Advance literacy

Caimber accelerates literacy development through automated assessment and personalized learning

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Traditional ORF Testing Models: 1-on-1 Testing

Time Consuming
Possible Human error and bias
Emphasis on speed rather than comprehension
Inconsistent scores
Scores don ot inform instruction

Pedro had just moved from Mexico when
1   2   3   4   5   6   7

he saw an accident. A little boy had
8   9   10   11   12   13   14   15

fallen into an open manhole, and now h
16   17   18   19   20   21   22

leg was caught between two pipes.

24   25   26   27   28   29

Pedro was just ten. He didn't think he *that*

30   31   32   34   35   36   37   38

could rescue the boy alone.

39   40   41   42   43

Timing	1-minute maximum. Start your stopwatch after telling the student to begin. Say *Stop* after 1 minute.
Wait/ Reminder	If the student stops or hesitates for 3 seconds, select *one* of the following (allowed one time): —If the student has not said anything at all, provides a very limited response, or provides an off-track response, say *Tell me as much as you can about the story*. —Otherwise, ask *Can you tell me anything more about the story?*
Discontinue	After the first reminder, if the student does not say anything or gets off track for 5 seconds, say *Thank you* and discontinue the task.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94

Retell Total: _____

Quality of Response: (Note: If the student provides only a main idea, it is considered one detail.)

1 Provides 2 or fewer details

2 Provides 3 or more details

3 Provides 3 or more details in a meaningful sequence

4 Provides 3 or more details in a meaningful sequence that captures a main idea

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The Solution

MOBY.READ

A Fully Automated Self-Administered Oral Reading Fluency Assessment for Grades K-5

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Advantages

MOBY.READ

TARGETED INSTRUCTION: Teachers gain more time to focus on instruction and support of readers.

INNOVATIVE, PERFORMANCE-BASED ASSESSMENT: Developed by leading experts in machine learning, speech recognition technologies, and reading instruction.
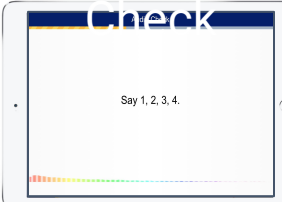
ENGAGEMENT: Elegant, intentional user experience design drives student engagement with the assessment.

EFFICIENCY: Online self-administered and immediately scored = saves time and money.

VALID AND OBJECTIVE: Advanced speech recognition technologies deliver authentic, valid, and objective assessment of key early reading skills.

MOBY.READ

MOBY.READ Benchmark Test

Audio Check
Say 1, 2, 3, 4.

Word List
Read Out Loud
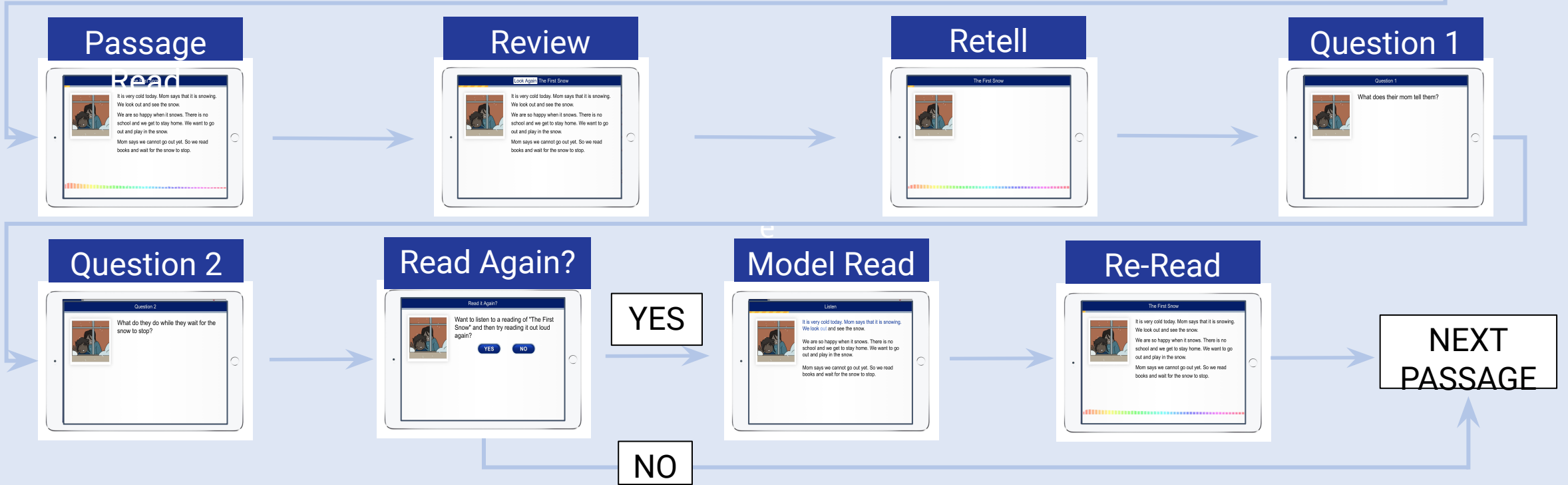can
find
going
stone
season
picked
pieces
motion
engines

Sentence
Read Out Loud

Walking in mud makes a mess.

1 Practice Passage, 3 Scored Passages

Passage Read
It is very cold today. Mom says that it is snowing. We look out and see the snow.

We are so happy when it snows. There is no school and we get to stay home. We want to go out and play in the snow.

Mom says we cannot go out yet. So we read books and wait for the snow to stop.

Review
Look Again   The First Snow

It is very cold today. Mom says that it is snowing. We look out and see the snow.

We are so happy when it snows. There is no school and we get to stay home. We want to go out and play in the snow.

Mom says we cannot go out yet. So we read books and wait for the snow to stop.

Retell
The First Snow

Question 1
Question 1

What does their mom tell them?

Question 2
Question 2

What do they do while they wait for the snow to stop?

Read Again?
Read it Again?

Want to listen to a reading of "The First Snow" and then try reading it out loud again?

YES   NO

YES

NO

Model Read
Listen

It is very cold today. Mom says that it is snowing. We look out and see the snow.

We are so happy when it snows. There is no school and we get to stay home. We want to go out and play in the snow.

Mom says we cannot go out yet. So we read books and wait for the snow to stop.

Re-Read
The First Snow

It is very cold today. Mom says that it is snowing. We look out and see the snow.

We are so happy when it snows. There is no school and we get to stay home. We want to go out and play in the snow.

Mom says we cannot go out yet. So we read books and wait for the snow to stop.

NEXT PASSAGE

Features and Benefits - Benchmarking

- Speech recognition engine
  - Adapted for oral reading fluency application
  - Scoring engines built and tested with school-aged children in real school environments.

- Oral Response to Comprehension Questions
  - Retell - promotes comprehension and vocabulary development.
  - Questions – oral response shows deeper understanding
  - Multi-modal approach fosters language comprehension

- Re-Reads
  - Model highlighting accurate reading at a reasonable rate. and with good phrasing, intonation, and expression

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Features and Benefits - Benchmarking

- Scores and audio recordings available immediately online
  - Enables quick and effective decision making

- Scores on multiple dimensions
  - Moby.Read level, mWCPM, WCPM, Accuracy, Comprehension and Expression
    - Moby.Read level -combination of Rate, Comprehension, and Accuracy.
    - mWCPM based on words correctly read and the difficulty of the passages
    - WCMP - rate at which a student reads words correctly per minute
    - Accuracy - percentage of correctly read words out of the total number of words attempted.
    - Comprehension - how well the student understands the material based on retellings and answers to content questions
    - Expression - the student's ability to read with meaningful phrasing, timing, and intonation – *unique to Caimber*

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Features and Benefits - Benchmarking

- ## Audio Recording
  - For teacher or parent review the Audio Performance page displays four or five recordings: the student's first reading, the student's retelling of the passage, the student's answers to the two short-answer questions, and the second reading of the passage after listening to a model reading

- ## Auto Running Records
  - Automated error analysis of misreads and omissions of each passage read aloud. Passage-level Accuracy, WCPM, and Expression scores
  - Printable records for further analysis

- ## Progress Charts
  - Display current and previous test scores with corresponding Automatic Running Records

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Scores in Running Record

Audio

MOBY.READ

Benchmark   Progress Monitor

Roster   Assignment   Charts   Audio   Resources ▸

Log Out

2021-22: Fourth Grade   DOR33398: Ellaria Sand

ID	Alias	Student	Token	Form	Level	mWCPM	Acc	Comp	Expr	Date
DOR33398		Ellaria Sand	TIRAF	BM - 4W	mO	110	Instr	5.0	3	29 Jul 2021

✔ Squirrels   ○ Chocolate   ○ Storm at Sea

Running Record

Flying Squirrels

Birds and bats can fly. But they aren't *the* only animals that can soar through the air. *Flying* squirrels can glide between tree branches.

These squirrels have a membrane, a *thin* piece of skin, between their front and back legs that catches the air when they jump. Flying squirrels *don't* actually have powered flight, like a bird or a bat. However, they can *coast* briefly on the wind before *landing* safely in a tree.

Taking a cue from these *gliding* squirrels, some human skydivers wear special suits modeled after the *flying* squirrel. They use these suits to guide their flight as they *soar* through the air. Among the flying animals of the world, we *should* include flying squirrels and some humans!

LEGEND
misread
omission
unread text

E
1
1
0
1
0
1
1
1
1
1
1
1
0
10

Passage Scores

Accuracy
92%

WCPM
103 WCPM

Expression
3 OF 4

Self-Corrects Rarely

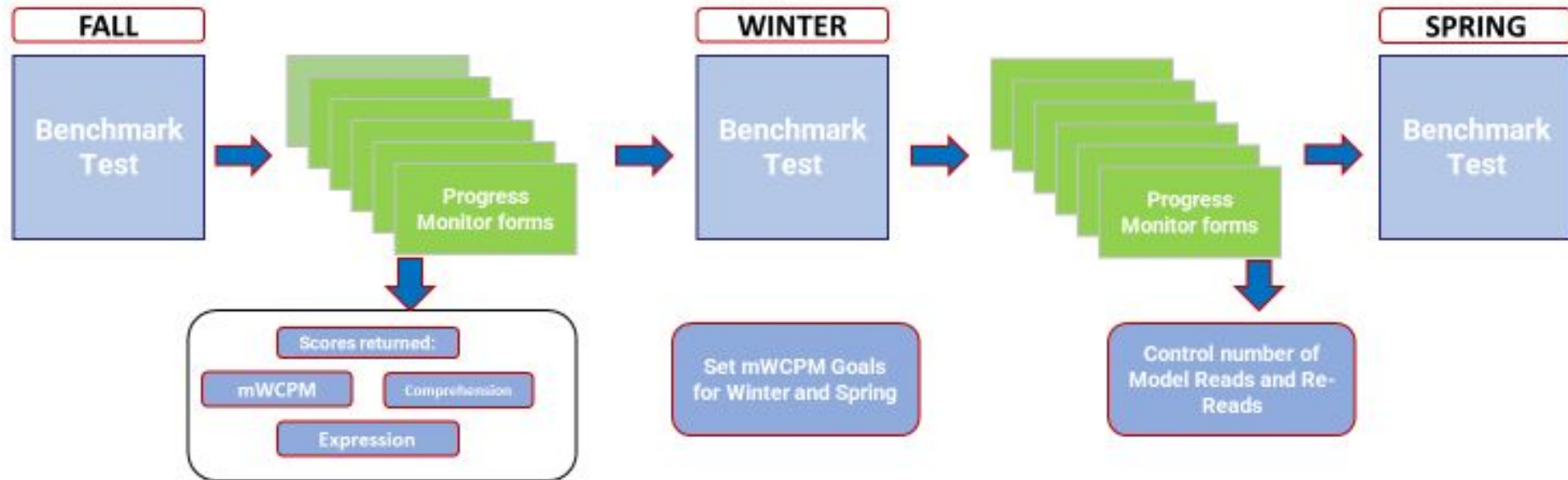PLAY: ● PASSAGE   ○ RETELL   ○ QUESTION 1   ○ QUESTION 2   ○ RE-READ

Reading Duration: 1.082 Minutes

Standardized method to evaluate a student's progress toward reading target

- Evaluate the effectiveness of instruction or intervention

- Progress charts show rate of improvement

- Over 100 passages at Grades K-5
  - Customize Winter and Spring WCPM goals
    - Goals auto mapped to progress charts
  - Options to choose passage and number of reads
  - Oral responses for comprehension, scoring, audio recordings and re-reads available.
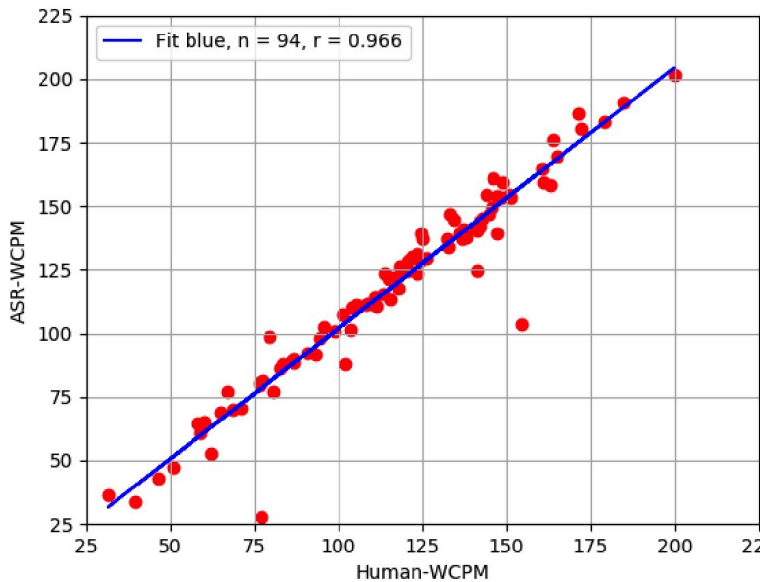
- Consistent UI/UX with benchmarking

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Validity: Human scores – Machine Scores

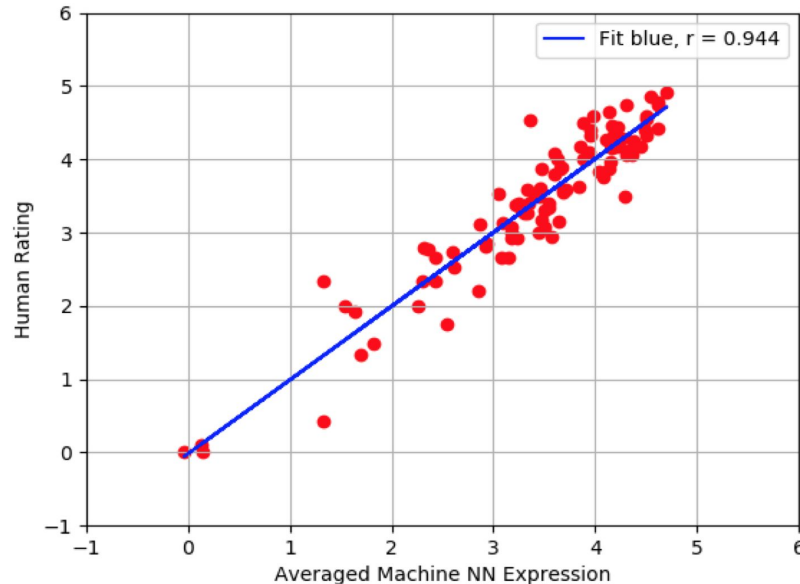**Accurate Reading Rate (WCPM)**

Average Human vs. *Moby.Read*
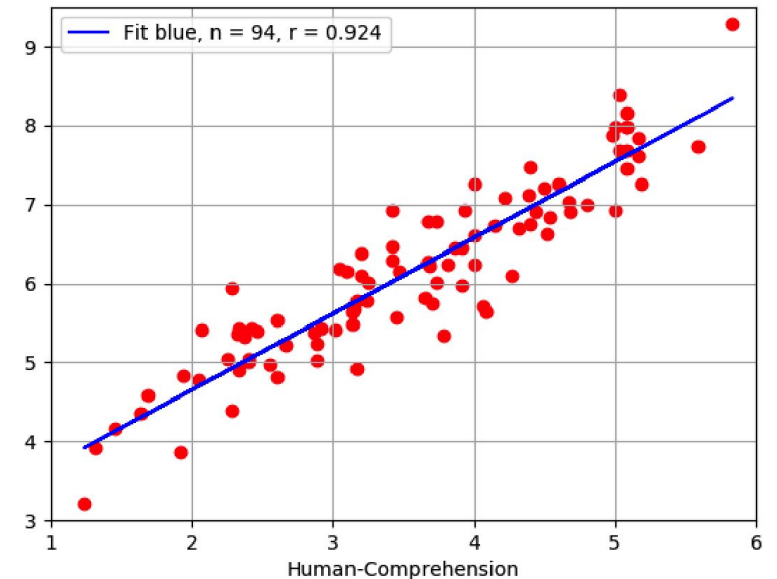Human Inter-rater reliability = 0.99
r(Moby, Average Human) = 0.97

Expression

Average Human vs. *Moby.Read*
Human Inter-rater reliability = 0.88
r(Moby, Average Human) = 0.94

Comprehension

Average Human vs. *Moby.Read*
Human Inter-rater reliability = 0.84
r(Moby, Average Human) = 0.92

In Development

- In-depth analysis of benchmark oral readings to identify strengths and weaknesses in basic reading skills – consistent with SOR
- Dynamic, interactive report pages that rate and illustrate the student's basic reading skills as analyzed from recorded benchmark performances
- Reduce or eliminate number of assessments required to provide appropriate instruction
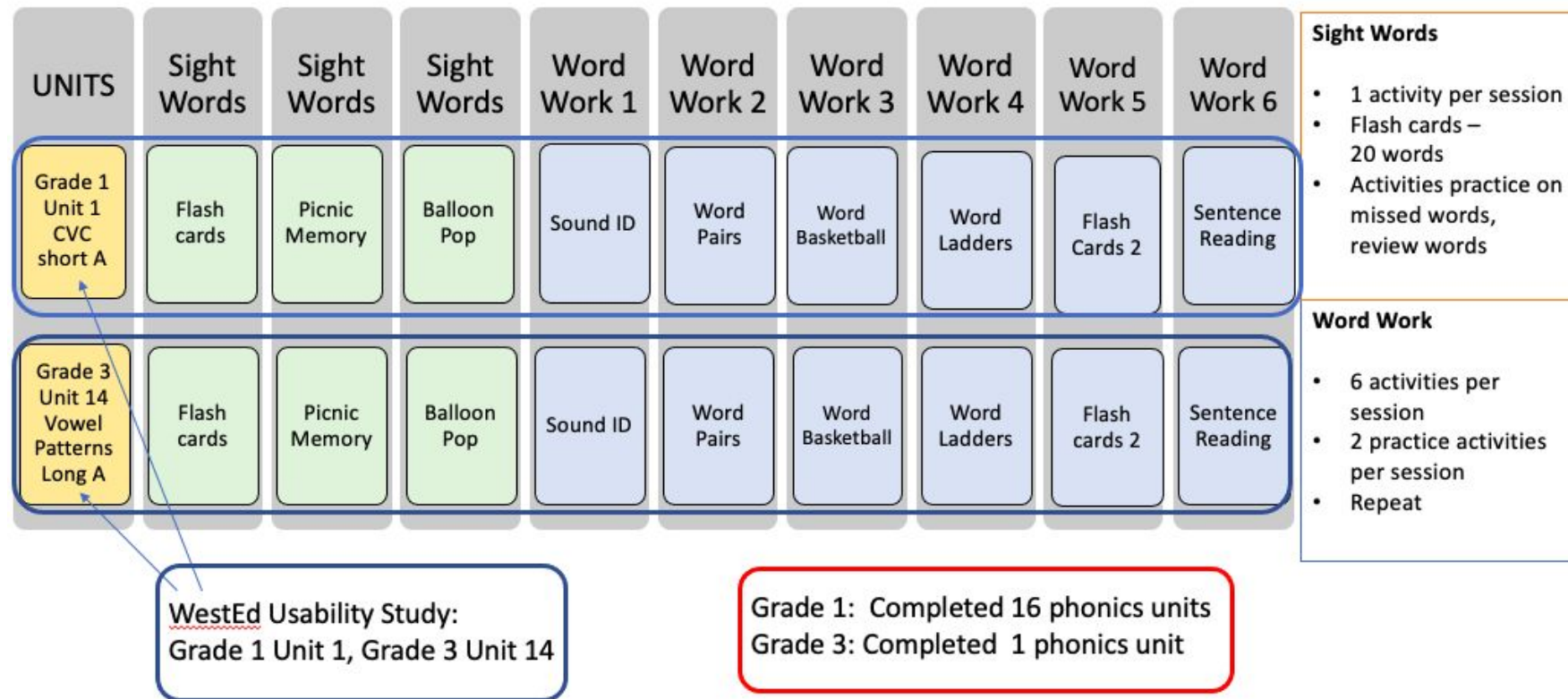- Teacher and/or system created custom lessons

- Illustrate strengths and weaknesses for students and teachers
- Practice for students in areas for improvement
- Skill-specific level measurement with skill-specific learning activities
- Multi-modal approach to multi-literacies
- Refined skill reporting for teachers and parents
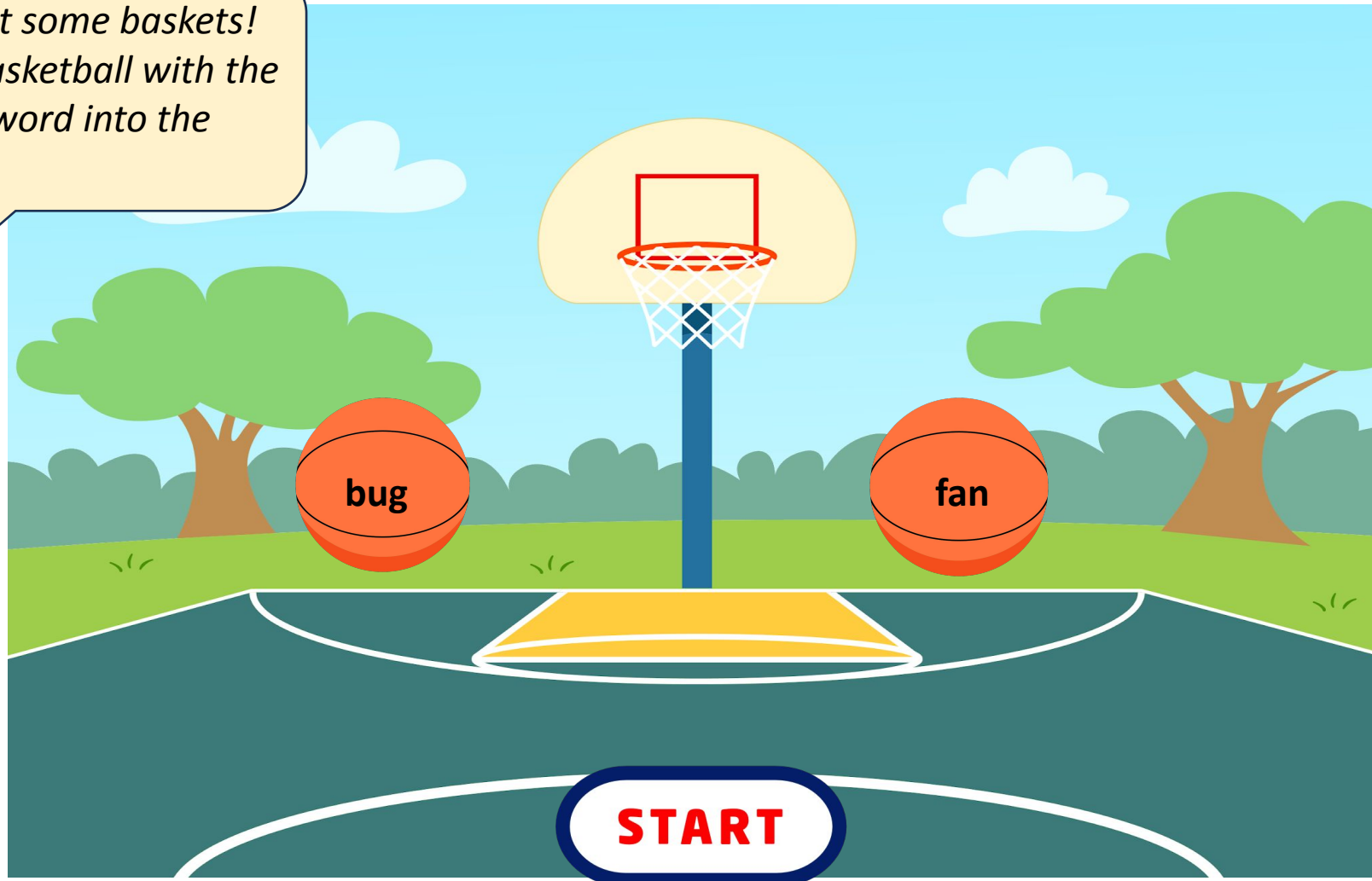- Personalized learning paths

Sample – Word Work

Word Work

- 15-min. practice session * 3 days a week (set up 5 min., activity 10 min.)
- 1 Sight word practice activity and 2 WordWork practice activities per session
- 1st grade phonics 16 units total; 3rd grade estimated 25 units total

UNITS	Sight Words	Sight Words	Sight Words	Word Work 1	Word Work 2	Word Work 3	Word Work 4	Word Work 5	Word Work 6
Grade 1 Unit 1 CVC short A	Flash cards	Picnic Memory	Balloon Pop	Sound ID	Word Pairs	Word Basketball	Word Ladders	Flash Cards 2	Sentence Reading
Grade 3 Unit 14 Vowel Patterns Long A	Flash cards	Picnic Memory	Balloon Pop	Sound ID	Word Pairs	Word Basketball	Word Ladders	Flash cards 2	Sentence Reading

Sight Words

- 1 activity per session
- Flash cards – 20 words
- Activities practice on missed words, review words

Word Work

- 6 activities per session
- 2 practice activities per session
- Repeat

WestEd Usability Study:
Grade 1 Unit 1, Grade 3 Unit 14

Grade 1: Completed 16 phonics units
Grade 3: Completed 1 phonics unit

Word Basketball

Sample – Fluency Work

FLUENCY PRACTICE ACTIVITIES

- 15-min. practice session * 3 days a week (set up 5 min., activity 10 min.)
- 3 skill building activities per practice session
- 8 weeks per term (24 practice sessions in total)

Unit 1: P1	Unit 2: P2	Unit 3: P3	Unit 4: P4	Unit 5: NP1	Unit 6: NP2	Unit 7: NP3	Unit 8: P1a-3a	Unit 9: P4a, NP1a-2a	Unit 10: NP3a & Review
1a: Phrasing	2a: Phrasing	3a: Phrasing	4a: Phrasing	1a: Phrasing	2a: Phrasing	3a: Phrasing	P1a: Repeated Reading	P4a: Repeated Reading	NP3a: Repeated Reading
1b: Punctuation /Expression	2b: Punctuation /Expression	3b: Punctuation /Expression	4b: Punctuation /Expression	1b: Punctuation /Expression	2b: Punctuation /Expression	3b: Punctuation /Expression	P2a: Repeated Reading	NP1a: Repeated Reading	Review
1c: Passage Practice	2c: Passage Practice	3c: Passage Practice	4c: Passage Practice	1c: Passage Practice	2c: Passage Practice	3c: Passage Practice	P3a: Repeated Reading	NP2a: Repeated Reading	Review

Week 1-6: Basics
a. Phrase-level
b. Sentence-level (punctuation / expression)
c. Passage-level

Week 7-8: Apply your Skills
Repeated reading (Model Listen & Re-Read)

x = N
- Px: Moby benchmark passage
- NPx: New passage
- Pxa: Parallel Moby benchmark passage
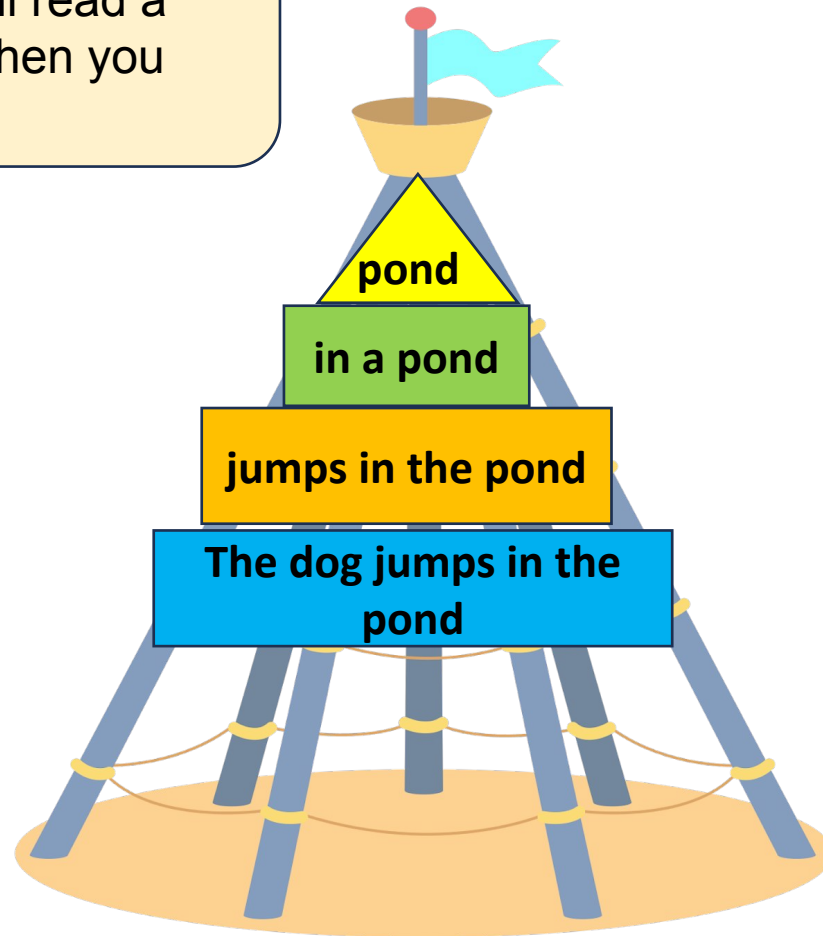- NPxa: Parallel new passage

Completed Grade 3 Winter: In development Grade 1 Winter, Grade 3 Fall

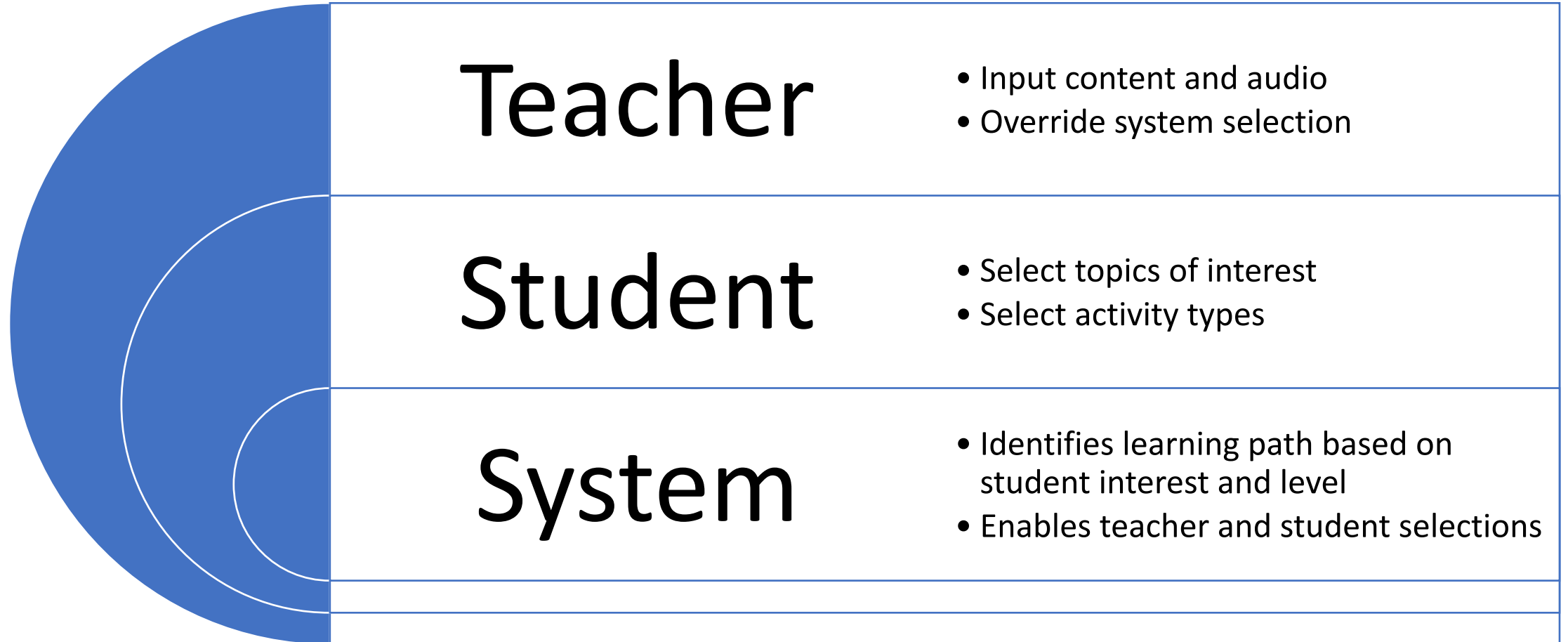West Ed Usability Study Grades 1,3 Week 5 Winter

Sentence Pyramid

Multi-Modal /Multi-Literacy Approach

Teaches concepts through visual, auditory, reading and writing

- Speech recognition guides students through instruction and provides oral practice
  - Reduce "point and click"
- Cross-curricular readings to develop literacy
- Persuasive, narrative, expository, and descriptive writing activities automatically scored
- Activities to practice visual , audio, and digital literacy

For more information

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Email us @ **info@caimber.com**

For a Moby.Read demo:

https://www.amiread.com/login/demo