

Concept Note
Virtual Interactive Universal
Classroom for Sustainable
Development Schools

by



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SUSTAINABLE DEVELOPMENT SCHOOL CONCEPT

Total-School-In-A-Box Concept

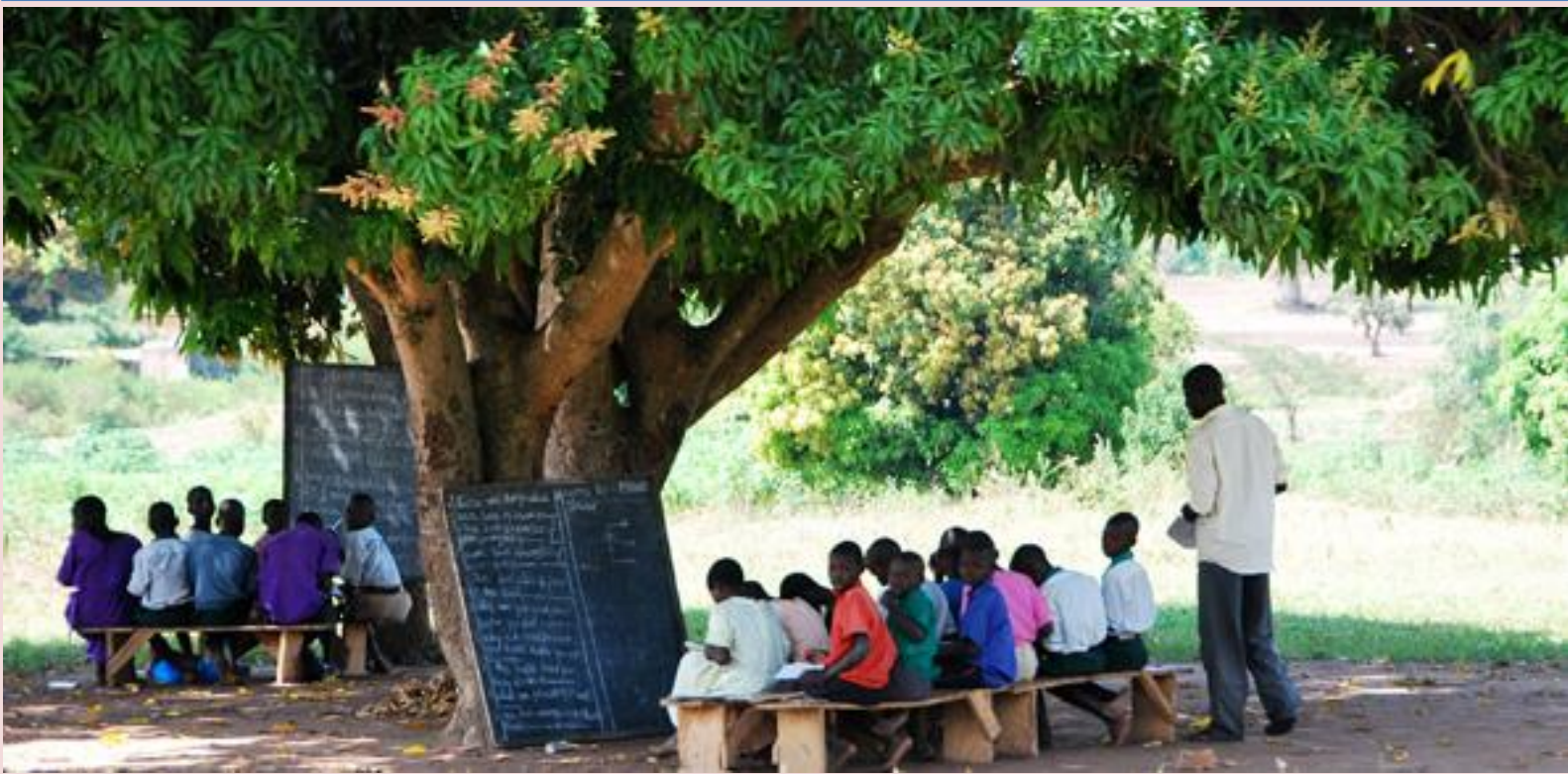


Children in a rural area of Lagos State availing themselves of opportunity to learn with the exciting VIUC.

The Sustainable Development School (SDS) is a world-class comprehensive virtual-school-and-vocational-centre-in-a-box with a curriculum based on the Nigerian Education Research & Development Council (NERDC). It is designed to weather all peculiar perennial obstacles that impede functional education in our environment (including dearth of infrastructure, qualified teachers, books and other instructional materials, funding and learner-motivation) to reach the goal of leveraging on education to create a competitive 21st century skilled workforce.

The SDS exploits the rich, incisive and fun features of the Virtual Interactive Universal Classroom (VIUC), an innovative multimedia-based e-learning pedagogy.

Virtual Interactive Universal Classroom



VIUC employs a novel and exciting scheme that makes learning appealing and turns school into an irresistible rendezvous. It stands head and shoulders above all existing e-learning systems in Nigeria today. In this era of social and physical distancing it will become an indispensable tool in every classroom.

It is an innovative hands-on, interactive, learner-centred, content-driven and multimedia-based e-learning system that excites students, improves teacher efficiency, boosts examination grades and drives down long-term costs.

It supports virtually all modern teaching methodologies and quickly becomes every teacher's best friend.

Virtual Interactive Universal Classroom Features

Multiple Layers of
Lesson Mediation

Manifold Learning
Styles

Comprehensive
Curriculum

Experiential &
Immersive

VIUC FEATURES

Student-centric;
Teacher-friendly

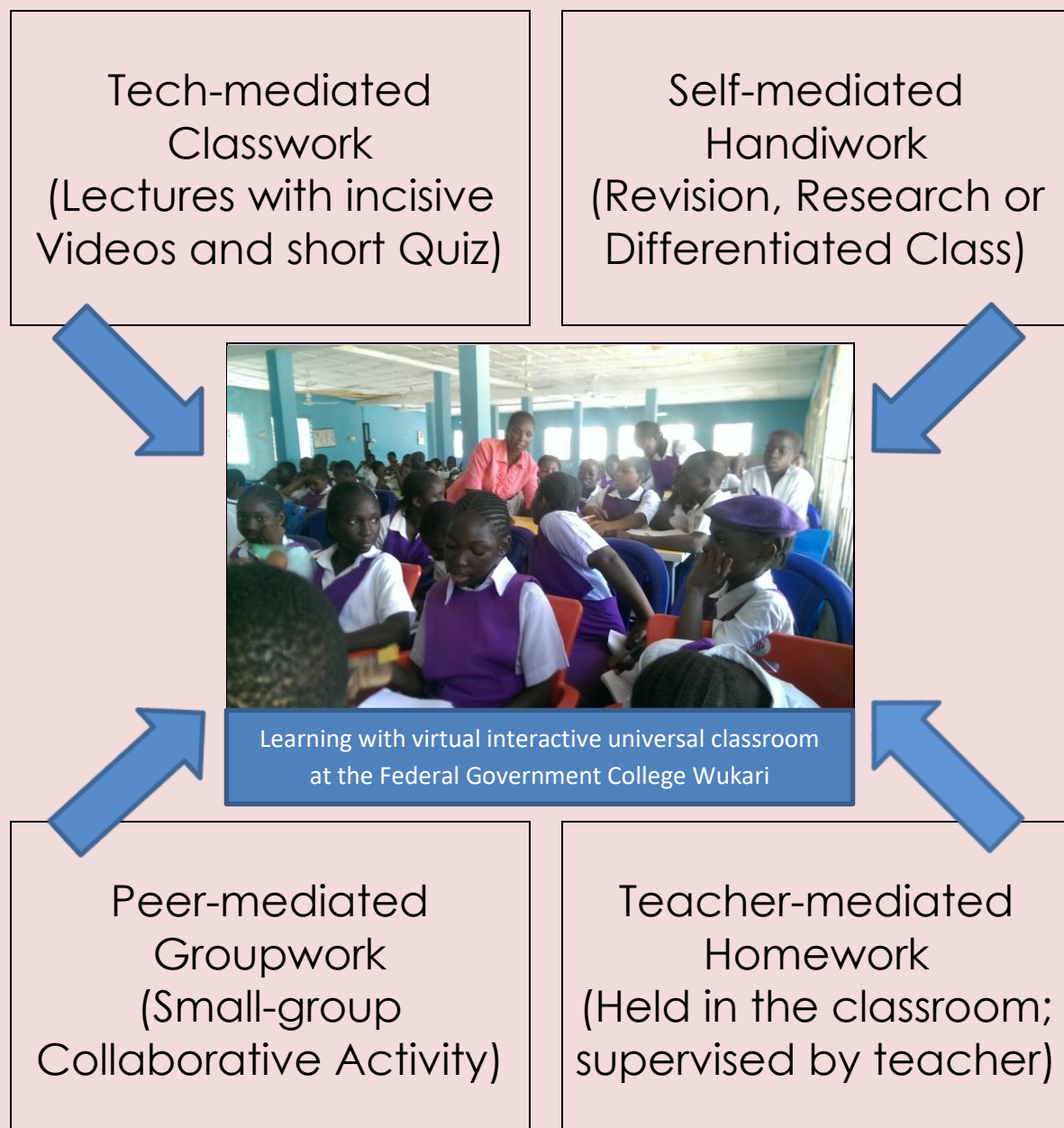
Innovative and Fun
Methodology

Functional
Education;
21st Century
Pedagogy

Unmatched Cost
Reduction

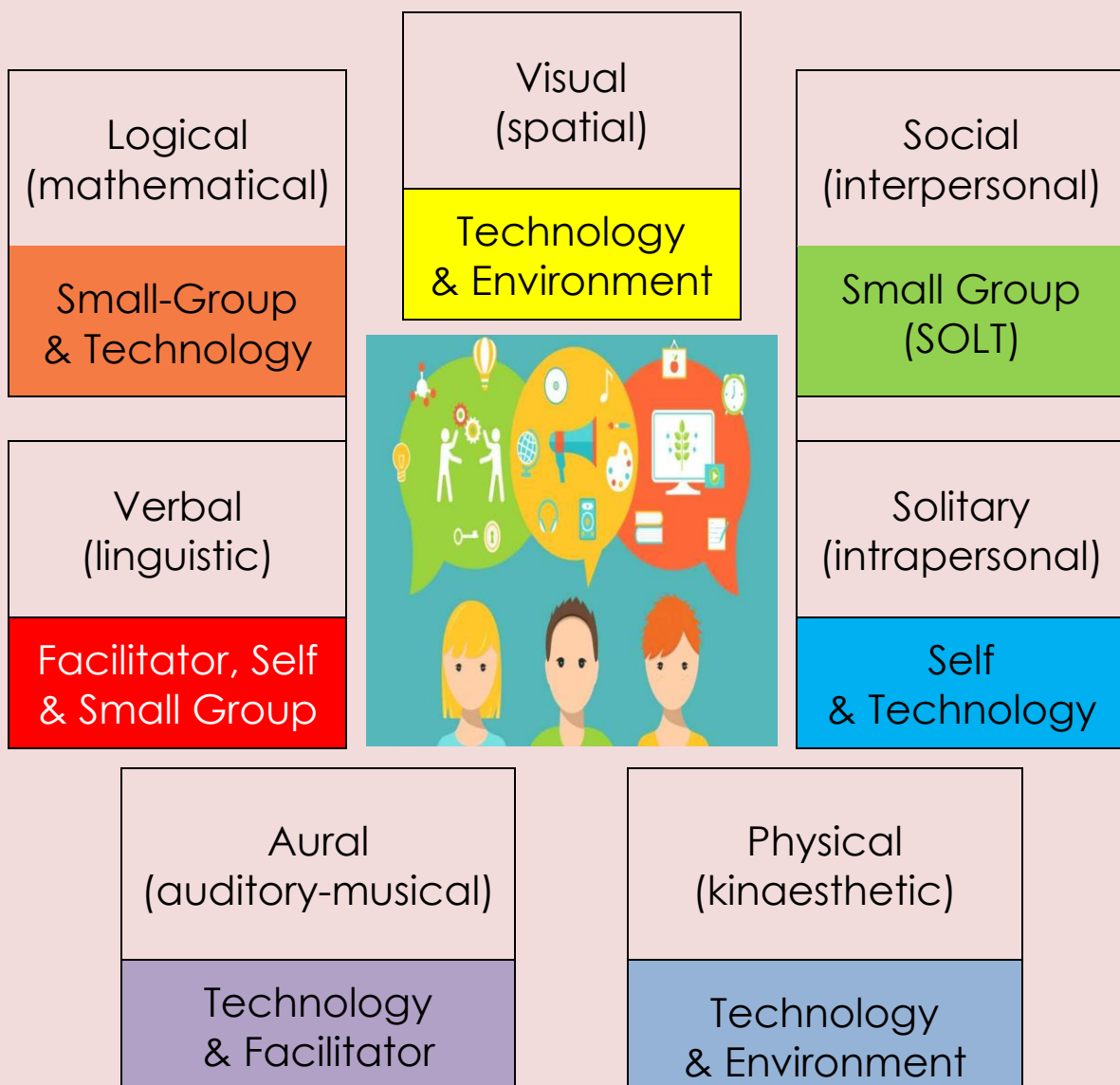
Multiple Stages of Lesson Mediation

Lesson modules comprise rich suites of interactive videos and virtual laboratory simulations that are designed for multiple mediation techniques. They foster quick comprehension, deep retention, teacher efficiency and curriculum effectiveness. The pedagogy is a tight integration of technology, facilitator-innovation, learning environment and lesson plan, in four interdependent learning activities. It appeals to all classes of learners.



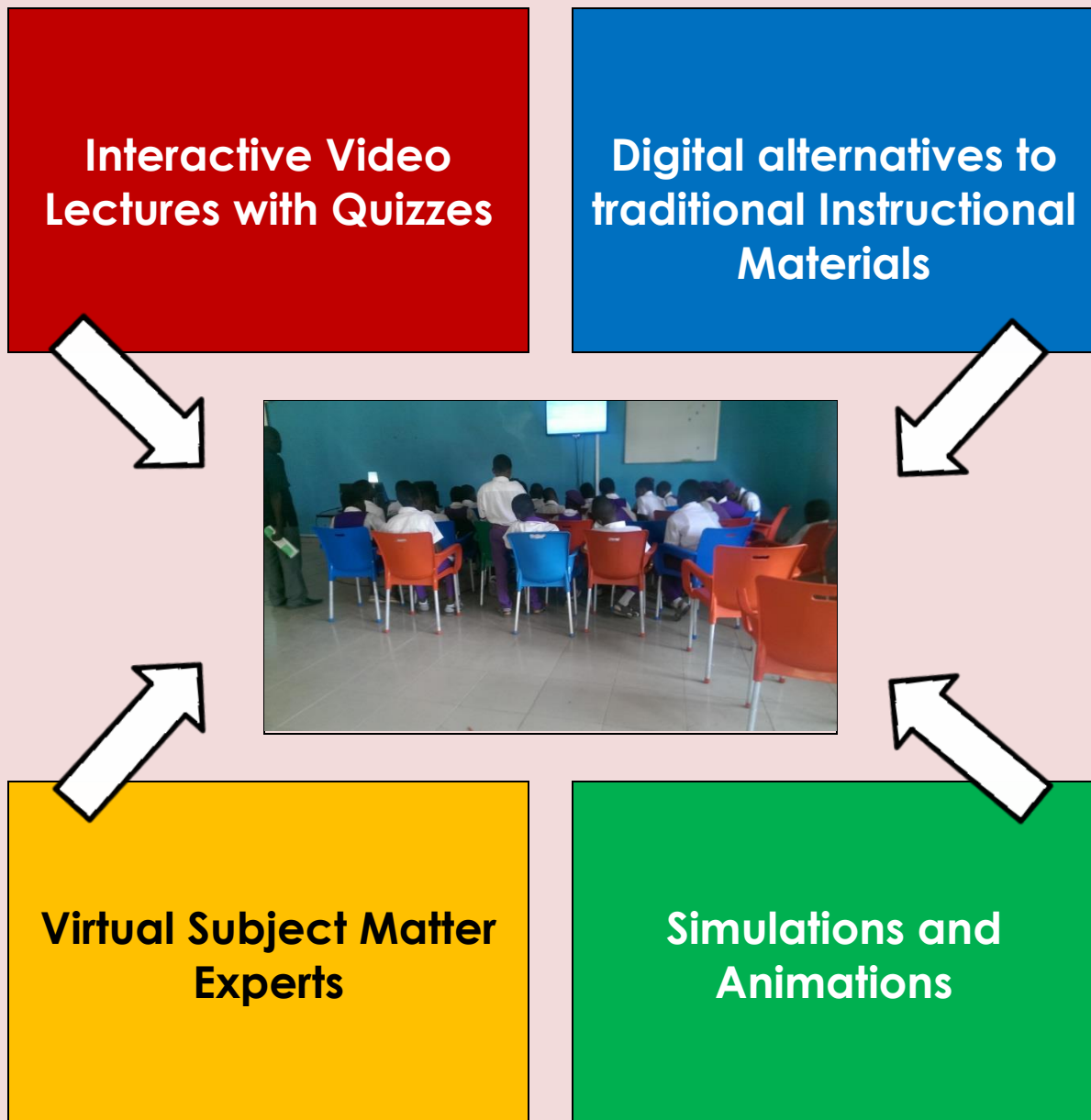
Manifold Learning Styles

Like white light, which is a synthesis of the seven colours of the rainbow, vivid knowledge is constructed from a compendium of stimuli from different interconnected sources. Effective learning comes from assimilating information from diverse media. Every individual has peculiar preferences for unravelling and assimilating data. VIUC pedagogy conveys information through four stimulating settings that leverage all seven learning styles among them.



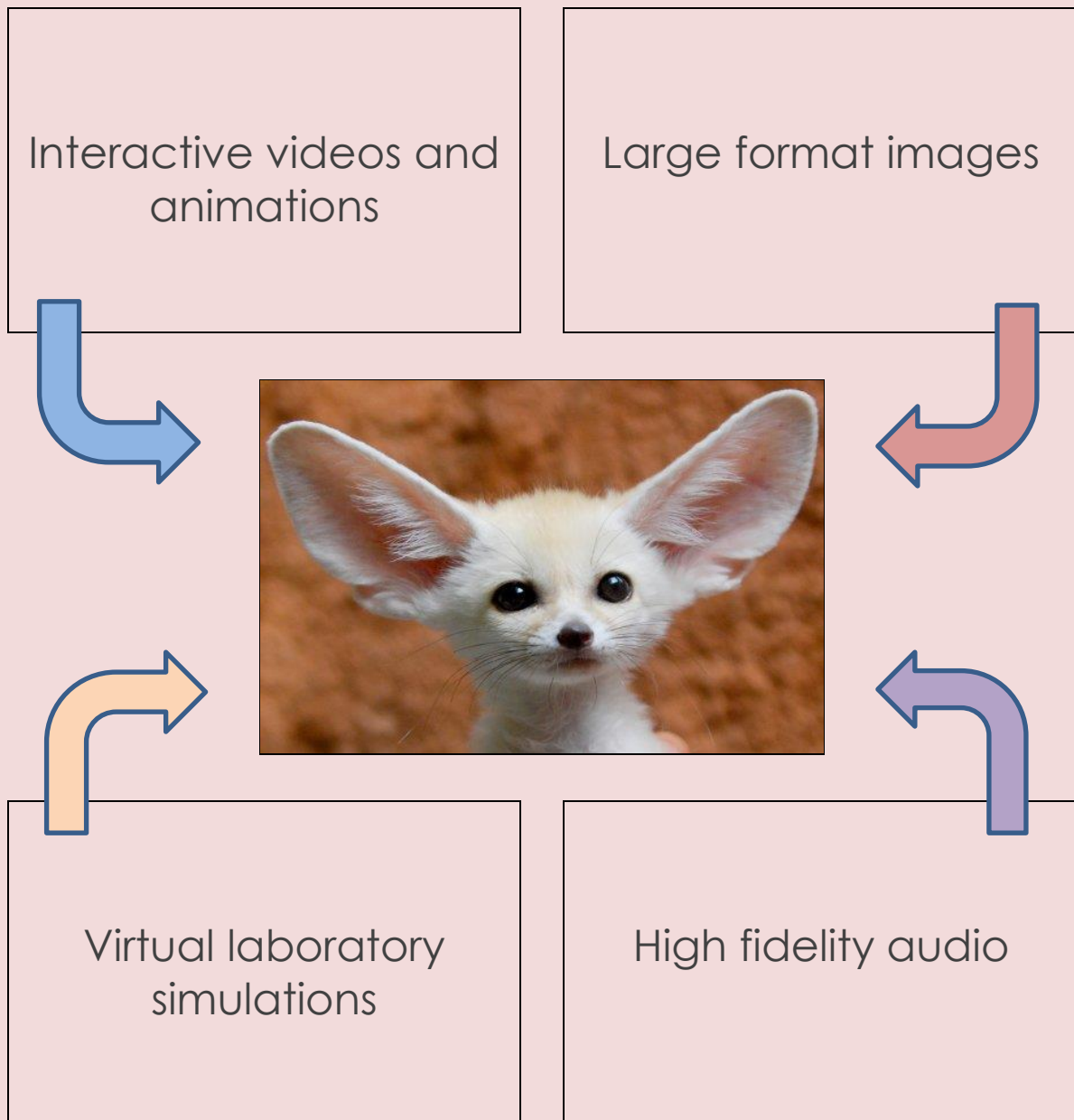
Comprehensive Curriculum

VIUC leverages on the appeal of interactive multimedia and the efficiency of virtual instructional materials to compensate for shortage of qualified teachers, subject matter experts, textbooks, funds and infrastructure. It is able to provide instructions in every subject area using virtual alternatives.



Experiential and Immersive Instructions

Interactive videos, illustrations, simulations and animations utilise large-format images, high resolution graphics and high-fidelity audio, to create close-to-life environments, which immerse learners in fundamentally contextual experiences.



Student-centric and Teacher-friendly

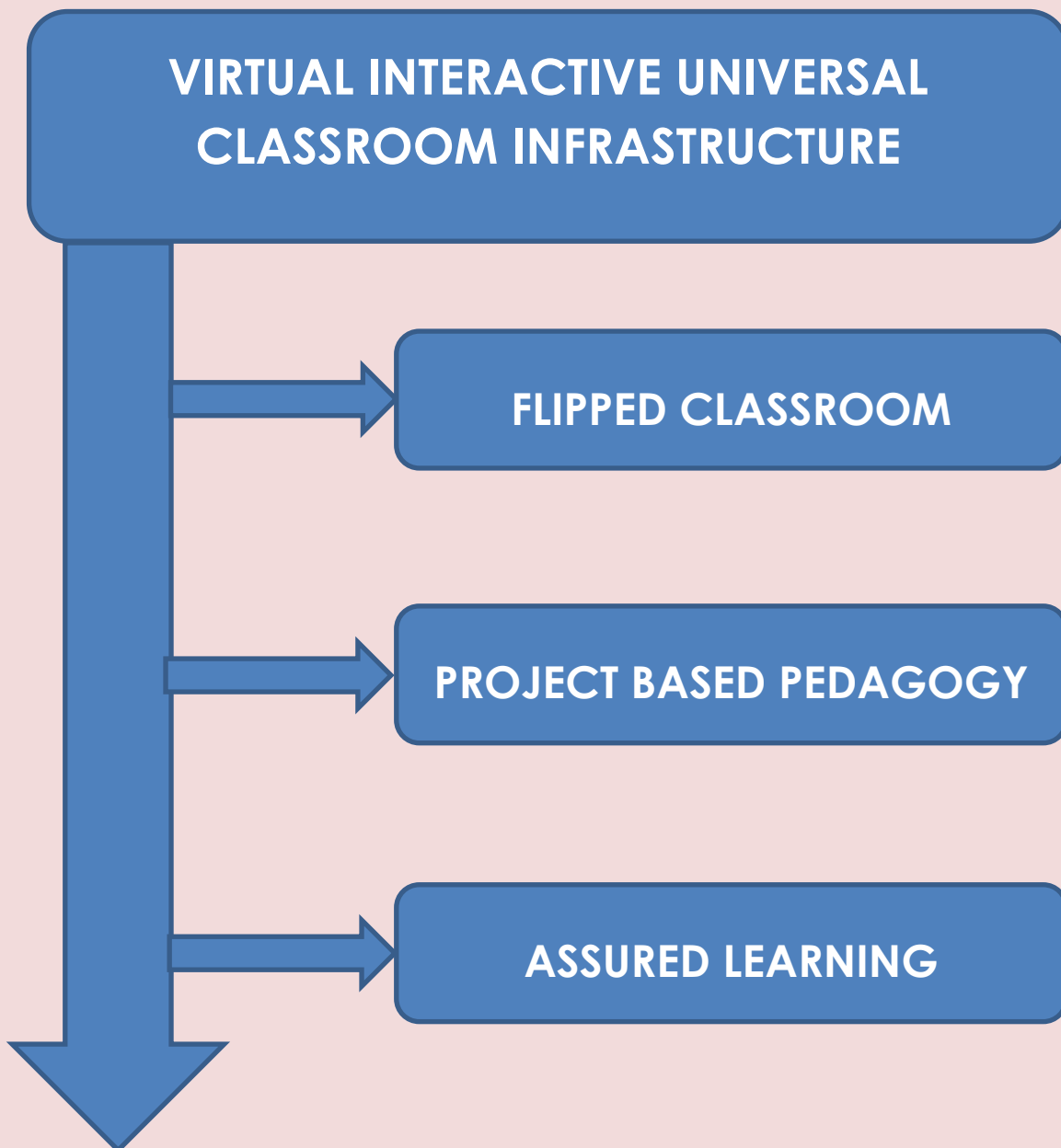
VIUC recreates the environments adolescents and teenagers cherish naturally, and seamlessly imparts knowledge through those settings. It turns school and studying into endless fun experiences, reminiscent of movie theatres, peer chat rooms, competitive games and collaborative chores.



For teachers, it eliminates the toil and bore of repetitive stand-up-and-deliver tasks, ensures that each student personally carries out his or her assignments on schedule, and saves time that teachers can focus towards mentoring students, improving curriculum and on one-on-one tutorials. It drives involvement, speeds assimilation, boosts comprehension and helps long retention.

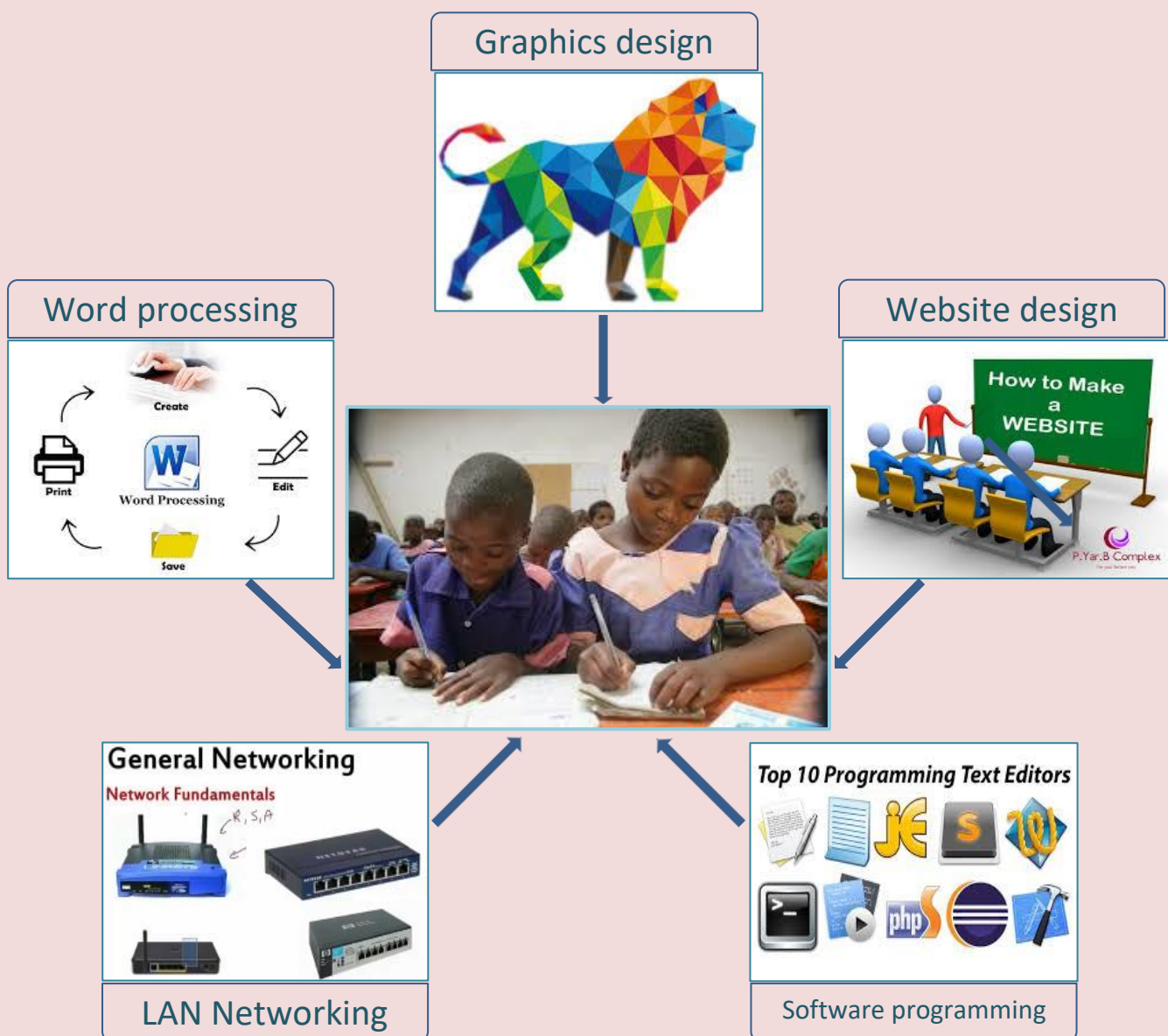
Innovative and Fun Methodology

VIUC platform may include a structured local area network. Management and e-learning software can be efficiently deployed even in serious infrastructural challenges. The default pedagogy of VIUC is a flipped or inverted classroom in a blended methodology. It also simplifies and automates administrative tasks.



Dispensing Employable 21st Century Skills

In addition to its hands-on academic curriculum, the VIUC has several extracurricular Computer Based Training (CBT) programmes. Both combine to impart academic knowledge alongside digital, life and work skills. With the VIUC, every product of Basic School (JSS-3 or Grade 9) will be a digital native who possesses two or more employable skills for economic productivity and prosperity.



Superior Cost Reduction

One of the most rewarding features of the VIUC is the drastic reduction of the cost of mass education projects even with its world-class outcomes. It is the ideal springboard to leapfrog the SDGs in education, health, economy and the girl child.

A summation of the convenience and attraction the VIUC holds for learners, young and old, the employable knowledge and skills it promptly disseminates, and its minimal cost, stands it out as key to reforming education and launching the knowledge economy that is central to sustainable economic progress and socioeconomic transformation in this millennium.

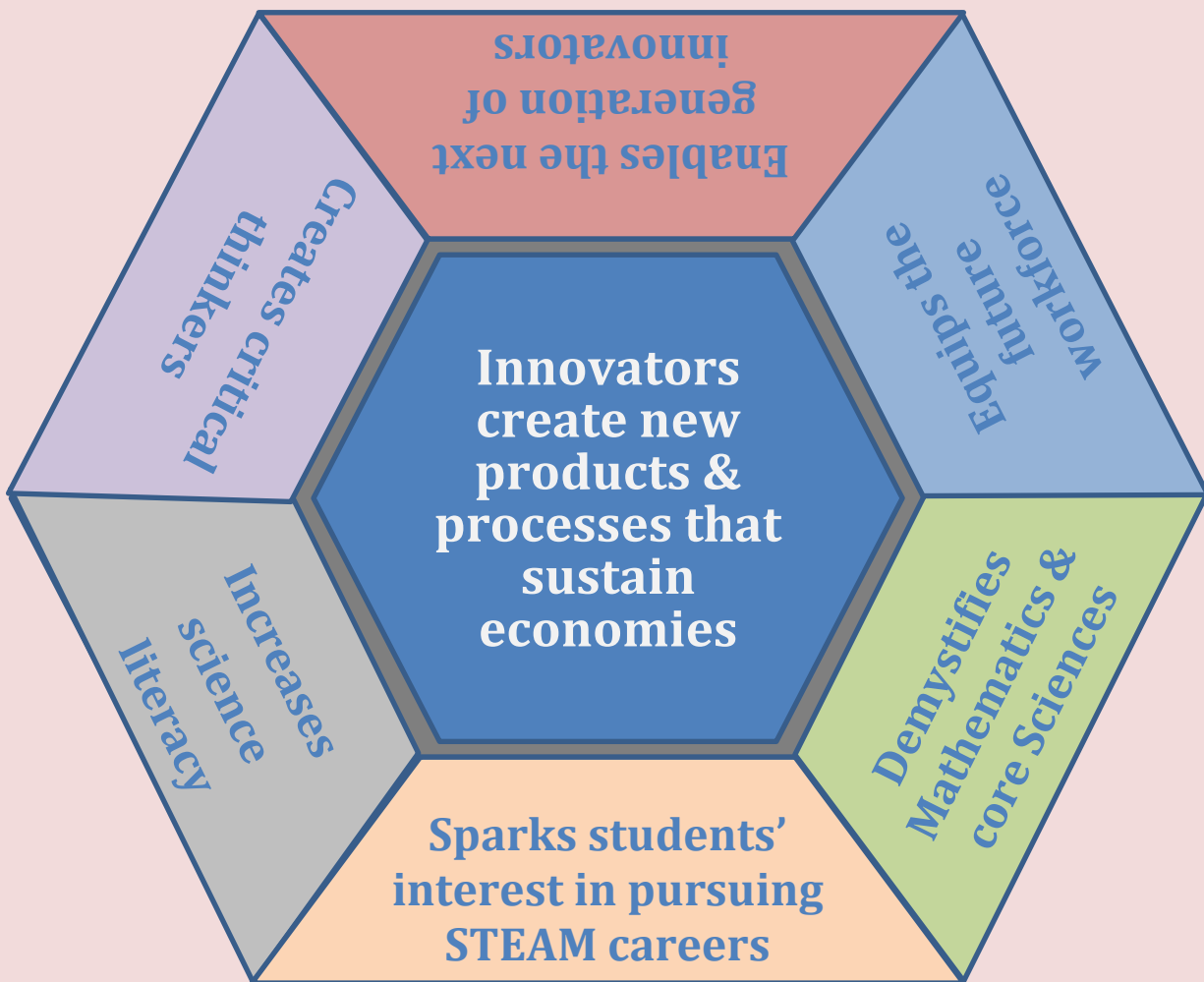
21ST CENTURY SKILLS
CONTEXTUALISED
SELF-PACING

LIFE-LONG LEARNING SKILLS
HANDS-ON CURRICULUM
STEAM METHODOLOGY
ASSURED LEARNING
CUSTOM NOTEBOOKS
DIFFERENTIATED CLASSES
EXCELLENT GRADES
WORLD-CLASS QUALIFICATIONS
LIFELONG LEARNINGABILITY

SCIENCE, TECHNOLOGY, ENGINEERING, [tech-driven] ART & MATHEMATICS

The Promise of Virtual Interactive Universal Classroom

VIUC emphasises Creativity, Collaboration, Communication, Critical Thinking, Problem Solving and Research, which are the fundamental features of STEAM education.



STEAM workers play key roles in sustaining growth and stability of any 21st century economy.

STEAM professions are growing in unprecedented proportions while leveraging Artificial Intelligence (AI), Big Data, Robotics and the Internet of Things (IoT) to literally hijack most non-STEAM jobs.

Junior School Virtual Classrooms

- Computer Desktop or Laptop Workstation
- 4K Projector and Screen
- High fidelity Audio System
- Uninterruptible Power Supply
- NERDC Upper Basic Curriculum
- Extracurricular and vocational programmes
- Certificate Computer based Tutorial Software
- Customised Hardcover Lifelong Notebooks

Senior School Virtual Classrooms

- Computer Desktop or Laptop Workstation
- 4K Projector and Screen
- High fidelity Audio System
- Uninterruptible Power Supply
- NERDC Secondary Curriculum
- Extracurricular and vocational programmes
- Trade subjects in the new national curriculum
- Customised Hardcover Lifelong Notebooks

Intranet and ERP/LMS

- Structured LAN and WAN Infrastructure
- Combined File and Web Server
- Laptop Computers
- Tablet Devices
- Uninterruptible Power Supply
- Enterprise Resource Planning Platform
- Learning Management System

Power Redundancy

- Solar Energy System
- Optional standby power generating set

e-Administration & Testing (ERP)

The Enterprise Resource Planning (ERP) part of the VIUC comprise Online modules that facilitate all processes of an institution, include Registration, Timetable, Attendance, Newsletters, Boarding, Library, School Calendar, Events, Examinations, Transportation, and more.

The Learning Management System (LMS) decentralises the classroom and makes learning available anytime anywhere.



A Learning Tool Interoperability (LTI) interface integrated the LMS with other products and services.

A wide variety of reports and logs allow teachers to track student progress and successes. Some course materials are downloadable for offsite use.

VIUC IMMERSIVE BLENDED PEDAGOGY

A QUAD-TIRED INNOVATIVE METHODOLOGY

Tutor-led, Peer-facilitated, Tech-mediated and Self-constructed Learning

STIMULATING CLASSWORK	FULFILLING HANDIWORK	EXCITING GROUPWORK	REAFFIRMING HOMEWORK
Stage One	Stage Two	Stage Three	Stage Four
Tech-mediation	Self-mediation	Peer-mediation	Tutor-mediation
Interactive videos Memory prompter points Quizzes and tests.	Research and investigation. Question generation	Discussions Collaborative exercises Social learning	Knowledge consolidation Problem solving Critical thinking
Knowledge acquisition	Knowledge-construction	Knowledge-sharing	Knowledge-application
Expedition/ Adventure/ Discovery	Visualisation Contextualisation. Ideas & Question generation	Chat room experience	DEPT. for Deepening: Discussions /Exercises /Projects /Tests
INSIGHTFUL	INFORMATIVE	ENLIVENING	CONSOLIDATION

The Virtual Interactive Universal Classroom Pedagogical Model showing an immersive interaction between a learner and technology, environment, peers, and facilitators, which leverages on an innovative methodology that maximises the formidable features of information and communications technology, an exciting learning environment and the combined pool of knowledge, experiences, talents and skills of all learners, teachers and peers.

Rewards and Benefits

BENEFITS DERIVABLE FROM THE VIUC PEDAGOGY

- Capture the interest of aloof students
- Help slow learners keep pace with the rest of the class
- Release fast learners to sprint and soar
- Concretise abstract and complex topics
- Relieve teachers
- Demonstrate every topic
- Deepen knowledge
- Improve teacher-efficiency
- Increase learning effectiveness
- Automate administrative tasks
- Popularise Science and Mathematics
- Compensate for staff shortages
- Speed up the syllabus
- Simplify administrative tasks
- Preserve records
- Implement multi-layered data security
- Save costs with virtual teaching aids and laboratories
- Inspire Lifelong learning culture in learners and society
- Popularise STEAM education
- Engage learners inside and outside classrooms
- Rekindle interest in school
- Compensate for teacher shortages
- Propagate and popularise economic and social skills
- Make the full curriculum ubiquitous
- Improve registration and completion
- Reduce the out-of-school population
- Deliver world-class education
- Build a globally competitive workforce