PRESIDENTIAL DIGITAL TALENT PROGRAM 2016

EMBU COUNTY QUARTERLY REPORT

JANUARY 2017

DIGITAL LITERACY PROGRAMME INSPECTION AND E-READINESS REPORT

SEPTEMBER- DECEMBER 2016

CONTRACTOR: JKUAT UNIVERSITY – POSITIVO BGH

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LIST OF ABBREVIATIONS AND ACRONYMS

No	Term	Meaning
1	DLP	Digital Literacy Programme
2	POC	Proof of Concept
3	Q.I	Quality Inspector
4	ICTA	Information and Communication Technology Authority
5	TDD	Teacher Digital Device
6	LDD	Learner Digital Device
7	AICTO	Assistant Information and Communication Technology Officer
8	TSC	Teacher Service Commission

I. BACKGROUND

Location

Embu County lies some 120 kilometers north east of Nairobi, on south-eastern side of Mount Kenya. The county covers an area of 2,818 square kilometres. The county borders Tharaka Nithi to the North, Kitui to the east, Machakos to the south, Murang'a to the south west and Kirinyaga to the West.

Also known as Kirimari, meaning top of the hill in Kiembu, Embu town in Manyatta Constituency serves as the county's administrative capital.

Embu County Government

Embu County comprises of four constituencies namely, **Runyenjes, Manyatta, Mbeere North and Mbeere South.**

The county's top leaders are Martin Nyaga Wambora (Governor), Esther Maina (County Commissioner), Lenny Kivuti (Senator) and Rose Mitaru (Women Representative).

Administrative Subdivision

Embu County is divided into five sub-Counties; namely, Embu West with headquarters at Embu town, and Embu North with headquarters at Manyatta. These two form Manyatta

constituency, Embu East with headquarters at Runyenjes, Mbeere North with headquarters at Siakago, and Mbeere South with headquarters at Kiritiri market.

II.   OVERVIEW OF DLP

a) Introduction

The Government of Kenya is implementing the Digital Literacy Programme (DLP) through a multi stakeholder engagement. This is a national Programme which is implemented countrywide. The focus of the Programme is to enhance learning in all Public Primary

Schools in Kenya through the use of digital technologies.

In addition, through this Programme, the government intends to fulfill the promise of:-

- Development of innovation skills for a knowledge economy.

- Promoting Research and Development.

- Promoting locally assembled / manufactured goods and services.

- Enhancing Job creation.

The key components of the Programme are:

- Provision of content for digital learning;

- Provision of digital devices for both learners and teachers;

- Capacity development for teacher and implementers;

- Establishment of local assembly for digital devices and related accessories;

- Broadband connectivity.

b) Key Stakeholders to DLP

- The Ministry of Education, Science and Technology (project owner)
- Ministry of Industrialization & Enterprise Development
- Ministry of Energy and Petroleum
- The National Treasury and the Office of the Attorney General
- The ICT Authority is the lead implementing agency for the Programme
- JKUAT -Positivo BGH as the main contractor to deliver the devices to the schools.
- Teachers Service Commission (TSC)

- County Government
- Kenyan Teachers
- Kenyan Students

c) Scope of DLP in Embu County

The assignment involved carrying out of E-readiness inspection in public primary schools to foresee the effective implementation of DLP, to carry out installation of the various devices and to provide training to the teachers.

Embu County has a total of 382 public primary schools.

d) Embu County ICTA Representatives/Staff

The Embu team comprised of 1 AICTO and 8 Quality Inspectors who were allocated various Sub-Counties:

- Eric Erastus Mutugi   -   AICTO
- Christine Wambui Kinuthia   -   Q.I
- Nancy Nyawira Kang'ara   -   Q.I
- Pauline Muthoni Njeru   -   Q.I
- Reuben Ochieng' Charles   -   Q.I
- Duncan Kinyua   -   Q.I
- Gichovi Jane C. Warima   -   Q.I
- Karicho Lewis Murithi   -   Q.I
- Catherine M Ndege   -   Q.I

The AICTO is in charge of the rest of the team and his role is overseeing and assigning tasks.

The Quality Inspectors were tasked with the overall scope of DLP in the 382 schools.

III.   DLP MILESTONES

a) Total Number of POC Schools

A total of 3 schools were used as Proof of Concept Schools to help asses the feasibility/ viability of the DLP project in Embu County.

The schools are as follows detailing the number of devices each school received:

| NAME OF THE SCHOOL	SUB-COUNTY	NO OF DEVICES
Embu County Primary	Embu West	75 LDDs
DEB Gichiche Primary	Embu East	47 LDDs
Kariguri Primary	Mbeere South	17 LDDs

b) Total Number of Schools Inspected/Assessed for E-Readiness

378 Schools (98.9%) out of the 382 schools in the county were inspected by the 8 Q.Is during the three month period excluding the POC schools and a boarding school with no class one class.

The following is the distribution of the schools per Sub County:

Sub-County	No of Schools Assessed
Embu North	37
Embu West	36
Embu East	70
Mbeere North	96
Mbeere South	139

NO OF SCHOOLS ASSESSED
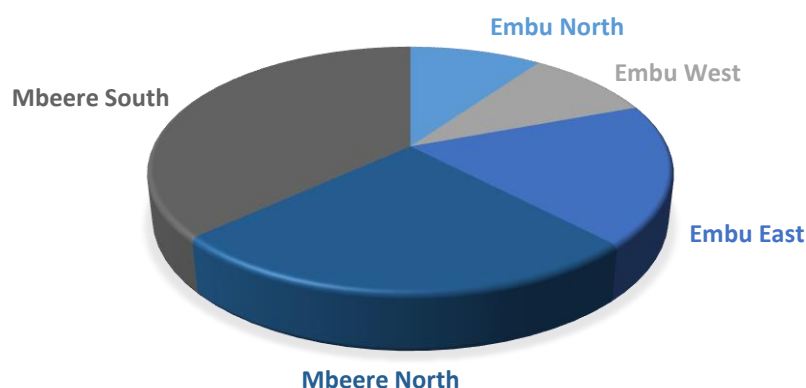
c) Total Number of Schools that were Ready during the Assessment period

272 Schools (71.95%) of the 378 Schools inspected in Embu County were found to have secure storage space, a source of power (either solar or from the national grid) and at least two trained teachers.

39 of these schools did not have a cabinet or had cabinets that were sub-standard.

16 of the schools did not have power at all.

106 of the schools were not completely ready at the time of inspection.

d) Total Number of Schools with Devices installed as at 31/12/2016

8 Schools (2.94%) of the 272 ready schools in Embu County had already been installed with the devices as at 31st Dec 2016 together with training of the class 1 and 2 teachers.

IV.   DLP EXPERIENCES

The assignment came with new and various experiences that impacted each team member differently.

The experiences were both positive and negative.

Due to the ragged nature of the terrain, motorbikes and old saloon cars-cum-'matatus' were the main form of transportation.

With their reflector jackets and armed with the necessary tools, each quality inspector would go from school to school under the scorching heat of temperatures ranging from 24°C to 29°C.

Some of the quality inspectors deployed in Embu hailed from other counties hence were able to experience the rich culture and peaceful surroundings.

The general opinion was that **Mbeere North** and **South** Sub-counties had some of the greatest challenges to overcome including distances to travel and the remoteness of the area. Some of the Q.Is would even have to find refuge in lodgings within a certain area to be able to cover more schools as the distance between the schools were too far.

In order to gain access to most schools, the Q.Is needed to establish a relationship with the Ministry of Education Office including the County Director of Education, Sub-County Directors of Education etc.

Most of the head teachers were welcoming and received the advice given with a lot of enthusiasm as depicted when they would effect the changes almost immediately in a span or days or weeks.

The local people are friendly and would give directions willingly. Some of the Quality Inspectors were known to the local people simply as **"ICT"**.

V.   DLP KEY ACHIEVEMENTS

- Initially, only one inspector had been deployed to the county of Embu until mid-October where the rest joined and the team was still able to conduct e-readiness assessment in almost all the schools in the county (all the schools assigned by the AICTO).

- The team organized and were involved in a successful launch function at St Kizito Kathangari Primary School on 20/10/2016 where Nancy Macharia, CEO of TSC and Paul Ronoh, Director of Programmes and Standards at ICTA were the main Guests of Honour. The function was colorful and the children did not mind sitting under the direct heat of the sun to listen to the various words of wisdom from the speeches and the promise of a brighter future with the hope that has been brought about by the digitization of our education system. The occasion was graced by many head teachers who promised to assist the team in any way possible for the various tasks that were still underway. This assisted in the ease of assessment and inspection.

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[1] DLP LAUNCH EMBU COUNTY

- The Q.Is were able to successfully update all the information gathered from all schools in the portal.

- We were involved in the installation of the devices in the schools that received them and also gave technical support where required
- We provided training to some of the teachers in the county.

VI. DLP KEY CHALLENGES
- Initially, only 1 Q.I had been deployed to Embu county and this number was significantly low as compared to other counties and in regards to the number of schools. This resulted with the initial progress of the assessment to be very slow and not in line with the time constraints given.
- Initially, many Q.Is were denied access to many schools visited and were required to go through a rigorous process of getting letters from the Ministry of Education to prove that they were indeed who they said they were. This is because of many thefts that had occurred in primary schools in the county by conmen masquerading as representatives of the government prior to the assessment period. The suspicion would sometimes interfere with data collection.
- Due to the ragged nature of the terrain, motorbikes and old saloon cars-cum-'matatus' were the main form of transportation. This would result in physical aches and pains at the end of a day.
- Some of the quality inspectors deployed in Embu hailed from other counties hence navigating through the various schools posed to be a challenge.
- One had to travel a long way to go from one school to the next and since the inspectors were required to assess a minimum of 5 schools a day, meeting the required target would sometimes be a challenge especially for the Q.Is who were doing assessment in Mbeere North and South.
- The results of the assessments we carried out were majorly ignored by JKUAT during supply as schools which did not have proper storage cabinets still received devices and were forced to store them in cupboards which poses a security concern.
- Lack of proper and timely communication from the JKUAT training team to the ICT Authority team on all fronts. This was marked by confusion and derailed efforts from our end.
- In many of the schools, the Q.Is would assess the teachers who were indicated as having received the training and found many of them had forgotten or never understood the content of their training including concepts as simple as the meaning of LDD and TDD.
- Many of the school head teachers pointed out that the funds given by the government for the program were insufficient resulting in the schools' need to ask parents to fund the balance.
- Many of the schools would be left without sufficient personnel who were trained in the program as some trained teachers were transferred after the trainings had been concluded.
- Security is a big challenge in many of the schools as the schools do not have funds to build a proper fence or employ the services of a security firm.

- Some head teachers had concerns of insufficient devices when children transfer from other schools mid-year or getting significantly more students in the next school year.

VII. RECOMMENDATIONS FOR DLP

- As there are still many schools set to receive the devices in January, ICTA should deploy sufficient staff to assist in the various processes and for technical support.
- ICTA should have a clear and proper communication line with the Ministry of Education office to streamline any exercises conducted in schools to reduce suspicion and to offer ease of access in lieu of the suspicion/hostility experienced due to numerous cases of theft.
- ICTA can consider offering vehicles instead of tasking employees to board motorbikes which can easily traverse through the terrain. It also gives credibility to the whole process as some head teachers were suspicious of whether the Q.Is were truly government employees when they would see them disembarking from a local motorbike.
- In future, any assessment or data that is needed to be implemented should be carried out way in advance to avoid the results being ignored.
- Establishment of proper communication model framework to be followed between the ministry of Education, ICT Authority and the JKUAT -Positivo BGH team.
- To prevent the theft or embezzlement of any DLP resources, the security agencies (police), the legal justice system, the ICT Authority and other key stakeholders should work hand in hand to develop and implement policies and procedures that will foster responsibility and accountability.
- Provide additional training to the already trained teachers and also increase the minimum requirement of the number of trained teachers per school.
- The government should address cases of students transferring to public schools from private institutions and/ or students transferring from one public school to another. The LDDs as per the program in general was intended to be used by 1 student at a time. Hence when the school receives more children mid-term or significantly more children in the next school year, there might be a problem of insufficient devices.

VIII. CONCLUSION

The Digital Literacy Programme "Digischool" aims to enhance the teaching and learning experience in schools. This is a key deliverable under the Kenya Vision 2030.

In this regard, the various stakeholders such as teachers and students are now more hopeful than ever of the fulfilment of the digital promise by the government.

In Embu county, the team worked tirelessly under the able supervision of Eric Mutugi in playing their part to fulfilling and bringing about the realization of this key deliverable.