A close-up photograph of three young students in blue school uniforms. They are gathered around a table, looking intently at a book or document. One student in the foreground is holding a blue pen, and another is holding a red pen. The background is slightly blurred, showing more of the classroom environment. The image is overlaid with a dark teal gradient and a yellow and blue geometric design in the top left corner.

Empowering Local Educators:

Instructional Coaching for Sustained School Improvements in Rural Tanzania

Monduli District, Arusha Region, Tanzania

www.teachunited.org



TeachUNITED

An Education Impact Study
from TeachUNITED

Funding Partner:
The Schooner Foundation



SCHOONER
FOUNDATION

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EXECUTIVE SUMMARY**EMPOWERING LOCAL EDUCATORS**

Ensuring children receive an equitable, quality education starts with having great teachers. Teacher quality is the single biggest school-related factor in student success (Oppen, 2019). However, in underserved and rural communities, due to limiting factors like isolation and constrained budgets, schools lack access to the one tool that reliably impacts student achievement: high-quality teacher training. Consequently, rural schools globally are in crisis, as students consistently see lower primary and secondary completion and college attendance rates than more urban areas, limiting future opportunities.

Of seven districts in Tanzania's Arusha Region, Monduli District is one of the most rural. Teachers and schools in the district face daunting challenges in ensuring students have access to quality education, as many children must labor in fields and teachers are working with few resources and very large class sizes. TeachUNITED has worked within this region for six years.

The core finding of the impact study is that the TeachUNITED program has demonstrated success in the dissemination and coaching of transformative best practices for teaching and learning in the rural Tanzanian district of Monduli. Focusing on evidence-based impact strategies (purpose and mindset, student engagement, personalization, data-driven instruction) leads to improved student outcomes, increased teacher effectiveness and motivation, and sustained school improvement. Of note, when comparing to pre- and post-assessment and/or control schools, TeachUNITED schools saw the following outcomes:

- Nearly 10 percent more students were able to access secondary education (primary school completion exam pass rates improved from 79 percent to 87 percent one year after the TeachUNITED program).
- Secondary schools increased in regional rankings from 56th percentile prior to the program to 94th percentile post-program.
- Students saw significant growth in content-specific subject matter: +11 percentage points growth in reading, and +18 percentage points growth in math (compared to control schools).
- More than 90 percent of participating teachers reported improved teaching practices, feeling motivated to teach, and feeling they have significant positive effects on their students' lives.
- Teachers' intention to continue in the education profession increased by 13 percent over the course of the program.

These changes at a local level showcase the opportunity for greater systemic change. Because the program builds the internal capacity of local educators, schools are not reliant on TeachUNITED in subsequent years, creating sustainable impact for teachers and the thousands of students they reach throughout their careers.

INTRODUCTION

TeachUNITED is a global nonprofit organization whose mission is to improve the quality of education in rural and historically underserved communities. TeachUNITED combines community-based teacher coaching with evidence-based pedagogical training in a philanthropically-supported, scalable package that allows local education leaders to own, co-design, and adapt context-specific strategies to increase academic achievement.

Aligned with SDG4*, TeachUNITED is ensuring that underserved educators are empowered with high-impact strategies to increase academic achievement, develop each student's full potential, and break cycles of poverty. Since 2016, TeachUNITED has been mobilizing local teacher leaders to build capacity, not dependency, in underserved rural communities. In the 6 years since TeachUNITED started working in Monduli District, they have reached 2,156 educators in 75 schools, who in turn have served 89,925 students.

With a rigorous approach to monitoring and evaluation, TeachUNITED continuously collects and analyzes data with impressive outcomes in student learning, student and teacher engagement, and teacher leadership development. This ensures that schools participating in the TeachUNITED program have a high-quality and sustainable program moving forward with teacher leaders who are trained to deliver the program for years to come.

TeachUNITED conducted this Education Impact Study to get a systemic view of the impact their work has had in the Monduli District of Arusha Region, Tanzania.



Students eating food at Enguiki Primary School

*Sustainable Development Goal 4 (SDG4) focuses on education and aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”

LEARNING CHALLENGES

In Sub-Saharan Africa, nearly 87 percent of children are learning poor, defined as the inability to read and understand a simple text by the age of 10 (UNICEF, 2021). While some progress in global education has been made over the last decade, the COVID-19 pandemic has wiped out twenty years of education gains (United Nations, 2020). This directly limits opportunities for future employment and consigns generations of young people to futures of economic insecurity and poverty.

About Monduli District, Tanzania

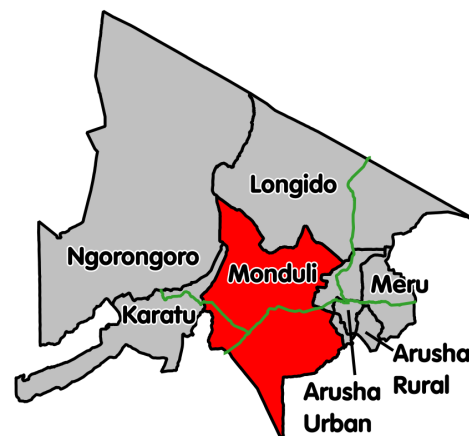
Monduli District is one of the most rural in the Arusha Region of Tanzania. With a diverse geography of plains, mountains, rainforests, and volcanoes, the district largely depends on both agriculture and tourism as economic drivers.

Monduli town serves as a regional educational hub with several primary and secondary schools, as well as a teacher's college. And while each ward within the district has a high school and practically every village has a primary school, it's a very real challenge to educate all of the children for several reasons:

- Many students must labor in fields, herding cattle with their families.
- Some children walk upwards of 9km to school.
- Routes to schools often become impassable during the rainy season.

Teachers and schools in the district also face very real challenges in ensuring students have access to

quality education. Resources, training, and technology are limited in many schools. Class sizes can be problematically large, with 80 to 100 students in some cases. In such large classes, teachers struggle to support individual students, instead relying on less effective lecture-style pedagogies and corporal punishment. Such overload can also lead to stress, burnout, and low morale for educators.



Map of Monduli District, Arusha Region, Tanzania. Wikimedia Commons



Children walking to school, Monduli District, Tanzania

A root cause of this learning crisis is limited or no access to teacher professional development (World Bank, 2019). According to research conducted by RAND (Oppen, 2019), teacher quality is the single biggest school-related factor in student success. However, due to constrained budgets, many schools lack access to teacher training; only 64 percent of primary teachers in Sub-Saharan Africa are adequately trained (Montoya 2019). In Monduli District, teachers rarely have time to collaborate, lack familiarity with data, and rely heavily on end-of-year assessments and lecture-based lessons. This leads to demoralized teachers, high teacher turnover, and underperforming schools where teachers lack the skills to deliver a high-quality education, which reinforces cycles of low educational attainment and poverty.

While these findings paint an alarming picture for education systems, TeachUNITED data show that adequate teacher training and support reverse that negative trajectory. Focusing interventions on teachers can and does substantially improve student outcomes. Effective teachers improve the long-term well-being of children, student academic achievement, persistence in school, workforce preparedness, and income once young people enter the labor market (Chetty 2014).

IMPLEMENTATION

TeachUNITED provides a full suite of research-based teaching strategies, job-embedded coaching, and small-cohort peer learning communities.

The program is localized to the challenges and needs of the schools and communities with which it is working, taking into account the limitations inherent in working with rural areas. In year one, cohorts of teachers are trained by TeachUNITED instructional coaches in strategies proven to close learning gaps of 2-3 years in a single school year (Hattie, 2012): Purpose and mindset, student engagement, personalization, data-driven instruction. Strategies are applied in the classroom throughout implementation and reflected upon during coaching sessions and small-cohort workshops. In year two, the trained year one cohorts facilitate the program for the other teachers within their school and/or district, serving as in-house instructional coaches to colleagues.

During the year one implementation of the program in Monduli District, over 75 workshops were conducted and 350 individual coaching sessions held, resulting in a 98 percent program completion rate among participating teachers.



Teachers practicing pedagogical strategies, Olarash Primary School

METHODS AND IMPACT STUDY DESIGN

Implementation Fidelity and Program

Data

During all programs, TeachUNITED instructional coaches track lesson and assignment completion, webinar and coaching call attendance, and capstone project completions for graduation. Coaches also conduct classroom visits for observation and microteaching sessions using feedback rubrics. Participating teachers and their students also complete baseline and endline surveys on their attitudes, beliefs, and classroom practices.

Baseline surveys are administered to teachers and to students near the beginning of the school year and endline near the end of the school year. Data from teacher surveys are used to provide insights into changes in teacher understanding, confidence, and practice after engaging with and learning from TeachUNITED coaches. Likewise, data from student surveys are used for insights into changes in beliefs, attitudes, and classroom experiences for the students of those teachers.

Both teacher and student surveys are administered on paper. Raw data from paper surveys, along with appropriate student and school identifiers, are entered into Jotform electronic data collection forms. The raw data from all sources are then cleaned, processed, and analyzed using Tableau's data prep and analytics platform.

Analysis of teacher and student survey

data focuses on the distribution of responses for both the baseline and endline survey items, and the change in the proportion of favorable responses from baseline to endline.

Quantitative Assessments

In Monduli, standardized national exam data are collected from publicly available data released by the National Examinations Council of Tanzania (NECTA). These exams are administered on an annual basis, and pass rates and school comparison measures are made public by the government.

The Primary School Leaving Exam (PSLE) is given to standard 7 students and covers Mathematics, English Language, Science, Social Studies, and Kiswahili. Students must pass this PSLE for entry into government secondary schools.

The Certificate of Secondary Education Examination (CSEE) is an achievement test offered to students who have completed four years of secondary education. The core subjects are Civics, History, Geography, Kiswahili, English Language, Biology, and Basic Mathematics, and candidates may also register for additional subjects.

Tanzania School System		
School System	Primary	Secondary
Years of Schooling	7	4
Exams	Primary School Leaving	Certificate of Secondary Education

Passing the CSEE may be required for admission to postsecondary institutions.

As part of our yearly M&E protocol, TeachUNITED collects the data from these assessments from the publicly available website, before being entered into spreadsheets and uploaded to Tableau's electronic database for cleaning and analysis. Comparisons are made in national and regional rankings, as well as overall and subject-level pass rates, for both TeachUNITED and control schools. Analysis of national exam data provides insights into the impact of TeachUNITED's services on student achievement as measured by a large-scale national assessment.

In addition, TeachUNITED also conducts student assessments to monitor the success of the program, using externally validated standardized assessments. Ten randomly selected students per grade per school (including control schools) take TeachUNITED assessments in literacy and mathematics. The early primary grades use a modified Early Grade Reading Assessment in Kiswahili. Later primary students and secondary students take

easyCBM math and LearningAZ literacy assessments. Assessments are completed online using Jotform or with paper, depending on access and connectivity. Baseline assessments are administered to students near the beginning of the school year and endline near the end of the school year. Data from these assessments are used to assess the progress of students receiving instruction from teachers in schools served by TeachUNITED compared to those in schools not receiving TeachUNITED services.

Similar to the teacher and student surveys, TeachUNITED staff members enter the raw data from each student's paper assessment, along with appropriate student and school identifiers, into Jotform data entry forms before data are processed and analyzed in Tableau. Analysis focuses on the average baseline and endline scores, and the magnitude of change from baseline to endline, of students receiving instruction from teachers in schools served by TeachUNITED compared to those in schools not receiving TeachUNITED services.

Qualitative Interviews and Analysis

During this case study, qualitative interviews were conducted at the school, district, and regional levels. Interviews were conducted with teachers and administrators at Olarash Primary, Lashaine Primary, Engutoto Secondary, and Orkeeswa Secondary, as well as ward and regional educational officers throughout Monduli. TeachUNITED instructional coaches who worked with those



Students complete assessments, Olesokoine Secondary School

schools were also interviewed for their expert opinion and context. All interviews were recorded and were semi-scripted and open-ended in order to gather additional insight from participants.

Analysis of the interviews was done inductively and in vivo whenever possible. Initial coding created general categories and line coding created specific categories related to teaching and learning practices, including teacher attitudes toward school, experience with professional learning, peer learning communities, and student performance, among others. Interviews were translated for inclusion in this case study and have been reviewed by both internal and external translators.

IMPACTS AND OUTCOMES

As noted earlier, students and teachers in Monduli District often face significant barriers to teaching and learning. However, when schools receive the necessary support and resources, those challenges are not insurmountable. The impact and outcomes in this section support the efficacy of the TeachUNITED program and mirror what research shows: effective teachers can and do improve students' well-being, academic achievement, and persistence in school, even in the face of significant barriers.

Collaborative Learning

TeachUNITED helps teachers create engaging, welcoming, and personalized classroom environments, which impact both educator and

student happiness. After the program, teachers report increased collaborative time spent working with their peers to exchange ideas and strategies for classroom improvement.

By the end of the program, more than 90 percent of TeachUNITED participating teachers reported that:

- They can improve their teaching practice
- They collect and use student data in their classrooms
- They can have significant positive effects on their students' lives
- They have positive relationships with their fellow teachers and their students



Students raising hands in class, Olarash Primary School

The TeachUNITED program includes direct instruction on how to run professional learning communities (PLCs), which builds structured time for educators to share resources and strategies.

As teacher Hawa Kepay from Olarash Primary notes, “In our work, nobody knows better than the other. So, we share whatever knowledge we have got with one another so that we can all prosper.” The structures and support provided by TeachUNITED allow that collaborative drive to flourish.

Those benefits translate directly to the students, as over 90 percent of students reported that:

- They enjoy going to school
- What they learn in school is relevant and useful for their future
- Their teachers encourage them to succeed and progress toward their goals
- They have positive relationships with their teachers and peers

School Spotlight: Engutoto Secondary

Not only are teachers learning how to apply the strategies, but they are also replicating the model in the classroom itself. Engutoto Secondary mathematics teacher, Simon Chipya, adapted the TeachUNITED train-the-trainer model to use with his students.

Students who have already mastered content serve as “experts” who help teach and support their peers. Given that class sizes in Tanzania can be as high as 80-100 students, having support from these students allows Chipya to ensure more students are receiving direct support.

Engutoto students improved 50% on both Math and Literacy assessments from pre to post program.



Engutoto Secondary mathematics teacher, Simon Chipya

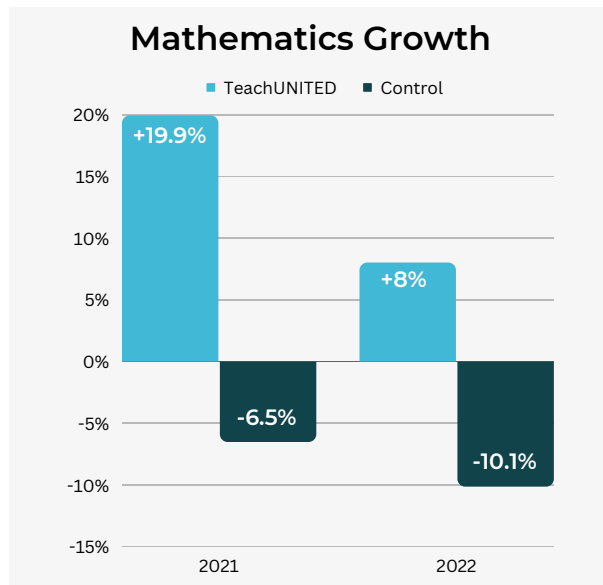
Academic Success

Teachers continue to show that, if supported with coaching, high-impact strategies, and a cohort of their peers, they will set and reach ambitious student outcome goals. TeachUNITED Monduli partner schools demonstrated this with significant growth scores, outpacing regional counterparts.

In 2021, students at TeachUNITED Monduli schools had 19 percentage points higher growth in reading and 26 percentage points higher growth in mathematics, compared to control schools. Similar trends occurred in 2022, where TeachUNITED schools in Monduli scored 11 percentage points higher growth in reading and 18 percentage points higher growth in mathematics.

Even greater impact can be seen in the Early Grade Reading Assessment (EGRA) scores. In 2021, control schools

dropped by 5 percent in their EGRA scores. In that same time period, TeachUNITED Monduli schools averaged an incredible 55 percent increase. Though no control school data were available for 2022, TeachUNITED schools in Monduli had an astounding 149 percent increase from their pre- to post-assessment.

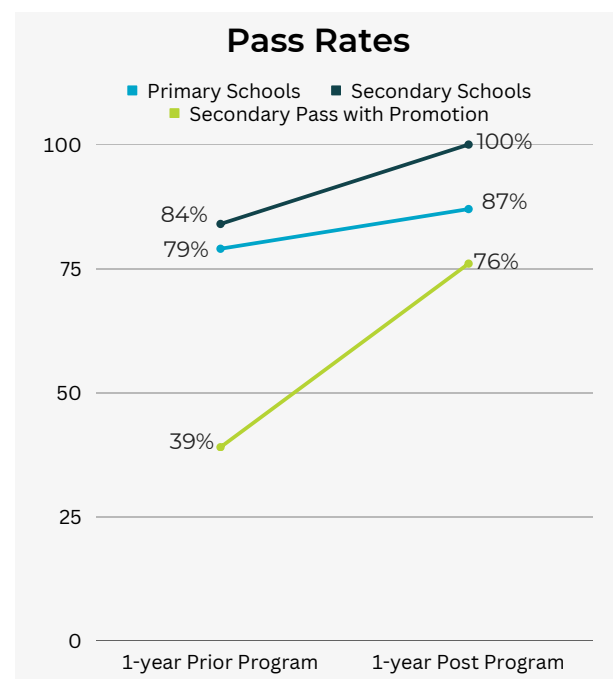


Primary Schools

One year after completion of the program, nearly 10 percent more Monduli students passed their primary school leaving exams. That means almost 10 percent more students at TeachUNITED schools are able to access secondary education. TeachUNITED schools also outperformed their regional peers, as Monduli schools increased their primary school regional rankings from the 31st percentile one year prior to the program to the 43rd percentile at the end of the program. In other words, not only did TeachUNITED schools improve their pass rates, their improvement outpaced their regional counterparts.

Secondary Schools

Monduli secondary schools that have completed the program showed similarly large increases on the CSEE, Tanzania's secondary school exam. In the year prior to working with TeachUNITED, schools showed an 84 percent pass rate, which jumped to a 100 percent passing rate the year after program completion. The impact is even more dramatic for students scoring a pass with promotion, which is required for postsecondary admission. In the year prior to working with TeachUNITED, only 39 percent of students passed with promotion at Monduli schools. One year after program completion, that percentage jumped to a 76 percent pass with promotion rate, meaning the number of students eligible for postsecondary education nearly doubled. Those results also outpaced their peers, as TeachUNITED Monduli secondary schools increased in regional rank from 56th percentile one year prior to the program to 94th percentile at the end of the program.



Female Students

In 2022, girls in Monduli TeachUNITED schools outperformed girls at non-TeachUNITED schools dramatically, with 12 percentage point higher growth in literacy and 14 percentage point higher growth in mathematics. Early primary girls in Monduli TeachUNITED schools also nearly doubled their overall EGRA scores during the program implementation.

School Spotlight: Olarash Primary

Learning about and implementing data-driven instructional practices has had a transformative impact on student academics at Olarash Primary. Elinuru Sumari described how teachers used to depend solely on end-of-year evaluations. Now, with the use of formative assessment strategies learned from the TeachUNITED program, teachers can see how well students are grasping the material and follow up with individual students, ensuring none are falling behind.



Olarash Primary: Percent Increases

Literacy: +25
Math: +14
EGRA Scores: +77

"By using these techniques, I have started to see results. Children now love subjects that they had given up hope on, thinking that they are hard. These included Mathematics and Science"

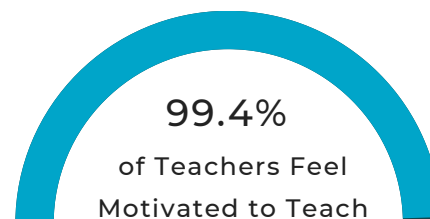
- Sarah Michael Kinyanguli, Olarash Primary

Lasting Improvement

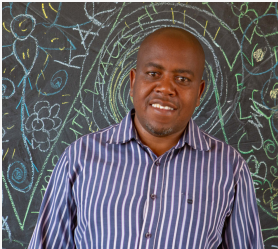
TeachUNITED data shows that program participants and alumni remain committed to the profession. They have gone on to lead full-school coaching and advanced in their careers to school and district leadership with confidence in their newfound skills. Teachers no longer feel they have to leave their schools to grow professionally. As a result, more teachers stay in the classroom with improved practices that they share with others, creating lasting improvement.

- 99.4 percent of East African educators reported feeling motivated to teach, with a 21.5 percent increase in the number of participants feeling extremely motivated to teach.
- Participating teachers' intention to continue in the education profession increased by 13 percent, which is particularly powerful considering the disruptions of COVID in recent years.

Moreover, the TeachUNITED schools in Monduli are now operating in cycles of continuous improvement. Educators are able to see the results of their work, examine data results, and work collaboratively to share ideas for strengthening weaknesses.



The continued success allows educators to feel more invested in their schools and students, since they see the benefits of their work. As seen in Monduli, with the proper structures for collaborative learning and support, these cycles of improvement can sustain continued growth for years after initial intervention.



Lolkisale Ward
Education Officer,
Christian Urassa

"I expect that our cooperation with TeachUNITED will result in teachers who are willing to teach, teachers who believe that when they teach students can and will understand"

**- Christian Leonard Urassa, Lolkisale
Ward Education Officer**

CONCLUSION

Based on the results presented here, the TeachUNITED program delivers transformative best practices for teaching and learning. TeachUNITED data show that focusing on evidence-based impact strategies and pedagogies leads to improved student outcomes, increased teacher effectiveness and motivation, and sustained school improvement.

TeachUNITED intends to build on this work by expanding to other, similarly underserved districts in Tanzania and

beyond. With nearly 100 percent saturation in Monduli district via direct service or government partnerships, TeachUNITED will build on this tremendous success by supporting a new East Africa innovation lab district in order to monitor the impact of program iterations, ensure fidelity of outcome data while scaling, and maintain deep partnerships with the Ministry of Education. TeachUNITED will continue to support lasting impact in Monduli District: providing an alumni program to keep teachers engaged and learning; expanding the program to other regions of the country by investing in local NGOs to train in the program and implement in the schools with which they work; and providing access to resources and helpful training in perpetuity to all partners.

These changes at a local level showcase the opportunity for sustainable, systemic change. Because the program builds the capacity of local educators, TeachUNITED schools continue to excel years after the program by shifting pedagogical practices over the long term. As teachers continue to improve, their work can improve student outcomes and help ensure success for generations of students.



**Hear from
participating
students, teachers,
and educational
leaders throughout
Arusha Region,
Tanzania.**

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