



CEMASTE INFO

Newsletter

Issue 002 July - August 2020

INNOVATIONS FOR THE NEW NORMAL

The COVID-19 Pandemic has disrupted the old ways of doing business and delivering services across many sectors. The disruption has led to the need for adjusting and adapting to the new normal. For the Centre for Mathematics, Science, and Technology Education in Africa (CEMASTE), the closure of schools meant the stoppage of the usual face-to-face model of teacher professional development. CEMASTE is keen on the continuity of its INSET programmes for teachers in STEM, Lesson Study, and ICT integration. To ensure continuity of teacher professional development during COVID-19 times has been the shift from face to face to online training. So far a total of 1000+ who serve as lead trainers at



In particular, teachers will gain skills for creating a Google Classroom, upload content, assign activities and assessments to learners; teach online lessons, and manage learners in a virtual environment. Skills gained will be useful even after the pandemic.

This training is funded by the Ministry of Education through CEMASTE and managed collaboratively by the County Teacher Capacity Development Committees (CTCDC). The teachers are expected to use personal devices-Bring Your

Own Device (BYOD) such as smartphones and laptops during the course. CEMASTE is alive to the inherent threats of online

environments more so to the young ones. It is for this reason that a unit on online safety and netiquette has been included as well as bringing teachers' attention to the existing legal framework about child online safety. We are hopeful for a successful outcome of the training and look forward to joining the teachers' online

the County level have undertaken this course. They are expected to roll out the same training to 11,000 other teachers of STEM across the country in August and September 2020 targeting about 11,000 teachers. The theme of the course is *'innovative teaching and learning for critical thinking and problem solving'*. The course, apt given the COVID 19 pandemic seeks to equip teachers with competencies as they seek innovative pedagogical solutions for continued engagement with their learners.

Pupils of Ganjoni Primary, Mombasa enjoying the use of a tablet during a lesson

classes as they use the skills gained to engage their learners. Going forward, blended learning will be the 'new normal' in post-COVID-19 instructional approaches.

At CEMASTE, we are happy to be part of the educational solution during the pandemic and in laying the long-term foundation for quicker interventions in the future.

*Mrs. Jacinta L. Akatsa, HSC
Director, CEMASTE*

Editorial

We are pleased to present to our esteemed clients, stakeholders, and staff the July – August 2020 issue of **CEMASTEA INFO Newsletter**.

This issue focuses more on how CEMASTEА is stepping up to respond to the new situation through INSET innovations as well as its participation in different training activities. As COVID-19 continues to spread prompting the closure of schools, CEMASTEА and its stakeholders have been inspired to come up with innovative ways to stay the course. In line with Government advice for reducing human contact, most staff are successfully working from home.

The Centre Director, Mrs. Jacinta Akatsa, HSC has detailed in the cover article the online training where 11000 STEM teachers are expected to take part. This was a promise she gave in the last issue of shifting the training model to blended and off-site using virtual platforms. There are testimonial articles from the County on the online experience during the course. We are optimistic that the COVID-19 pandemic will soon be over and a return to normalcy resume. The editorial team is grateful to members of staff and colleagues at CEMASTEА for contributing articles leading to the production of this issue. We welcome feedback from all stakeholders. *Kindly use the link at the back page to give feedback*

Enjoy your reading. Stay home and stay safe.

Thuo Karanja, Editor

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Feedback

Comments and contributions can be sent to the editor on the below address. Contributions may be edited for clarity, space or legal consideration.

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CEMASTEA Hosts MOE CBC Taskforce

Education Cabinet Secretary Prof. George Magoha accompanied by the Principal Secretary Education, Dr. Belio Kipsang was at CEMASTEA on 11th June 2020 to grace the ceremony ending a two-month data entry for the CBC Taskforce that was led by Kenyatta University Deputy Vice-Chancellor in charge of administration Prof Fatuma Chege. The task force, established in June 2019, had taken views from Kenyans on possible strategies for implementation of senior secondary pathways, conceptualization of competence-based pre-service teacher education, design and implementation of value-based education, community service learning, parental empowerment and engagement programmes. The team had also received views on the transition of Grade Six cohort and Standard Seven and Eight pupils in 2023, domiciling of Grades Seven, Eight, and Nine— which will constitute Junior Secondary School— within the basic education structure, and competence-based



Prof. Magoha CS MoE signs the visitors' book at CEMASTEA



assessment. The task force has the mandate to advise the Cabinet Secretary on issues, policies, and strategies that the education sector needs to address to ensure access, relevance, transition, equity, and quality for effective curriculum reforms and in particular the incorporation and implementation of the 2-6-3-3-3 system in Kenya.

Ann Jane Mumbi, CEMASTEA

Tooling the Youth for Entrepreneurship



Hon. Kanini Kega CBS, MP, Kieni receives beehives from Mrs Jacinta Akatsa, HSC, Director, CEMASTEA

CEMASTEA hosted a ceremony for handing over beehives to youth from Chaka region of Kieni Constituency, Nyeri County. The ceremony was presided over by Hon. Kanini Kega, CBS, MP Kieni Constituency and Chair, Budget and Appropriations Committee at the Kenya National Assembly. The ceremony held on 23rd July 2020, was an outcome of a partnership programme funded by the Kenya Power and Lighting Company (KPLC) and implemented by Out-of-School Youth Science, Technology, and Innovation (OSYSTEI) Program. OSYSTEI is a Program of the Strategic Initiatives Unit, Office of the President aimed at giving youth productive entrepreneurship tools and resources.

Aligned to the work of CEMASTEA in promoting STEM, OSYSTEI focus on the application of science, technology, and innovation in creating alternative and productive enterprises that lead to job and wealth creation among the out of school youth. In his remarks Hon. Kanini lauded the demonstration of the resilience of youth from Chaka. He was optimistic that the beehives would go a long way in enhancing promoting entrepreneurship among the youth. He promised to get the youth allocated stalls at the new Chaka market for the sale of processed honey. In his remarks, Mr. Mukhtar Ogle, Office of the President labelled the occasion as a moment of delivering impactful programs that change the lives of the most

vulnerable members of our communities. Dr. Patrick Karimi, the Deputy Director, Institute of Energy Studies and Research, Kenya Power and Lighting Company (KPLC); thanked all the stakeholders for the accomplishments, and reiterated KPLC's willingness to continue with the partnership. Director CEMASTEА Mrs. Jacinta Akatsa, HSC who hosted the guests, appreciated the partnership reiterating that the handing over ceremony was the realization of the dream that began in 2019 when the centre was honoured to host the OSYSTEI program Secretariat. Youth form Chaka was represented by Mr. Richard Waitthaka.

Mr. Eric Nyamwaro and Amina Hirsi, OSYSTEI

CEMASTEА Launches Free Webinar Series



Poster invitation for Webinar

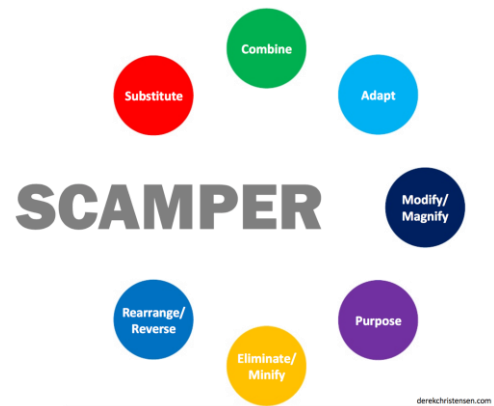
CEMASTEА has launched a free webinar series on "Educational Innovation in STEM: Towards Enhancing Continual Learning during Crisis Times". The well-paced five-day hands and minds-on training is staggered to one session for each of the three cohorts. The course attracted over 450 participants drawn from 19 countries. Participants include officials from Ministries of Education, university lecturers, teacher and teacher trainers, school leaders, quality assurance officers, and members of NGOs.

To effectively interact and learn from the course, participants were grouped into three cohorts. The one-month online webinar series was officially started on 30th July 2020 by Mr. Elyas Abdi, OGW, Director General, Ministry of Education, State Department of Early Learning & Basic Education. His remarks focused on the need for the education sub-sector to make use of technology to ensure continual learning despite the challenges brought by COVID-19. He also underscored the importance of keeping learners busy not only through academic learning but also through the learning of life skills at home. He lauded CEMASTEА for being at the forefront of utilizing technology to reach out to teachers and education stakeholders.

In the keynote brief, Director CEMASTEА Mrs. Jacinta Akatsa, HSC brought to the attention of the participants that crisis [like COVID-19] provided an opportunity for systems and individuals to know their strengths, weaknesses, and opportunities. She encouraged course participants to develop innovative solutions and actions to mitigate the effects of the extended school closure and challenges that have emerged such as limited access to technology, need for psycho-social support, parent-teacher-child partnership, establishing home study routines and adapting learning to the home environment. This can only be achieved through constructive discussions in developing innovative actions that respond to defined needs.

During the course, participants will learn about concepts such as the pedagogical entrepreneurship cycle that supports blended learning and the innovative tool SCAMPER that participants can quickly apply to make quick but effective decisions. SCAMPER is a creative but effective brainstorming framework for sparking ideas to improve services and products. COVID-19 has allowed education sector players to rethink how certain practices can be adjusted to ensure continual learning irrespective of the circumstances. Read more on SCAMPER from <https://www.designorate.com/a-guide-to-the-scamper-technique-for-creative-thinking/>

M. Sichangi & D. Otero, CEMASTEА



Maximizing the Impact of ICT: Personalised Learning



There is a multiplicity of collaborative efforts in the education subsector seeking for best solutions to the problem of school closures occasioned by the COVID-19. It's in this same spirit that on 9th July 2020, CEMASTEА, participated in a webinar on the theme:

'Maximizing, the Impact of ICT and Personalized Learning'. The webinar, hosted by MwalimuPlus Co-founder Mr. Ahmed Ali was a partnership of Kenya Private Schools Association (KPSA), Kenya Institute of Curriculum Development (KICD), CEMASTEА and MwalimuPlus. Director CEMASTEА Mrs. Jacinta Akatsa, Mr. Kiruja, Coordinator of Primary Programme, and Mrs. Sichangi, Coordinator, P&L participated.

The webinar focused on the kind of policies, education leadership standards, and, practices that can help accelerate the adoption of ICT-based methods of learning and possible challenges. Mr. Ali acknowledged that the disruption of regular schooling by COVID-19 had positioned stakeholders in the education subsector on a pathway of an unplanned technology revolution. He described Personalized Learning (PL) as an instructional approach that aims to customize learning for each learner's strengths, needs,

skills, and interests. A panelist Prof. Bitange Ndemo, expressed that "We are currently in a transition from the third to the fourth industrial revolution where learning is becoming personalised and Artificial Intelligence is making it possible for a learner to progress at their own pace." He implored the Government to embrace the times as the world was already moving towards digital learning and the COVID-19 just hastened the process.

KPSA Chair Mutheu Kasanga a panelist argued considering that Kenyan children are competing on a global stage they would be disadvantaged should they lose the opportunity to transit to the next levels of learning. She urged that online learning has more potential for bridging the gap of school closures

and that this has not been adequately explored. Mr. George Njau, Principal Kongoni Primary School in Nairobi's South-C, gave a testimony that digital tools are already showing great promise in the education of students.

Kiruja G. Kiria, CEMASTEА

We have not lost a year [in education], rather what we have is a year to learn how to do things differently. We will need to learn how to live with this virus as it is not going nowhere.

KPSA Chair,
Mutheu Kasanga

COVID-19 Quotes

"Covid-19 pandemic created the largest disruption of education in history, affecting 1.6 billion students in all countries and continents. It is a generational catastrophe that could waste untold human potential, undermine decades of progress, and exacerbate [already] entrenched inequalities."

UN SG, Antonio Guterres: Policy Brief: The Impact of COVID-19 on Children, APRIL 2020
<https://unsdg.un.org/resources/policv-brief-impact-covid-19-children>

Tools for Online Learning: Focus on the Padlet

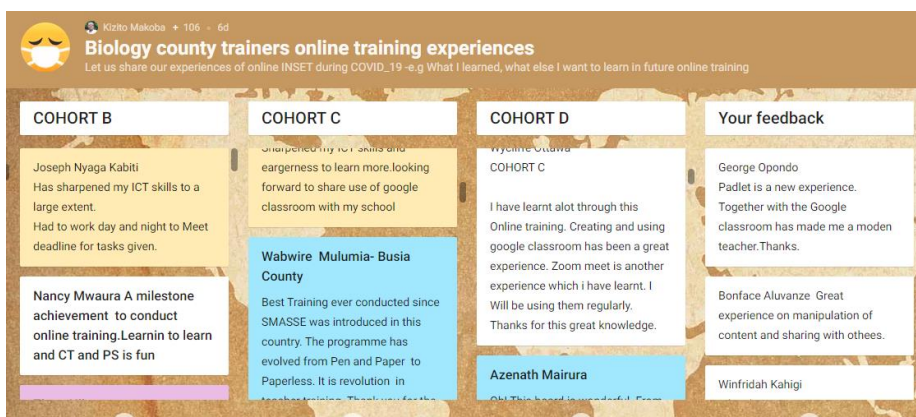
CEMASTEA concluded an online National INSET training course on the theme of *Innovative Teaching and*

Learning for Critical Thinking and Problem Solving. During the course participants engaged in activities to enhance their Technological Pedagogical Content Knowledge (TPCK) and skills in mathematics and science subjects. The course delivery was a departure from the usual face to face model fashioned as an interventional strategy to ensure continuous Teacher Professional Development during the COVID19 pandemic.

CEMASTEA National Trainers utilized various online learning tools to ensure that the rich interactions and collaborations experienced during face to face are maintained. The course adopted the Google Classroom which is an online Learning Management System (LMS) as the key training platform. Google classroom has the advantage of linking to other collaborative tools and resources in the Google for Education Suite (*Google Docs, Slides, Sheets, Forms, Meets, Drive*) and others outside such as the *JambBoard* and *Peardeck*. The training integrated other tools such as Zoom, WhatsApp, and Padlet. Since the Padlet was the newest it is briefly described.



A Padlet is a versatile online virtual tool that students and teachers [as it moderates the interactions] can use to collaborate, reflect, and share ideas and pictures. The teacher can also use it to create an online bulletin board, collaborative projects, digital storyboarding as well as real-time capture of feedback from learners. Inspired by the need to provide an interactive platform from which to obtain comments and feedback from participants during the training Mr. Kizito Makoba, Dean of Biology at CEMASTEIA introduced the Padlet. The tool proved to be a more effective method than the previous approach where participants would write their comments on small 'post-it' notes.



Padlet generated during the online training by participants in biology

The Padlet allowed all participants to read and benefit from their colleague's ideas. These ideas and projects were then collated as the Padlet and at a click of a button converted into a publication such as newsletters, photographs, and certificates that can be shared with participants as training mementos. See Mr. Kizito's Padlet at <https://padlet.com/mkizito/npd3kt2iigsjmnji>

Mr. Makoba Kizito & Winfred Magu, CEMASTEIA



Word of Encouragement

In the Qur'an, we are taught that we were all created from a single soul. Our love and compassion must, therefore, extend beyond our nuclear families. We should not put too much emphasis on *individual* gains or look out for our own needs over others, love ourselves, and be heartlessly competitive. Our beloved Prophet Muhammad (s.a.s.) explains, "No one of you truly believes until he loves for his brother what he loves for himself."¹ Let us love those near and far for the sake of Allah. Let us share generously of what we have and enable our souls to take flight, Even during these times of COVID-19.

James Olekima, CEMASTEIA



Recognition of STEM Teachers During COVID-19

INTRODUCTION

CEMASTEA and eKitabu have partnered to recognize efforts and innovations STEM teachers (County Trainers and teachers of mathematics and science) are making to continue teaching during the school closures due to COVID-19. It is hoped that this recognition will go a long way in making remote learning entrenched in schools for the benefit of the learners.

COMPETITION CATEGORIES

Category 1: Open to **County Trainers** from the 47 counties and 8 regions who met qualifications requirements during the 2020 Online National INSET.

Category 2: Open to **Mathematics and Science teachers** drawn from the 47 counties and 8 regions who will qualify during the on-going Online County INSET 2020.

ASSESSMENT

Category 1: Cohort Coordinators and CEMASTEAs staff will assess and identify the best Google Classroom Project created by the County Trainers per County.

Category 2: County Trainers will assess and identify the best Google Classroom Project per county as created by the teachers. County Trainers' Representative and the CQASO will guide the process with technical support by the Liaison Officer.

REQUIREMENTS

Any County Trainer or teacher to participate **must:**

- 1) Register for the competition
- 2) Complete the project
- 3) Have qualified during the Online 2020 National and County INSET's respectively

ASSESSMENT CRITERIA

Assessment of submitted projects will be based on how well those responding can:

- 1) Create suitable online content in a learning management system
- 2) Prepare a suitable lesson plan/implementation plan to use for teaching online remotely;
- 3) Deliver or engage learners' meaningfully in the learning process using the online lesson.

AWARDS

- 1) The best project in the county will be awarded a present
- 2) The best project in the region will be awarded a laptop
- 3) The best three projects nationally will be awarded KShs. 100,000/=; KShs. 75,000/=; and KShs. 50,000/= for the 1st; 2nd; and 3rd positions respectively.
- 4) All the awards will be accompanied by a certificate

TIMELINES

The assessment will be completed by 31st October 2020

The awards will be issued in November 2020.

Paul Waibochi, ICT CEMASTEAs

CEMASTEA Contributes to Community-Based Learning

To gainfully engage learners during the period when schools will be closed due to COVID 19 pandemic, the Ministry of Education in Kenya in conjunction with the Teachers Service Commission has initiated Community-Based learning (CBL). CBL refers to a wide variety of teaching methods and programs used to connect learner's experiences in schools to their surrounding communities including history, health, literature, cultural heritage, and natural environments. Teachers are central to the success of the CBL programme and TSC has directed them to register in the local communities in readiness for the programme.

To support the Ministry of Education and TSC effectively implement the programme, CEMASTE A had integrated a component of CBL in its online TPD content. This is aimed at equipping mathematics and science teachers with knowledge, skills, and strategies on CBL. Contents of CEMASTE A CBL include

multi-grade teaching, self-guided learning, and strategies for making learning as interactive as possible whether using remote learning technology such as the Google Classroom or face-face.

During the course teachers are expected to develop learning activities in key thematic areas such as wellness and health including COVID -19 pandemic; environmental

conservation; values, culture & society; entrepreneurship; agribusiness; drugs and substance abuse among others. The Ministry of Interior and Coordination of National Government and, Ministry of Health will respectively ensure the safety of the learners and the maintenance of COVID-19 protocols during the programme.



Children attend a lesson during a community-based learning initiative.

Courtesy, Daily Nation 20th Aug. 2020

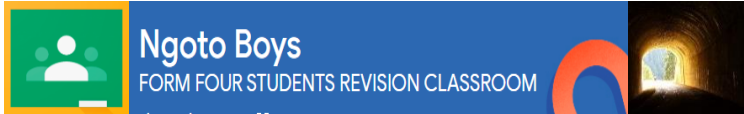
Makanda John, CEMASTE A

The responsibility
for your protection
against COVID 19
begins with you.

- President Uhuru
Kenyatta



Google Classrooms: Light at the End of the Tunnel



A new challenge was slowly building up! Everyone was perplexed at how fast it was approaching and we were unable to fathom its impact on all of us. Suddenly, it struck our beloved nation. COVID-19 had finally landed in the country! Everyone got scared as the message to prevent its spread was frequently repeated. All learners and teachers were asked to keep off their educational institutions as a social distancing measure.

Learning stopped instantly! The reality that there would be no in-school teaching for a while hit my mind. Many questions run through my mind. 'How do I keep our contact with my learners from their homes?' What were the available options to me? How do I ensure my learners continue to learn in a similar situation as in a classroom?" The immediate future seemed like a dark tunnel. Thankfully many intervention programs were put in place. Television channels were awash with learning programs, timetables were prepared and it proved relevant. I slowly started to adjust to what is now known as the 'new normal'. The most viable option and alternative for me were offered by CEMASTEA. I was in a group of teachers that were introduced to the remote learning platform Google Classroom. I quickly gained the skills to create the Google Classroom and navigate how it functions. I created one immediately and invited my learners and teachers from my school. I also introduced other teachers in my school to the Google Classroom. We began to send revision materials and giving guidelines to our learners. We also installed the Zoom conferencing facility and Google meet apps installed for lesson presentations. I truly thank CEMASTEA for the timely training and for providing the light at the end of the tunnel. God Bless CEMASTEA, God Bless Kenya.

Muthoka J. Kyengo, Ngoto Boys High School, Makueni

Our Experience: Online Learning during COVID-19

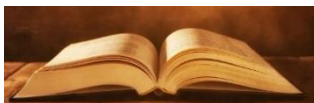
Our online training as participants during this INSET was different from what we were used to. Online learning enabled us to do the assignments at our own time and in the comfort of our homes. In biology, we used topics *Ecology and gaseous exchange* to develop innovative activities for critical thinking and problem-solving.

The topics were picked since proposed activities in the textbooks mostly encourage low order thinking. We learned how to design learning activities and ask questions that trigger critical thinking and problem-solving. Session activities required high order reasoning and taking defensive decisions in addition to demanding for action using the available resources. We enjoyed using Google classroom too. It is easy to use and can be accessed from all devices, enables effective communication and sharing of resources, assignments, and feedback.



Online classes allow us to enjoy a lot of flexibility including teaching from remote locations and access to a wide range of online resources. Some challenges we foresee with our learners include few manipulative activities, limited social interactions which are important for holistic learning and lack of class control. Going forward we are confident that online platforms and tools such as the Google classroom will be indispensable and especially during the closure of schools as the one accessioned by COVID-19.

Margaret, Judy, Billy & Paul; Biology County Trainers, Nakuru



Word of Encouragement

Be encouraged by the mighty works of God, that even in such a time, He is powerful.

1Samuel5:1-6. -The Philistines captured the Covenant Box from the Israelites, kept it next to the statue of Dagon. The statue of Dagon fell and broke because no other god has power. May our lord stand for YOU and every "Dagon power" fall and break. We will live to witness the power, love, forgiveness, mercy, and wisdom of our God in the land of the living.

Faridah Nasaka, CEMASTEA

Research: ICT Tools for Teaching during COVID-19

Research and Development Department at CEMASTEА conducted the first phase of the study *Teaching and Learning during Covid-19 in Kenya: Perspectives of Secondary School Mathematics and Science Teachers*. Among the objectives of the study was the determination of ICT tools (both offline and online) and platforms that has enabled mathematics and science teachers to continue teaching and learning during the COVID-19 pandemic. This also included challenges experienced, skills gap, and needs for further capacity development. The graph below summarizes the outcomes of the knowledge about, the usage and non-usage of the ICT tools and platforms. One of the outstanding provisional findings from the ongoing research shows that a greater majority of the teachers are using WhatsApp as a mitigation tool to ensure continued learning by their students.

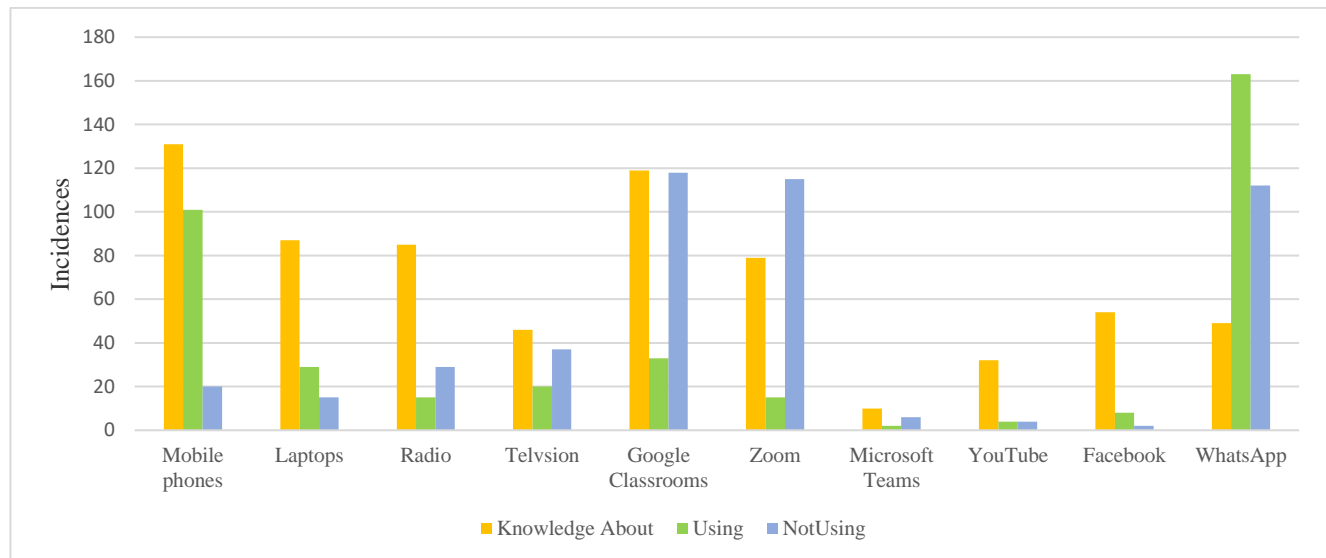


Chart showing incidences of knowledge about, usage and non-usage of ICT instructional tools

The data revealed that a majority of STEM teachers are aware of a wide range of ICT tools, resources, and platforms that can be deployed for instructional purposes. Mobile phones and laptops are the most known pieces of hardware with compact discs scoring the lowest. Concerning usage, WhatsApp is the most used application. This in comparison to Google classroom, television, radio, Zoom, and YouTube, and Microsoft Meets. Incidentally, there were cases of respondents citing none use of any ICT tools! An important outcome that was a pointer to where capacity development efforts could focus was that while a majority of the teachers know of the existence of learning management platforms such as *Google classroom*, *Microsoft Teams*, and video conferencing applications are used for online teaching such as *Zoom*, only a few are deploying them for purposes of teaching.

WhatsApp was the favorite application where the majority of teachers use it to support learners through the posting revision notes, materials, and assignments. Reasons for the use of *WhatsApp* and the mobile phone included low cost, accessibility, and convenience of use. Only a handful of respondents are using the ICT tools for active lesson delivery. Google classrooms and Microsoft Teams scored low for reasons associated with a lack of technical skills and knowledge to navigate the platforms, cost of data, and network challenges. The study points to the need for more capacity development especially in the use of learning management platforms. The outcomes of this study inform INSET programmes at CEMASTEА. Currently, about 10,000+ STEM teachers are undergoing training with a greater focus on the use of the Google classroom.

Thuo Karanja, CEMASTEА

COVID-19 Containment

Safeguarding Staff at Work

CEMASTEA, in line with Kenya Government Directives and Circulars on COVID-19 pandemic containment measures and protective guidelines; has put in place strategies to ensure compliance. The process of putting in a sustainable strategy at CEMASTEА, under the office of the Director started with the appointment of the *CEMASTEA COVID-19 Pandemic Surveillance and Support Committee*. The Committee, headed by the Deputy Director, Mrs. Lydia Muriithi, is comprised of the Heads of finance, hospitality, estates, stores, administration, communication, human resource department, and the Centre nurse. The Committee is expected to plan, implement, monitor, and evaluate CEMASTEА's response and performance in adherence to the containment measures put in place by the Government and as agreed at the centre. They are expected to submit daily updates to the Director.

Since its appointment on 22nd June 2020, the Committee has put in place mechanisms to ensure effective daily registration of all persons at the Centre including monitoring their body temperature, sufficient, provision of handwashing and

sanitizers at strategic points within the compound, putting in place physical markings for social distancing at points of high human traffic such as offices, laboratories, and classrooms. Everyone at the centre is expected to wear a face mask at all times and regularly used the hand sanitizer.



Mr Patrick Wanjohi, CEMASTEА (left) going through the COVID-19 protocols at the entrance of the centre by Mr Eddy Yabesh, the Centre's Nurse.

Except for those rendering essential services, most of the staff are facilitated to work from home. The number of visitors to the Centre is also minimal with clients and stakeholders encouraged to use online and telephones to communicate with the Centre.

The committee has also developed *CEMASTEA Emergency Procedures for the COVID-19*, identified and equipped a *COVID-19 possible case holding room*, procured Personal Protective Equipment (PPEs), and thermal guns. The Committee holds sensitization meetings with staff and personnel who are regularly at the centre.

Mrs. Lydia Muriithi,
Deputy Director, CEMASTEА





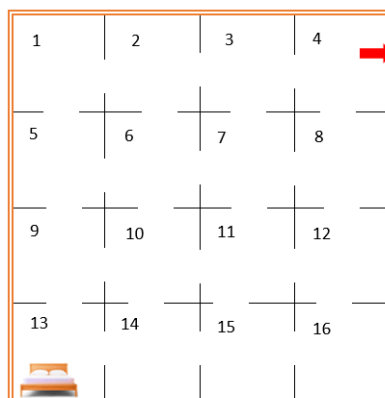
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A	X	E	R	M	L	C	S	A	N	Y	E	R	I	E	D	N	L	E	O	U	R	R	I	H
L	E	E	E	R	F	O	K	E	D	O	N	E	A	S	C	I	N	A	P	T	I	E	K	Y
M	L	S	L	B	P	B	W	T	M	N	O	E	E	E	T	S	O	P	R	I	B	H	E	O
N	B	P	T	F	A	C	E	M	W	E	C	A	N	G	I	A	A	B	A	L	R	T	T	U
O	O	L	Z	L	A	R	L	A	O	Y	O	R	E	E	E	H	N	S	T	M	Y	O	C	R
N	W	U	N	U	E	N	L	S	B	L	B	E	A	T	W	E	L	C	I	O	O	N	E	N
E	W	E	S	M	O	S	I	K	I	S	E	I	P	I	O	M	E	M	E	N	T	A	C	O
E	R	O	S	N	E	E	Z	E	D	G	O	O	D	T	R	A	I	N	F	R	O	M	O	S
D	F	O	R	S	T	R	E	S	S	U	P	V	O	A	P	H	T	U	O	M	D	S	E	E
A	V	A	V	O	I	D	C	R	O	W	D	E	D	P	L	A	C	E	S	E	E	N	B	Y
E	K	E	E	P	W	E	L	L	H	Y	D	R	A	T	E	D	S	A	F	E	A	R	A	E

Puzzle A: Reflect on your experiences and response to COVID-19 by looking up the following statements in the crossword grid above. Colour the sentences and the words.

- KEEP ONE HALF METRE DISTANCE FROM ANOTHER PERSON
- WE THANK ALL THE FRONT LINE WORKERS
- DON'T TOUCH NOSE, EYES AND MOUTH
- UNWELL GO SEE DOCTOR RIGHT AWAY
- KEEP CALM NO NEED FOR STRESS UP
- WASH YOUR HANDS REGULARLY
- WEAR PROTECTIVE CLOTHING
- AVOID CROWDED PLACES
- DON'T TRAVEL ANYHOW
- SPREAD LOVE NOT PANIC
- SNEEZE IN A FLEX ELBOW
- KEEP WELL HYDRATED
- WEAR MASK ALWAYS
- WORK FROM HOME
- ANYONE CAN GET IT
- WEAR MASK WELL
- STAY AT HOME
- MASK IS GOOD

- CORONA VIRUS
- KEY SYMPTOMS
- FEVER LIKE
- FACE MASK
- SOAP WELL
- EAT WELL*
- SANITISER
- CURFEW
- HEALING
- COVID
- SAFE
- CARE
- FLU

Puzzle B: A hospital has 16 rooms and each room has a sick patient. The patient in room 13 has healed and needs to go home. However, if they go through a room twice, they get re-infected. How can they get out at room 4 without going through the same room twice?



Thuo Karanja, CEMASTE A

Picture Speak: Skills in Science and Mathematics



Communication, analysis, writing and reporting



Collaboration, group work and social skills



Investigation, observations and documentation skills

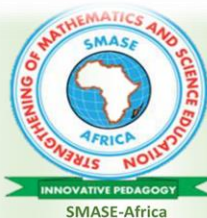
It was a nice class which inspired me. I learnt that you shouldn't judge easily. It was amazing and fun. I would like to visit again and learn more.

Activity 2
On the 4×8 grid provided, arrange the numbers from 1 to 32 such that the sum down all columns is equal, and the sum across all rows is equal.
Columns
Rows

Photos: Thuo Karanja Feedback and logical skills



Universidade Rovuma,
Mozambique



Announcement & Call for Papers



Nampula, Mozambique

**18th Conference on Mathematics, Science and Technology Education in Africa
[COMSTEDA 18] and Annual SMASE-Africa Delegates Meeting
2nd – 6th NOVEMBER, 2020 IN NAMPULA, MOZAMBIQUE**

**Theme: *Teacher Professional Development in Africa: Knowledge, Skills and
Values in STEM Learning Environments***

ABOUT COMSTEDA

COMSTEDA is a continental platform for educators to share innovative ideas, best practice, and interrogate issues relating to teaching and learning mathematics and science. The aim is to strengthen the capability of youth in Science, Technology, Engineering and Mathematics (STEM) subjects for 21st century living. It brings together educators, policy makers, researchers, teachers, NGOs, and public / private sector stakeholders to present papers, posters, exhibitions and workshop concepts

ABOUT AUC CESA STEM CLUSTER

The need to enhance Science, Technology, Engineering and Mathematics (STEM) Education in Africa continues to increase aimed at achieving Sustainable Development Goals (SDGs). CESA is AUC's revolutionary approach for implementing Agenda 2063 & SDG 4 on education. The STEM cluster was launched in 2016 hosted by Kenya with mandate to operationalize CESA Strategic Objective Seven. SMASE-Africa is a member of the cluster. The STEM cluster is co-coordinated by CEMASTE, African Institute for Mathematical Sciences (AIMS) & African Academy of Sciences (AAS). The cluster serves to consolidate information on STEM education in Africa for peer learning, enhance alignment and harmony to facilitate identification and creation of synergies for efficiency and effectiveness. You are invited to join the STEM cluster & the meeting to be held during COMSTEDA 18 forum.

COMSTEDA18 aims to achieve the following specific objectives

1. Bring together teachers, educators, policy makers and researchers from public and private sectors to interrogate issues, share ideas on promising practices relating to teaching and learning mathematics, science and technology education in Africa
2. Contribute to the improvement of quality education in Africa through sharing of research findings on classroom practices in Mathematics, Science and Technology Education
3. Promote the role of STEM education in socio-economic development in line with the continental education strategy for Africa (CESA, 2016-2025) through policy and practice
4. Create an excellent opportunity for sustainable network of partner and stakeholder organizations.



CONTACTS

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Cemastea

3W Wear your mask
Watch your distance
Wash your hands regularly