

Is generalized impact of learning outcomes explained by positive deviance?

The challenge of social norms on the scaling of early grade reading programs

RISE Annual Conference, June 23-24, 2022

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Response to Educational Change — Guess the country?

“

Trouble was in the initial stages no-one knew how the whole thing would work out in practice.

It was like jumping into the unknown, and suddenly everything you knew and did was wrong. It demoralized teachers, so they got defensive.

I was running training days without really knowing what was going to happen.

*Every school had to find its way through, which took *****
— a bit like COVID.*

”

Regional early grade literacy advisor

Background I — Purpose of this Study

Study implementation effectiveness of Early Grade Reading Programs:

- Over time
- Across schools

Align a **behavioral science lens** with systems thinking to develop a deeper understanding of variation in implementation:

- Specifically, how **different** teachers respond to **change** within an education system.



Background II – Early Grade Reading Programs

USAID supports numerous Early Grade Reading (EGR) Programs in LMICs. These program work through local education ministry systems.

Typical program components include (but not limited to):

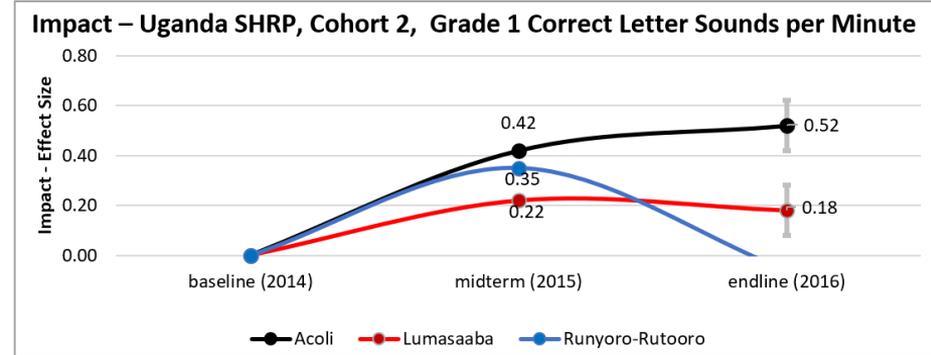
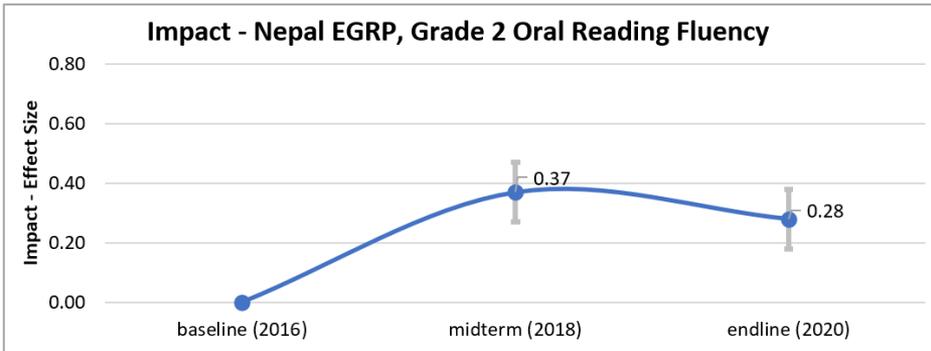
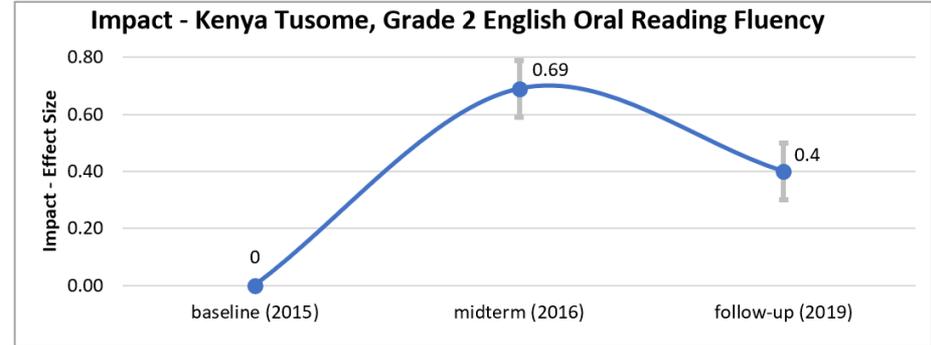
- the development and distribution of classroom teaching and learning materials
- teacher training
- follow-up teacher support

These programs range in size from small pilots to national scale.



Impact Over Time

No case of an EGR program with demonstrated improved impact multiple time points.



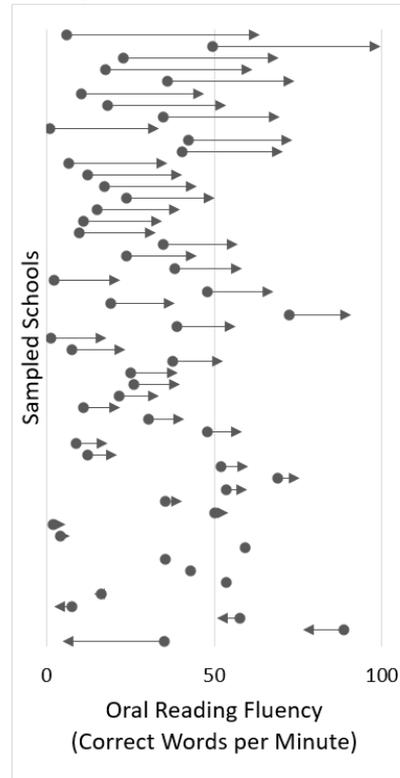
Impact Evaluation – Variation Across Schools

School-level Average Gains

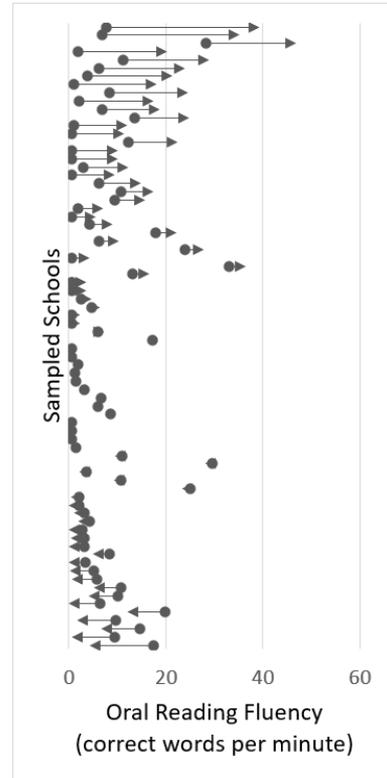
80% of impact is explained 13% to 34% of schools.

How do these **different** teachers respond to **change** within an education system?

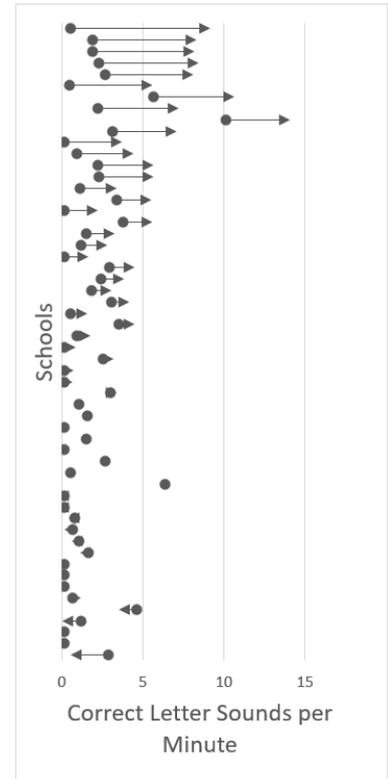
Kenya Tusome, Grade 2, 2015-2016



Nepal EGRP, Grade 2, 2016-2020



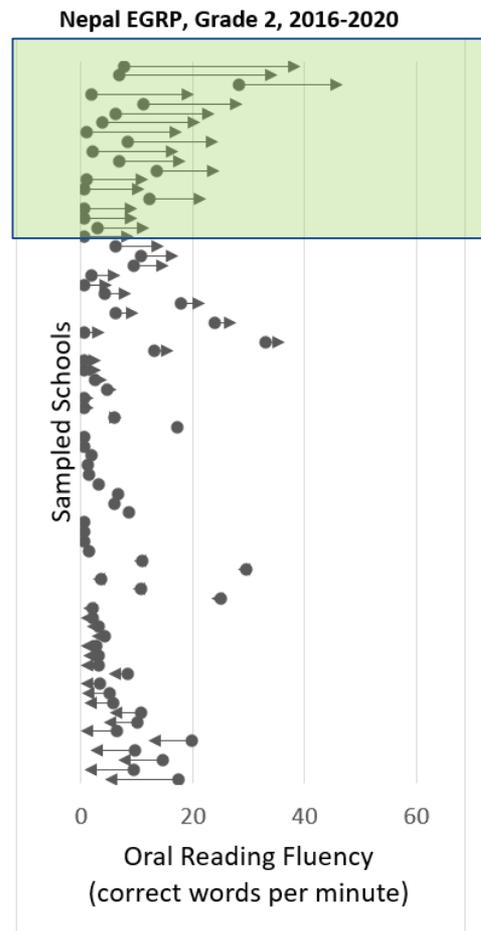
Uganda SHRP, Grade 1, 2014



We studied the Positive Deviants in Nepal

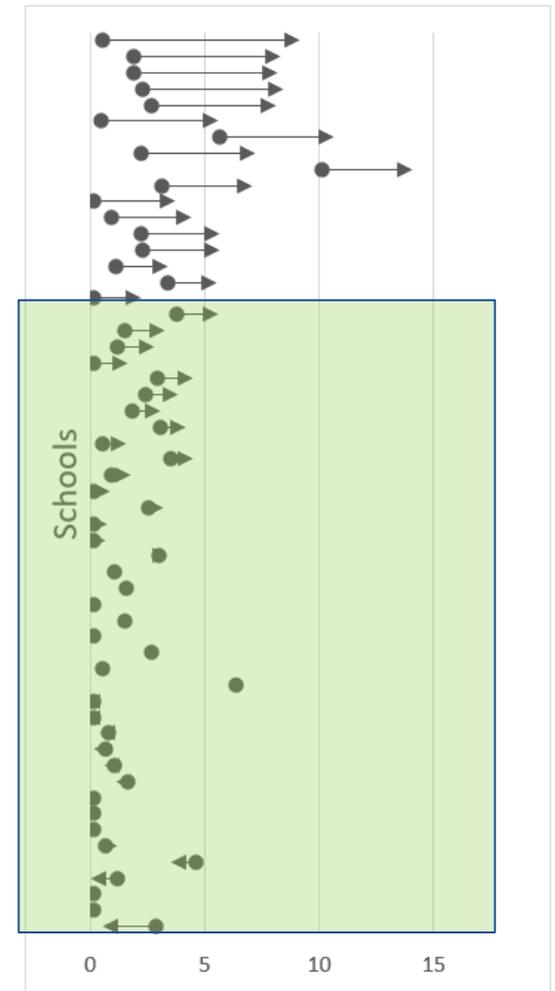
- Limited qualitative study in eight schools in Nepal
- The positive deviant(s) varied – teacher, head teacher, community member.
- All had positive personality characteristics similar to Rogers' early implementors (2003)
- e.g., communication behavior, rational, empathy, ability to deal with abstraction, etc.

Next, we studied the schools in Tanzania with low impact on student learning...



Qualitative Data Collection — Jifunze Ulewe EGR Program in Tanzania

- Research framework **blends a systems approach** with **behavioral science** that focuses on educational change
- Selected 12 schools based on mostly **low performing schools** in rural Iringa and Morogoro – 17 teachers (grades 1 & 2)
- **Classroom observations** of teachers used to inquire about teaching approach during Teacher interview
- **Teacher interview**



Findings I — teacher perception of the program

After six years of implementation all the teachers had a **positive perception** of the EGR Program.



Superior to their prior approach



Easy enough to understand and implement



Mandatory



Observed others teaching program



Compatible with prior approach & adaptable for context

Findings II — Education Systems

The majority of teachers...



...could describe the **student learning expectations**.



...felt they had **support**.



...described their **learning** process for improving their classroom instructional practice.

Findings III — Teachers . . .



Reflection on practice

...believed their students participated in an interactive classroom environment.



Achieving expectations

...believed that the majority of their students would achieve the academic expectations by the end of the year.



Modifying or adapting program

...were all observed modifying the program in the same way.

Conclusions I — Contradictions

- Positive education system characteristics
- Poor learning outcomes



Teachers are unaware of their actual level of achievement of their students



Teachers were focused on curriculum delivery, but not pedagogy



Student learning was not focused on **results**



Teacher learning was not focused on **results**

Conclusions II — Behavioral Science

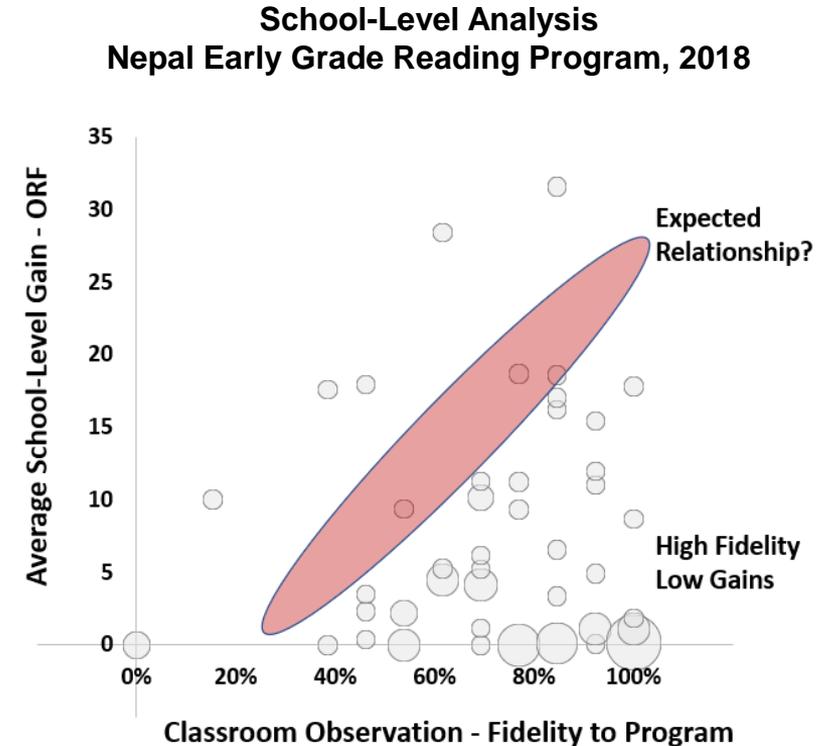
- **Social Norm** – all the teachers observed adopted the phonics-based reading content, but kept their **default** ineffective pedagogy
- Teachers applied a **heuristic** short-cut that requires a much lower **mental effort**
- Suggestion of teacher **cognitive dissonance**
- Consequently, the teachers are now content



External Coach - Classroom observations in Nepal

The teachers in this study would score adequately using a typical fidelity classroom observation.

- ✓ Lesson plan
- ✓ Classroom management
- ✓ Classroom environment (e.g., print rich)
- ✓ Supportive learning environment
- ✓ Student participation
- ✓ Teacher checking for student understanding
- ✓ Student feedback given



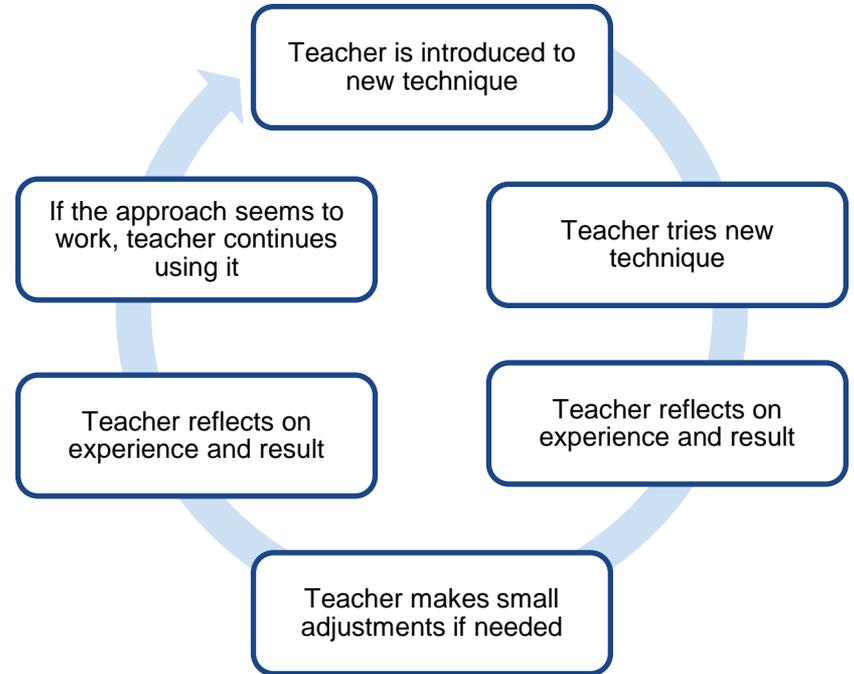
$N=78, r=0.285 (p=0.02)$

Recommendation: The role of statistics is to describe variation

Then, our understanding of variation of teacher response to change should be applied to intervention designs.

Example: Guskey's (1986) model of teacher change

- Guskey's model of change suits rational personality types in certain environments.
- For most teachers, educational change is emotional, messy, and disruptive.



Next Steps for Research — Behavioral Science

“

Lewin (1997) suggested that to achieve behavior change; there is a good way and bad way to do it.

The bad way is to increase the driving forces, such as incentives and implementation components, while the good way is to **diminish the restraining forces**.

This approach, according to Kahneman (2011), is profoundly counter-intuitive.

”

Anon

Next Steps for Research — Educational Change

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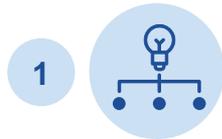
The problem is that no nation has improved by focusing on individual teachers as the driver.

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Michael Fullan, *The New Meaning of Educational Change*, 2015, p.43

Next Steps for Research — Social Network Analysis

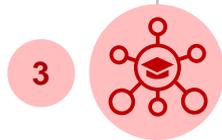
Top-down
introduction of EGR
Programming



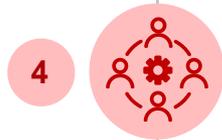
1 Centralized introduction of effective pedagogy



2 Effective pedagogy adopted by small percentage of positive deviant teachers



3 Strengthen and support networks within and across school to diffuse effective pedagogy



4 System facilitates a focus on collaboration



5 System facilitates a focus on learning for results

Diffuse effective
pedagogy from
the ground-up

Thank You!

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