Theme: Adaptive testing and iteration on scalable models

Title: Optimizing Education Interventions for Impact@Scale: Lessons Learned from

Dignitas' LeadNow Testing

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Abstract: This abstract presents the findings of a comparative study evaluating the effectiveness of the Dignitas' innovative training and coaching app - LeadNow in enhancing user engagement and improving classroom practices for improved foundational literacy and numeracy outcomes. LeadNow is a training and coaching application developed by Dignitas, focusing on formative assessment, differentiation and data-driven instruction. The study used an A/B test methodology with three intervention arms: LeadNow app training only, LeadNow app training with in-school Professional Learning Communities (PLCs), and LeadNow app training with remote coaching phone calls. The research was conducted in two counties in Kenya, with 253 schools selected using stratified sampling. The study found that coaching played a critical role in module completion rates. Participants receiving remote coaching were more likely to successfully complete the LeadNow modules. This highlights the importance of personalized coaching support in fostering engagement and application of learned concepts. Participants across all intervention arms showed improved knowledge and positive attitudes towards formative assessment practices. A notable shift in instructional leaders' and teachers' formative assessment practices was observed. However, establishing a clear causal link between LeadNow and practice changes proved challenging, requiring further investigation. Recommendations for future studies include incorporating a control group, developing a comprehensive MEL framework, and implementing criteria-based school selection.

Keywords: LeadNow, coaching, formative assessment, practices, coaching, Professional Learning Communities

INTRODUCTION

Dignitas is implementing a training and coaching platform, LeadNow, which offers tech-enabled training and coaching for educators – instructional leaders and early year educators. The Foundational Literacy and Numeracy (FLN) Learning Pathway, founded on Teaching at the Right Level (TaRL) principles, focuses on formative assessment, differentiation, and data-driven instruction. Kane, T. J., et al. (2017)¹ and Pratham (2021)² highlight the impact of TaRL on learning outcomes and the role of data driven instruction in supporting learners. This LeadNow training content was co-created by Dignitas and University of York and a team of expert educators. The app provides engagement, knowledge and performance data, as teachers take a pre-post assessment for each training module, and input their goals and reflections into the app.

In 2023, Dignitas conducted an A/B test to investigate the impact of LeadNow on practices, alongside two additional treatments – remote coaching phone calls and in-school Professional Learning Communities. This abstract presents the findings of a comparative study conducted to evaluate the effectiveness of the LeadNow. The study focused on three intervention arms: LeadNow app training only, LeadNow app training combined with in-school Professional Learning Communities (PLCs), and LeadNow app training combined with remote coaching phone calls provided by Curriculum Support Officers. In the school, the study engaged the instructional leader (headteacher or deputy headteacher) and three lower primary (Grade 1-3) teachers. The objective was to understand the differences in user engagement and impact among these intervention groups in schools and classrooms.

METHODOLOGY

The study employed an A/B test methodology to compare the three intervention arms (LeadNow app training only, LeadNow app training combined with in-school Professional Learning Communities (PLCs), and LeadNow app training combined with remote coaching phone calls provided by Curriculum Support Officers). The research took place in two counties in Kenya: Kajiado and Machakos, with a sample of 253 schools selected using stratified sampling. In each

¹https://usprogram.gatesfoundation.org/-/media/dataimport/resources/pdf/2016/12/preliminary-findings-research-

paper.pdf?rev=3f154fb534cd4acd8aae83608dafda47&hash=4E838F73408B9EE69972C7C9F3FE8FBD

² https://www.pratham.org/wp-content/uploads/2022/02/ASER-2021-report.pdf

school, 4 participants were enrolled into the LeadNow App to access two modules: purpose of assessments and designing formative assessments. The study ran for one academic term (three months). The evaluation assessed user engagement and impact by analyzing engagement, participants' attitudes towards the training content and application of concepts learned in school. LeadNow has in-built pre and post module assessments which assess the participants knowledge of concepts before and after going through each module. In addition to this, a sample of schools were visited for observations to assess the application of the concepts in schools. Further, the study explored the impact of in-school Professional Learning Communities and remote coaching phone calls on engagement and impact (shifts in instructional leadership and classroom practices). The participants received SMSes through the LeadNow app, bulk SMS and WhatsApp groups, to nudge uptake of the modules and implementation of practices within the school.

FINDINGS

The study revealed several key observations. Firstly, coaching is a critical driver of engagement. The study engaged Curriculum Support Officers to provide remote coaching phone calls to the instructional leaders fortnightly. Despite challenges in coaching implementation where only 27% of the instructional leaders in the LeadNow & coaching phone calls arm received coaching, it emerged as a pivotal factor significantly influencing LeadNow completion rates. Participants who received coaching were 0.3 times more likely to complete the program successfully compared to those who did not receive coaching. This highlights the importance of personalized coaching support and guidance in fostering engagement and application of learned concepts. Kraft et al (2018)³ confirm that coaching improves teacher effectiveness and learning outcomes.

Secondly, participants across all intervention arms demonstrated knowledge gains and positive attitudes towards implementing formative assessment practices in schools and classrooms. By the end of the modules, 80% of participants reported they were confident in implementing the concepts learned in school. This indicates that the LeadNow app enhances educators' understanding and approaches to formative assessments, which are essential for promoting improvement in foundational literacy and numeracy outcomes.

³ https://scholar.harvard.edu/files/mkraft/files/kraft blazar hogan 2018 teacher coaching.pdf

Thirdly, a noticeable shift in instructional leaders' and teachers' formative assessment practices was observed. 45%, 40% aand 33% of teachers in LeadNow & coaching phone calls, Leadnow only and LeadNow & PLC arms, attained mastery by endline, respectively. LeadNow played a role in influencing shifts in instructional leadership and teaching approaches to formative assessment. However, establishing a clear link between these changes and the LeadNow proved challenging, necessitating further exploration of causality. While there were notable changes in the participants' formative assessment strategies within schools, establishing a direct connection to the specific components such as LeadNow, coaching, or Professional Learning Communities proved challenging, highlighting the need for further research.

Overall, the findings indicate that the LeadNow program has a positive impact on educators' understanding and implementation of formative assessment practices. Coaching emerges as a crucial determinant of program completion rates, highlighting the importance of personalized support. However, further exploration is needed to establish a clear causal link between the LeadNow app and observed shifts in practices. These findings provide valuable insights for refining LeadNow and maximizing its impact on learning outcomes.

CONCLUSIONS

The study provided valuable insights into the effectiveness of LeadNow in improving user engagement and shifts in practices. The study findings indicate that LeadNow has a positive impact on educators' understanding and implementation of formative assessment practices. However, establishing a direct connection between LeadNow and the additional components (remote coaching phone calls and Professional Learning Communities) remains a challenge. Therefore, based on the findings, several recommendations were proposed.

Future studies should include a control group to provide a baseline for comparison and a more comprehensive understanding of LeadNow's specific contribution, as well as contribution by remote coaching phone calls and PLCs. Implementing a criteria-based school selection process is advised to ensure homogeneity across schools. Establishing a monitoring framework is essential for identifying deviations from the program plan and implementing corrective measures promptly. Furthermore, implementing an automated data-driven SMS nudge system is recommended to provide personalized nudges and support, enhancing program completion, sustained engagement and practice.