

Improving teaching of science and mathematics

The WWW project has joined hands with Kenya's Ministry of Education, Teachers Service Commission (TSC) and the Centre for Mathematics, Science and Technology Education in Africa to improve teaching of science and mathematics



A cross-section of departmental heads for science and mathematics during the training on how to handle STEM subjects.

Heads of science and mathematics departments from 50 project secondary schools were taken through an intensive week-long training on how to improve teaching of these crucial subjects.

The training is a partnership between *Wasichana Wetu Wafaulu* (WWW) project and the Government of Kenya; it aims to make Science, Technology, Engineering and Mathematics (STEM) more attractive, particularly to girls.

Specifically, it is a joint initiative by the WWW project, the Ministry of Education, Teachers Service Commission (TSC) and the Centre for Mathematics, Science and Technology Education in Africa (CEMASTEA).

Addressing teachers during the training, the Director of CEMASTEA, Stephen N. Njoroge urged teachers to be innovative in teaching these subjects adding that 'we need to improvise equipment using available materials'

He commended the WWW project for taking the initiative to improve teaching and learning of STEM subjects in arid and semi-arid lands (ASAL) and urban slums in Kenya.

On his part, ED Dev Trust's Regional Deputy Director, Sub-Saharan Africa, Mark Rotich, observed that the classroom is the true depiction of the future and that 'teachers have the privilege to change the trajectory of our country'.

He said teachers should aim to produce individuals who can change the society and fit comfortably in the global space.

The Secretary of the Strategic Initiatives Unit, Cabinet Affairs in the Executive Office of the President, Mr. Mukhtar Abdi Ogle, said teachers are the pillars of social progress and drivers of technological change.

He revealed that his office was keen to support education of STEM subjects especially in ASAL areas.

The initiative proposes to complement existing STEM strategies in schools to enable students be reflective learners, able to accrue the desired outcomes, transition through STEM subjects and where possible transition into STEM related careers.

Catch-up centres: An avenue for school re-entry

The WWW project has hatched an ingenious plan to ensure smooth re-entry of girls who dropped out of school but want to continue with their education



A catch-up class in Samburu County. So far, 25 centres, strategically distributed in all the eight project counties, have been set up.

Going back to school after dropping out is not an easy option; and for those who do, challenges abound that make it hard to reintegrate smoothly into the schooling system.

Apart from being left behind in academic programmes, psycho-social issues also come into play, especially for girls who drop out due to pregnancy.

To address these challenges, the WWW project has hatched an ingenious plan to ensure a smooth re-entry for girls who dropped out of school but want to continue with their education.

To actualise the plan, special classes - catch up centres – have been set-up where girls who dropped out of school are taken through an accelerated learning programme to bring them up to speed with their academic peers.

The girls are also given psycho-social support to ensure they are in the right frame of mind to continue with their education uninterrupted.

So far, 25 centres, strategically distributed in all the eight project counties, have been set up; and 480 girls have since joined.

Schools where the centres are located provided classrooms, which have either been renovated or undergoing renovations. Once done, the classes will be furnished.

Teachers have also been recruited to run these centres; learning materials will also be provided to the learners.

The aim of having a catch up centre is largely to facilitate and drive learners to re-enter the mainstream schools/ formal education system; and where re-entry does not occur, students pursue alternative pathway: Technical and vocational training.

However, it is not mandatory for all girls who drop out of school go through catch-up centres. Some can be admitted directly to the schools.

Immediately a student joins the centre, a needs assessment is conducted on the day of admission, which determines how the student will be supported to learn.



Another catch-up class session in Kwale County.

Child to child clubs: Navigating adolescence

The WWW project has facilitated formation of child-to child clubs in all schools under its wings with a view to helping adolescents navigate through this crucial stage



A student champion presiding over a club session in a school within Samburu County. About 280 club champions have been trained.

Adolescence can be confusing, very confusing. It is a stage characterised by rapid biological growth and development, an undefined status, increased decision-making, peer pressure and the search for identity.

So how do you help adolescents to successfully navigate through this sensitive stage and succeed in their education?

To answer this question, the WWW project has facilitated formation of child-to child clubs in all schools under its wings with a view to helping adolescents navigate through this crucial stage.

The clubs, which meet once a week, are guided by a three-part module with topics aimed at helping adolescents have a better understanding of themselves, their rights and responsibilities; and plan well for their future while in school at this 'sensitive' stage of their lives.

The modules are structured as follows: Who am I? - knowing and living with one self; where am I going? - knowing and living with others; and how am I going to get there? - effective decision making.

The modules are part of the Gender, Inclusion and Adolescent Health (GEIAH) developed for use by the child to child clubs in all WWW project schools.

They aim to improve girls' readiness to learn by enhancing their physical and psycho-social wellbeing, self-confidence, awareness and aspirations to succeed.

The modules have content on specific issues encountered during adolescence; participating club members should be ten years of age or older.

Having been developed with a gender lens, they deal with both girls' and boys' growth and development issues and supplements other WWW project interventions for behaviour change in the child to child clubs.



A teacher guiding pupils during a club session in a school within Mombasa County.

WWW Project in Pictures



Pupils at a WWW project school in Kwale County verifying contents of the girls' school kits. The project is distributing more than 2000 such kits.



A teacher and two beneficiaries of the WWW bursary scheme for secondary education in Kwale County. Over 450 pupils have benefited from bursaries.



A teacher at a school in Tana River County setting up an ICT integrated lesson. The project has distributed more than 2200 tablets and 460 projectors to schools.



An ICT integrated class at Gede Special School For The Hearing Impaired and Physically Challenged in Kilifi County.



A teacher in Kilifi County takes pupils through Math-Whizz, a virtual tutoring programme designed to raise scores in mathematics for learners.



Girls at a vocational training institute in Kwale County during a practical lesson on tailoring.