How are some children learning when most are not?

Positive deviance in Uganda's primary schools

1. Introduction

We face a learning crisis in our schools today. For millions of school-going children, the time they spend in school is being wasted, as they are barely learning. And a failing school system will impact the country's long term development trajectory. As a country, we need to do everything possible to address this learning crisis. And yet, resources available for basic education in Uganda are way below what is required to solve these issues, making it necessary to propose solutions that impose minimal or no extra resource burden.

Several Uwezo studies[1] have revealed that many children are falling behind while still in the early grades of primary school. By Primary 3, only a small minority are learning at the right level for their grade, creating knock on effects on their later learning as well. This results in widespread grade repetitions and early dropouts. For such children, the odds are stacked against them as they have not developed the knowledge and skills to help them live decent and productive lives.

Positive Deviance is an approach to solving complex social problems without using extra resources that may not be available. It is premised on the observation that in every community that struggles with such a problem, there are always some individuals or groups of individuals whose unique behaviours and practices enable them to successfully overcome the problem without needing to resort to extra resources. Such behaviours are often available to the whole community: the solution to the problem is hidden in plain sight.

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1   Uwezo reports: Are our children learning? 2015, 2014

Using the Positive Deviance approach, we identified schools and teachers who, despite their difficult circumstances, have over time been able to improve children's learning achievements. We then studied closely the strategies that these schools and teachers are using, that might explain their performance. Through this, we identified the following six strategies to improve learning:

- Promoting community involvement mechanisms to bridge existing gaps and increase interaction between parents and teachers.
- Encouraging a culture of effort, achievement and openness, to increase teacher commitment, provide individual-level support to learners and guarantee more effective use of funds.
- Fostering teacher responsibility for subject-level performance and providing guidance to parents to help children achieve mastery.
- Using peer-led and context-relevant approaches to motivate and support teachers and their professional development efforts.
- Proactively involving formal structures at the school to galvanise support for school initiatives geared at improving learning.
- Always prioritising learner needs and thereby developing a positive teacher-learner relationship that fosters better learning.

2. Methodology

We conducted a trend analysis of two sets of data: (i) district-level Uwezo basic competence assessment results in literacy and numeracy, and (ii) the end-of-primary exam (PLE) results for the years 2011-2016. We found that districts that showed consistently poor performance in the citizen-led Uwezo assessments also performed poorly in the national exams. Using geographical proximity, we purposively selected ten poorly performing districts for this study – Bugiri, Butebo, Iganga, Kaliro, Luuka, Manafwa, Mayuge, Namisindwa, Paliisa and Tororo.

Positively deviant schools and teachers were then selected through a three-step process, focusing on public primary schools which house the majority of primary-level enrolments in Uganda. First, we used school and subject-level PLE data to select the first list of 206 higher-performing schools[2]. Second, more detailed information relating to various school quality variables[3] was collected from these schools, which was used to reduce the list to 37 schools. Third, a physical visit to these 37 school communities led to the development of school-level thematic narratives that informed the selection of the final 17 study schools.

An in-depth ethnographic inquiry was then conducted in these 17 schools, lasting a week in each school community in the second half of 2017 and early 2018. During this week, our investigators gathered information from a wide array of sources, using a range of methods and tools, including personal interviews, participant and detached observations, informal interactions, focus group discussions, videography and photography, note taking and the triangulation of all the above. Validation sessions involving all the study schools and other neighbouring schools, to discuss initial findings, were completed in July 2018.

3. Six strategies to improve learning

The inquiry identified interesting stories including some unusual but accessible pathways that schools and teachers have taken in their efforts to improve learning. Deeply grounded in their local contexts, each school's uniqueness is revealed through its own story[4].

From these stories, various strategies, practices and behaviours are identifiable which might explain the better-than-expected performance these schools and teachers have achieved in recent years. After much reflection, synthesis and discussion of the stories, the following six strategies emerge:

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2   88 Positive Deviant Type schools and 118 Positive Deviant Type subject schools were selected: schools that achieved top quartile exam results among public schools, or top quartile subject-level results among otherwise poorly performing schools.

3   Overall performance, feeding arrangements, external support, school size, pupil-teacher ratio, social economic activity in the area, rural or urban location, day or boarding status, head teacher gender, time spent as head teacher in the school.

4   We tell, in the best way we can, the engaging and captivating stories that situate each of these schools in its local context and give a comprehensive account of how it finds itself among the list of positively deviant schools – see section 3.0 of the main report accessible at www.twaweza.org/positive-deviance-uganda

Strategy one: Community involvement in schools

We observed that local community members played important roles in the achievement of both academic and non-academic success at the schools involved in this study. Parents, religious and cultural leaders, local councillors, civil servants and other residents are involved in supporting learning. This involvement stretches from seemingly spontaneous actions taken by individuals, such as reporting cases of school-aged children who are found working in sugar cane plantations or stone quarries during school time, to planned and agreed on actions involving many players, such as attending and actively participating in scheduled meetings organised inside or outside of school premises.

To facilitate this involvement, we noted the critical role played by head teachers. Not only did they encourage the community to join hands with the school in tackling the education challenges affecting their children's learning, they also actively opened school doors to parents to enable free engagement with the school authorities on any matters of interest or concern. The head teachers fully understood and acknowledged their communities' hunger for good performance and willingness to support their schools, but also took it upon themselves to point to concrete actions that community members could take to contribute to learning. In turn, parents have made use of the open-door approach to discuss their children's education issues with head teachers and class teachers through individual visits in addition to the regularly scheduled class-level or general parents' meetings.

By developing close relations with the community and with the full support of the parents, most of the study schools provide for children to have lunch at school. Furthermore, parents are more willing, and even keen, to provide support at home, such as buying scholastic materials and ensuring children attend school regularly. Some of these schools require parents and children to jointly pick up the child's performance report card. This encourages parents to speak one-on-one with their child's teachers and sometimes even welcome them into their homes. This helps teachers to get a feel of the child's home environment and have closer interactions that improve the child's opportunities to learn. So this strategy bridges the gap between homes / parents and the school / teachers.

School founding bodies are also heavily involved in schools providing not only moral nurturing of the children, but also contributing more directly to improving learning. This includes provision of land for the school to grow food crops for the children to have a meal at school, and involving children in reading the Bible/Quran during prayer services to improve their language and reading skills and to nurture their self-confidence. In some schools, the head teachers heavily relied on the founding body to use its influential position in the community to mobilise and speak to parents and teachers on important issues affecting their children's education. These include promotion of girl-child education in areas where child marriages are common, appealing to parents to contribute towards food, and encouraging teachers to be more diligent and eliminate absenteeism.

Schools in the study introduced practices that won the confidence and cooperation of their parents.

1. In one school, storage boxes were introduced for P1 and P2 children to safely keep their scholastic items at school thereby reducing the financial burden on parents by preventing repeated loss and other damage.

2. In another school, children in lower primary classes kept their cups at school while the others carried them to school and back home every day – again to safeguard against damage.

Such practices demonstrate to parents that the school understands their circumstances and greatly values their contribution.

Strategy two: Effort, openness and achievement in schools.

The stories also reveal systematic efforts to introduce and embed cultures and values that focus everyone on achievement. Teachers and learners are urged to exert effort, the head teacher and the management committee are transparent in managing school resources, and everyone's actions are driven by the desire to create a friendly environment that positively nurtures learning for all children.

Again, this strategy is built on a commitment by the head teacher to live and promote these values in the school. Head teachers demonstrated effective administrative and pedagogical leadership mainly by "setting a good example" for other teachers to emulate. Despite their other

exacting responsibilities at school, we found all the head teachers in the study schools taught at least one subject and class, usually the candidate class. They also used soft persuasive tactics to motivate their teachers to give their best.

In describing their unique qualities, teachers in the study schools referred to their head teachers as friendly, understanding, patient, considerate, punctual and hard working. This positive peer leadership exhibited by the head teachers creates a strong moral imperative for teachers to follow the head teacher's example and reduces the need for close supervision and frequent disciplinary actions. Similar descriptions were used by parents and other community members who referred to the teachers and head teacher as caring and understanding of both their needs and realities. This positive energy in the schools spreads into the community as they feel encouraged to contribute to their schools.

Direct involvement of teachers in planning, budgeting and actual spending of UPE grants was another prominent practice identified in these schools. This high level of transparency in financial management activities at the school is thought to be critical in preventing conflicts that might derail the school from its primary focus on learning.

Finally, some schools have established structures that mimic a family environment in the school, through which teachers are assigned children to mentor, support, guide and counsel as "guardian teachers". This role enables the school to support children with challenges that fall outside classroom subject-matter, but with potentially significant consequences for their learning. Guardian teachers can listen and guide the children, and in some unique cases, take up and resolve the issues with the children's parents.

1. In one school we discovered that the head teacher and one of the teachers were involved in a long-standing 'punctuality challenge' – who arrived at school earlier today? The whole school knew about it and enjoyed the fact it meant everyone arrived early and the school avoided teacher punctuality challenges.

2. In another school, teachers must sign the attendance register in the head teacher's office immediately after they arrive at school. This encourages them to come early since the head teacher is usually the first to arrive.
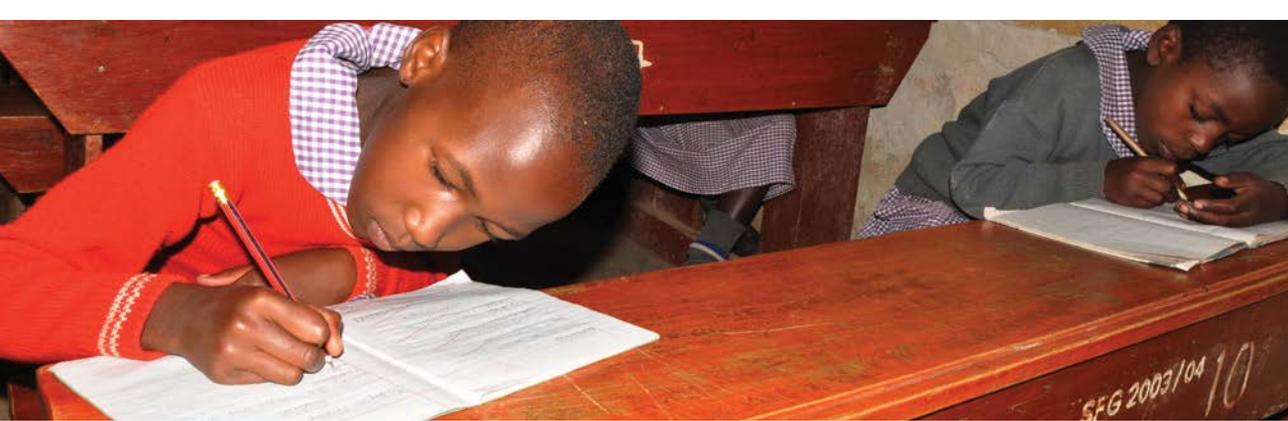
Strategy three: Ensuring children achieve mastery in schools

The school stories reveal that emphasis on learners achieving mastery is another common strategy. To realise this, schools have introduced practices targeting improvement of the teaching-learning process, development of learners' capabilities to query and discover, and influencing parenting decisions that might impact children's learning outside the school.

A widespread practice is that of teachers moving with a particular cohort of learners as they progress up the grades. Depending on the school, this practice took on a number of forms: a class teacher moving with their student cohort throughout the three lower primary grades; a set of teachers moving with their student cohort in grades four and five, or grades six and seven, or all the upper primary grades four to seven; and a subject teacher moving with their student cohort from primary four to seven. This practice is not only likely to lead to improved teacher-learner relationships but also increases the likelihood that teachers will design and implement effective learning remedies for all of their students. When teachers have longer-term exposure to a particular group of students, they are likely to understand better how to efficiently engage them in the learning process, which translates into more effective planning for and coverage of the overall syllabus content.

Additionally, teachers that move with their students as they progress through grades face extra pressure to understand the needs of, and adapt their teaching to, the grade-level in which the children are currently enrolled. This pressure therefore, not only improves the teacher's capabilities, it also makes them more accountable for the actual learning achieved since they will not be able to blame future failures on other teachers. Teachers develop strong attachment to their group of students and go out of their way to help them learn and achieve top performances in the national exams. On a separate note, this practice reduces the repetition associated with teaching the same content to the same grade for many years which effectively kills the teacher's initiative, desire and drive to grow in the profession.

Other practices being used to improve the teaching-learning process include using teachers of lower primary grades to conduct review lessons in upper primary classes thereby helping children revise what they learnt during the foundational years; using continuous assessment for formative purposes – to spot problem areas and guide remedial teaching sessions, not as a mere testing routine; teachers making full use of the school surroundings as a source of low-cost instructional materials to aid children's comprehension[5]; and requiring all teachers to enrol their own primary school age children in the same school where they teach – as a means to secure their commitment and effort.

To promote teamwork and develop other important life skills and values among learners – such as the capacity to query and discover – teachers in the schools in this study systematically group learners and assign them group tasks. Through this practice, children learn to value their peers and discover their own capabilities to perform in a group setting, engage with, discover and create knowledge. This practice allows children to discover themselves and to be responsible for owning and transforming their learning experiences. Furthermore, children learn to share their ideas, develop friendships, empathise, make decisions, and support and respect each other's points of view.

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5   Examples include visiting nearby physical features, making improvised local instructional materials, conducting outdoor learning, talking walls and compounds, and maintaining school gardens.

Finally, leaders in these schools have realised that left to their own means, many parents will likely undermine their children's efforts to learn – for example, through giving children a lot of chores while at home, which will frustrate their ability to do homework, revise or even focus when in class. Therefore, teachers are reaching out to sensitise and guide parents on how best to structure the home environment to facilitate rather than hinder their children's education.

In almost all the schools in this study, it was discovered that head teachers frequently visited pupils' homes and talked to parents on one critical aspect – creating a home environment that helps rather than hinders the child's learning. Nevertheless, they too acknowledged that it was difficult to achieve the ideal home environment required for P7 candidates to concentrate on their studies. This led to many of the schools running modest boarding arrangements for candidates only.

Strategy four: Teacher support and motivation in schools

The centrality of the teacher also emerges as a recurring theme in the school stories. It is clear that all key players in these school communities appreciate the need for teachers to be supported and motivated to perform and achieve. The school-level support given to teachers in the study schools is predominantly focused on achieving continuous improvement in the quality of instruction in the classroom.

These schools recognise that teachers come from different backgrounds, which affects the quality of teaching they are able to deliver. The critical background factors that these schools are responding to include the original motivations that attracted the teachers into the profession, the foundational stock of knowledge of relevant content they accumulated during their formative education years, the quality of teacher training programs they have had and how that plays out in terms of their practice and pedagogical skills in teaching, the experiences they have accumulated over the years in the profession, and the interactional effects of their individual or group values and attitudes on approaches to work.

Two unique practices were identified in the study schools. First, locally-organised and regularly held peer-led teacher professional development sessions at the school targeted at improving specific areas of need – including preparation of comprehensive schemes of work and lesson plans, conducting assessments, handling teacher-learner relations, classroom management and teacher work ethics. Second, teacher mentoring and coaching through structured and comprehensive peer-led support supervision is used as a means of improving classroom instructional practices. The study schools attached great importance to these practices as they have also acted as the main avenues through which they have managed to foster good teacher relations and teamwork – a feature that greatly helps in aligning the school to achieve its' overarching goal of improving learning.

On teacher motivation, the stories reveal simple and affordable teacher performance incentive practices[6]. The study schools rewarded good performance of teachers through open recognition in the presence of all the key players at the school – School Management Committee (SMC), Parent-Teacher Association (PTA), students and fellow teachers. In some cases, head teachers

6   These mostly include the giving of simple gifts and official appreciation letters from the head teacher, the sub-county or district education office.

go out of their way to buy and give some symbolic appreciation items to these teachers. This study found that the prevailing thinking behind teacher motivation in these schools is that it is an intrinsic matter, which may not be easily manipulated through extrinsic performance reward mechanisms. As such, schools use these simple recognition and reward mechanisms to appeal to or stimulate teachers' existing internal motivations to teach more effectively.

In one school, we discovered that the head teacher entered into a performance agreement with each teacher in the school at the start of every school year. In this agreement, they set out clear learning targets and indicators. This head teacher uses his December salary to organize a party and reward his teachers when they achieve excellent performance in the PLEs. This practice had also rubbed-off to the teachers, who buy scholastic items as rewards for their star pupils.

Strategy five: Proactive involvement of SMCs and PTAs in the schools

School Management Committees (SMCs) and Parent-Teacher Associations (PTAs) exist in all primary schools in Uganda. However, there are challenges in the effectiveness with which these structures play their roles and how, in practice, they relate with the school and the community. While the overall management of primary schools in Uganda is the responsibility of the SMC, school head teachers are entrusted with the day-to-day running of schools. Head teachers who develop and maintain strong relations with their SMC and PTA find it easier to effectively run the day-to-day operations of the school and to introduce initiatives that improve learning.

Two practices exemplify the proactive involvement of the SMC and PTA in study schools: In order to shield themselves from political pressure and possible interference in the operations of the school by local politicians, head teachers seek advance backing from the SMC and PTA. A common example is the introduction of feeding programs for children when they are at school. Since head teachers must seek support and often contributions from parents for such programs, this opens up the possibility of political interference to block parents from parting with their own resources for these programs. In order to avoid this interference, the SMC and PTA play the lead role in mobilising and sensitising parents on why such initiatives are needed. This shield that the SMCs and PTAs provide to the school against negative external forces goes a long way in strengthening the authority and confidence of the head teacher as the executive head of the school.

A second practice is that of the SMC and PTA being directly involved in supervising and evaluating teachers and the school's general performance – teaching, learning, welfare and co-curricular activities. Issues of teacher absenteeism from school or class are brought to the attention of the SMC and PTA, and such teachers are required to defend themselves before these bodies. This has greatly bridged the accountability gap that is prominent in many schools in which these structures are not playing such roles – usually these issues are left to the head teacher to resolve. The SMC and PTA in these schools are fully involved in supervising and evaluating school and teacher-level performances. The involvement of these bodies in supervising schools has also resulted in schools realising and responding to the need to conduct co-curricular activities.

In one school, we learnt that the SMC and PTA held regular joint meetings to discuss important matters that required parental input. After they have agreed on how to proceed, they call parental sensitization meetings and explain the jointly agreed positions. Only after this is done do they embark on jointly implementing the agreed positions. School feeding arrangements and the conduct of remedial classes are examples of issues that require these type of approaches

Strategy six: Teachers caring for and prioritising learner needs

As part of this inquiry, we also studied ten subject-teacher groups that consistently out-performed their peers (subject-level performance) in otherwise below-average schools. We refer to these teachers as positively deviant teachers – they use their unique strategies and practices to consistently out-perform their peers in the same school without having access to any additional resources that are beyond the reach of their colleagues. While some of the practices we unearthed were similar to those we had found being practised by teachers in the schools discussed above, others were new. We also found some subject-specific (as opposed to generic) practices.

In order to facilitate children's use and mastery of the English language, teachers encouraged children to retell movie stories they had watched to the rest of the class, in English. They also encouraged children to use the library and develop an interest in reading. Likewise, organising and encouraging participation in debates (whether class-level or school-level debates) was used by English language teachers since they believe that debates improve children's self-esteem and spoken language skills.

Recognising that many children fear mathematics as a subject, mathematics teachers go out of their way from the start to portray a positive image of the subject. These teachers also emphasise the importance of assessment of pupils' skills to pace their teaching according to these competency levels. In order to ensure the class was keeping up, the teachers gave frequent exercises after every concept taught, rather than teaching two or three concepts and then testing all of them at once. The lessons are therefore well-paced, and any challenges are diagnosed and corrected before it's too late. For effective concept development therefore, mathematics teachers give practice exercises immediately after a concept has been taught and only proceed to the next concept when sure the children have mastered the earlier concept. An example is the addition operation in lower primary grades: first, addition "without carrying", and then "with carrying" only after confirming that the children have mastered the former.

Teachers in the study were found to be driven by a strong desire for the learner to actually benefit from their instruction. They did not just come to class to fulfil a timetable requirement to teach, rather they made their effort count by improving each child's learning experience. These teachers were found to be using practices such as deliberate mixed ability grouping of children to facilitate child-level peer-to-peer learning benefits, endeavouring to repeat and clarify difficult concepts just in case some pupils had actually not understood, and always making themselves easily approachable and available for consultations by pupils. Furthermore, some of these teachers ensured their learners received a diversified learning experience on difficult concepts by having other similar-subject teachers come to their class and teach the same concepts from an entirely different perspective. In addition to being highly beneficial for children's learning, this practice is great for developing a team spirit among teachers.

Although these teachers were selected from poorly performing ordinary (not positively deviant) schools, we discovered a few similar practices to what was happening with teachers in the schools that could be categorised as positive deviants. First, teachers were very highly-regarded and their subjects loved by the learners. Reasons for this include their strong rapport with the children, being supportive of, rather than berating, pupils who struggle to grasp certain concepts, regular and punctual attendance and conduct of their classes, their ability to effectively plan and deliver the syllabus content within the allocated time with ample time for revision, and the use of real-life locally available materials and illustrations to clarify difficult concepts to learners.

Second, these teachers were also very highly regarded by their fellow teachers, mainly because of the peer support and development roles they played in the school. In one school we found that a certain teacher had introduced the lunch time "what went wrong" forum for teachers to share challenges from their class sessions. Teachers were using this forum to freely discuss and support each other on a variety of aspects, thus making it a practical teacher development forum which continuously improves the quality of instruction and learning in the classroom on a day-to-day basis. These teachers also supported their peers through drawing lesson plans and schemes of work, conducting research on various aspects of common interest to teachers and sharing the insights, and filling-in for absent teachers who have emergencies to deal with.

Finally, study teachers were using continuous assessment as a tool to diagnose problem areas that they reviewed during remedial classes. They also demonstrated more confidence about their work and brought an extra edge to children's learning experiences because these teachers tended to teach across grades and thus have deeper understanding of their subject.

1. In one school, when the children were asked to justify their choice of best teacher, they mentioned that he always told interesting stories and sung songs that refreshed their minds. On talking to this teacher, we discovered that his stories and songs are well calculated to capture the children's attention and relate to whatever he is teaching at that moment.

2. In another school, we learnt of a science teacher who, when teaching about personal hygiene, was alerted to a pupil who had a difficult health condition. He personally took keen interest in that pupil's case and helped the child to fully recover from the condition. The pupils were very proud of this act of kindness from their teacher and never hesitated to identify him as their best teacher.

4. Conclusions

This inquiry confirmed the existence of extraordinary schools in districts that are categorised as poor performers, and extraordinary teachers in schools that otherwise perform badly. This provides an important beacon of hope for the education sector and can serve as a source of creative ideas that are within the reach of individual schools and teachers to employ.

The six strategies highlight the importance of adopting a multi-level approach to confronting the learning crisis. The practices identified involve players at different levels – including parent and community, school, teacher and classroom, subject, and learners themselves. On deeper reflection, it is evident that a focus on getting parents and the wider community to support school-level efforts to improve learning holds great promise.

These unusual practices that lie fully within the control of the players at school provide not only the greatest potential for quick adoption or adaptation but also a high chance of sustainable implementation. Such practices include head teachers who set a good example for other teachers to emulate, the holding of regular locally-organized peer-led teacher professional development sessions, and the utilization of continuous assessments to spot problem areas and inform remedial teaching.

The strategies also clearly reveal that head teachers play a pivotal role as the glue that binds together all players to constructively contribute towards improving learning. They play not only administrative but also leadership, parenting, teaching, mobilisation, and networking roles. But to do all this, head teachers must risk their personal reputations and therefore need to be assured of full support by all players and authorities.

This study and the strategies identified can help to play an important role in the future of the sector more broadly. Identifying and engaging with head teachers and teachers who go above and beyond the norm to ensure children learn will provide a powerful source of new ideas for policy and practice in the education sector in Uganda. It is the voices of these teachers, at the front lines of building the next generation of Ugandans that must be heard, supported and amplified.