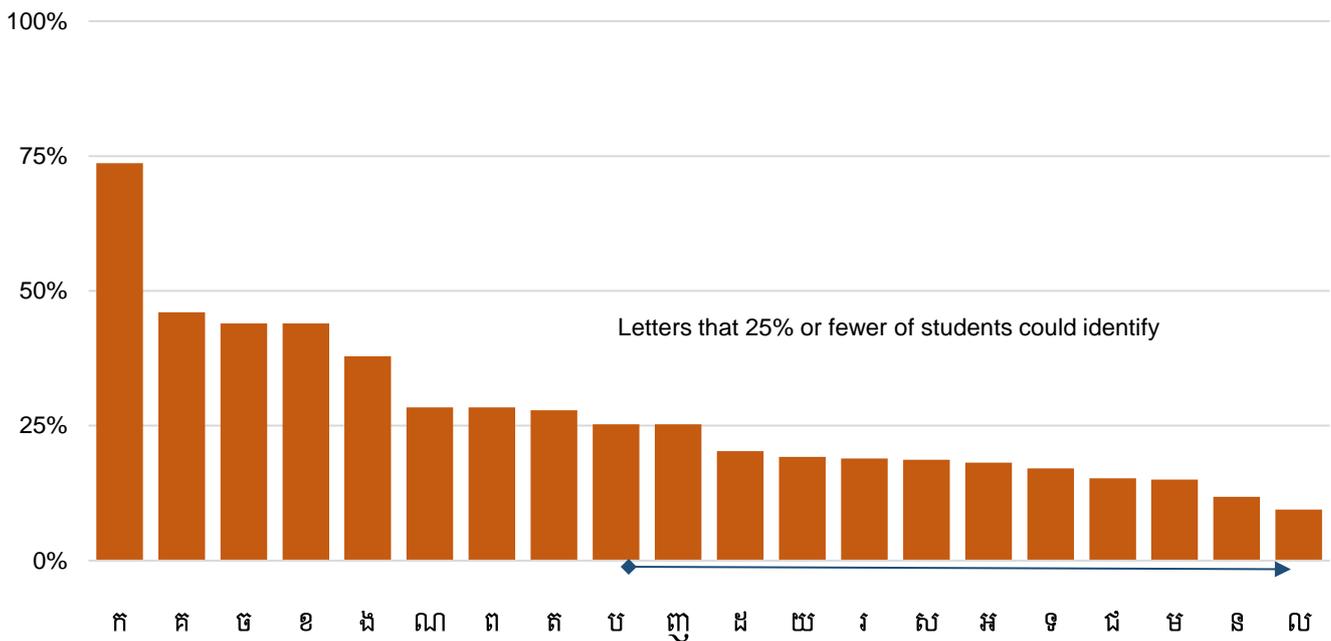
**Exhibit 6: Distribution of letter identification scores for upper pre-school students**



To understand which letters children were learning and which they were not, **Exhibit 7** below shows the percentage of students who identified each of the 20 consonants correctly. Only one letter, shown in the text box (the first in the Khmer alphabet), was correctly identified by the majority, 74%, of students. Fewer than 50% of the students could identify any of the others correctly. For 12 of the 20 letters, 25% or fewer of the children could correctly identify them.



**Exhibit 7: Item analysis for upper pre-school letter identification**



The final analysis we conducted on pre-school assessment results separated out the performance of students in the two comparison groups of interest to the pilot implementation evaluation. **Exhibit 8** below shows that there were no statistically significant differences in the mean scores of students in Kampong Thom A districts when compared to the scores of students in the control province of Battambang.

**Exhibit 8: Mean scores of upper pre-school students for each comparison group**

Subtest	Kampong Thom Intervention A	Battambang Control
	n=167	n=213
Expressive vocabulary	9.3	10.8
Identifying letters	29.2	27.9
Listening comprehension	3.0	2.8

Future assessments of changes in performance in Kampong Thom and Battambang therefore can be viably compared without having to adjust for differences in baseline scores.

**4.2 Grade 1**

The results of the EGRA subtests reveal that students in the latter part of grade 1 (month 7) could identify letters with only limited accuracy and very limited fluency, with slightly better performance on consonants than vowels. Grade 1 students had extremely low performance reading familiar words in isolation and reading and understanding a short passage of text.

**Exhibit 9** below shows the percentages of students scoring no items correct (scoring zero) on each of the subtests. Zero scores were relatively low for letter identification, and especially for consonants. The percentage of students scoring zero on the more complex forms is higher than that for those reading the simpler consonant and vowel forms separately.

In familiar word reading and text reading (oral reading fluency) the vast majority of students scored zero.

**Exhibit 9: Percent of grade 1 students scoring no items correct on each reading subtest**

Subtest	Percent Scoring Zero
Letter identification	17.2%
Consonant identification	7.9%
Vowel identification	13.8%
Familiar word reading	71.1%
Oral reading fluency	86.2%
Reading comprehension	91.0%

**Exhibit 10** shows means scores for each subtest. For consonant and vowel identification, and for familiar word reading, the table includes the mean scores for the percent of items the children completed correctly. This provides a measure of how accurately the students completed the task—in other words, whether they had acquired the skill of recognizing letters or reading familiar words. Also shown are letter naming fluency (overall and for vowels and consonants separately) and word reading fluency. These measures show whether students applied the concerned skill automatically—higher rates of fluency indicate that students developed the skill sufficiently to quickly and correctly perform the required task.

What we see in Exhibit 10 is that this set of skills is neither accurate nor automatic. For letters, on average students identified a letter correctly only 34% of the time and could only correctly identify between 9 and 10 letters per minute. When asked to identify consonants and vowels separately, accuracy and fluency were somewhat improved, and especially for consonants. However, the levels of performance remained disappointingly low for students tested during the latter part of grade 1.

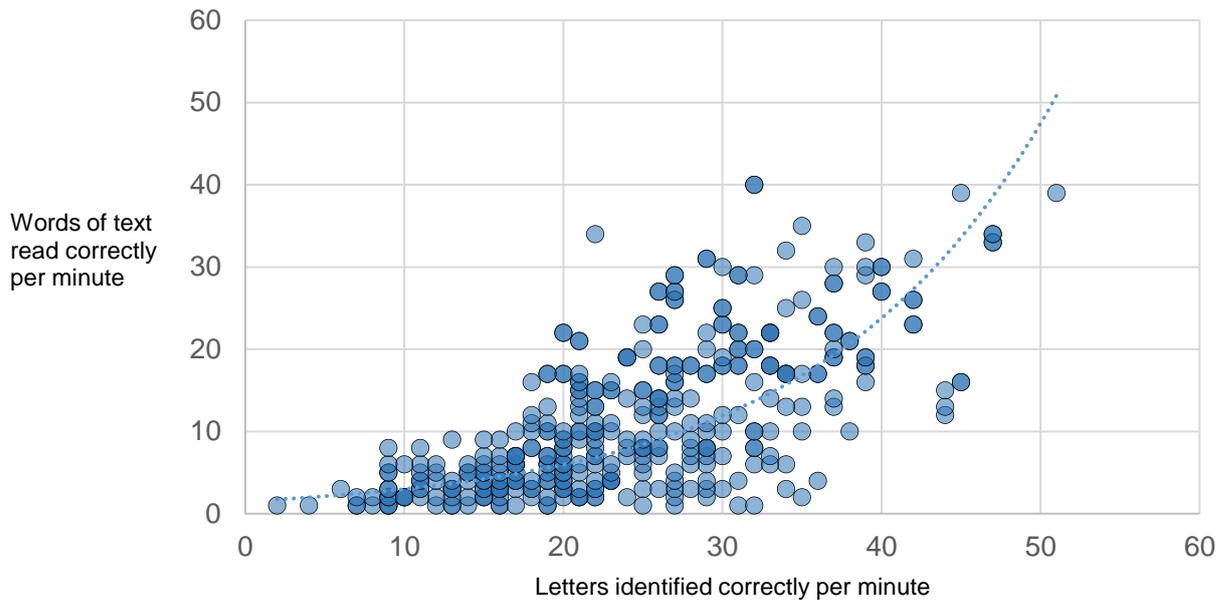
**Exhibit 10: Mean scores for accuracy and fluency of grade 1 students on each reading subtest**

<b>Subtest</b>	<b>Mean Scores</b>	<b>Confidence Interval</b>
<b>Letter identification</b> (mean percent correct of attempted)	34.1%	[±2.1]
<b>Letter naming fluency</b> (number correctly identified per minute)	9.3	[±.7]
<b>Consonant identification</b> (mean percent correct out of 33)	46.5%	[±2.5]
<b>Consonant naming fluency</b> (number correctly identified per minute)	14.8	[±1.1]
<b>Vowel identification</b> (mean percent correct out of 23))	40.2%	[±2.6]
<b>Vowel naming fluency</b> (number correctly identified per minute)	11.6	[±.9]
<b>Familiar word reading – accuracy</b> (mean percent correct of attempted)	11.2%	[±1.6]
<b>Familiar word reading fluency</b> (number correct per minute)	2.1	[±.3]
<b>Text reading – oral reading fluency</b> (words correct per minute)	1.0	[±.2]
<b>Reading comprehension</b> (mean number correct out of 5 items)	0.1	[±.0]

Given the high percentages of students scoring zero on text reading (oral reading fluency), we looked at the average scores of those students who could read at least one word of the reading passage. Students who scored above zero on oral reading fluency could read correctly on average 7.2 familiar words in isolation per minute and 7.3 words of text per minute. They also average 1.5 correct responses out of 5 questions on reading comprehension. These scores, even with zeroes excluded, still indicated very low performance.

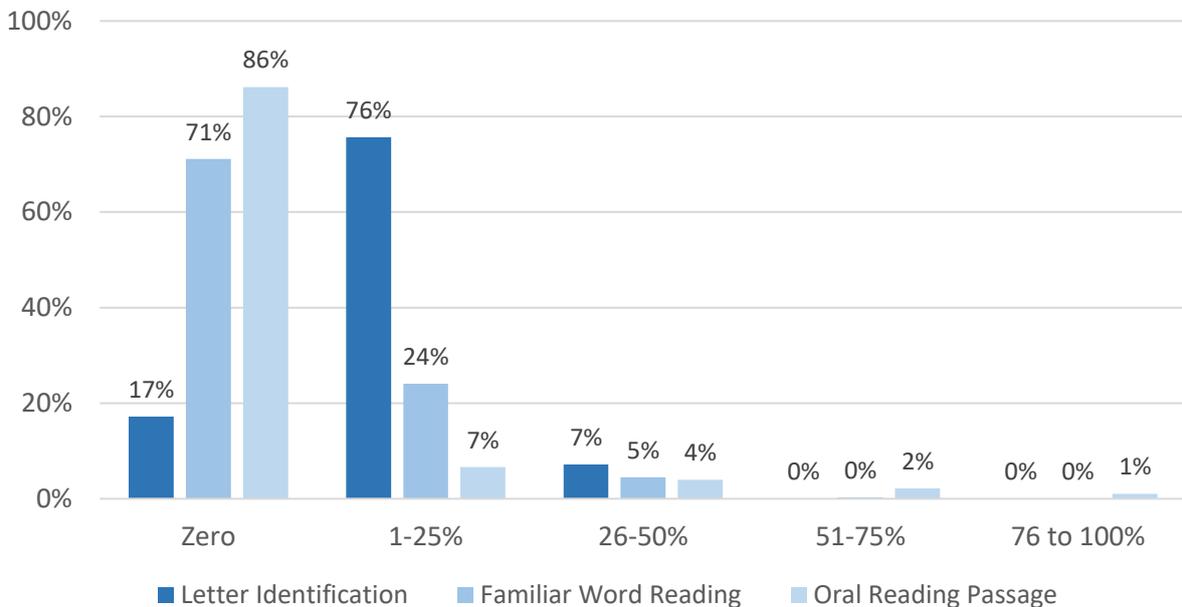
Interestingly, if we consider the relationship between each student’s ability to more fluently and correctly identify letters and their oral reading fluency when reading a short passage of text, we see that letter identification had a strong, positive relationship with reading fluency, as depicted in **Exhibit 11** below. In fact, 44% of the variation in oral reading fluency could be explained by a student’s fluency in letter identification.

**Exhibit 11: The relationship between letter identification and oral reading fluency**



In addition to considering zero scores and mean scores on the grade 1 EGRA subtests, it is useful to look at the distribution of scores, and to then look also at the item by item scores for the three letter identification subtests. **Exhibit 12** below shows the distribution of student scores for identifying letters (overall) and for familiar word and text reading. The distribution shows the percentages of items that students correctly identified (accuracy).

**Exhibit 12: Distribution of grade 1 letter identification, familiar word reading, and text reading accuracy scores**



For familiar word reading and oral passage reading, we see that the vast majority of students scored zero. Very few accurately read more than half the words, either when reading familiar words in isolation or in a reading passage. Accuracy in letter identification was better, with many fewer zero scores (17%), but with 76% of the students able to correctly identify only one quarter or less of the letters. Given that

correct letter identification correlates with oral reading fluency, getting more students to both accurately and automatically identify their letters, while not the only important prerequisite for reading, is a crucial basic skill and should contribute to them reading more fluently.

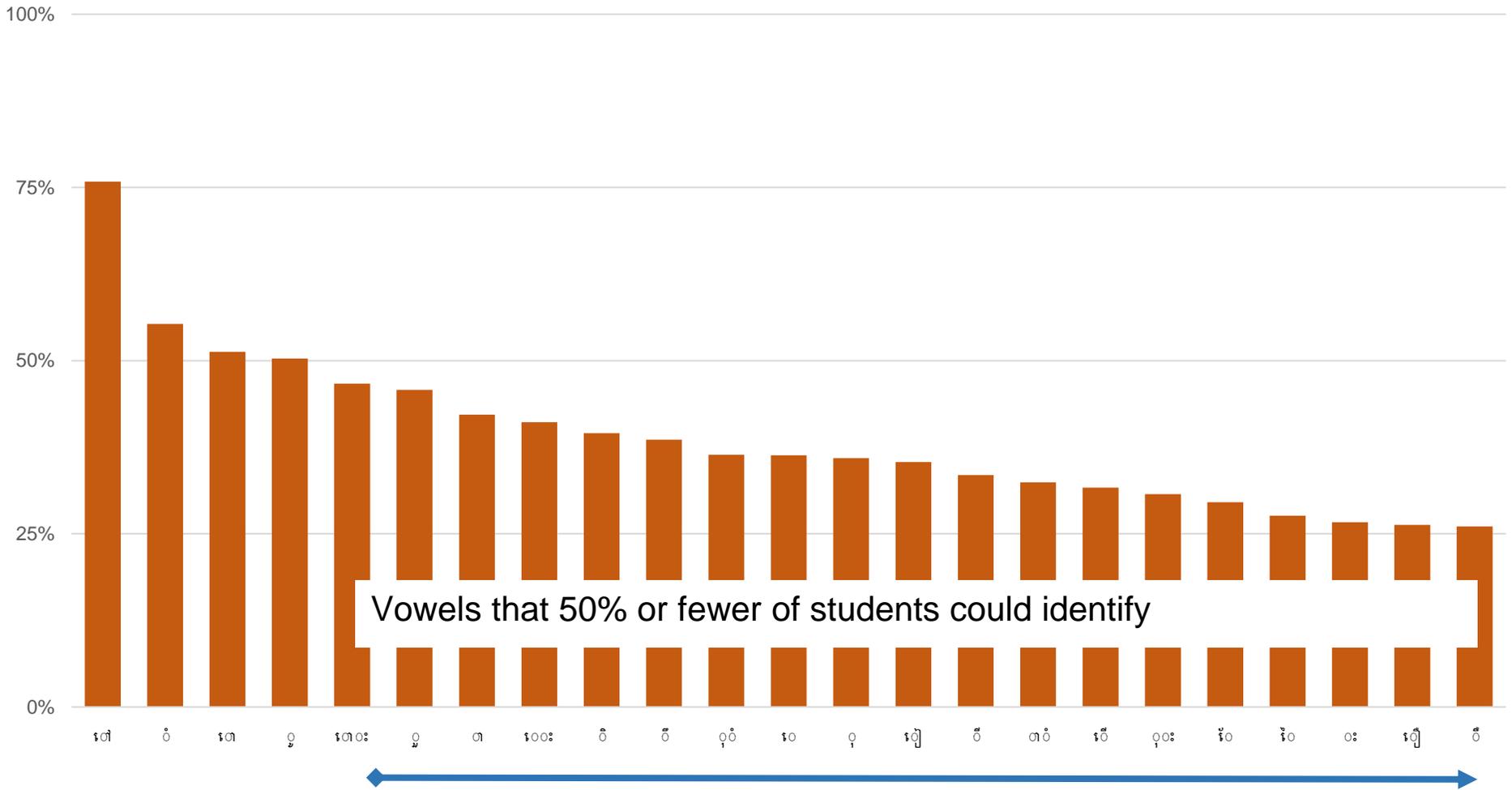
To further understand how students are learning to identify Khmer letters, we include item analyses for the consonant identification and vowel identification subtests.

**Exhibit 13** shows the percentage of students who accurately identified each of the 23 vowels included in the test, followed by **Exhibit 14**, showing the same information for the 33 consonants.

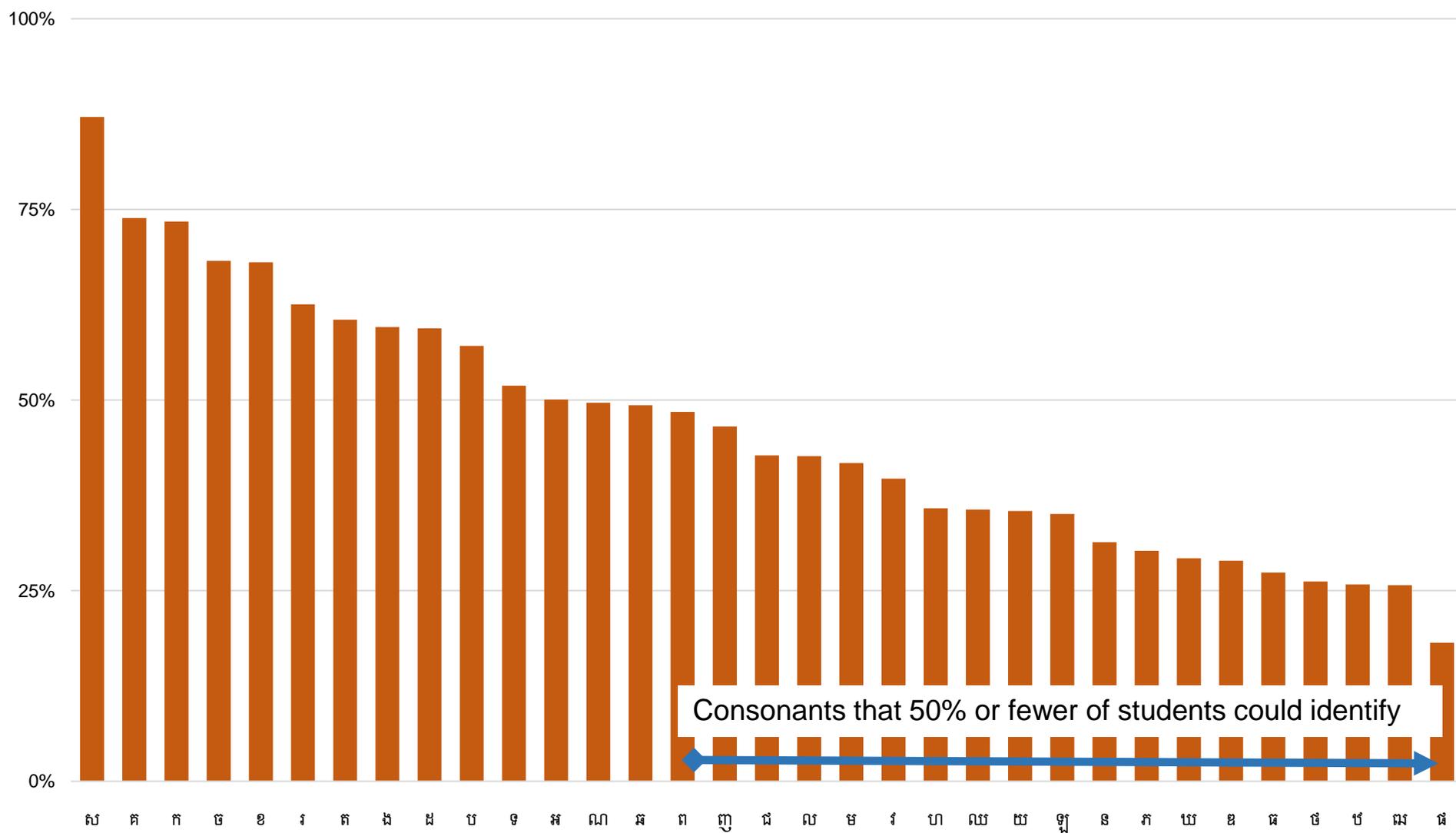
The four vowels that students recognized with more than 50% accuracy:	េ	ែ
	័	្រ

The consonants that students could identify with greater than 50% accuracy:	ស	រ	ទ
	គ	ត	អ
	ក	ង	ណ
	ច	ដ	
	ខ	ប	

**Exhibit 13: Percentage of students accurately identifying each vowel**

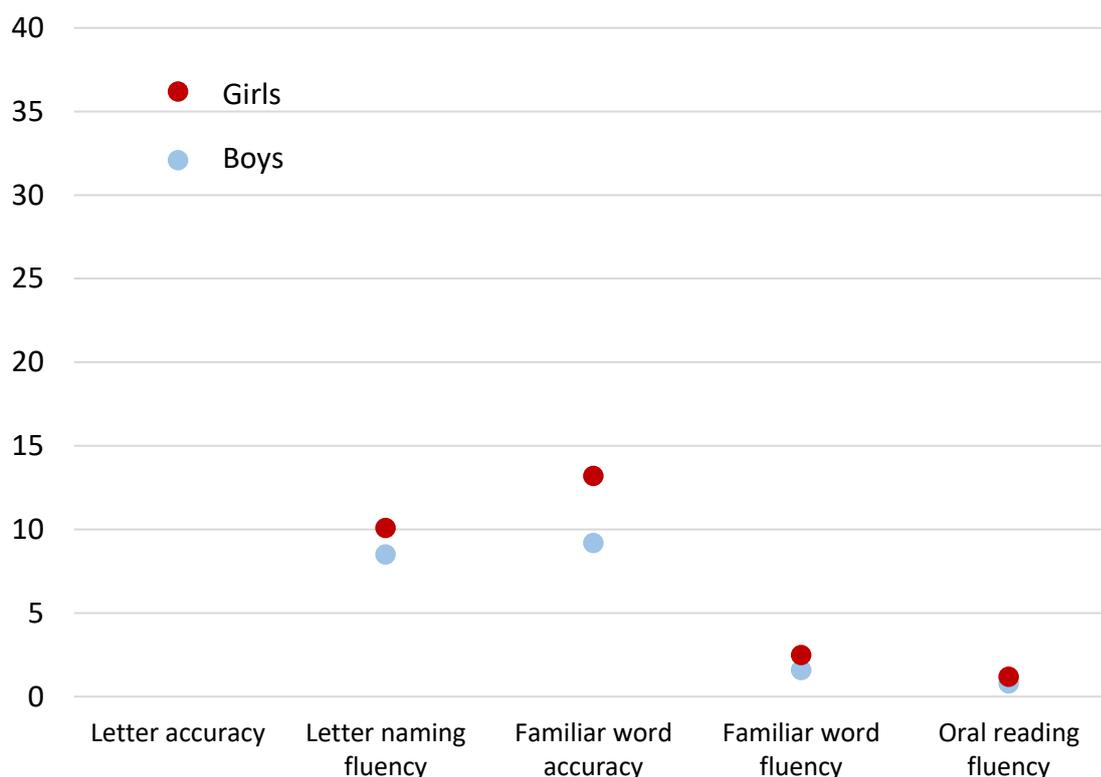


**Exhibit 14: Percentage of students accurately identifying each consonant**



The last analysis performed on grade 1 EGRA results was to compare the performance of boys and girls. **Exhibit 15** below shows that on average girls outperformed boys on letter identification (both in terms of accuracy and fluency) and on accuracy of reading familiar words. Girls identified 4 more letters accurately than boys and read 4 more familiar words per minute. Gender differences were less pronounced, and therefore not significant, for familiar word reading fluency and oral reading fluency of a text passage. The lack of appreciable differences between boys and girls on word and text reading is likely in part due to most students of both genders scoring very low. This lack of variation means statistically significant differences would not be detectable.

**Exhibit 15: Performance of grade 1 boys and girls on EGRA subtests**



#### 4.3 Comparing performance in Kampong Thom A, Kampong Thom B, Siem Reap, and Battambang

These assessments will serve as baseline points of comparison for assessments throughout the pilot phase of implementation of the national early grade learning program. Of concern at this stage is that the comparison groups be appropriately balanced so that growth from these baseline measures can be accurately measured and compared and so that any gains can be attributed to the differences in the interventions rather than other demographic factors.

When assessing baseline early grade reading fluency, especially in pre-school or grade 1 in developing countries, the phenomena we usually see is most students either scoring very low or unable to identify a single word and just a few students able to read at an emergent or higher level. These outlying students have the effect of greatly increasing the average score for any treatment or comparison groups.

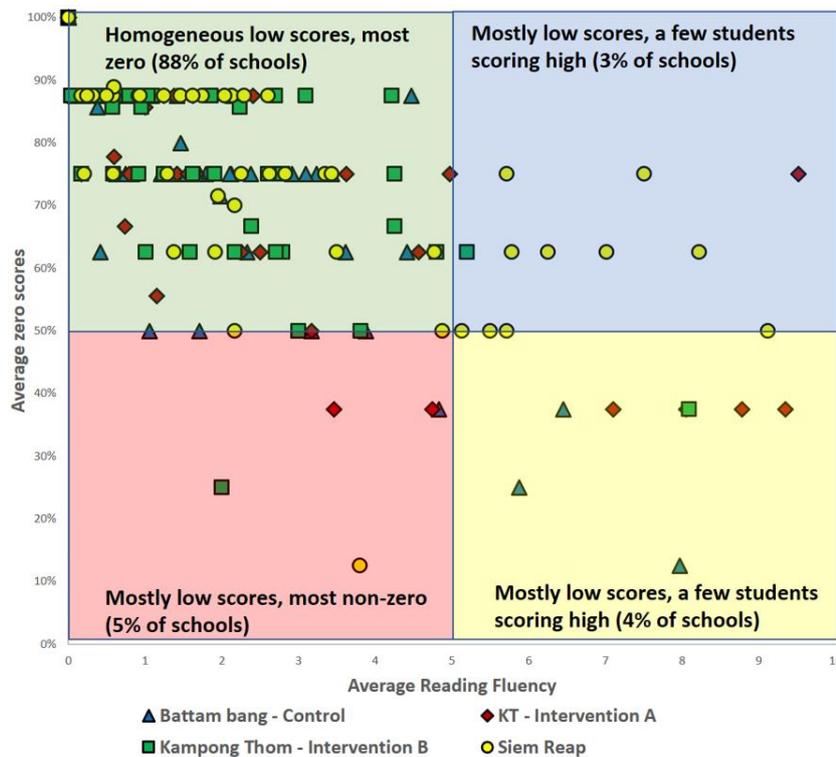
**Exhibit 16** below shows school-level averages for reading fluency (x-axis) and zero scores (y-axis) for all the schools included in the full sample. Most of schools (88%)

across all the comparison/treatment groups were very similar, with a school-level average reading fluency of fewer than 5 words per minute, and with more than half the students unable to recognize a single word. These schools were well balanced (i.e., comparable), at least for the oral reading fluency indicator. They are those in the upper left quadrant shown in Exhibit 16.

The schools that contributed most to imbalance are ones with a few students scoring high and the rest of their peers scoring low, those in the two quadrants on the right side of Exhibit 16. This created a school cluster that had one or two students whose reading skills had clearly been influenced by non-school factors and whose performance pulled up the average performance of their school or cluster in a disproportionate way.

Thus, to create and maintain balance, the schools on the right-hand side of **Exhibit 16** were dropped and scores across all subtests were recalculated and compared to assess whether the comparison/treatment groups were comparable (i.e., there were no statistically significant differences in the average performance of students on each subtest).

**Exhibit 16: Grade 1 oral reading fluency imbalances**



Using the balanced sample for each group of schools, **Exhibit 17** below shows the mean performance in each group on each of the subtests. Mean scores for Battambang, Kampong Thom A, Kampong Thom B, and Siem Reap were not statistically significantly different. Exhibit 17 shows students mean scores in each comparison group for each subtest for both accuracy and fluency measures as appropriate.

**Exhibit 17: Mean performance of grade 1 students by comparison groups**

	Battambang (Control)	Kampong Thom Intervention A	Kampong Thom Intervention B	Siem Reap
	n=531	n=515	n=632	n=468
Letter identification	35.3%	30.9%	34.4%	34.1%
Letter naming fluency	9.8	8.6	9.1	9.5
Consonant identification	47.0%	41.8%	47.7%	46.6%
Consonant naming fluency	15.3	13.1	15.1	14.9
Vowel identification	42.0%	35.1%	36.2%	42.9%
Vowel naming fluency	12.5	9.9	9.9	12.6
Familiar word reading – accuracy	12.6%	9.0%	8.1%	12.9%
Familiar word reading fluency	2.3	1.6	1.5	2.4
Oral reading fluency – text reading	1.2	0.8	0.9	1.1
Reading comprehension	0.2	0.1	0.1	0.1

#### 4.4 Survey of school characteristics

The last set of findings from the baseline survey concerns the characteristics of the schools in the different comparison groups: Kampong Thom A, Kampong Thom B, Siem Reap, and Battambang. The data collected about each school are summarized in **Exhibit 18**, showing means for all four comparison groups combined.

**Exhibit 18: Means for school variables all comparison groups combined**

Mean Values	
Average % schools that are complete primary (1–6)	89.4%
Average enrollment grades 1–3	111.2
Average number of teachers grades 1–3	3.7
Average pupil-teacher ratio grades 1–3	28.2
Average age of grade 1 students (yrs)	7.1
Average % of grade 1–3 teachers with training in Khmer literacy	56.6%
Average % that have pre-school	30.7%
If yes, average upper pre-school enrollment	29.1
Average % of schools receiving NGO support for early grade learning	62.6%
Average % with enough Khmer textbooks for grade 1	72.4%
Average % of schools with storybooks in grade 1 classroom	18.9%
Average % of schools with a library	45.1%
If yes, average years the library has been at school:	
More than 7 years	33.5%
5 to 7 years	22.8%
3 to 5 years	25.9%
Less than 3 years	12.2%
if yes, average % receiving support for their library	93.7%
if yes, average % with kids inside the library on day of visit	53.6%
Average % of schools with electricity	43.9%
Average % of schools with any water source	85.7%
Average % of schools with piped water	4.5%
Average % of schools w/functioning toilets	89.5%
Average % of schools with two shifts	41.9%
Average % of schools with morning session only	45.7%
Average % of schools with full day session	10.6%
Average % of schools with feeding program	53.9%
% of schools where most children come to school:	
on foot	73.7%
by bicycle	16.6%
by motorized transport	9.7%

Some characteristics that stand out include the following:

- Most schools were of moderate size, with average enrollment in grades 1–3 of 111 students.
- Just over 40% of schools operated in two shifts.
- About 30% of schools had an attached pre-school.
- More than 60% of the schools had received NGO support.
- Just under half the schools had a library, and almost all those schools received support for their library.
- Most schools had sufficient Khmer textbooks for grade 1, but fewer than 20% of schools had storybooks in the grade 1 classroom.
- Fewer than half the schools had electricity, almost 90% had functioning toilets, and 86% had a water source, but only 4.5% of them had piped water.
- More than half the schools had a feeding program.

The above kind of information allows us to understand the context of each school. These data also will be useful when explaining any variations in the impact of the pilot early grade learning program over the next three years. **Exhibit 19** below presents the same set of information but disaggregated for the four comparison groups included in the survey design. The means were calculated using the balanced samples as described in Section 4.3 above.

**Exhibit 19: Means for school variables by comparison group**

Mean Values	Kampong Thom A	Kampong Thom B	Siem Reap	Battambang
Avg % schools that are complete primary (1–6)	87.9%	87.3%	95.6%	83.1%
Avg total enrollment for grades 1–3 (combined)	107.1	66.5	165.2	134.8
Avg total number of teachers grades 1–3 (combined)	3.8	3.3	4.2	3.8
Avg pupil-teacher ratio grades 1–3	29.5	21.1	36.0	32.4
Avg age of grade 1 students (yrs)	7.1	7.2	7.1	7.2
Avg % of grade 1–3 teachers with training in Khmer literacy	37.2%	65.7%	58.9%	36.1%
Avg % that have pre-school	29.0%	30.6%	-	32.1%
If yes, avg upper pre-school enrollment	32.3	24.9	-	39.4
Avg % of schools receiving NGO support for early grade reading	44.6%	67.7%	77.1%	27.7%
Avg % with enough Khmer textbooks for grade 1	80.9%	63.2%	85.6%	67.0%
Avg % of schools with storybooks in grade 1 classroom	11.6%	20.0%	25.6%	6.3%
Avg % of schools with a library	35.5%	27.4%	77.1%	36.7%
If yes, avg years the library has been at school:				
More than 7 years	46.0%	69.0%	33.8%	56.5%
5 to 7 years	16.3%	9.6%	9.9%	1.5%
3 to 5 years	23.0%	2.2%	19.0%	15.8%
Less than 3 years	4.3%	0.0%	28.6%	26.1%
if yes, avg % receiving support for their library	95.7%	95.4%	95.6%	80.1%
if yes, avg % with kids inside the library on day of visit	55.9%	40.9%	55.9%	70.6%
Avg % of schools with electricity	43.5%	23.4%	58.1%	75.8%
Avg % of schools with any water source	95.2%	78.8%	93.7%	83.5%
Avg % of schools with piped water	4.5%	2.0%	4.8%	11.6%
Avg % of schools w/functioning toilets	91.7%	88.2%	89.8%	91.7%
Avg % of schools with two shifts	72.1%	25.4%	42.7%	70.7%
Avg % of schools with morning session only	23.3%	66.3%	37.1%	15.7%
Avg % of schools with full day session	2.1%	4.7%	20.2%	13.6%
Avg % of schools with student-feeding program	35.3%	65.5%	66.3%	3.9%
% of schools where most children come to school:				
on foot	78.3%	83.4%	63.7%	62.6%
by bicycle	12.5%	13.6%	21.7%	17.6%
by motorized transport	9.2%	3.0%	14.6%	19.8%

Some differences were noticeable across the comparison groups, in particular, for Siem Reap, which had a higher percentage of complete primary schools, slightly larger school size, and the highest pupil-teacher ratio. Siem Reap also had by far the highest percentage of schools with libraries (77%), but many of those were relatively recently established. Battambang and Kampong Thom A had many fewer schools receiving NGO support than did Kampong Thom B and Siem Reap. Battambang and Siem Reap had the highest percentages of schools with electricity. Battambang had by far the fewest schools with student-feeding programs.

Future analyses will have to control for some of these variations in school characteristics to isolate the impact of the early grade learning interventions. Additionally, these data can be used to explain variations in impact within each comparison group.

#### **4.5 Preliminary analysis of the relationship of school characteristics to student performance**

We conducted analyses of the relationships (if any) between school characteristics presented in the previous section and grade 1 student performance on the EGRA. Three outcome variables were considered: student accuracy and automaticity in letter identification and student accuracy in reading the text passage. The relationships uncovered were consistent across all three of those measures. School-level variables that had statistically significant relationships with student performance were primarily those that serve as proxies for a school's level of resources.

For example, attending a school with electricity was associated with students' identifying 2.5 more letters per minute than their peers who attended a school without electricity. Similarly, having functioning toilets and having a library as a separate room also had positive associations with school performance on the EGRA. One observed factor that may indicate a school's attention to reading instruction did have a relationship with reading performance. Students attending schools that had a library—with children using it on the day of the visit—on average could also identify 2 to 3 more letters per minute. While the variables mentioned here did correlate with student performance, the differences in outcomes associated with them were minimal. And the existence of a correlation in no way implies that these variables are what contribute to slightly higher student performance.

Variables such as size of a school, pupil-teacher ratio, availability of adequate grade 1 Khmer books for students, or having storybooks in the grade 1 classroom did not show any relationship with student performance. This does not mean that these factors cannot influence quality. Rather, in this case, given the extremely low levels of performance measured, it is likely that poor teacher is limiting student performance more than any school-related variables.. All the other school characteristics did not demonstrate statistically significant correlations with reading performance.

## **5. Conclusions**

The purpose of this baseline survey was to evaluate students' pre-literacy and early literacy performance in upper pre-school and grade 1, respectively. Analysis of the results of the survey across the comparison groups allowed us to balance the sample so that future comparisons of changes in outcomes will be attributable to differences in the interventions rather than to any inherent pre-existing differences among the concerned provinces and districts.

The data collected from the three provinces reveal lower than expected levels of oral language ability among students in upper pre-school, especially given that Khmer is the mother tongue for nearly all students in the areas covered. For example, students responded correctly to only 3 out of 5 questions concerning a short passage that had

been read to them. And in terms of their pre-literacy skills, when shown the letters they were supposed to learn in upper pre-school, students identified them with only 28% accuracy.

Performance of grade 1 students on early literacy skills was also much lower than should be expected for the period during which the test was administered. For example, grade 1 students who were almost three-quarters of the way through the school year could only correctly identify letters 34% of the time and were identifying fewer than 10 letters per minute. When simpler forms of consonants and vowels were tested separately, grade 1 students performed better, but still correctly identified letters with less than 50% accuracy. Reading of familiar words in isolation or reading of a short grade-level passage were essentially non-existent. Given that the results were consistent across all the provinces included in the survey, it is safe to conclude that grade 1 teachers were not adequately preparing students to know and easily identify Khmer letters and it appears were not employing methods that could help children learn to read. Numerous other home and/or community factors may also be contributing to poor reading performance in grade 1. Nevertheless, instructional approaches in grade 1 need to be robust enough to help students overcome whatever disadvantages they may face.

## **Annex 1: Instruments used in the assessments**

## Pre-literacy Assessment

ACR-Cambodia

**របាយការណ៍អំណានកម្រិតមតិយុត្តិធម៌ក្នុងស្ថានភាពកម្ពុជា: ទម្រង់សម្រាប់ចម្លើយរបស់សិស្ស**

**ការណែនាំទូទៅ :**

ឯកសារនេះ នឹងអាចឱ្យអ្នកវាស់ស្ទង់ការអភិវឌ្ឍន៍ និងការសិក្សាពីឧបទ្វីបរបស់កុមារនៅមតិយុត្តិធម៌កម្ពុជា។ អ្នកនឹងឃើញទម្រង់នេះត្រូវបានរៀបចំឡើងដើម្បីជួយកុមារឱ្យយល់ពីការអភិវឌ្ឍន៍ និងការសិក្សា។

- ទម្រង់អក្សរដិតនៅក្នុងប្រអប់ បង្ហាញពីអ្វីដែលអ្នកវាយតម្លៃត្រូវតែនិយាយទៅកាន់កុមារឱ្យឮឮ ។ សូមអានល្អៗក្នុងទម្រង់នេះ ឱ្យឮឮទៅកាន់កុមារ ដោយអានឱ្យអស់ខ្លឹមសារ និង ដួងដំបូងនៃអ្វីដែលបានសរសេរ។ ការធ្វើបែបនេះដើម្បីធានាថា ទិន្នន័យដែលនឹងត្រូវប្រមូលមានលក្ខណៈស្រដៀងគ្នាជាមួយគ្នា។
- ទម្រង់ជាអក្សរតូច បង្ហាញពីការណែនាំសម្រាប់អ្នកធ្វើការ ។ អ្នកមិនត្រូវអានការណែនាំនេះឡើយទៅកាន់កុមារនោះទេ ។

នៅក្នុងដំណើរការនៃការវាយតម្លៃ សូមចូលការលើកទឹកចិត្តដែលមិនយំអឿងទៅដល់កុមារ។ ឧទាហរណ៍និយាយពាក្យដូចជា «កូនបានប្រឹងប្រែងខ្លាំងណាស់ សូមប្រឹងប្រែងបន្តទៀត!»។ មិនត្រូវបង្ហាញឱ្យកុមារឃើញថា គេបានឆ្លើយត្រូវ ឬខុសនោះទេ លើកលែងតែចំណុចដែលបានបង្ហាញនៅក្នុងការវាយតម្លៃស្រដៀងគ្នា។ សូមចូលការលើកទឹកចិត្តនៅចន្លោះសំណួរនីមួយៗ ជាជាងនៅពាក់កណ្តាលសំណួរ ។ មិនត្រូវចូលជាតម្រូវឱ្យបង្ហាញទឹកមុខបញ្ហាក្នុងការសំណួរ ខណៈពេលដែលស្វែងរកចម្លើយឡើយ។

បង្កើតបរិយាកាសវិភាយជាមួយកុមារតាមរយៈការសន្ទនាខ្លីៗ (មើលឧទាហរណ៍ប្រធានបទខាងក្រោម)។ ធ្វើឱ្យសិស្សយល់ថាការវាយតម្លៃនេះគឺជាការយល់ច្រឡំសប្បាយៗ មិនមែនជាការធ្វើតេស្តទេ។ សូមយកពេលវេលានេះដើម្បីកំណត់កាលវេលាដែលកុមារចូលចិត្តប្រើប្រាស់ក្នុងការធ្វើទំនាក់ទំនង។ អានព្យួរនិងយើកៗនៅផ្នែកក្នុងប្រអប់តែប៉ុណ្ណោះ។

<b>ការសាកមន្តី និងការយល់ព្រមដោយផ្ទាល់មាត់</b>
<p>អរណសសៗ ខ្ញុំឈ្មោះ.....រស់នៅ.....។ ខ្ញុំសូមធ្វើការណែនាំខ្លួន។</p> <p>សូមប្រាប់សិស្សពីចំនួនកូនរបស់អ្នកនិងអាយុរបស់កូនៗ ប្រភេទភេទៗ កម្មវិធីទូរទស្សន៍ ឬវិទ្យុជាដើមដែលអ្នកចូលចិត្ត។ ១. តើប្អូនចូលចិត្តធ្វើអ្វីខ្លះពេលប្អូនមិនទៅសាលា? រៀនចាំចម្លើយប្រសិនបើសិស្សមានការស្នាក់នៅស្រដៀងគ្នា។ ២. បើប្រសិនបើពួកគេមានទំនុកចិត្តឆ្លើយសូមបន្តទៅការយល់ព្រមផ្ទាល់មាត់។ ២. តើល្បែងអ្វីដែលប្អូនចូលចិត្តលេង?</p> <p>ខ្ញុំសូមប្រាប់មូលហេតុដែលខ្ញុំមកទីនេះ។ ពួកយើងមកទីនេះដើម្បីសិក្សាពីរបៀបរៀនរបស់កូន ហើយចង់ដឹងថាតើកូនចេះលេងល្បែងខ្លះដែរឬទេ។ ពួកយើងនឹងសរសេរកូនមួយចំនួនអំពីរឿងនិងអក្សរ។ មានសកម្មភាពខ្លះស្រដៀងគ្នាប្រសិនបើកូនមិនចង់ចូលរួមទេ។ កូនកុំបារម្ភប្រសិនបើកូនមិនអាចធ្វើសកម្មភាពមួយចំនួនបាន។ ពួកយើងគ្រាន់តែចង់ឱ្យកូនសាកល្បង។ កូនអាចឈប់សម្រាកសិនបើកូនមិនចង់។ គ្រាន់តែប្រាប់ពួកយើងបានហើយ។ ប្រសិនបើកូនលេងចង់ឆ្លើយបន្ត ឬកូនមិនចង់លេងល្បែងណាមួយ អ៊ីចឹងក៏មិនអីដែរ។ កូនយល់ទេ? កូនមានសំណួរឬទេ? កូនត្រូវមន្តីនូវចម្លើយឬនៅ?</p>

កូស ។ ក្នុងប្រអប់ បើទទួលបានចម្លើយផ្ទាល់មាត់  បាន-បាន \_\_\_\_\_  
(ប្រសិនបើមិនទទួលបានចម្លើយទេ អរគុណកុមារហើយផ្លាស់ទៅកុមារបន្ទាប់ទៀត)

A. កាលបរិច្ឆេទវាយតម្លៃ: (ឧ. 5 ឧសភា 2013 = 5/03/2013)	ថ្ងៃ: _____ ខែ: _____ ឆ្នាំ: _____	H. ថ្នាក់:	
B. ឈ្មោះខេត្ត:			
C. ឈ្មោះស្រុក:		I. លេខសិស្ស:	
D. ឈ្មោះអ្នកសម្ភាសន៍:		J. ខែឆ្នាំកំណើតសិស្ស:	ខែ ____ ឆ្នាំ ____
E. ឈ្មោះសាលា:		K. ភេទ:	<input type="checkbox"/> ប្រុស <input type="checkbox"/> ស្រី
F. កូដសាលាក្នុង EMIS :			
G. ផែនសិក្សា:			
	<input type="checkbox"/> ពេញមួយថ្ងៃ <input type="checkbox"/> ពេញព្រឹក <input type="checkbox"/> ពេញសៀល	<b>ដោងចាប់ផ្តើម</b> <input type="checkbox"/> ត្រឹមត្រូវ <input type="checkbox"/> មិនត្រឹមត្រូវ	

កិច្ចការលេខ # ១, និយាយរៀនសូត្រ	៣ ទំព័រ ១	៖ មិនកំណត់ម៉ោង
<p>ស្ត្រី៖ គ្មាន</p> <p>☛ និយាយថា៖ ឥឡូវនេះយើងនឹងសាកល្បងលេងល្បែងអីៗដែលយើងអាចរៀនបាន។ សូមកូនព្យាយាមរាប់ឈ្មោះអ្វីៗដែលអាចរៀនបានឱ្យបានច្រើនតាមដែលអាចរាប់បាន។</p> <p><b>គ្រូបញ្ជូន៖</b> អ្វីដែលអាចរាប់បាន៖ នៅពេលកុមារមិនអាចគិតឃើញថែមទៀត ឬរាប់អ្វីដែលអាចរាប់បានចំនួន២០ សូមបន្តទៅសំណួរអំពីការរាប់ឈ្មោះសត្វ។</p> <p>ឈ្មោះសត្វ៖ នៅពេលកុមារមិនអាចគិតឃើញថែមទៀត ឬរាប់ឈ្មោះសត្វបានចំនួន២០ សូមបន្តទៅកិច្ចការដេបន្ទាប់ទៀត។</p>		<p>កិច្ចការនេះមិនកំណត់ម៉ោងទេ។</p> <p>៖ នៅពេលដែលកុមារលេងរាប់ឈ្មោះសត្វ/រាប់ឈ្មោះសត្វ/សត្វសូមបន្តសំណួរម្តងដោយនិយាយថា៖</p> <p><b>កូនអាចគិតឃើញអ្វីបន្ថែមទៀត?</b></p> <p>៖ ប្រសិនបើសិស្សស្នាក់នៅមិនឆ្លើយក្នុងរយៈពេល១០វិនាទី បន្ទាប់ពីសំណួររាប់ឈ្មោះសត្វ ទីមួយ (ឧទាហរណ៍ បន្ទាប់ពីរាប់បាន៥សត្វ/សត្វ) សូមនិយាយថា "អរគុណ!" រួចបញ្ចប់កិច្ចការនេះ។</p>
ការណែនាំ	<p>បង្ហាញពីចំនួនវត្ថុឃើញបាន/សត្វច្រើនបំផុតដែលកុមារបានរាប់</p> <p>ចំនួនវត្ថុ/សត្វច្រើនបំផុតដែលរាប់បាន (ប្រសិនបើកុមារនិយាយថា "ខ្ញុំមិនចេះ/មិនដឹង" សូមដាក់ចំនួន ០ )</p> <p>មិនឆ្លើយ (១១)</p>	
និយាយថា៖ ឥឡូវនេះយើងលេងល្បែងពាក្យ តើកូនអាចរាប់ឈ្មោះអ្វីដែលកូនអាចឃើញបានឬទេ? សូមប្រាប់ពួក/ម៉ែងឱ្យបានច្រើនតាមដែលកូនអាចរាប់បាន ។ បញ្ចប់កុមារនៅពេលរាប់បាន២០។		
ឥឡូវ ពួក/ម៉ែងចង់ថា តើសត្វអ្វីខ្លះដែលកូនស្គាល់? សូមប្រាប់ពួក/ម៉ែងឱ្យបានច្រើនតាមដែលកូនអាចរាប់បាន។ បញ្ចប់កុមារនៅពេលរាប់បាន២០។		
៖ លំហាត់នេះមិនត្រូវបានបន្ត ដោយសារសិស្សរៀនរាប់។		

អរគុណ តោះយើងបន្តទៅផ្នែកមួយទៀត!

<b>កិច្ចការលេខ #២ ចំណេះដឹងពីតួអក្សរ ការស្គាល់តួអក្សរ</b>	<b>៧៧ ទំព័រ ២</b>	<b>០ ១៨០ វិនាទី</b>																									
<p>សម្ភារៈ៖ តារាងតួអក្សរ និងក្រដាសសម្រាប់សិក្សាស្រាវជ្រាវគ្រប់ពីរដំណាក់កាល។ សម្ភារៈផ្សេងទៀត៖ អន្ទូញតម្រូវមានស្រាប់តែក្រដាស។</p> <p>ដាក់តារាងតួអក្សរនៅពីមុខកុមារ។</p> <p><b>៖ និយាយថា៖ តួអក្សរនេះ យើងនឹងលេងល្បែងតួអក្សរ។</b> នេះជាតួអក្សរខ្មែរ។ ព្យ/ម៉ងនិងចង្កូលតួអក្សរណាមួយ ហើយកូនហៅឈ្មោះតួអក្សរនោះ ។ <b>ឧទាហរណ៍៖</b> អក្សរនេះ[ចង្កូលនៅអក្សរជ] គឺ “ជ” <b>គោះសាកល្បង៖</b> តើនេះជាអក្សរអ្វី? [ដោយចង្កូលតួអក្សរ ជ] ប្រសិនបើកុមារឆ្លើយត្រូវ និយាយថា៖ ត្រឹមត្រូវនេះជាអក្សរ ជ ប្រសិនបើកុមារឆ្លើយមិនត្រឹមត្រូវ និយាយថា៖ នេះជាអក្សរ អ</p> <p>ប្រើក្រដាសសម្រាប់ដើម្បីបង្ហាញអក្សរនៅជួរផ្សេងៗ ដោយទុកតែអក្សរនៅជួរទី១។ ចាប់ផ្តើមពីតួអក្សរទី១ នៃជួរទី១ ដោយចង្កូលតួអក្សរ ហើយសួរកុមារ។ និយាយថា៖ ព្យ/ម៉ងនិងចង្កូលតួអក្សរណាមួយ ហើយ កូនហៅឈ្មោះតួអក្សរនោះបើកូនមិនដឹងទាំងអស់ក៏មិនអីដែរ សូមកូនខិតខំឆ្លើយឱ្យបានល្អណា។ ចង្កូលនៅតួអក្សរទី១ នៃជួរទី១ ហើយសួរកុមារតើនេះជាអក្សរអ្វី?</p> <p>ចាប់បន្តសួរកុមារពីអក្សរមួយទៅអក្សរមួយ ដោយប្រើចង្កូលដៃហូតដល់ចប់តួអក្សរក្នុងជួរទាំងអស់ បើកុមារអាចដឹងបានពីអក្សរណាមួយបានក្នុងជួរទី១។ ហើយនិយាយ៖ សូមមើលអក្សរក្នុងជួរផ្សេងទៀត ព្យ/ម៉ងនិងចង្កូលតួអក្សរណាមួយខ្លះទៀត។</p>		<p>១៨០ វិនាទី</p> <p>១ ប្រសិនបើសិស្សស្ទាត់ឆ្លើយ ឬលឿននៅតួអក្សរណាមួយ ក្នុង រយៈពេល៤វិនាទីសូមចង្កូល ទៅតួអក្សរផ្សេងហើយនិយាយ៖ ចុះតួអក្សរនេះវិញ?</p> <p>២ ប្រសិនបើសិស្ស មិនឆ្លើយបានត្រឹមត្រូវចំនួន ៤តួអក្សរ ដំបូង សូមនិយាយថា “អរគុណ” បញ្ឈប់ត្រឹមព្រឹងហើយត្រូវ បញ្ជាក់នៅក្នុងប្រអប់ខាង ក្រោម ហើយបន្តកិច្ចការលេខបន្ទាប់ ទៀត។</p>																									
<p>៦ ( / ) ប្រសិនបើសិស្សអាចពាក្យណាមួយមិនបានត្រឹមត្រូវ សូមត្រូវសញ្ញា ( / ) នេះនៅលើពាក្យនោះ។ ( ០ ) ប្រសិនបើសិស្សអាចពាក្យណាមួយខុស ប៉ុន្តែបើក្នុងមួយនោះ សិស្សកែតម្រូវ ដោយអាចពាក្យនោះមកត្រូវវិញ សូមត្រូវសញ្ញា ( / ) នេះ។ ដូច្នេះយើងនឹងឃើញមានសញ្ញា ( ០ ) នៅលើពាក្យដែលបានកែតម្រូវនោះ។ <b>ឧទាហរណ៍៖</b> ជ អ</p> <table border="1" data-bbox="276 949 612 1196"> <tr> <td>១</td> <td>២</td> <td>៣</td> <td>៤</td> <td>៥</td> </tr> <tr> <td>ច</td> <td>ស</td> <td>ក</td> <td>ក</td> <td>ឆ</td> </tr> <tr> <td>រ</td> <td>ង</td> <td>ប</td> <td>ម</td> <td>ល</td> </tr> <tr> <td>ខ</td> <td>ដ</td> <td>ណ</td> <td>ញ</td> <td>ត</td> </tr> <tr> <td>ទ</td> <td>យ</td> <td>អ</td> <td>ក</td> <td>ជ</td> </tr> </table>		១	២	៣	៤	៥	ច	ស	ក	ក	ឆ	រ	ង	ប	ម	ល	ខ	ដ	ណ	ញ	ត	ទ	យ	អ	ក	ជ	
១	២	៣	៤	៥																							
ច	ស	ក	ក	ឆ																							
រ	ង	ប	ម	ល																							
ខ	ដ	ណ	ញ	ត																							
ទ	យ	អ	ក	ជ																							
<p>៧ លំហាត់នេះមិនត្រូវបានបន្ត ដោយសារសិស្សឆ្លើយមិនបានត្រឹមត្រូវក្នុងជួរទី១។</p>																											
<p>៨ លំហាត់នេះមិនត្រូវបានបន្ត បើសិនកុមារស្គាល់ហើយ។</p>																											
<p>៩ បញ្ហាម៉ោងក្នុងនាទីកាតែងនៅសល់ (ចំនួននាទីនិងវិនាទី)</p>																											

អរគុណ! យើងបន្តទៅផ្នែកមួយទៀត!

កិច្ចការដង #៣ ការស្តាប់ដោយយល់ន័យ		៣ ទំព័រ ៣		៖ មិនកំណត់ម៉ោង	
<p><b>រឿង:</b></p> <p><i>និយាយថា ៖ ឥឡូវពូ/មីងនឹងប្រាប់កូនពីរឿងមួយដ៏គួរឱ្យចាប់អារម្មណ៍ ។ បន្ទាប់ពីស្តាប់រឿងចប់ ពូ/មីងនឹងសួរសំណួរខ្លះដល់កូន ។ តើកូនយល់ប្រាមទេ?</i></p> <p><i>និយាយថា រឿងនេះមានចំណងជើងថា ឆ្មា និងកណ្តុរ ។ កាលពីយូរលង់ណាស់មកហើយ មានឆ្មាជាតិមួយ។ វាតែងតែពាក់មួកពណ៌ក្រហម។ នៅពេលវាកំពុងដេក មានកណ្តុរតូចមួយគំរាមកំរាមដោយស្លៀកស្លាត ហើយបានលួចមួករបស់វា។ ឆ្មាក៏ឡើងហើយបាត់មួកវា។ វាខឹងខ្លាំងណាស់ ហើយចាប់ផ្តើមរត់ដេញតាមកណ្តុរ។ មួយសន្ទុះក្រោយមក ឆ្មាចាប់កណ្តុរបាននៅក្រោមគុក ហើយវាមិនអាចរត់ទៅណាបានឡើយ។ ដូច្នោះ កណ្តុរក៏និយាយទៅកាន់ឆ្មាថា «សូមកុំស៊ីខ្ញុំ បងឆ្មា»។ បើបងទុកជីវិតខ្ញុំ នោះខ្ញុំនឹងសងមួកបងវិញ។ បន្ទាប់ពីបានមួកត្រឡប់មកវិញ ឆ្មានិយាយថា «សូមកុំលួចមួកយើងទៀត» ហើយបន្ទាប់មក ឆ្មាក៏ត្រឡប់ទៅដេកវិញ ដោយអារម្មណ៍រីករាយ ។</i></p> <p><b>ឥឡូវពូ/មីងនឹងសួរសំណួរខ្លះៗទាក់ទងនឹងសាច់រឿងនេះ ។ សួរសំណួរមួយៗយកៗ ហើយច្បាស់ៗ។</b></p>					
	ការណែនាំ	ចម្លើយដែលត្រឹមត្រូវ	ត្រឹមត្រូវ (1)	មិនត្រឹមត្រូវ/ កុំមាននិយាយថា ឃុំ (៥) ត្រឹមត្រូវ (10)	មិនឡើយ (១១)
៣ក	នរណាលួចមួករបស់ឆ្មា?	កណ្តុរ			
៣ខ	តើមួកមានពណ៌អ្វី?	ក្រហម			
៣គ	ហេតុអ្វីឆ្មាដេញចាប់កណ្តុរ ?	ព្រោះកណ្តុរលួច/យកមួកវា			
៣ឃ	តើកណ្តុរត្រូវបាននៅក្នុងគុកនឹងណា?	ក្រោមគុក			
៣ង	ហេតុអ្វីឆ្មាមិនស៊ីកណ្តុរ?	ព្រោះកណ្តុរឱ្យមួកមកវាវិញ			
៖ លំហាត់នេះមិនត្រូវបានបន្ត ដោយសារសិស្សស្តាប់យល់។					

នេះជាចុងបញ្ចប់នៃការវាយតម្លៃនេះ ។  
 ពេលចប់ការវាយតម្លៃ និយាយថា ៖ នេះជាសំណួរចុងក្រោយរបស់ពូ/មីងហើយ ។ អរគុណកូនដែលចូលរួម!

## Adapted Early Grade Reading Assessment

## ការវាយតម្លៃផលជះអំណានថ្នាក់ទី១៖ ទម្រង់សម្រាប់ចម្លើយរបស់សិស្ស

### ការណែនាំទូទៅ

បង្កើតបរិយាកាសលេងជាមួយសិស្សតាមរយៈការសន្ទនាងាយៗ (មើលឧទាហរណ៍ ខាងក្រោម)។ សិស្សគួរតែអាចទទួលបានការវាស់ស្ទង់សមត្ថភាពជាលក្ខណៈកំសាន្ត ជាជាងការធ្វើតេស្ត ឬប្រលងដាក់ពិន្ទុ។ សូមយកពេលវេលានេះដើម្បីកំណត់ភាសាដែលកុមារចូលចិត្តប្រើប្រាស់ក្នុងការទាក់ទង។ សូមអានឱ្យឮៗ យឺតៗ និងច្បាស់ៗ នៅផ្នែកក្នុងប្រអប់តែប៉ុណ្ណោះ។

**អុណស្កស្កី។ ខ្ញុំឈ្មោះ \_\_\_\_\_ និងរស់នៅ \_\_\_\_\_។ ខ្ញុំសូមធ្វើការណែនាំខ្លួន។** [សូមប្រាប់សិស្សពីចំនួនកូនរបស់អ្នកនិងអាយុរបស់កូនៗ ប្រភេទកីឡា កម្មវិធីទូរទស្សន៍ ឬវិទ្យុជាដើមដែលអ្នកចូលចិត្ត] **១. តើប្អូនចូលចិត្តធ្វើអ្វីខ្លះពេលប្អូនចេញលេង? រង់ចាំចម្លើយ ប្រសិនបើសិស្សមានការស្ទាក់ស្ទើរសួរសំណួរទី២ ប៉ុន្តែប្រសិនបើពួកគាត់មានទំនុកចិត្តឆ្លើយ សូមបន្តទៅកិច្ច ព្រមព្រៀងផ្ទាល់មាត់។ ២. តើល្បែងអ្វីដែលប្អូនចូលចិត្តលេង?**

**កិច្ចព្រមព្រៀងដោយផ្ទាល់មាត់ ៖** អានអត្ថបទនៅក្នុងប្រអប់ខាងក្រោមឱ្យច្បាស់ៗទៅកាន់សិស្ស។

- ខ្ញុំសូមប្រាប់មូលហេតុដែលខ្ញុំមកទីនេះ។ ខ្ញុំធ្វើការជាមួយសាលារៀនប្អូន និងក្រសួងអប់រំ ហើយពួកខ្ញុំកំពុងព្យាយាមស្វែងយល់ពីរបៀបដែលសិស្សរៀនអាន។ ពួកខ្ញុំបានជ្រើសរើសប្អូនៗដោយចៃដន្យ។
- ខ្ញុំចង់ឱ្យប្អូន ចូលរួមជាមួយខ្ញុំ ប៉ុន្តែប្រសិនបើប្អូនមិនចង់ចូលរួមក៏បានដែរ។
- យើងនឹងលេងល្បែងដែលទាក់ទងនឹងការអាន។ ខ្ញុំនឹងឱ្យប្អូនអានអក្សរ ពាក្យ និងអានរឿងខ្លីៗៗ។
- នេះមិនមែនជាការធ្វើតេស្តនោះទេ ហើយវានឹងមិនប៉ះពាល់ដល់ពិន្ទុក្នុងថ្នាក់រៀនរបស់ប្អូនឡើយ។
- ខ្ញុំសូមបញ្ជាក់ប្រាប់ម្តងទៀតថា ប្រសិនបើប្អូនណាមិនចង់ចូលរួមក៏បានដែរ។ នៅពេលដែលយើងចាប់ផ្តើម ប្រសិនបើប្អូនណាមិនចង់ឆ្លើយសំណួរណាមួយក៏បានដែរ។
- តើប្អូនមានសំណួរអ្វីដែរឬទេ? តើប្អូនត្រៀមខ្លួនហើយឬនៅ?

គូសក្នុងប្រអប់ ប្រសិនបើមានការយល់ព្រមទៅលើការព្រមព្រៀងដោយផ្ទាល់មាត់៖  បាទ/ចាស

A. កាលបរិច្ឆេទវាយតម្លៃ៖ (ឧ. 5 ឧសភា 2013 = 5/03/2013)	ថ្ងៃ៖ _____ ខែ៖ _____ ឆ្នាំ៖ _____	H. កម្រិតថ្នាក់៖	<input type="checkbox"/> ថ្នាក់ទី១
B. ខេត្ត៖			
C. ស្រុក៖		I. លេខសិស្ស៖	
D. ឈ្មោះអ្នកសម្ភាសន៍៖		J. ខែឆ្នាំកំណើតសិស្ស៖	ខែ _____ ឆ្នាំ _____
E. ឈ្មោះសាលា៖		K. ភេទ៖	<input type="checkbox"/> ប្រុស <input type="checkbox"/> ស្រី
F. កូដសាលាក្នុង EMIS ៖		<b>ម៉ោងចាប់ផ្តើម</b>	
G. វេនសិក្សា៖	<input type="checkbox"/> = ពេញមួយថ្ងៃ(៨ ម៉ោង) <input type="checkbox"/> = ពេលព្រឹក (៤ម៉ោង)	_____ : _____ <input type="checkbox"/> ព្រឹក [ជ្រើសរើសមួយ] <input type="checkbox"/> រសៀល	

	<input type="checkbox"/> =ពេលរសៀល(៤ ម៉ោង)		
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<b>កិច្ចការ # ១. ការកំណត់ឈ្មោះតួអក្សរ(ព្យញ្ជនៈ)</b>										<b>១</b>	<b>១៨០វិនាទី</b>
<p><b>❶ ឥឡូវនេះយើងនឹងលេងល្បែងតួអក្សរ។ ក្នុងខ្ញុំនេះជាបញ្ជីតួអក្សរដែលមានព្យញ្ជនៈ។ សូមប្តូរអានតួអក្សរនេះ ឱ្យឮៗ ច្បាស់ៗ និងឱ្យបានច្រើន តាមដែលអាចធ្វើទៅបាន។</b></p> <p><b>ឧទាហរណ៍ អក្សរនេះ[ចង្កុលទៅអក្សរធាតុ] «ធា»</b>  <b>ចាប់ផ្តើមសាកល្បង ៖ តើនេះជាអក្សរអ្វី? [ចង្កុលទៅអក្សរ«ម»]</b>          [ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា] <b>ល្អ! អក្សរនេះគឺ «ម»។</b>          [ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា] <b>អក្សរនេះគឺ «ម»។</b></p> <p><b>ឥឡូវសាកល្បងអក្សរមួយផ្សេងទៀត ៖ តើនេះជាអក្សរអ្វី? [ចង្កុលទៅអក្សរ «ស»]</b>          [ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា] <b>ល្អ! អក្សរនេះគឺ «ស»។</b>          [ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា] <b>អក្សរនេះគឺ «ស»។</b></p> <p><b>នៅពេលខ្ញុំនិយាយថា "ចាប់ផ្តើម" ត្រូវអានដោយចាប់ផ្តើមពីនេះ[ចង្កុលទៅអក្សរដំបូងនៅលើតួអក្សរដំបូងបន្ទាប់ពី ឧទាហរណ៍] ហើយបន្តតាមរបៀបនេះ [បន្តចង្កុលតួអក្សរបន្តបន្ទាប់ដល់ចុងនៃបន្ទាត់ដំបូង]។ ចង្កុលតួអក្សរនីមួយៗ ហើយប្រាប់ខ្ញុំពីអក្សរទាំងនោះឱ្យបានឮៗ។ ចូរអានឱ្យបានលឿន និងយកចិត្តទុកដាក់បំផុតតាមដែលអាចធ្វើបាន។</b></p> <p><b>ប្រសិនបើតួអក្សរណាដែលប្តូរមិនស្គាល់ សូមបន្តទៅកាន់តួអក្សរបន្ទាប់។ សូមប្តូរចង្កុលអក្សរដំបូងគេ។ ត្រៀមខ្លួន រួចរាល់ហើយឬនៅ? តោះចាប់ផ្តើម!</b></p>										<p><b>១</b> ប្រសិនបើសិស្សស្ទាត់ស្ទើរ ឬឈប់ នៅតួអក្សរណាមួយ ក្នុងរយៈពេល៣វិនាទី សូមចង្កុលតួអក្សរ បន្ទាប់ ហើយនិយាយ ថា "ទៅមុខទៀត"</p>	
<p>⊗ ( / ) ប្រសិនបើសិស្សអានពាក្យណាមួយមិនបានត្រឹមត្រូវ សូមគូសសញ្ញា ( / ) នេះនៅលើពាក្យនោះ។          ⊗ ( ០ ) ប្រសិនបើសិស្សកែតម្រូវខុសមកត្រូវវិញ សូមគូសរង្វង់ជុំវិញសញ្ញា ( / ) នេះ។ ដូច្នេះយើងនឹងឃើញមាន សញ្ញា ( ០ ) នៅលើពាក្យដែលបានកែតម្រូវនោះ។</p> <p><i>ឧទាហរណ៍: ធា ម ស</i></p>											
១	២	៣	៤	៥	៦	៧	៨	៩	១០	១១	១២
ប	ស	ក	រ	ង	ម	ន	ត	ច	ល	ព	(១១)
ទ	យ	ជ	ខ	ញ	ដ	អ	គ	ណ	វ	ធ	(២២)
ភ	ហ	ច	ធា	ឆ	យ	ឡ	ឈ	ប	ខ	ឈ	(៣៣)

៖ ពេលវេលាដែលនៅសល់ (ចំនួនវិនាទី)							
<b>អរគុណ! តោះបន្តទៅកិច្ចការមួយទៀត!</b>							
<b>កិច្ចការ # ២. ការកំណត់ឈ្មោះតួអក្សរ(ស្រៈ)</b>					<b>២ ទំព័រ ២</b>		<b>១៨០វិនាទី</b>
● ឥឡូវនេះយើងនឹងលេងល្បែងតួអក្សរ។ ក្នុងឯកសារនេះជាបញ្ជីតួអក្សរដែលមានស្រៈ។ សូមប្តូរអានតួអក្សរនេះឱ្យឮ ៗ ច្បាស់ៗ និងឱ្យបានច្រើន តាមដែលអាចធ្វើទៅបាន។							១ ប្រសិនបើសិស្សស្នាក់ស្នើ ឬឈប់នៅតួអក្សរណាមួយ ក្នុងរយៈពេល៣វិនាទី សូមចង្អុលតួអក្សរ បន្ទាប់ ហើយនិយាយថា "ទៅមុខទៀត"
<b>ឧទាហរណ៍ អក្សរនេះចង្អុលទៅអក្សរ ១១ គឺ « ១ »</b> <b>ចាប់ផ្តើមសាកល្បង ៖ តើនេះជាអក្សរអ្វី? [ចង្អុលទៅអក្សរ « ១ »]</b> ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា <b>ល្អ! អក្សរនេះគឺ « ១ »</b> ។ ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា <b>អក្សរនេះគឺ « ១ »</b> ។ <b>ឥឡូវសាកល្បងអក្សរមួយផ្សេងទៀត ៖ តើនេះជាអក្សរអ្វី? [ចង្អុលទៅអក្សរ « ១ »]</b> ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា <b>ល្អ! អក្សរនេះគឺ « ១ »</b> ។ ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា <b>អក្សរនេះគឺ « ១ »</b> ។							
<b>នៅពេលខ្ញុំនិយាយថា "ចាប់ផ្តើម" ត្រូវអានដោយចាប់ផ្តើមពីនេះចង្អុលទៅអក្សរដំបូងនៅលើផ្ទៃដកបន្ទាប់ពី ឧទាហរណ៍ ហើយបន្តតាមរបៀបនេះ បន្តចង្អុលតួអក្សរបន្តបន្ទាប់ដល់ចុងនៃបន្ទាត់ដំបូង។ ចង្អុលតួអក្សរនីមួយៗ ហើយប្រាប់ខ្ញុំពីអក្សរទាំងនោះឱ្យបានឮៗ។ ចូរអានឱ្យបានលឿន និងយកចិត្តទុកដាក់បំផុតតាមដែលអាចធ្វើបាន។</b>							
<b>ប្រសិនបើតួអក្សរណាដែលប្តូរមិនស្គាល់ សូមបន្តទៅកាន់តួអក្សរបន្ទាប់។ សូមប្តូរចង្អុលអក្សរដំបូងគេ។ ក្រៀមខ្លួន រួចរាល់ហើយឬនៅ? តោះចាប់ផ្តើម!</b>							
៖ ( / ) ប្រសិនបើសិស្សអានពាក្យណាមួយមិនបានត្រឹមត្រូវ សូមគូសសញ្ញា ( / ) នេះនៅលើពាក្យនោះ។ ៖ ( ៧ ) ប្រសិនបើសិស្សកែពីអានខុសមកត្រូវវិញ សូមគូសរង្វង់ជុំវិញសញ្ញា ( / ) នេះ។ ដូច្នេះយើងនឹងឃើញមានសញ្ញា ( ៧ ) នៅលើពាក្យដែលបានកែតម្រូវនោះ។							
<b>ឧទាហរណ៍: ១១ ១ ១</b>							
១	២	៣	៤	៥	៦		
២	១	ំ	០	១	២	(៦)	
២	១១	១១	២	២	២	(១២)	
១	១	២	១	២	១	(១៨)	
១	០	០	២	២	២	(២៤)	
៖ ពេលវេលាដែលនៅសល់ (ចំនួនវិនាទី)							

<b>អរគុណ! តោះបន្តទៅកិច្ចការមួយទៀត!</b>		
<b>កិច្ចការលេខ # ២. ការកំណត់ឈ្មោះតួអក្សរ(កំណត់ឈ្មោះតួអក្សរកម្រិតខ្ពស់)</b>	<b>៨ ទំព័រ ៣</b>	<b>២ ៦០វិនាទី</b>
<p><b>* ក្នុងទំព័រនេះមានជាប់កិច្ចការដែលមានល្បឿន: ស្រ:និស្ស័យ ស្រ:ពេញតូ និងជើងល្បឿន:។ សូមប្អូនអានតួអក្សរនេះឱ្យឮៗ ច្បាស់ៗ និងឱ្យបានច្រើន តាមដែលអាចធ្វើទៅបាន។</b></p> <p><b>ឧទាហរណ៍ អក្សរនេះ(ចង្កុលទៅអក្សរ ឧ)គឺ &lt; ឧ &gt;</b>  <b>ចាប់ផ្តើមសាកល្បង ៖ តើនេះជាអក្សរអ្វី? (ចង្កុលទៅអក្សរ &lt; ឧ &gt;)</b>          ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា <b>ល្អ! អក្សរនេះគឺ &lt; ឧ &gt;។</b>          ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា <b>អក្សរនេះគឺ &lt; ឧ &gt;។</b></p> <p><b>ឥឡូវសាកល្បងអក្សរមួយផ្សេងទៀត ៖ តើនេះជាអក្សរអ្វី? (ចង្កុលទៅអក្សរ &lt; ា &gt;)</b>          ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា <b>ល្អ! អក្សរនេះគឺ &lt; ា &gt;។</b>          ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា <b>អក្សរនេះគឺ &lt; ា &gt;។</b></p> <p><b>នៅពេលប្តូរនិយាយថា "ចាប់ផ្តើម" ត្រូវអានដោយចាប់ផ្តើមពីនេះ (ចង្កុលទៅអក្សរដំបូងទៅតួអក្សរដំបូងនៅលើតួអក្សរដំបូងនៃឧទាហរណ៍) ហើយបន្តតាមរបៀបនេះ (បន្តចង្កុលតួអក្សរបន្តបន្ទាប់ដល់ចុងនៃបន្ទាត់ដំបូង)។ ចង្កុលតួអក្សរនីមួយៗ ហើយប្រាប់ខ្ញុំពីអក្សរទាំងនោះឱ្យបានឮៗ។ ចូរអានឱ្យបានលឿន និងយកចិត្តទុកដាក់បំផុតតាមដែលអាចធ្វើបាន។</b></p> <p><b>ប្រសិនបើតួអក្សរណាដែលប្អូនមិនស្គាល់ សូមបន្តទៅកាន់តួអក្សរបន្ទាប់។ សូមប្អូនចង្កុលអក្សរដំបូងគេ។ គ្រឿងខ្លះរូបចាស់ហើយឬនៅ? តោះចាប់ផ្តើម!</b></p>	<p>ចាប់ផ្តើមកំណត់ពេលវេលានៅលើនាឡិកាពេលសិស្សអានតួអក្សរដំបូង។</p> <p><b>១</b> ប្រសិនបើសិស្សស្គាល់ស្ទើរ ឬលេចនៅតួអក្សរណាមួយក្នុងរយៈពេល៣វិនាទី សូមចង្កុលតួអក្សរបន្ទាប់ ហើយនិយាយថា <b>"ទៅមុខទៀត"</b></p> <p><b>២</b> នៅពេលដែលនាឡិកាលោតដល់ពេល១៥នាទី ប្រសិនបើសិស្សមិនអាចអានបានត្រឹមត្រូវនៃបន្ទាត់ទី ១ ដែលមាន(១០តួអក្សរ)ត្រូវនិយាយថា <b>អរគុណ!</b> សូមបញ្ចប់ផ្នែកនេះហើយគូសក្នុងប្រអប់ខាងក្រោមរួចបន្តទៅផ្នែកបន្ទាប់។</p>	
<p><b>២ ( / )</b> ប្រសិនបើសិស្សអានពាក្យណាមួយមិនបានត្រឹមត្រូវ សូមគូសសញ្ញា ( / ) នេះនៅលើពាក្យនោះ។</p> <p><b>២ ( ៧ )</b> ប្រសិនបើសិស្សកែពីអានខុសមកត្រូវវិញ សូមគូសរង្វង់ជុំវិញសញ្ញា ( / ) នេះ។ ដូច្នេះកើតនឹងឃើញមានសញ្ញា ( ៧ ) នៅលើពាក្យដែលបានកែតម្រូវនោះ។</p> <p><b>២ ( )</b> សូមគូសសញ្ញា ( ) នេះ នៅខាងក្រោមពាក្យដែលសិស្សបានអាន ចុងក្រោយគេពេញអស់នាទី</p> <p><b>ឧទាហរណ៍: ឧ ឧ ា</b></p>		

១	២	៣	៤	៥	៦	៧	៨	៩	១០	
ដ	ឿ	វី	ោ	ថ	្រ	ឌី	ក	ព	ឿ	(១០)
ញ	្រ	ឿ	អ	រ	្រ	ល	ល	ោ	្រ	(២០)
ះ	ត	ឆ	្រ	ប្រ	ង	ទ	្រ	ឌ	ឡ	(៣០)
ស	្រ	ខ	ឆ	ត	្រ	េ	ច	យ	្រ	(៤០)
ជ	្រ	ហ	្រ	ត	យ	្រ	ន	ត	ោ	(៥០)
្រ	ប	្រ	យ	្រ	ជ	្រ	ប្រ	ភ	្រ	(៦០)
ម	ណ	្រ	េ	្រ	ង	្រ	រ	ប	្រ	(៧០)
្រ	ា	្រ	្រ	អ	្រ	ក	្រ	ម	ឌ	(៨០)
យ	្រ	ប	ង	ស	្រ	្រ	ច	្រ	្រ	(៩០)
្រ	្រ	្រ	ខ	ា	្រ	្រ	្រ	ព	ា	(១០០)
<input checked="" type="checkbox"/> ពេលវេលាដែលនៅសល់ (ចំនួនវិនាទី)										
<input checked="" type="checkbox"/> លំហាត់នេះត្រូវបញ្ចប់ ដោយសារសិស្សមិនអាចអានបានត្រឹមត្រូវនូវពាក្យណាមួយនៅក្នុងបន្ទាត់ទីមួយ										

<b>កិច្ចការរង #២. ការអានពាក្យដែលស្គាល់</b>	<b>៣ ទំព័រ 3</b>	<b>៦០វិនាទី</b>																																																																	
<p>● នេះគឺជាបញ្ជីពាក្យខ្លះៗ រ។ សូមប្តូរអានពាក្យនេះឱ្យឮៗ ច្បាស់ៗ និងឱ្យបានច្រើន តាមដែលអាចធ្វើទៅបាន។ មិនត្រូវប្រកបទេ ប៉ុន្តែត្រូវអានពាក្យតែម្តង។</p> <p><b>ឧទាហរណ៍ពាក្យនេះគឺ "ឆ្មា" ។</b></p> <p><b>ចាប់ផ្តើមសាកល្បង ៖ សូមអានពាក្យនេះច្រងូលទៅអក្សរ "ឈើ" ។</b></p> <p style="padding-left: 20px;">ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា ល្អ! ពាក្យនេះគឺ "ឈើ" ។</p> <p style="padding-left: 20px;">ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា ពាក្យនេះគឺ "ឈើ" ។</p> <p><b>ឥឡូវចាប់ផ្តើមសាកល្បងពាក្យមួយទៀត៖ សូមអានពាក្យនេះច្រងូលពាក្យ "បង្កើត" ។</b></p> <p style="padding-left: 20px;">ប្រសិនបើសិស្សឆ្លើយបានត្រឹមត្រូវ សូមនិយាយថា ល្អ! ពាក្យនេះគឺ "បង្កើត" ។</p> <p style="padding-left: 20px;">ប្រសិនបើសិស្សឆ្លើយមិនបានត្រឹមត្រូវ សូមនិយាយថា ពាក្យនេះគឺ "បង្កើត" ។</p> <p><b>នៅពេលខ្ញុំនិយាយថា "ចាប់ផ្តើម" ត្រូវអានដោយចាប់ផ្តើមពីនេះច្រងូលទៅពាក្យដំបូងនៅលើតួរដេកបន្ទាប់ពីឧទាហរណ៍។ ហើយបន្តតាមរបៀបនេះ បន្តច្រងូលពាក្យបន្តបន្ទាប់ដល់ចុងនៃបន្ទាត់ដំបូង។ អានឱ្យបានលឿន និងយកចិត្តទុកដាក់បំផុតតាមដែលអ្នកអាចធ្វើបាន។ ប្រសិនបើពាក្យដែលប្តូរមិនចេះ សូមបន្តទៅពាក្យបន្ទាប់។ សូមប្តូរច្រងូលពាក្យដំបូងគេ។ ត្រៀមខ្លួនរួចរាល់ហើយឬនៅ? តោះចាប់ផ្តើម!</b></p> <p>⊗ ( / ) ប្រសិនបើសិស្សអានពាក្យណាមួយមិនបានត្រឹមត្រូវ សូមគូសសញ្ញា ( / ) នេះនៅលើពាក្យនោះ។</p> <p>⊗ ( ០ ) ប្រសិនបើសិស្សកែពីអានខុសមកត្រូវវិញ សូមគូសរង្វង់ជុំវិញសញ្ញា ( / ) នេះ។ ដូច្នោះយើងនឹងឃើញមានសញ្ញា ( ០ ) នៅលើពាក្យដែលបានកែតម្រូវនោះ។</p> <p>⊗ ( 1 ) សូមគូសសញ្ញា ( 1 ) នេះ នៅខាងក្រោយពាក្យដែលសិស្សបានអាន ចុងក្រោយគេពេលអស់នាទី។</p> <p>ឧទាហរណ៍៖ ឆ្មា ឈើ បង្កើត</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 16.6%;">១</th> <th style="width: 16.6%;">២</th> <th style="width: 16.6%;">៣</th> <th style="width: 16.6%;">៤</th> <th style="width: 16.6%;">៥</th> <th style="width: 16.6%;"></th> </tr> </thead> <tbody> <tr> <td>ទឹក</td> <td>ធ្វើ</td> <td>កុំ</td> <td>ថ្ងៃ</td> <td>អាហារ</td> <td>(៥)</td> </tr> <tr> <td>មក</td> <td>នៅ</td> <td>នេះ</td> <td>សរសេរ</td> <td>កង្កែប</td> <td>(១០)</td> </tr> <tr> <td>ជា</td> <td>ប្រកប</td> <td>ចៅ</td> <td>អាន</td> <td>រោច</td> <td>(១៥)</td> </tr> <tr> <td>បង</td> <td>ខ្មែរ</td> <td>គាត់</td> <td>ខោ</td> <td>ស្រះ</td> <td>(២០)</td> </tr> <tr> <td>តាម</td> <td>ណា</td> <td>នឹង</td> <td>សៀវភៅ</td> <td>រៀន</td> <td>(២៥)</td> </tr> <tr> <td>បាន</td> <td>ចិញ្ចឹម</td> <td>ដោយ</td> <td>ការ</td> <td>គោរព</td> <td>(៣០)</td> </tr> <tr> <td>ចាំ</td> <td>ចូរ</td> <td>មាន</td> <td>អំណាន</td> <td>ព្យញ្ជនៈ</td> <td>(៣៥)</td> </tr> <tr> <td>ដាក់</td> <td>សំណាង</td> <td>កំហុស</td> <td>ត្រូវ</td> <td>សំណួរ</td> <td>(៤០)</td> </tr> <tr> <td>ព្រាន</td> <td>ផ្ទះ</td> <td>ថា</td> <td>យើង</td> <td>ពេល</td> <td>(៤៥)</td> </tr> <tr> <td>រក</td> <td>ទៅ</td> <td>លំហាត់</td> <td>ចង្កាន់</td> <td>ល្បះ</td> <td>(៥០)</td> </tr> </tbody> </table>	១	២	៣	៤	៥		ទឹក	ធ្វើ	កុំ	ថ្ងៃ	អាហារ	(៥)	មក	នៅ	នេះ	សរសេរ	កង្កែប	(១០)	ជា	ប្រកប	ចៅ	អាន	រោច	(១៥)	បង	ខ្មែរ	គាត់	ខោ	ស្រះ	(២០)	តាម	ណា	នឹង	សៀវភៅ	រៀន	(២៥)	បាន	ចិញ្ចឹម	ដោយ	ការ	គោរព	(៣០)	ចាំ	ចូរ	មាន	អំណាន	ព្យញ្ជនៈ	(៣៥)	ដាក់	សំណាង	កំហុស	ត្រូវ	សំណួរ	(៤០)	ព្រាន	ផ្ទះ	ថា	យើង	ពេល	(៤៥)	រក	ទៅ	លំហាត់	ចង្កាន់	ល្បះ	(៥០)	<p>ចាប់ផ្តើមកំណត់ពេលវេលានៅលើនាឡិកាពេលសិស្សចាប់ផ្តើមអានពាក្យដំបូងគេ។</p> <p>⊗ ប្រសិនបើសិស្សស្ទាក់ស្ទើរ ឬឈប់នៅពាក្យណាមួយ ក្នុងរយៈពេល ៣០វិនាទី សូមចង្អុលពាក្យបន្ទាប់ហើយនិយាយថា "ទៅមុខទៀត"។</p> <p>⊗ នៅពេលដែលនាឡិកាលោតដល់ពេលខសូន្យត្រូវនិយាយថា "ឈប់"។</p> <p>⊗ ប្រសិនបើសិស្សមិនអាចអានបានត្រឹមត្រូវនូវពាក្យបន្ទាត់ទី១ ដែលមាន(៥ពាក្យ)ត្រូវនិយាយថា "អគុណ!" សូមបញ្ចប់ផ្នែកនេះហើយគូសក្នុងប្រអប់ខាងក្រោម រួចបន្តទៅផ្នែកបន្ទាប់។</p>
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<p>⊗ ពេលវេលាដែលនៅសល់ (ចំនួនវិនាទី)</p>																																																																			
<p>⊗ លំហាត់នេះត្រូវបញ្ចប់ ដោយសារសិស្សមិនអាចអានបានត្រឹមត្រូវនូវពាក្យណាមួយនៅក្នុងបន្ទាត់ទីមួយ</p>																																																																			

ពិចារណ៍ #៣A. ការអានអក្សរ	ឈ្មោះ ៤	២១៨០នាទី
<p>៖ នេះគឺជារឿងអ្វី? ខ្ញុំចង់ឱ្យប្អូនអានឱ្យឮ លឿន ហើយយកចិត្តទុកដាក់។ បន្ទាប់ពីប្អូនអានចប់ ខ្ញុំនឹងសួរសំណួរមួយចំនួនអំពីអ្វីដែលប្អូនបានអាន។ នៅពេលដែលខ្ញុំនិយាយថា -ចាប់ផ្តើម- ប្អូនអានរឿងនេះឱ្យបានល្អបំផុតតាមដែលអាចធ្វើបាន។ ប្រសិនបើប្អូនមិនចេះអានពាក្យណាមួយ សូមបន្តទៅពាក្យ បន្ទាប់។ សូមប្អូនចម្លើយពាក្យដំបូងគេ។ គ្រឿងខ្លះខ្លះចាស់ហើយឬនៅ? សូមចាប់ផ្តើម។</p> <p>បន្ទាប់ពីសិស្សបញ្ចប់ការអានរបស់គេមិនត្រូវផ្អាកអត្ថបទរឿងចេញពីទូចសិស្សទេ។</p>	<p><b>ពិចារណ៍ #៣B. ការអានអក្សរ</b></p> <p>៖ ប្រសិនបើសិស្សមិនឆ្លើយសំណួរ ក្នុងរយៈពេល១០ វិនាទី ចូរកាត់ត្រាថា «គ្មានតម្លើង» ហើយបន្តទៅសំណួរមួយទៀត។ ពិនិត្យស្រស់ស្អាតនោះឡើងវិញទៀត។</p> <p>ៗ ប្រសិនបើសិស្សទិញការកាត់ «ខ្ញុំមិនចេះអានទេ» ត្រូវផ្តល់សញ្ញា (១) នៅខាងក្រោម «មិនត្រឹមត្រូវ»។</p> <p><b>ឥឡូវ ខ្ញុំនឹងសួរប្អូនអ្វីសំណួរមួយចំនួនពីអត្ថបទរឿងដែលប្អូនមើលតាមអក្សររួចរួច។ សូមប្អូនព្យាយាមឆ្លើយសំណួរតាមលំដាប់លំដោយ។</b></p>	<p>ចាប់ផ្តើមកំណត់ពេលវេលានៅពេលខ្ញុំនិយាយថា «ចាប់ផ្តើម» ឱ្យបានត្រឹមត្រូវ។</p> <p>៖ ប្រសិនបើសិស្សស្ទាត់ស្ទើរ ឬឈប់នៅពាក្យណាមួយ ក្នុងរយៈពេល ៣០នាទី សូមបន្តបញ្ជាក់បន្ទាប់ហើយនិយាយថា «ហើយប្រសិនបើ»។</p> <p>ៗ នៅពេលដែលបង្ហាញការយោគដឹងរបស់សិស្សត្រូវនិយាយថា «ឈប់»។</p> <p>៖ ប្រសិនបើសិស្សមិនអានបានត្រឹមត្រូវខ្លះមួយចំនួនដែលគេបានដាក់ពាក្យប្រាប់និយាយថា «អត្ថបទ» សូមបញ្ជាក់ផ្នែកនេះ ហើយគូសគូសប្រាប់ខាងក្រោម ។</p>
<p>៖ (1) ប្រសិនបើសិស្សអានពាក្យណាមួយមិនបានត្រឹមត្រូវ សូមផ្តល់សញ្ញា (១) នេះនៅលើពាក្យនោះ។</p> <p>ៗ (២) ប្រសិនបើសិស្សកែតម្រូវខ្លួនឯងស្របតាមសំណួរដែលខ្ញុំបានសួរ (1) នេះ។ ឬចុះបើគេនឹងប្រើសញ្ញា (១) នៅលើពាក្យដែលគេបានកែតម្រូវនោះ។</p> <p>ៗ (3) សូមផ្តល់សញ្ញា (1) នេះ នៅខាងក្រោមពាក្យដែលសិស្សបានអានបានរយៈពេល ៦០នាទី ហើយអនុញ្ញាតឱ្យសិស្សអានអក្សរអន្តរាគមន៍ដាច់ដាច់។ សូមបញ្ជាក់ឱ្យបានលម្អិតលម្អាតចាប់ពីព្រះ ៦០នាទី ឬ ១៨០នាទី។</p>		

	ចំនួន ពាក្យ	សំណួរ [ចម្លើយ]	ត្រឹមត្រូវ	មិនត្រឹមត្រូវ	គ្មានចម្លើយ
<b>រៀងៗ សណ្តានចិត្តរបស់សុខា</b> <i>(Autostop: 7)</i>	សរុបចំនួនពាក្យ	សំនួរ (ចម្លើយ)			
រៀងរាល់ ថ្ងៃ សុខា តែងតែ ដើរ ទៅ សាលារៀន។	៧ អង់គ្លេស ៧ ខ្មែរ	<b>១. តើសុខាធ្វើដំណើរទៅសាលារៀនរាល់ ថ្ងៃ? (សាលារៀន)</b>			
ថ្ងៃមួយ សុខា បាន ជួប នឹង អ៊ី ពិការ ជើង ដែល ត្រូវការ ជំនួយ។	១៧ អង់គ្លេស ១៨ ខ្មែរ	<b>២. តើសុខាបានជួបនរណា? (អ៊ីពិការ / អ៊ី / អ៊ីប្រុស)</b>			
សុខា បាន ជូន អ៊ី នោះ ទៅ ដល់ ផ្ទះ ដែល នៅ ជិត សាលារៀន របស់ សុខា។	៣០ អង់គ្លេស ៣២ ខ្មែរ	<b>៣. តើសុខាបានធ្វើអ្វីជាមួយអ៊ីទាក់ទងនោះ? (ជូនអ៊ីពិការទៅផ្ទះ)</b>			
អ៊ី បាន កោតសរសើរ នូវ ទឹកចិត្ត ដ៏ល្អ របស់ សុខា ដែល បាន ជូន គាត់ មក ដល់ ផ្ទះ។	៤០ អង់គ្លេស ៤៧ ខ្មែរ	<b>៤. តើអ៊ីសម្តែងអារម្មណ៍យ៉ាងដូចម្តេច ចំពោះសុខា? (កោតសរសើរ)</b>			
សុខា មាន អារម្មណ៍ រីករាយ យ៉ាង ខ្លាំង ដែល បាន ធ្វើ នូវ អំពើ ល្អ បែប នេះ។	៥០ អង់គ្លេស ៦១ ខ្មែរ	<b>៥. តើសុខាជាក្មេងដែលមានទឹកដួចម្តេច? (ចិត្តល្អ / ចេះជួយ / ក្មេងល្អ / ចម្លើយ ផ្សេងទៀតដែលសមស្រប)</b>			
<input checked="" type="checkbox"/> ពេលវេលាដែលនៅសល់ (ចំនួនវិនាទី)					
<input checked="" type="checkbox"/> លំហាត់នេះត្រូវបានបញ្ចប់ ដោយសារសិស្សមិនអាចអានពាក្យណាមួយត្រឹមត្រូវនៅក្នុងល្បះទីមួយ					

**សូមអរគុណ! ប្អូនអាចត្រឡប់ទៅវិញបានហើយ!**