Love

TEACHING to Inspire Love of Learning

Providing the best education possible for every child requires teachers and officials to be intrinsically motivated and effective role models for the foundations of lifelong learning.
Today, more children and adolescents are enrolled in school than ever before. Yet, for many of them, schooling does not lead to learning—and that was true even before the COVID-19 pandemic shuttered schools and disrupted learning across the globe. Children today face an increasingly complex world as affected by the pandemic, the climate crisis, increased inequality, and rapid technological changes. Education systems must prepare them for these challenges and set them on the path to achieve social justice, challenge inequalities, and build healthy, resilient, and prosperous societies.

At STiR Education, we support government education systems to improve learning outcomes for children. We began in 2012 with a single pilot involving 25 teachers in Delhi, India. Today, we work with 200,000 teachers and six million children across three states in India and a quarter of all districts in Uganda. We believe that intrinsic motivation plays an essential role in achieving this ambition. Our model uses monthly networks to motivate teachers and teacher-support officials within governments. One of our teachers from
Mysore, Karnataka, India shared that the strategies she has learned as part of the network has brought happiness to her class and made them more curious. She says that she now sees them enjoying the process of learning. This spurs her to do even better.

We are addressing the need to support teachers and revive their passion for their work, which significantly increases their abilities in the classroom and improves how they interact with their students. By involving governments, school leaders, and teachers, we take a holistic approach toward change. We believe programs are most enduring and effective when they are delivered in partnership with governments from the outset and fully integrated into social systems.

A Motivational Crisis

Education systems today must prepare every child, everywhere, to thrive in an increasingly complex world. But despite huge increases in education spending over the past two decades, children are not achieving the desired outcomes. A lack of belief and investment has led to widespread demotivation of teachers and officials, as demonstrated by high levels of absenteeism and low levels of job satisfaction. They are disempowered by their working conditions, including a lack of support, poor training, and weak accountability mechanisms.

Since the outbreak of COVID-19, educators have been
further challenged to adapt to new working practices, with many raising concerns about their personal well-being and a growing need for psychosocial support. These motivational challenges are hampering education systems from effecting meaningful change. As a result, children too often leave school without the most basic skills needed for success in the modern world, and unprepared for a future citizenship and workforce. In Uganda, over 700,000 young people enter the labor market each year with few jobs on offer, in line with rising global trends for youth unemployment. In India, the Confederation of Indian Industry found that more than 50% of school leavers were “unemployable.” These challenges are expected to deepen following the pandemic, with millions of children unlikely to ever return to the classroom.

**An Intrinsic Solution**

Intrinsic motivation has a key role to play in addressing these challenges. It’s no longer enough for children to be able to read and write. To thrive in the 21st century, children must be able to continually seek, process, act on, and reflect about new information. Our radically uncertain future demands that we prepare children and education systems to adapt and be resilient to change. The development of a love of learning is essential for future success. To achieve this, teachers need the intrinsic motivation to create environments in which children can flourish. They need support to effectively, intentionally, and sustainably improve their classroom practice.

Research shows that the intrinsic motivation of teachers correlates not only with a variety of positive outcomes for children (including engagement, behavior, enjoyment, and achievement), but also with teachers’ own well-being, job satisfaction, and reduced burnout. Research also tells us that environments matter for teachers’ experience of the workplace. Contexts that foster teachers’ sense of professional identity facilitate teachers’ intrinsic motivation to stay, teach, or grow within their profession. Role-modeling from school leaders and officials is therefore key to ensuring that these conditions are in place to build positive and trusting relationships.

**Our Approach**

We see our role as that of a catalyst and facilitator working to transform education systems through sustainable behavior change. We create an environment in which government investments into education can be increasingly efficient. We currently have active partnerships with governments in three states in India (Delhi, Karnataka, and Tamil Nadu), the national education system in Uganda, and two districts in East Java, Indonesia. At its core, our work is about changing behaviors and attitudes at every level of an education system by reigniting intrinsic motivation. We work with government partners to define the behaviors they want to see at each level of the system, and help them to clearly demonstrate how these can be promoted through strong role-modeling and positive relationships. For example:

- At the child level, we want to see participation and learning as an active choice, as well as a desire to keep on learning more.
- For teachers, this might include reflection on how to effectively deploy teaching strategies and a desire to constantly improve their classroom practice.
- Officials will spend more time in schools supporting and understanding teachers, and recognize their crucial role in driving improvements.
These behaviors are reinforced across all of our activities, and we have developed practical behavioral measures to help us observe changes over time. Behavior change takes time, so our program is set up to enable incremental improvements at every level that contribute to an overall system change. Our term-based learning improvement cycles each focus on a different theme, with teachers and officials joining peer networks and learning new strategies to embed into their professional practice. This learning is reinforced by monthly coaching and support, with improvements in the use of data to inform better decision-making. The iterative process applies to our own program design as well. STiR constantly seeks to enrich its understanding of its own work through internal and external research and evidence, and innovates to increase its impact. We test the efficacy of new approaches to ensure that they can be sustained at scale, and encourage replication and adaptation of new ideas across our different global contexts.
“The TDC (Teacher Development Coordinator) program is result-oriented. In most schools, it helped teachers to think beyond the ‘chalk-and-talk’ method and motivated them to try different teaching strategies based on their classroom dynamics. Network meetings helped to improve the teaching skills of teachers, which ultimately resulted in better learning outcomes.”

—Jaspal Singh Negi, Mentor Teacher, NorthEast district, Delhi, India

Sustainability
No NGO intervention can last forever, and STiR is very aware how difficult it can be to achieve true sustainability. Our learning has been that engaging governments is absolutely critical if our vision is to be achieved, since they provide the best opportunity to ensure that our approach can be sustained over the long term. We therefore initiate deep learning partnerships with national and state governments, with clear time-bound milestones of progress to build strong ownership. We are determined not to create parallel structures and instead work with the existing government officials to deliver all of our activities.

From the outset, rigorous system diagnostics allow us to adapt our core program principles to local contexts and needs. Increasingly, our teams are working together to co-customize and co-design content for each geography, while we work closely to ensure that our program aligns with their policies and priorities. We aim to show governments that our approach can be a highly cost-effective mechanism to increase the effectiveness and impact of their overall investment in education, and influence them to place increased focus on reigniting intrinsic motivation at every level. Over time, we expect to step back our own involvement with governments, as they increase their own contribution to the costs of delivery. We’re also starting to explore opportunities to partner with other implementing entities to amplify our approaches and improve our own organizational sustainability.

“We appreciate STiR because wherever they work in the country, they deliver. We need to make sure that this kind of program is scaled up to the whole country.”

—Dr. Cleophus Mugenyi, National Commissioner for Basic and Primary Education, Uganda

Our Learning
We have seen that our program has had a wide variety of positive effects on children’s academic and social-emotional learning, identified through a variety of forms of evaluation:

- A recent survey of nearly 8,000 teachers in India showed that 88% of teachers believe that their participation in teacher networks resulted in an improvement in student reading levels.
- Our external longitudinal study data from 2019 suggest that students taught by STiR teachers had high levels of grit and determination, were engaged, and participated meaningfully in classroom activities.
- Our internal classroom observation data show increases in student engagement, participation, curiosity, and critical thinking. For example, in Delhi, we saw a 14 percentage point increase in
the proportion of children asking for help from their teacher:

- Findings from our external longitudinal study also showed that core routines to support officials and teachers were already in place and happening at relatively high quality after just one year. Officials are role-modeling engagement through actively observing and providing feedback to teachers, and the great majority of teachers find this feedback to be useful.

- In 2021, a case study was conducted alongside the International Institute for Educational Planning of UNESCO (IIEP-UNESCO), which focused on the project in Delhi. Their report found that the “program has had noticeable positive effects since its initial implementation. These can be seen through increased teacher collaboration, a shift to a more professional culture in schools, improvements in student outcomes, greater ownership from Delhi’s middle tier over the program, enhanced usage and application of feedback and data, and strengthening connections to adapt to difficult situations.”

- A similar review commissioned by the Mastercard Foundation in 2019 found that our work in Uganda was directly supporting the government’s priorities for teaching and learning, and that officials showed commitment to the concept of teacher motivation.

It has been difficult to collect rigorous evaluation data during the pandemic due to national restrictions.

“STiR is a wonderful program for me. You introduce new strategies which bring more happiness and curiosity for my class, and students engage more in their learning.”

—Ms. Suma, teacher, Government Primary School, Dehuru, Mysuru district, Karnataka, India

**Our Next Steps**

In our recent strategy, we have set an ambitious target to scale up our work to reach 25 million children by 2025. This will be achieved by expanding our work to reach every district in our existing geographies, as well as starting new projects in other countries, including Indonesia, Ethiopia, Brazil, and Egypt, and in additional states in India.

We’ve also set an increased focus on equity within government systems, particularly in the context of COVID-19, which has disproportionately impacted girls around the world. We intend to more deliberately understand inequities in partner systems, explicitly address these in our program design, and share our learning with governments and the wider sector. We believe that it is possible to build a world where teachers love teaching and children love learning. An investment in intrinsic motivation can be a cost effective and sustainable way to strengthen education systems, and make a very significant and equitable impact in the achievement of SDG4.
The Emerging Neuroscience of Intrinsic Motivation: 
A New Frontier in Self-Determination Research

Stefano I. Di Domenico and Richard M. Ryan
Frontiers in Human Neuroscience, 2017; 11:145.
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Intrinsic motivation refers to people's spontaneous tendencies to be curious and interested, to seek out challenges, and to exercise and develop their skills and knowledge, even in the absence of operationally separable rewards. Over the past four decades, experimental and field research guided by self-determination theory has found intrinsic motivation to predict enhanced learning, performance, creativity, optimal development, and psychological wellness. Only recently, however, have studies begun to examine the neurobiological substrates of intrinsic motivation. The authors of this article trace the history of intrinsic motivation research; compare and contrast intrinsic motivation to closely related topics (flow, curiosity, trait plasticity); link intrinsic motivation to key findings in the comparative affective neurosciences; and review burgeoning neuroscience research on intrinsic motivation. They review converging evidence suggesting that intrinsically motivated exploratory and mastery behaviors are phylogenetically ancient tendencies that are subserved by dopaminergic systems. Studies also suggest that intrinsic motivation is associated with patterns of activity across large-scale neural networks, namely, those that support salience detection, attentional control, and self-referential cognition. They suggest novel research directions and offer recommendations for the application of neuroscience methods in the study of intrinsic motivation.

Despite the importance of intrinsic motivation for keeping children engaged in learning, many traditional education approaches rely on extrinsically goading students into educational activities. In "Making Learning Fun: A Taxonomy of Intrinsic Motivations for Learning," authors Thomas Malone and Mark Leeper identify several different ways to make learning environments that are intrinsically rewarding:

- **Challenge**: People are more motivated when they pursue goals with personal meaning and when attaining the goal is possible but not necessarily certain. These goals may also relate to their self-esteem when performance feedback is available.

- **Control**: People want control over themselves and their environments and want to determine what they pursue.

- **Cooperation and competition**: Intrinsic motivation can be increased in situations where people gain satisfaction from helping others. It also applies to cases where they are able to compare their own performance favorably to that of others.

- **Curiosity**: Internal motivation is increased when something in the physical environment grabs the individual's attention (sensory curiosity). It also occurs when something about the activity stimulates the person to want to learn more (cognitive curiosity).

- **Recognition**: People enjoy having their accomplishment recognized by others, which can increase internal motivation.

https://learningenvironmentsdesign.pressbooks.com/chapter/malone-lepper-making-learning-fun-a-taxonomy-of-intrinsic-motivations-for-learning/