Teacher Usage of Reading Benchmarks Pilot Study

Ms. Asanda Lobelo (UCT; J-PAL Africa); Dr Nompumelelo Nyathi-Mohohlwane (Department of Basic Education); Ms. Lesang Sebaeng (Department of Basic Education); Ms. Zamangwe Zwane (Department of Basic Education); Dr Ramashego Mphahlele (UNISA); Prof. Cally Ardington (UCT)









Background & Context

Using Benchmarks

- How can benchmarks be used in the classroom setting?
- In order to identify at-risk learners, teachers need to accurately assess
- Results of accurate assessment are needed to adapt teaching to meet learner needs

NATIONAL AND PROVINCIAL ADMINISTRATION	SCHOOL	CLASSROOM
Establishes definition of reading proficiency	Standards and targets that school leaders can aim towards	Standard against which to measure learner skills
Clearly communicates standards and targets	Standardises assessment practices across and within schools	Identify early on learners at risk of not being able to read
Monitor progress	Identify the extent of remedial support required	Adapt instructional focus to meet learners' needs

What we know about formative assessment practices

- Teachers face many challenges like inadequate training and support, limited reading resources and time constraints (Kanjee & Bhanda, 2022)
- Large class sizes and teacher-led pedagogies mean limited opportunities for individualised assessment and feedback (Hoadley, 2018; Kanjee, 2020)
- Weak link between assessment results and learner abilities (Lam et al., 2011; Van der Berg & Shepherd, 2015; Ardington & Meiring, 2020)
- Teachers are unable to use formative assessment to identify learning gaps and support learning (Mkhwanazi et al., 2014; Kanjee, 2020; Kanjee & Bhanda, 2022)
- There are inefficiencies at multiple stages in the formative assessment process

Linkages with Differentiated Instruction

- Growing interest in targeting and differentiating instruction in developing country contexts as it has shown success in improving learning outcome (Banerjee et al., 2007; Bassi et al., 2020)
- To target instruction, teachers need to 1) Know where learners are, 2) Understand learning needs in relation to where learners should be, 3) Understand how to address those needs, 4) Be willing and able to do so (William & Thompson, 2007)
- Benchmarks can improve formative assessment process by serving as a lens through which teachers can interpret learner scores into learning needs
- Enables teachers to adapt or target their instruction and hence improve learner performance

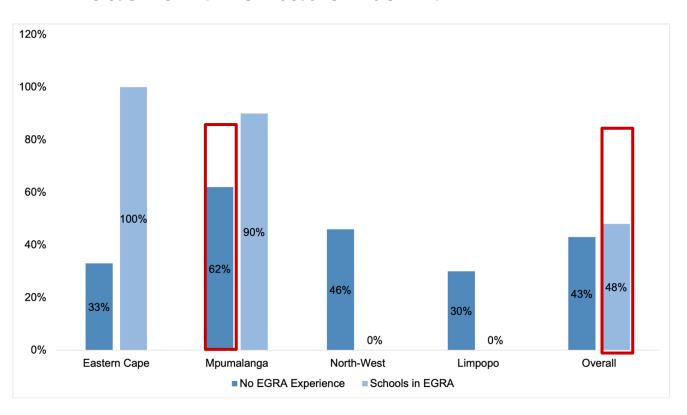
Research Aims & Questions

1) Inform our understanding of teachers' use of the EGRA tool and general assessment practices with respect to reading in the foundation phase

1) To implement and evaluate a pilot intervention to introduce newly established African language benchmarks into foundation phase classrooms

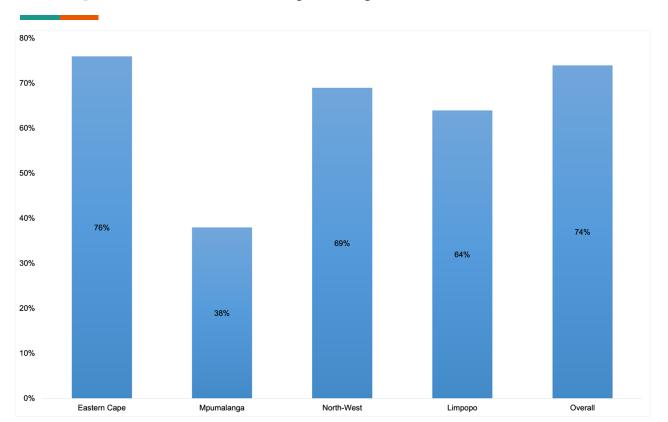
Home Language EGRA Assessment Practice

Teacher Orientation to EGRA



- 48% of teachers report not having exposure to EGRA
- Mpumalanga, where 90% of school were in EGRA roll-out, had the highest proportion of "non-trained" teachers

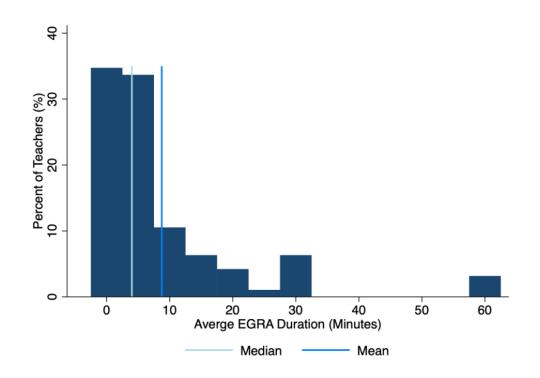
Completed EGRA by May



Of teachers who report having exposure to EGRA, 74% had completed a round of assessment by May

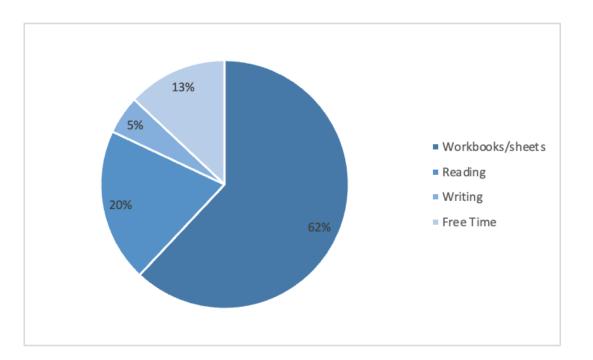
How long does an average EGRA last?

- Mean of 8.74 minutes but it is artificially pulled upwards by outliers
- Median of 5 Minutes
- Mean class size of 46 learners takes approximately 4 contact hours = 2 weeks of GGR lessons



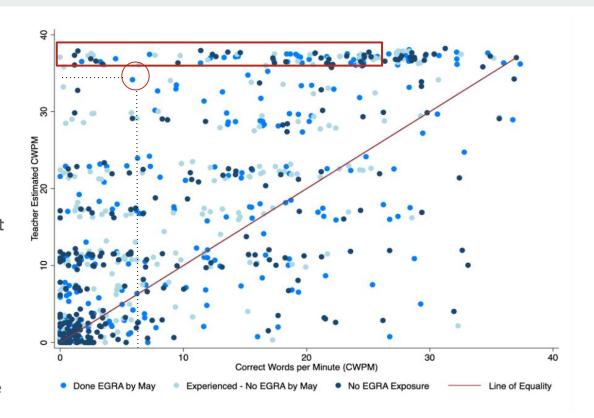
Do teachers make up "lost" instruction time?

 Teachers manage the classroom during individual assessment by assigning workbooks or worksheets



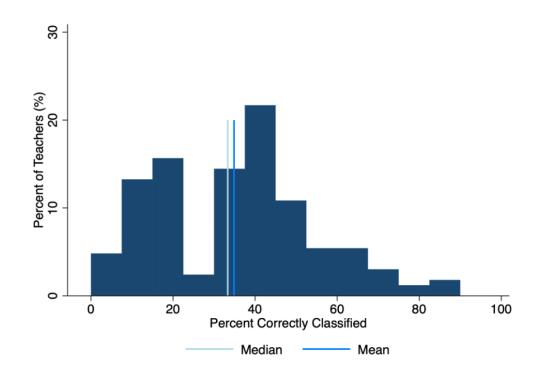
Assessment Efficacy

- Teachers tend to overestimate
- E.g this learner read 7 words correct but their teacher said they read 34 words correctly
- Dots on the line of equality indicate a teacher perfectly estimated the learner's score
- For learners who teachers say finished the passage (37 words), the range of their actual score is large
- EGRA training and experience does not seem to make teachers more accurate



Assessment Efficacy

- For each teacher, we calculate the % of learners they correctly classified
- Average: 37%
- Teachers classify 4 out of 10 learners correctly



Intervention Details

Early Grade Reading Assessment (EGRA) Tool

- A diagnostic test that enables teachers to assess learners' ability to perform foundational reading skills
- Language-adaptable, cost-effective and designed for easy administration without specialized knowledge
- To enhance formative assessment practices in reading, DBE rolled this tool out to primary schools
- Prior to recent evidence-based benchmarking efforts, the attainment criteria was formulated solely through expert knowledge
- Teachers face challenges in implementing the EGRA tool

Intervention Description

The intervention aims to improve the efficiency of formative assessments through

- Introducing teachers to the newly established early grade reading benchmarks for the foundation phase LoLTA in their school
- Facilitating meaningful interpretation of the EGRA results by linking them to the benchmarks
- Simplifying the administration of EGRA, reducing the cognitive burden and the time taken to conduct the assessment with each learner.
- Providing teachers with high level guidance on the appropriate use of the benchmark categories in the classroom over and above the assessment component

Early Grade Reading Benchmarks Cont.

The reading benchmarks were introduced to intervention teachers in colour coded categories.

Oral Reading Fluency Benchmark Categories

	NI LANGUAGE NG CATEGORI		SESOTHO-SETSWANA LANGUAGES READING CATEGORIES						
Category	Grade 2	Grade 3	Category	Grade 2	Grade 3				
Non-Reader	0	0	Non-Reader	0	0				
Struggling Reader	1-9 1-19		Struggling Reader	1-19	1-39				
Emerging Reader	10-19	20-34	Emerging Reader	20-39	40-59				
Proficient Reader	20-34	35 and above	Proficient Reader	40-59	60 and above				
Fluent Reader	35 and above		Fluent Reader	60 and above					

Letter Sound Knowledge Benchmark Categories

Category	Grade 2 and 3
Non-Reader	0
Struggling Reader	1-25
Emerging Reader	26-39
Proficient Reader	40 and above

These categories are helpful for teachers to find out whether their learners are on track to attaining the target at the end of the year as the terms progress and how many words they need to gain to meet the benchmark.

Intervention Design Cont.

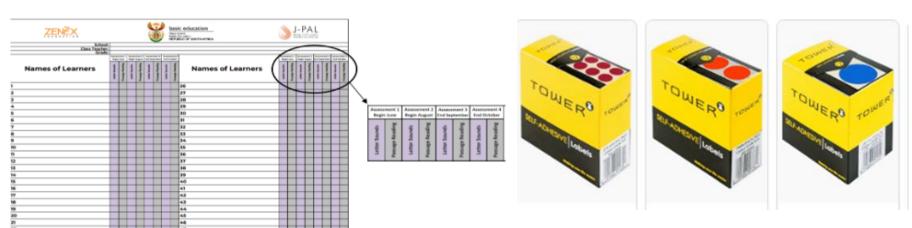
The EGRA tool was further adapted by color coding the charts of the two sub-tasks used for the intervention with the colour corresponding to the benchmark levels.

Only the teacher version of the assessment charts are code coded, the versions for use by learners are not colour coded

Chart 2 – PASSAGE READING	Chart 2 – PASSAGE READING							
UJabu unenja encinane.	UJabu unenja encane.	3						
Ngenye imini uJabu nenja yakhe	Ngelinye ilanga uJabu nenja yakhe	8						
baya kudlala ebaleni.	baya kuyodlala enkandla.	11						
Inja yabona umvundla yazama ukuwuleqa.	Inja yabona unogwaja yase yawujaha.	16						
Yalahleka inja.	Inja yalahleka.	18						
UJabu wayikhwaza kodwa ayizange ibuye.	UJabu wayimemeza kodwa yangabuya.	22						
UJabu walila wade wagoduka.	UJabu wakhala wase ephindela ekhaya.	27						
Kodwa kwathi phambi kwangorhatya yabuya inja.	Kodwa kwathi ngaphambi kokuhlwa inja yabuya.	33						
UJabu wavuya ukubona umhlobo wakhe.	UJabu wajabula ukubona umngani wakhe.	38						

Intervention Design Cont.

The intervention also consisted of learner progress charts which were handed to teachers along with stickers matching the reading level colour codes to use on the progress charts. These charts were adapted from the original EGRA recording sheet



Frequency of Assessments

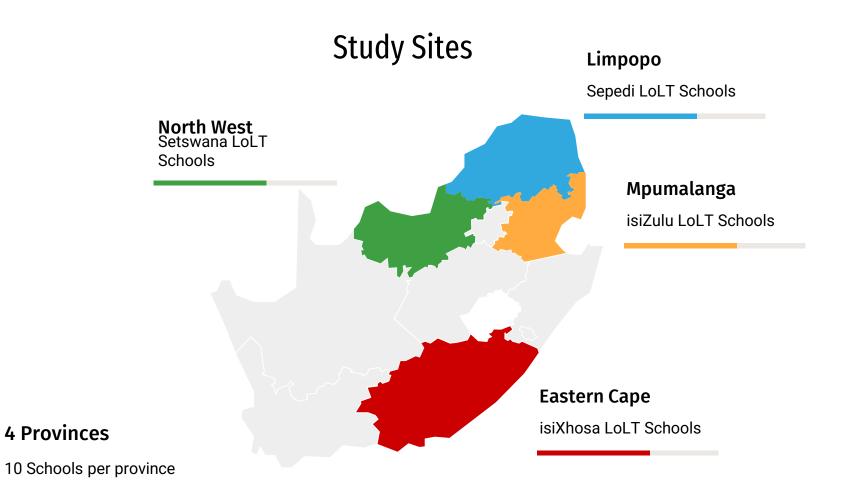
- Teachers were asked to assess learners four times between June and October on Letter Sound Knowledge and Oral Reading Fluency using the intervention materials
- According to CAPS Instructional time for Grade 2 and 3, a maximum of 8 hours and a minimum of 7 hours are allocated for home language per week
- To implement our Assessment, teachers could utilise two consecutive weeks of Group Guided Reading to assess learners

	GRADE 2		GRADE 3 Total per week						
HOME LANGUAGE	Total per week								
Listening & speaking	15 minutes per day for 3 days	45 minutes	s 15 minutes per day for 3 days 45						
Reading & phonics	Phonics: 15 minutes per day for 5 days (1 hour)	4 hours 30 minutes	Phonics: 15 minutes per day for 4 days (1 hour) 4 hours 30 minutes						
	Shared Reading: 20 minutes per day for 3 days (1 hour)		Shared Reading: 20 minutes per day for 3 days (1 hour)						
	Group Reading: 30 minutes per day (2 groups each for 15 minutes for 5 days (2 hours 30 minutes)		Group Reading: 30 minutes per day (2 groups each for 15 minutes for 5 days (2 hours 30 minutes)						
Handwriting	15 minutes per day for 3 days	45 minutes	15 minutes per day for 3 days	45 minutes					
Writing	15 minutes per day for 4 days	1 hour	20 minutes per day for 3 1 ho						
	Total per week	7 hours	Total per week 7 hours						

Interpretation of assessment results

- When assessing learners periodically, the teacher checks the progress of each learner to see how far or close they are to reaching the benchmark for that grade.
- Teachers should then be able to adapt their instruction in support of learner's needs.
- To do this teachers were directed to the National Framework for the teaching of Reading in African Languages in the Foundation phase.
- Intervention teachers were also directed to an <u>online teacher development platform</u> to help strengthen their pedagogical practice

Research Design

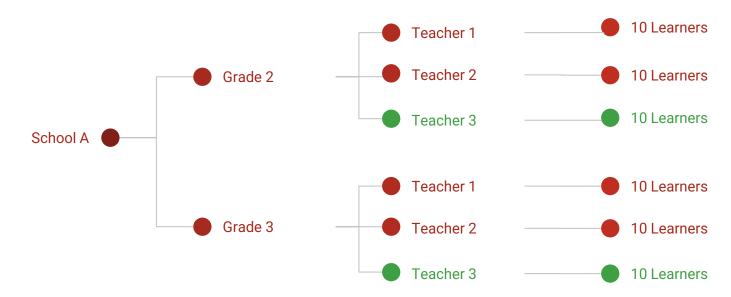


Sample

- Sampling Frame: Schools that have been part of DBE EGRA programme in Mpumalanga, Eastern Cape, Limpopo and North-West
 - O Intention: Build on and refine existing assessment practices rather than introduce EGRA to schools
- Sample Selection: Quintile 1-3 Schools, min. 3 classes in each of grade 2 &3
 - O Randomly selected schools amongst this group
- Sampling Issues: North West & Limpopo

Province	EGRA	Non-EGRA
Eastern Cape	10	0
Mpumalanga	9	I
North West	0	10
Limpopo	0	10

Teacher & Learner Sample



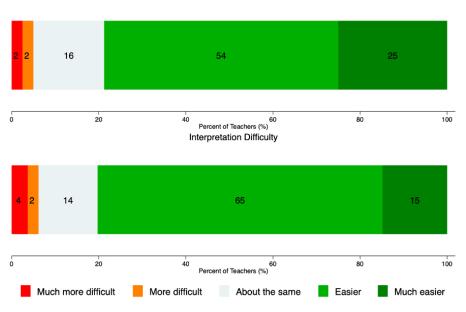
Total Sample Size: 40 Schools, 240 Teachers & 2400 Learners

Results

Intervention Feedback

Intervention Ease of Interpretation and Administration





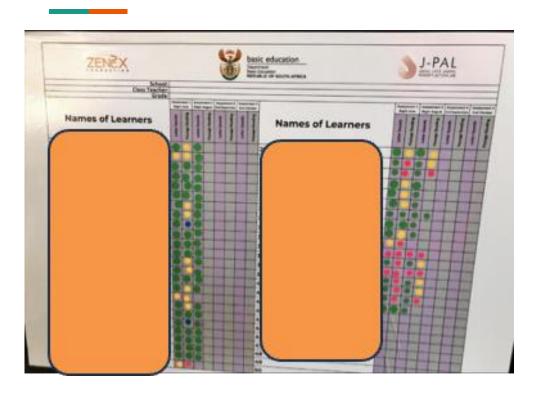
Teacher Understanding of Intervention

- Teachers did not understand the intervention as a formative assessment tool
- Teachers were concerned with learners not being able to complete charts within 1 minute
- Some teachers made copies of charts for learners to practice



Credit: Dr Ramashego Mphahlele

Progress Charts



- "There is a change ... It makes it easier now because you begin the assessment knowing where the learner is, their abilities"
- "... you see everyday that this [learner] needs help."
- "because these stickers are in different colour, [learners] wish to improve and get to the other level".

Other Challenges

- **Time Constraints**: "... lessons that needs to take place, there are meetings that we need to go to. So, time and the amount of the workload that is there in a day."
- Large Class Sizes: "....it was a challenge for us to or maybe let me say for me to be able to do that the assessment with all the learners in the in the given timeframe"
- **Crowded Classrooms and Overhearing**: "By the time we get to the seventh learner, they already memorised the passage"
- "Even the learner who is unable to read will follow the story and listen. If there is one passage read, all the time, the struggling readers memorise the passage from those that were assessed already in class. When you assess the struggling reader, they will recite the passage without looking at the text"

Classifying Intervention Use

	Frequency	Proportion
Treatment – high use	51	41%
Treatment – other	74	59%
Total	125	

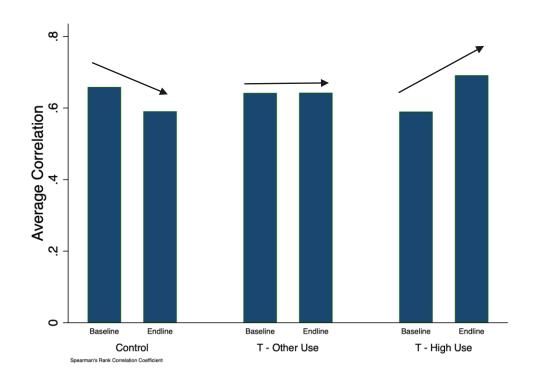
Note: Sample excludes the school where no teachers attended training.

• We were able to verify appropriate use for 51 teachers in the treatment group using pictures

Impact of the Intervention

Correlation

- The only group that improved were Treatment High Use Teachers
- Treatment (overall) teachers correlation score improve by 0.1 points relative to control
- T-high use improve by 0.12 relative to control



Summary of Findings

EGRA Practices

- Individualised Formative Assessment is poorly understood
- Inconsistencies in training received from DBE and teacher confirmation
- Large classes would take7 hours to assess

Assessment Practice

- 48% of teachers report having no exposure to EGRA
- 26% of teachers with EGRA exposure had not conducted an EGRA by May
- Teachers correctly classify 4 of 10 learners

Intervention

- Variable Take-up: 41% of treatment were high use
- Majority of teachers found it to be an improvement over EGRA
- Intervention improved teacher knowledge especially for high use teachers
- Challenges: Time constraints and crowded classrooms leading to memorization of assessment passage

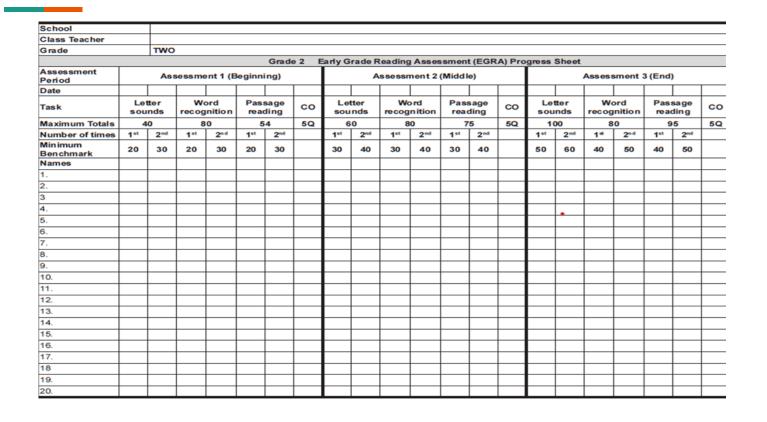
Recent Updates to EGRA Tools

Early Grade Reading Benchmarks: Reading Categories

CRITERIA: Number words correct in o IsiZulu, IsiXhosa, Is Siswati Grade 2	one minute for					
	Letter Sounds	Word Recognition	Passage Reading			
Term 1						
Non-Reader	0	0	0			
Struggling	1-25	1-9	1-9			
Reader	1-25	1-3	1-3			
Emerging Reader	26-39	10 - 19	10 - 14			
Proficient Reader	40 and above	20 - 24	15 - 17			
Fluent Reader		25 and above	18 and above			
Term 2						
Non-Reader		0	3 and below			
Struggling		1 - 19	4 - 10			
Reader						
Emerging Reader		20 - 24	11 -17			
Proficient Reader		25 - 29	18 - 19			
Fluent Reader		30 and above	20 and above			
Term 3 - 4						
Non-Reader		0	5 and below			
Character -			6 14			
Struggling		1-24	6-14			
Reader		1-24	6-14			
		25 - 29	6-14 15-19			
Reader						

- Reading Categories by term broken down according to the early grade reading benchmarks
- These categories help make meaning of the scores

EGRA Progress Charts



Updated EGRA Progress Charts

																					!			
Class Teacher:																								
Grade: 1																					<u> </u>			
IsiZulu Early Grade Rea	ading As	sessmen	nt (EGRA)	Progres	s Sheet																			
Assessment Period	Ass	essment	1 (Begin	ning)	As	ssessmer	rt 2 (Midd	lle)		Assessme	ent 3 (End	d)	Ass	essment	1 (Beginr	ning)		Assessm	ent 2 (Mid	ldle)		Assessm	ent 3 (End)	
Task						Lette	r Sounds											V	ord recogn	nition				
Date																					İ			
Task		Letter	Sounds			Letter	Sounds			Letter	Sounds			Word re	cognition			Word	recognition	n		Word re	ecognition	
Learner reading level	NR	SR	ER	PR	NR	SR	ER	PR	NR	SR	ER	PR	NR	SR	ER	PR	NR	SR	ER	PR	NR	SR	ER	PR
				20 and				30 and				40 and								10 and	3 and			15 and
Learner reading score	0	1-10	11-19	above	0	1-15	16-29	above	0	1-25	26-39	above					0	1-5	6-9	above	below	1-9	10-14	above
Names:																								

Next Steps & Recommendations

- Developing a teacher guide that gives teachers strategies on remediation and where relevant extension
- Developing a bank of assessments that can be used exclusively for either diagnostic or monitoring at different levels. Assessments will align with progression of sounds taught in each grade.
- Training will be conducted by the DBE. A national core training team will be trained on the early grade reading benchmarks and the implementation of the strengthened EGRAs.

Thank You