



## Analyzing Alignment in Early Grade Reading Curricula, Instruction, and Assessment in Nepal:

### The Surveys of Enacted Curriculum Approach

*Jodie Fonseca, Senior Education Advisor, RTI International*  
*Presentation at the CIES Conference, Washington, DC*  
*21 February 2023*



**NATIONAL EARLY GRADE READING PROGRAM**

## Questions...

- Are curriculum, instruction, and learning assessments in your country well aligned?
- *How do you know?*
- *Why is alignment important?*

### What is the Surveys of Enacted Curriculum (SEC)?

- An educational research tool for analyzing alignment among different instructional components, such as curriculum standards, classroom instruction, and assessments (Blank, Porter, & Smithson, 2001; Smithson, 2013)
- Originally developed in the United States but RISE has adapted it to lower- and middle-income countries
- <https://riseprogramme.org/tools/surveys-enacted-curriculum>

## What are the SEC Steps?

Work with experts to code the curriculum & assessment content and rate the level of cognitive demand



Survey teachers on their content coverage and pedagogy



Analyze the alignment between curriculum expectations, actual instruction, and assessment

आ कृति

Coding the Curriculum Content

आ कृति

NATIONAL EARLY GRADE READING PROGRAM

An example of one type of Nepal language lesson in the early grades.

## Coding Content: What Students Should Know

100	Phonemic awareness वर्ण सचेतीकरण	100	Phonemic awareness वर्ण सचेतीकरण
200	Phonics वर्ण	101	Phoneme isolation (e.g., the distinct sounds /c/, /a/ and /t/) वर्ण विच्छेदीकरण (उदाहरण: बसस = क/अ/स)
300	Vocabulary शब्दभण्डार	102	Phoneme blending (e.g., c/a/t = cat) वर्ण जोडाउ (उदाहरण: क/अ/स = कसस)
400	Text and print features पाठ्यक्रममा तथा मुद्रण विशेषता	103	Phoneme segmentation वर्ण विच्छेदन (कोली = कु+ली, सु+नी)
500	Fluency पठन प्रवाह	104	Onset-rime अक्षरम अन्त
600	Comprehension पठन बोध	105	Sound patterns वर्णबिंबा
700	Critical Reasoning तार्किक चिन्तन	106	Rhyme recognition अनुप्रास पहिचान
800	Author's craft लेखकीय कला	107	Phoneme deletion, substitution, and addition वर्णहटाउ, प्रतिस्थापन र थप्दाउ
900	Writing processes लेखन प्रक्रिया	108	Identify Syllables अक्षर संयन्त्र पहिचान (उदाहरण: अमिलो = अ+मि+लो, मकल = म+कल, खटल = खट+ल)
1000	Elements of Presentation (Verbal and Written) प्रस्तुतीकरणका तत्वहरू (वार्ताक र लिखित)	109	Describe Picture चित्र वर्णन
1100	Writing applications लेखन प्रयोग	190	Other अन्य
1200	Language Study भाषा अध्ययन		
1300	Listening and Viewing सुन्नु र हेर्नु		
1400	Speaking and Presenting बोल्नु र प्रस्तुती		
1500	Forms of Text पाठको स्वरूप		
1600	Genre (Fiction or non-fiction) विधाभेद (आकथनवाचक र अआकथनवाचक)		

The Nepali lesson on the previous slide is an example of phonemic awareness content – specifically phoneme blending.



Rating the Level of Cognitive Demand



NATIONAL EARLY GRADE READING PROGRAM

Here the teacher asks students to complete the phoneme (syllable) blending activity in their workbooks. The second picture shows what a similar exercise looks like in the curricular materials.

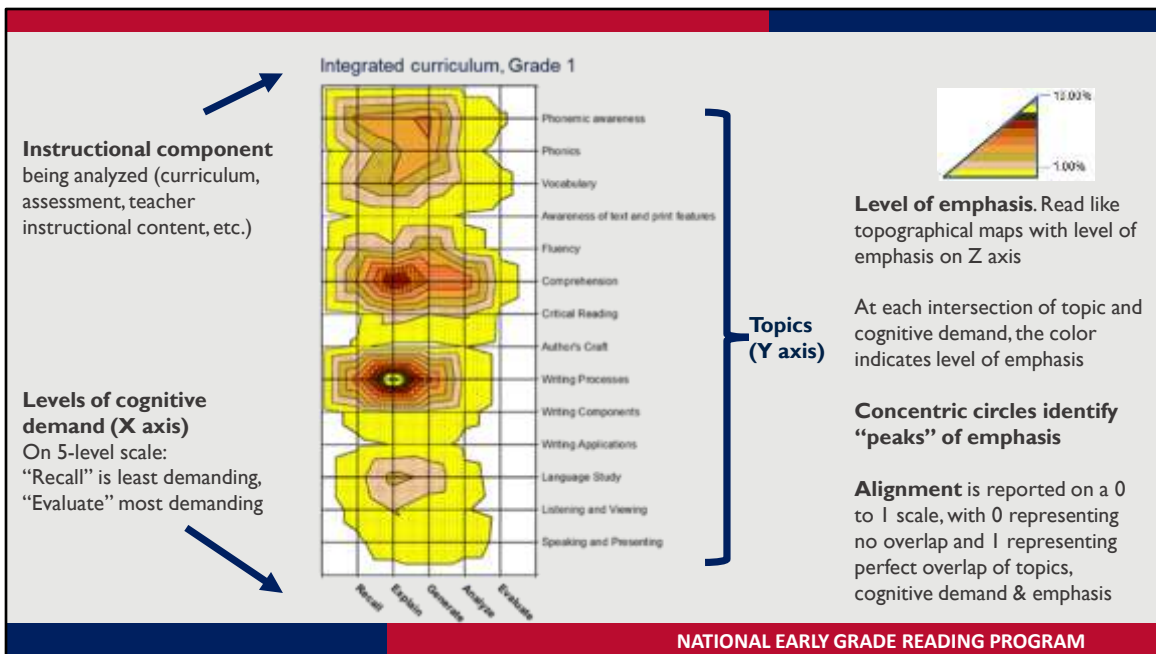
### Rating Cognitive Demand: What Students *Should be Able to Do*

Level of cognitive demand	Illustrative definition
Memorize/Recall	Recognize, identify, or recall facts, definitions, or formulas
Explain/Perform Procedures	Perform procedures, solve routine problems, do computations, make observations, take measurements
Generate/Demonstrate understanding	Communicate ideas, explain findings from analysis, explain reasoning
Analyze/Conjecture	Make and investigate conjectures, infer and predict
Evaluate/Apply to non-routine problems	Apply and adapt strategies, solve novel problems, make connections

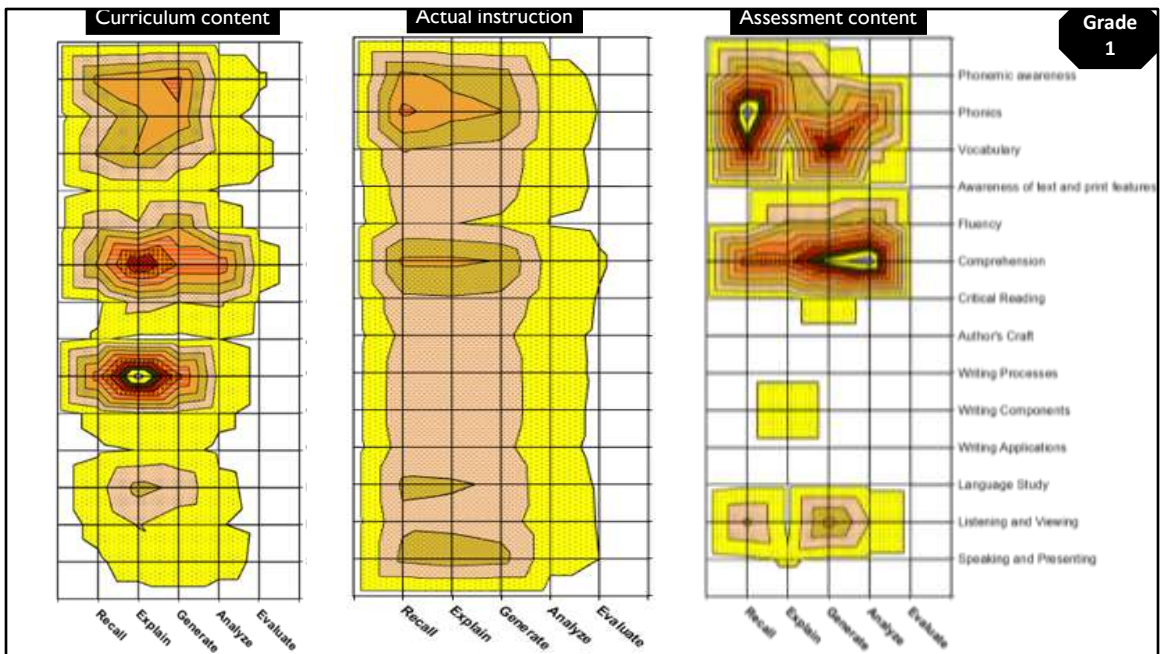
NATIONAL EARLY GRADE READING PROGRAM

The activity the teacher had the students do on the previous slide was an example of the “perform procedures” level of cognitive demand.





How to read the heat maps that are generated through the quantitative analysis of curriculum-instruction-assessment alignment in the SEC methodology.



This slide shows the heat maps for grade 1 Nepali language subject for curriculum content, actual instruction, and assessment content of the CB-EGRA

Curriculum content	Actual instruction	Assessment content
<ul style="list-style-type: none"> <li>• The grade I curriculum covers a broad range of content</li> <li>• Most emphasis is on comprehension (22%) and writing processes (21%)</li> <li>• Cognitive demand focuses on the middle levels of “performing procedures” (36%) and “demonstrating understanding” (31%)</li> </ul>	<ul style="list-style-type: none"> <li>• Grade I teachers also cover a broad range of content</li> <li>• Phonics (12%) and comprehension (11%) receive the most emphasis</li> <li>• Nearly equal emphasis on the first three cognitive demand levels: memorize/recall (32%), perform procedures (31%), and demonstrate understanding (29%)</li> </ul>	<ul style="list-style-type: none"> <li>• Classroom-based early grade reading assessments (CB-EGRAs) are highly focused on specific content</li> <li>• And cover broader cognitive demand areas up to the “Analyze” level</li> </ul>

NATIONAL EARLY GRADE READING PROGRAM

Further explanation of what the heat maps on the previous slide are showing. An important note is that the CB-EGRA is only one of the assessment tools used in Nepal and it is designed to measure specific foundational skills. Other assessments may have higher alignment with the curriculum and actual instruction.

(Things I haven't shown you but will be in the report...)

- Progression of content and cognitive demand in the curriculum and the assessment tools across grades 1-3
- Mapping of assessment content against actual student average scores on the assessment
- Urban/rural differences in findings

NATIONAL EARLY GRADE READING PROGRAM

This presentation is just an introduction – the full report will have much more detail, including the points on this slide.

## Key Take-Aways

+

- The methodology provided a systematic opportunity for analyzing the new curriculum
- Engaged a wide range of stakeholders across curriculum, teacher training, and assessment functions
- Built local capacity for this type of in-depth analysis
- Allows for disaggregation - rural/urban, language, etc.
- Can be used at various points, but need to consider the best staging

~

- Not a rapid methodology – requires time, resources, and technical know-how
- Doesn't necessarily explain the “why” – qualitative research can address this



*For example: In a related qualitative study, Grade 1 teachers felt that the curriculum was challenging for students who had not attended ECD – which may explain why they emphasized certain areas and cognitive demand levels over others*

NATIONAL EARLY GRADE READING PROGRAM

*Teachers in Salyan District discussing the level of cognitive demand in the IC during the orientation on the Surveys of Enacted Curriculum (SEC) methodology. (Photo credit: Birendra Dash)*

## Partners and Acknowledgements

- Design, capacity development, analysis, and reporting by the Research on Improving Systems of Education (RISE) Programme



- In country study implementation through the Early Grade Reading Program II (EGRP II) in Nepal:



**NATIONAL EARLY GRADE READING PROGRAM**

This study was a collaboration between multiple stakeholders as listed on the slide.



—  
**Thank you!**



**NATIONAL EARLY GRADE READING PROGRAM**