



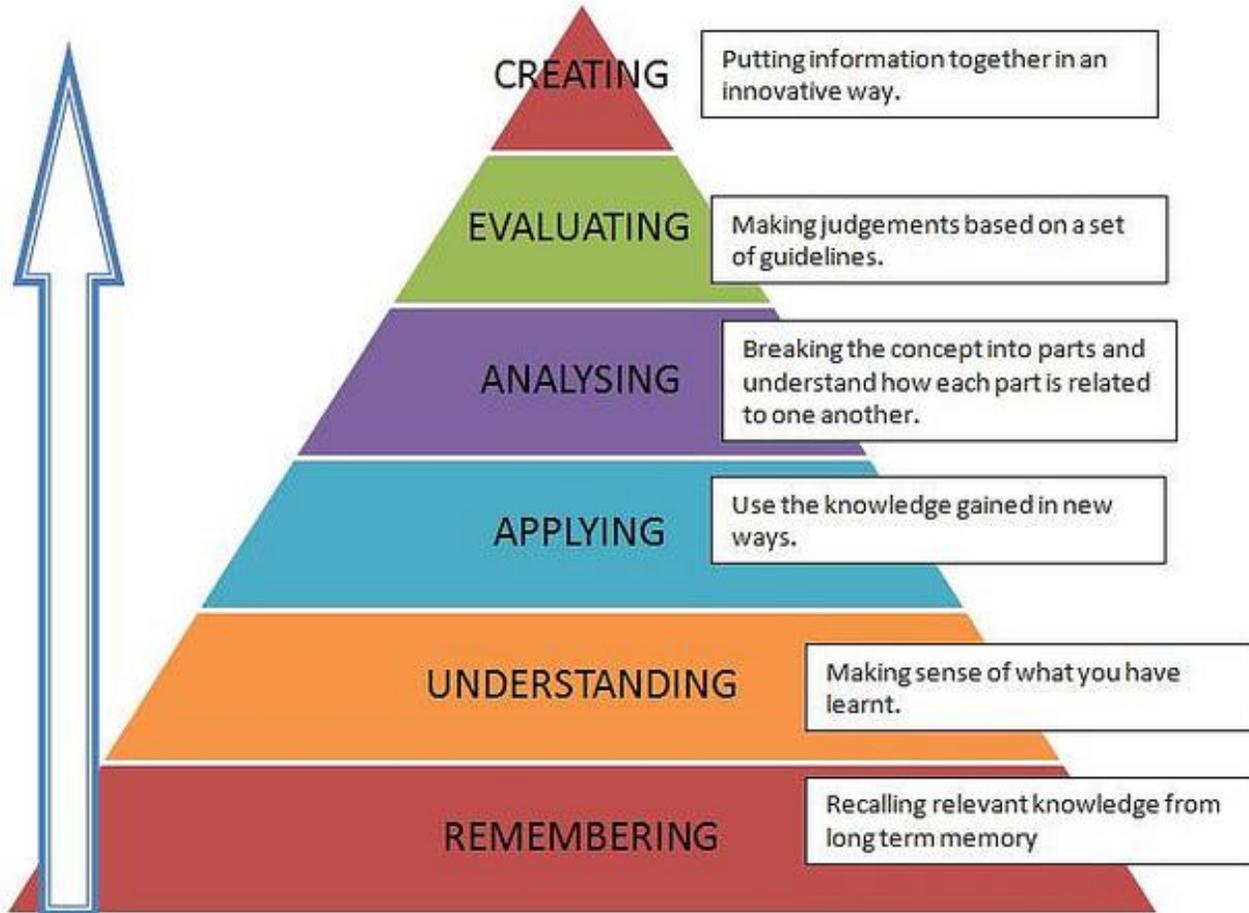
## Towards a learning transformation in West-African high schools



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# How do children learn?

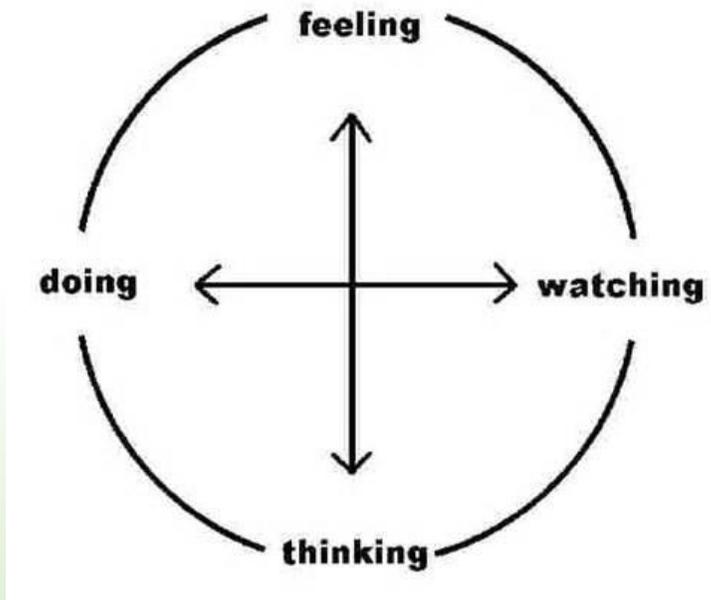


Traditionally, the educational system as it has evolved is focused on the transfer of information, which is a passive way of learning that only impacts students on a superficial level, where they are not necessarily able to really comprehend and apply what they have learned.

Various levels of learning have been distinguished in Bloom's taxonomy.

We observe that most education in the world is still focused on the two levels at the bottom the pyramid.

# How do children learn?



Kolb model of various learning styles

At the same time, not all individuals have the same learning style. The learning style model of Kolb discerns four different learning styles. While most students will combine different routes of learning, they will usually have a style of preference. In our classic educational system, a student may be very smart but may have a learning style mainly based on experimentation. Still, the system forces him to learn not by practice but by studying from a book and listening to the teacher. The effect of this situation is a big underperformance and loss of talent.

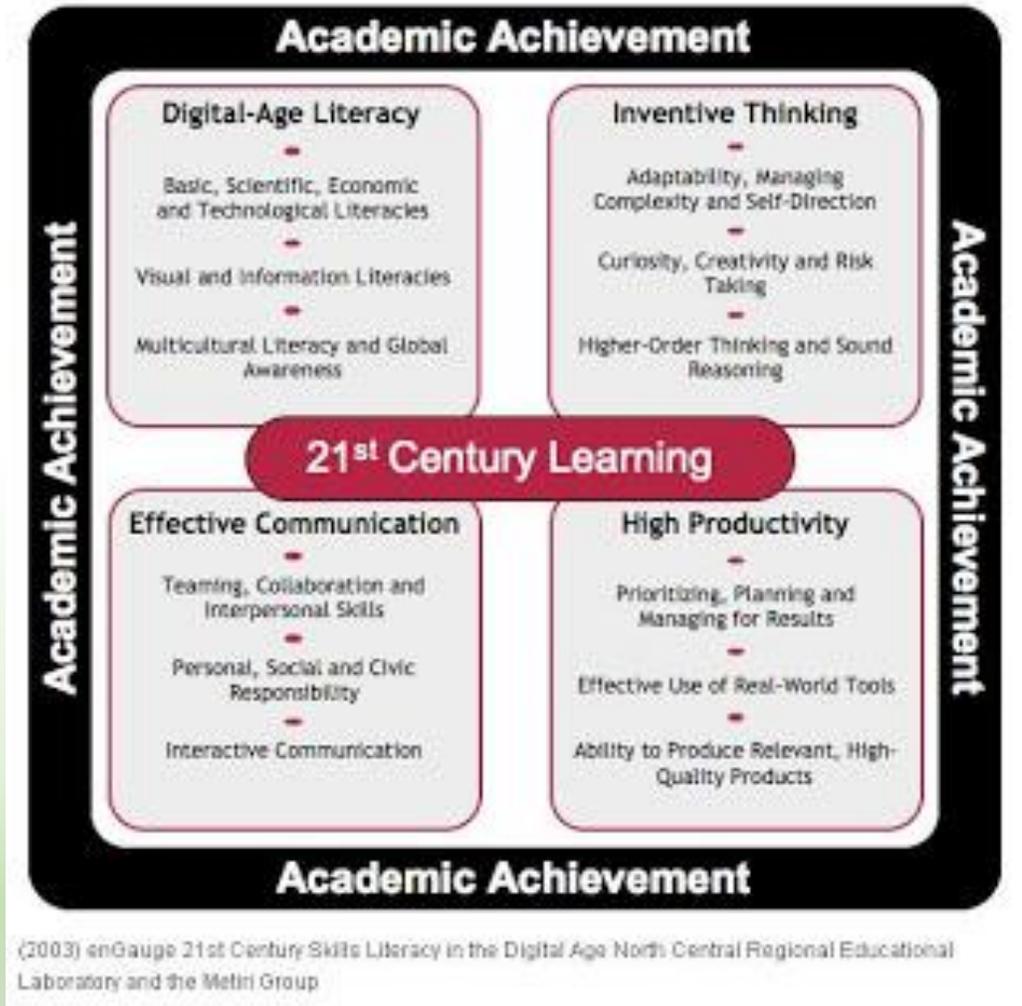
# How do children learn?



Finally, we know from the scientific experiences regarding action learning that in general the extent to which we learn depends on the media that are being used for the communication of the content.

Generally, by just hearing and reading the content, 80% of a message gets lost, in particular the deeper senses of understanding and learning from the top of the Bloom Taxonomy model.

# The urgency of change



Model of 21st Century Skills

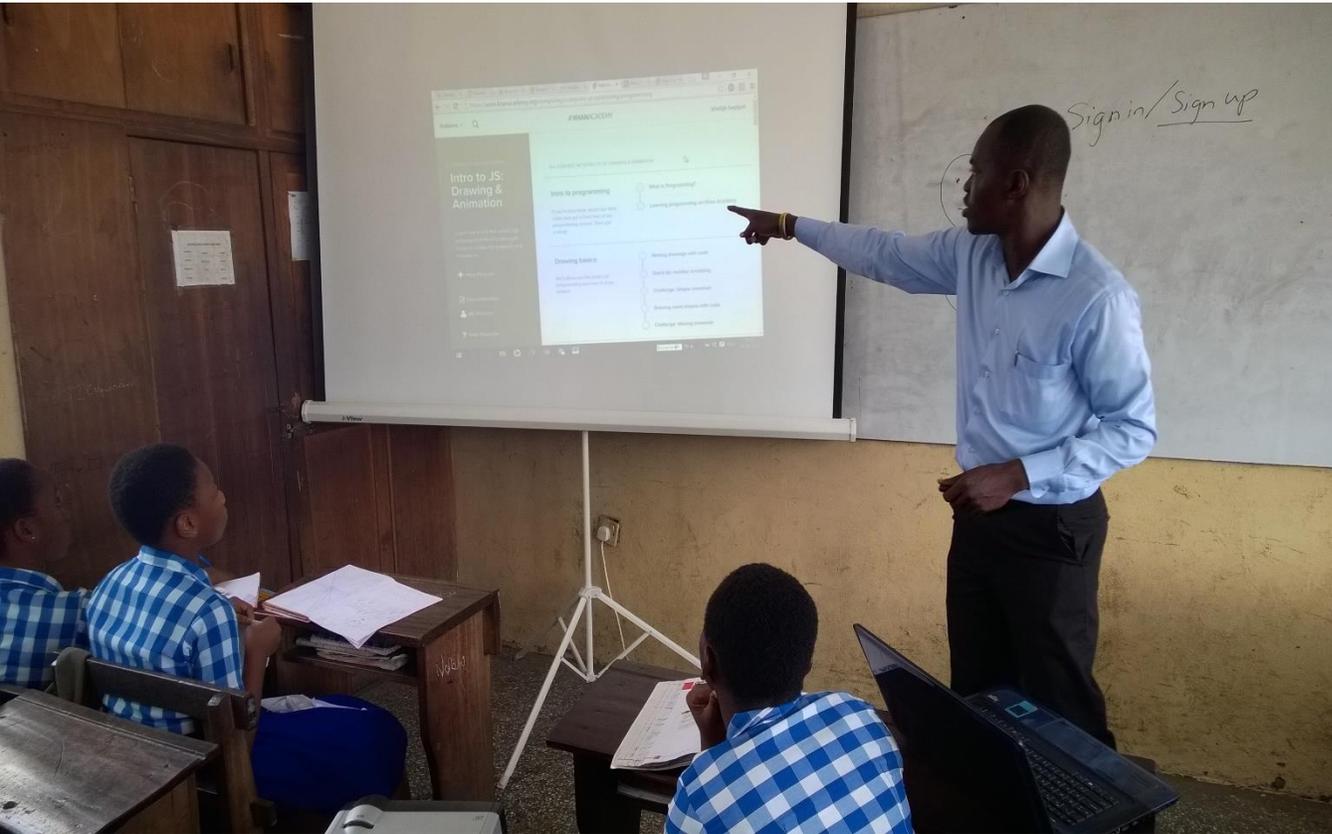
We live in a century of great change and innovation. IT and globalization are rapidly changing the world. New innovations will make life much easier for ordinary people. Others will discover that they have been trained for a profession that no longer exists.

Parents see these changes and are increasingly asking schools to adapt their curriculum to prepare their children not for the job market of 1990 but for the job market of 2025 or 2030. Digital literacy, creativity and communication skills are key elements to prepare students for the new world.

# Conclusions for our approach: We are not just about IT, but aiming at a Transformation of Learning

1. We want the West-African educational system to provide for a learning practice that allows children to obtain a deep level of understanding, application and creativity, preparing them for their 21<sup>st</sup> century future. This includes digital literacy, creativity and communication skills.
2. Students have different learning styles and should have ways to choose through what route and pace they obtain the required learning goals.
3. Students learn much better when they can see, write and practice by themselves.
4. Improving our educational system is a matter of a paradigm shift where students get more freedom to be actively involved in their own (partly individualized) learning activities. We just know from experience they are going to love it!
5. Modern media and IT can greatly help to support this transformation via the availability of video, interactive exercises and individualized Learning Management Software.

# The use of multimedia in the classroom



## Maxim Nyansa can help your students to perform in these areas; We use an integrated approach:

- Bringing brand new/slightly used computers into your school is only a first step.
- We bring what you need tailor made for your phase of development and available budget.
- Your school will experience higher examination results especially in Science, Mathematics and Information Technology.
- Students will enjoy going to school, as they will be actively involved in their own learning process.

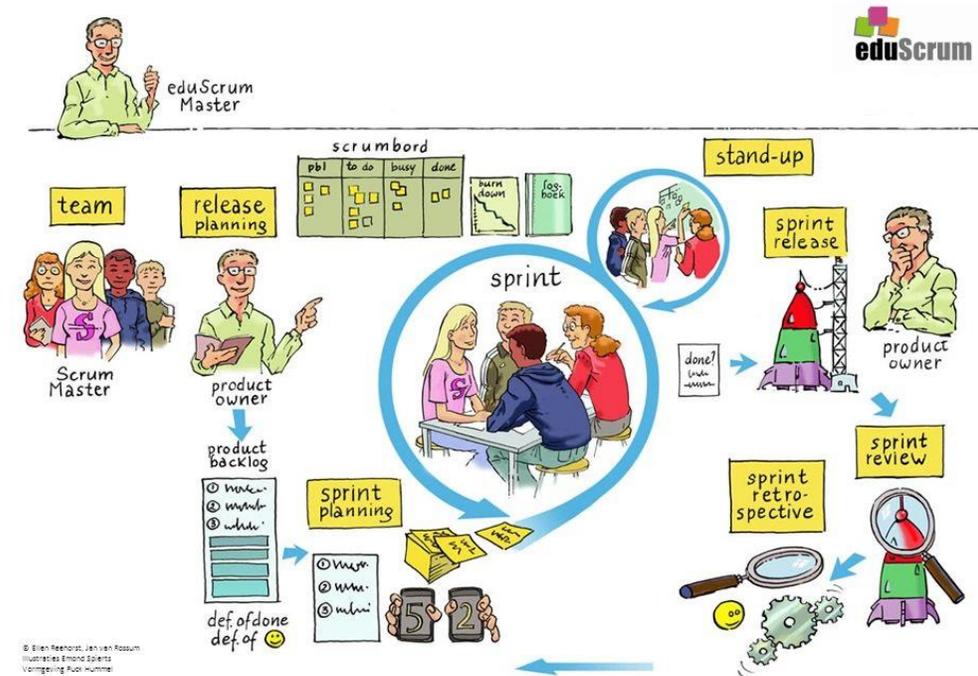
# The 10 elements of our integrated approach

## *Hardware and Networking: Installation and maintenance*

- Set up of IT laboratory
- Installation of other hardware like smartboards, projectors, ipads and laptops in class
- IT architecture and internet connectivity evt combined with on campus wifi and local servers

## *Training*

- Training of teachers in basic IT skills for their subject areas
- Training in multimedia teaching practices
- Training education innovation for 21st century skills including innovative approaches like EDUSCRUM



# The 10 elements of our integrated approach

## *Software*

- Learning Management Software (online or offline options)
- Open source digital educational content matched to the West-African curriculum
- School Management/Administration software

## *Specialized Consultancy and change management*

- Our consultants are available to advise you on the way forward in the coming years and the steps to take.

# First step: a quick scan of where you are now?

Maxim Nyansa will always first carry out a quick scan together with your school to investigate your current situation and the challenges you currently encounter.

Based on this quick scan, we will have an interview with the school administration and other relevant stakeholders.



## Second step: design a project interactively within your available resources

For all elements of our integrated approach, we have larger or smaller step by step building blocks available. We can match up with the budget your school has available.

For example, a school can choose to start with a lab of just 6 desktops and a training of a small group of teachers in IT skills and multimedia.

In the future, Maxim Nyansa can come back for the next phase.

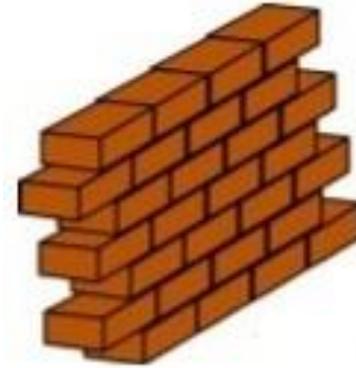
A more detailed inventory with prices for these bricks, walls and rooms of the “Maxim Nyansa house” are available for you.

# Nyansa Building Blocks



## *Nyansa Brick*

- ✓ 10 fully equipped Windows 7 desktops
- ✓ Laptop Computer
- ✓ Projector
- ✓ Training and consultation



## *Nyansa Wall*

- ✓ 15 fully equipped Windows 7 desktops
- ✓ Projector and laptop
- ✓ Internet-enabled
- ✓ Training and consultation



## *Nyansa Room*

- ✓ 15 fully equipped Windows 7 Desktops
- ✓ Smart board with projector
- ✓ Laptop (Optional)
- ✓ Internet-enabled
- ✓ Training and consultation



## *Nyansa House*

- ✓ 20 fully equipped PCs
- ✓ Smart board with Projector
- ✓ Laptops (Optional)
- ✓ Learning Management Software (LMS)
- ✓ Laserjet printer (Optional)
- ✓ Internet-enabled
- ✓ Training and consultation

## Third step: Implementation in phases

Based on your School's year calendar and the availability of your resources, we will implement the elements of your choice.

For example, for the training of teachers, their availability during the busy school schedule is key and sometimes challenging to realize. We will draw a suitable schedule with the school authorities and the teachers.

After implementation, Maxim Nyansa is still available for maintenance of the systems and eventual additional training sessions.

# Special Package for Public Schools

Based on the policy for the public Schools where education is free and schools are being funded by the government, it is our experience that public schools do not always find the financial resources needed to invest in learning innovation. In particular, investing in computer hardware.

That is why Maxim Nyansa offers a special package for Public Schools in such a situation consisting of:

1. A community based approach involving local stakeholders in the establishment of a neighborhood computer center.
2. Good quality slightly used computers donated by European schools and businesses.
3. Partnerships with European donor organizations who are willing to co-finance the project, for example from the Ghanaian diaspora community.

# Who are we? Experts in Education and IT

Our IT professionals have been trained in-company by Maxim Nyansa and they are prepared to work as IT consultant for Education to implement our integrated solution in schools.

Our Ghanaian team works under the daily leadership of [Stanley Kwakye Dankyira](#), our director of Maxim Nyansa Ghana, an IT expert with experience in secondary education.

[Diana van der Stelt](#), director of Maxim Nyansa in the Netherlands has extensive management experience, incl. deputy director of secondary education at the Ministry of Education and CFO/CIO of a large school board responsible for the innovation of learning and the use of IT in education.

Our consultants are graduates in Computer Science, Information Technology and related fields. Majority of the team have a background in Education, too.

# An NGO with significant partners

Maxim Nyansa is a true bi-cultural NGO based in Ghana and its partner organization Climbing The Right Tree (CTRT) in the Netherlands. In our work we partner with relevant organizations and experts in the field of learning innovation, IT and education in both countries as well as in India ([Computer Shiksha](#)).

Various significant experts in this field are available for free advice as they consider themselves Maxim Nyansa ambassadors dedicated to the same Maxim Nyansa mission:

Creating career perspective for young Africans using IT!

We partner with various Ghanaian foundations in the Netherlands involved in the introduction of IT in schools. Dutch schools regularly donate to us good quality computers. We ship them to Ghana for the target group of public schools who are not able to afford large hardware investments.

# Contact Information

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