



INCULCATING ENTREPRENEURIAL SKILLS AND ATTRIBUTES AMONG LEARNERS IN PUBLIC PRIMARY SCHOOLS IN NAIROBI COUNTY

WAYS OF INSTILLING AN ENTREPRENEURIAL MIND-SET



FEBRUARY 2, 2022

BY DR. LINDA N. KIMENCU

For Schools of Business of Kenyatta University
Nairobi

PART A



Acknowledgement

This was an exercise was carried out at a time when movement and close interaction was limited by the Covid19. It would be imprudent therefore not to acknowledge the support and encouragement I received from the three Ministry of Education Sub-County offices including: Westlands Sub-County, Ruai Sub-County and Langata Sub-County.

I would like to that the school heads and teachers of the four schools we visited, including: New Kihumbuini Primary School, Ruai Primary School, Karen 'C' Primary School and Kongoni Primary School. I am certain that this partnership will yield prosperous fruits in the quest to deliver the best for the learners.

Finally, I am indebted to the support I received from my research assistants; Ms Vivian W. Muiruri and Francis Muchiri – who also documented and put together the required materials to make this exercise a success. Ahsanteni sana.

Table of Contents

Introduction.....	4
The Report.....	4
Location of the study.....	4
The Report Components	4
Summary of the findings	5
Research Experience.....	7
The Classroom	7
The learners understanding of entrepreneurship	7
An Interview with the teachers.....	8
Conclusions and Recommendations	10
Detailed findings for Schools Visited	12
New Kihumbuini Primary School	12
Ruai Primary School	16
Karen ‘C’ Primary School	20
Kongoni Primary School.....	24
Group Discussions	26
Study Exercise Images	27

Introduction

Entrepreneurship is a huge developmental driving force globally. It creates vibrant avenues for investment and employment opportunities to a large proportion of the population. New businesses are formed. New industries are mooted. New markets are developed. New skills and requisite qualifications are established. In all, developing economies will rely on this growth to build on. Therefore, creating an environment where this thrives is crucial.

Entrepreneurship education plays an important role in motivating budding entrepreneurs. It mainly emphasises on the development and application of an entrepreneurial mind-set coupled with requisite skills in the different contexts. These could be when setting up new trade venture, developing and growing an existing business, or when designing an entrepreneurial entity.

However, despite the merits such knowledge portends, it is assumed and introduced later in life. What if it was begun earlier? Wouldn't this encourage aspiring entrepreneurs who believe they have what it takes to launch and scale up their business ventures?

The Report

This is a qualitative report that seeks to understand what would happen if entrepreneurship skills and attributes were inculcated among learners in Public Primary Schools in Nairobi. The study mainly focused on Grade 3 (lowest CBC class) and Grade 5 (pioneer and highest CBC class).

This report endeavours looking at the potential of introducing an entrepreneurial mind-set to the youth at primary school. The study acknowledges that entrepreneurship in practice might not be practical at this level, but that an attitude towards entrenching it as part of the learning is unequivocal.

Its finding envisages understanding whether this would stir up what is already existing in their normal learning curricular while drawing up appropriate parallels to churn out successful entrepreneurs in future. It is hoped that it will encourage an entrepreneurial thinking throughout their growth and upbringing.

Location of the study

To carry this out, the researcher identified four schools in Nairobi to pilot the study. These were

- 1) New Kihumbuini Primary School;
- 2) Ruai Primary School;
- 3) Karen C Primary School; and
- 4) Kongoni Primary School.

These schools were identified based on their population numbers, dynamics, and their location. The intention was to find out to what extent entrepreneurship was currently integrated in the teaching subjects.

The Report Components

This report will provide general findings on the three research areas:

- i) **The Classroom** – how well it is suited for entrepreneurship learning
- ii) **The learners understanding of entrepreneurship** – a focus group discussion that took the learners through understanding and making money, the concept of spending, saving and sharing and how time, money, collaboration and planning influence entrepreneurship performance; and
- iii) **An Interview with the teachers** - to find out their understanding of entrepreneurship; opinion regarding teaching entrepreneurship at the two levels (Grade 3 and Grade 5); the appropriate age learners can be introduced to entrepreneurship; the support provided in the

Competency Based Curriculum (CBC); and the challenge of introducing entrepreneurship to children.

It will also provide the actual findings and evidence of some of the aspects which the researcher felt should be capitalised on to make entrepreneurship learning a success.

It will provide conclusions and recommendations on what is required so that entrepreneurship does not become a remote concept and only introduced at level which might become too late, limiting them the opportunity to grow and succeed.

Summary of the findings

To carry this out, the researcher identified four schools in Nairobi to pilot the study. These were:

- 1) New Kihumbuini Primary School
- 2) Ruai Primary School;
- 3) Karen C Primary School; and
- 4) Kongoni Primary School.

The table below summarises the immediate physical manifestations from the interaction with the schools:

School	Population, Location, Dynamics, Findings
1. New Kihumbuini Primary School;	A population of approximately 1200 pupils and teachers; Located in the informal settlement of Kangemi; sensitive community - pressure from negative peer influences especially from criminal-related activities, detrimental drug related influences, poverty, extremities of lack of space; The level of influence from neighbourhood traits impacts the rational for pupil goal setting; poverty is causing a reduction of pupils in higher classes (early dropout, criminal activities, child labour)One of the best performing schools in Westlands Sub-County
2. Ruai Primary School;	A population or approximately 750 pupils; Located in the growing suburb of Ruai; Cosmopolitan population mainly influenced by the building and construction industry in the locality; one of the best performing schools in Embakassi East Sub-County
3. Karen C Primary School; and	A population of approximately 1200 pupils; located in Karen; school's population mainly transported to the school from neighbouring estates of Langata, Ongata Rongai, and Ngong'; the population exposure to economic disparities among them influenced by the location of the school makes them a ripe ground for expanded programs in entrepreneurship
4. Kongoni Primary School.	Population of approximately 1200 pupils; Located in the predominantly growing Somali and Hindu neighbourhood of South C; One of the best performing schools in Langata Sub-County; one of the only schools with a huge proportion of Muslim population (50%); parents who are entrepreneurs, creating a vibrant ground for business influence among the children; constraining space for outdoor activities but sufficient infrastructure for indoor-driven works; a religious incline towards business ventures.

These schools were identified based on their population numbers, dynamics, and their location. The intention was to find out to what extent entrepreneurship was currently integrated in the teaching subjects. Thus the study summarises its findings as follows:

- ***Infused/Integrated learning*** – The study found that this was well highlighted across each subject. It was clear that the curriculum was aimed at tying up all content to produce a rounded individual.

- ***Business still considered a side hustle*** – Entrepreneurs are viewed as operating as supplementary income, the main channel coming from regular white or blue collar ventures. Therefore, in order to stimulate an entrepreneurial mind-set, it would be prudent to change this attitude. CBC lessons seem to be working on this. The proposed entrepreneurship initiative will promote this change in its implementation.
- ***Learner socialization and behaviour*** – The researcher found an encouraging disparity in role model identification and this was tied to the learners' socialization e.g. In Kangemi the main role models identified were in line with artists (in the drama and music industry), while in South C, the role models were in the Business sector. In Ruai and in Karen, the role models were drawn from home (their parents) and the globally acknowledged fields of medicine and engineering. While this is not a misnomer, it is envisaged that the proposed initiative will not only draw out from local knowledge but from global best practice to encourage a wider outlook of entrepreneurship.
- ***Collaboration and partnership building*** – The *chama* spirit appears to be introduced at a later stage in life while learners are already interacting with the concept of sharing. During the simulation exercise, the respondents understood sharing as to being between only those involved and not as for charity. While it is clear that collaboration is a key competency in CBC, its role is yet to be infused in to practice at both levels (Grade 3 and Grade 5).
- ***The role of media*** – The respondents are at the curious and inquisitive age. This presents two faces – that of understanding the world and that of challenging the status quo. The influence of media might be key in improving attitudes and promoting the good especially in the face of waning trust and honesty, without which entrepreneurship might not thrive.
- ***Perception building*** – The study toiled over questions about making money: i) When should children start earning any money? Does this (making money) infringe on the rights of the child below the legal age? Would an entrepreneurial mind-set encourage the learners to finish their studies? How would this influence the parents' attitudes? The study found that the socio-environment and the socio-economic status of the school's catchment area played an enormous role in influencing the perceptions and attitudes towards entrepreneurial ideas. These ideas were mainly driven by the opportunities the neighbourhoods presented. Thus it would be judicious to customise the proposed initiative to fit varied catchments.
- ***Consumer education*** – The beneficiaries of the proposed intervention will require a balanced and phased delivery to ensure a standard in the symbols, vocabulary and terminologies used in the initiative. This will be in addition to changing pre-existing perceptions and attitudes. For instance, there are some of the symbols on the US Dollar that are evil, and so on.
- ***Awareness on Child-centred Policies*** – The study found the need to demystify child-centred policies to lay the right foundation for the initiative. This would ensure that the opportunities presented do not infringe on the policies and the beneficiaries clear about them.
- ***Influence of religion and spirituality*** – The study found that religion reinforces positive messaging but was found to have perpetrated negative connotations on certain societal norms. For example, the rich in the society are Illuminati/666 which of course is untrue. At the same time, there were communal attitudes about money and its utility in line with religion i.e. "Money is the root of evil" (rephrased to fit preconceived context); you are good if you have money but you are bad if you have a lot of it, and so on.
- ***Self-esteem and value setting*** – The study also found a gap in how each of the respondents' self-value was placed. This was mainly influenced by their socio-environment and this was seen as working against their potentially world changing view. Most of the views presented were more outward looking than in-looking and resourcing. The proposed initiative places its basis on self-awareness and cultivating success in individual strengths and values. It charges from what is locally available and drives towards a global view. Thus it engages its beneficiaries by building a global awareness adapting to new changes to incorporate emerging trends on current issue and topics and global debates.

- **Relationship building** – The study found crucial links that need to be aligned for easier implementation of the initiative. These include learner-parent-teacher engagement and empowerment to influence the attitudes towards societal change; learner-teacher relationship to ensure smooth operation of the initiative; and parental/communal socialization through professional development to discourage the overbearing parenting style that influences decision making processes. This will require the participation of all stakeholders – the education regulator at Sub-County level, public, private and non-governmental stakeholders, teachers, parents and the learners.

Research Experience

This report will provide general findings on the three areas:

- i) **The Classroom** – how well it is suited for entrepreneurship learning
- ii) **The learners understanding of entrepreneurship** – using a focus group discussion that took the learners through understanding and making money, the concept of spending, saving and sharing and how time, money, collaboration and planning influence entrepreneurship performance; and
- iii) **An Interview with the teachers** – to find out their understanding of entrepreneurship; opinion regarding teaching entrepreneurship at the two levels (Grade 3 and Grade 5); the appropriate age learners can be introduced to entrepreneurship; the support provided in the Competency Based Curriculum (CBC); and the challenge of introducing entrepreneurship to children.

The Classroom



The classrooms in the schools visited are all built based on the standard school classroom building code. The previous number of pupils per class was about 45. This number has since grown and some of the classes have up to between 55-75 pupils per class. This constraints movement and crowding is evident in most of the schools. New Kihumbuini Primary school had 67 learners in the Grade 3 classroom.

However, the teachers and pupils have creatively utilised the walls and cellars to display learning and creative materials. On the teacher's desk there are sufficient learning tools

and the cupboards provided are well organised for each subject. At Karen C Primary, the walls are well decorated with educational charts.

The pupils in the schools visited are eager to support their teachers with delivering for their subjects. The period for each subject are well regulated with a bell initialling every session. The breaks are also well utilised ensuring that each child had sufficient energy to participate in the class.

The classes are organized in a collaborative manner to ensure and encourage participation by all pupils. The teachers too moved throughout the classroom especially during discussion times to motivate the learners.

The learners understanding of entrepreneurship

The study found that entrepreneurship was not foreign in practice, but the terminology, as is, was new particularly to Grade 3 learners. The learners could relate the different practitioners in various

sectors and at least could identify some of the traits that made these entrepreneurs successful. The simulation exercises carried out during the research brought out important factors that would influence the implementation of entrepreneurship as a component of study at primary school level.

- *The terminologies used* – both Grade 3 and Grade 5 in all the schools visited were aware of what an entrepreneur did. At Ruai Primary School however, a pupil said that they wanted to become an entrepreneur because they made a lot of money and that is what they needed, raising concerns about the attitudes presented either at home or in the course of their studies.
- *The concepts of spending, saving and sharing* – The respondents were aware of the basic aspects of budgeting and accounting. Their conversance with saving and sharing were either remote or localised – more so for self-gratification.
- *The concept of time and money* were well received and the respondents could relate the importance of each in line with their learning in the different subjects



The learners are curious about new knowledge

Delayed gratification

During the simulation exercise, there was a positive finding among the respondents. There is an unwritten rule in the school against eating anything before the break. At the same time, candies and sweets were only used as a motivation or congratulatory gift to the learners. So having being given some biscuits each during the session, they became conflicted and could not keep it to themselves. "Should we eat our biscuits at the end of the 3rd break?" This is a good trait that could be qualified when teaching qualities of an entrepreneur. It enhances the need for patience when starting, running and managing an enterprise.

An Interview with the teachers

These were the overall responses presented by the teachers on the following issues

Understanding of Entrepreneurship

- Entrepreneurship seen as a transactional process between buyers and sellers.
- Entrepreneurship is covered throughout the curriculum and variously in different subjects.
- Entrepreneurship is conceptualized as an income generating activity.
- Entrepreneurship perceived as the process of coming up with ideas of selling something to a community that is admirable. The motive for this is to get money to buy necessities such as clothes, pencils, food, and save to buy a phone.

Opinion regarding teaching entrepreneurship

- Children in primary school are too young to be taught entrepreneurship
- The ability to covert content and fitting it in to practice in entrepreneurship is missing in the teachers as a guiding principle. It will require creativity of the teacher to deliver this, and remain focused on producing a whole child from the process.
- The concept of entrepreneurship can be broken down to be understood by learners from as early as Grade 3, through teaching concepts such as waste management.
- Learning entrepreneurship should be incremental. It should be taught from Grade 3 as these learners are able to understand the concept of needs and wants and currency which forms the foundation of entrepreneurship. Learners are also taught on foreign exchange in Grade 3 when they are learning about tourism.
- Learning is infused and should be integrated in all learning areas. Learners are already engaging in making their own playing equipment, jewellery, and other tools. Teaching entrepreneurship should be embedded in the school curriculum. Once integrated it should then be followed up as an extracurricular activity outside the classroom setting, perhaps done as a teacher-led/patron club.

The appropriate age learners can be introduced to entrepreneurship

- It should comfortably be introduced in Secondary School especially from form one.
- This is the right age for concept understanding, and perhaps at Grade 9 or 10 when it comes to practice.
- Evidentially, entrepreneurship as a subject might not be taught to learners in the study focussed classes (Grade 3 and Grade 5). However, the entrepreneurial concepts and mind-set can be modelled from Grade 3.
- Apart from repetitions, which has been overused as a teaching methodology, other teaching methodologies could also be used.

Support in the Competency Based Curriculum (CBC)

- A majority of the projects within the CBC curriculum, while done by both Grade 3 and Grade 5, foster an entrepreneurial mind-set. For example, the environmental studies activities such as enterprise projects and waste management for IGAs. Others include: the making of breathing system, playing equipment, ornaments, greening the environment and growing vegetables.

Challenges of introducing entrepreneurship to children

- **Learning resources** – The study came face-to-face with the challenge of availing unlimited required learning resources. This was a self-limiting factor influencing the delivery of each subject. All content delivered and written was based on only the provided textbooks.
- **Community support** – There is also the likelihood of encouraging child labour among the learners which is legally discouraged.
- **Entrepreneurship practice** – This seems to infringe on the child's right to education at the age below 18 years. With there being a missing link at home, where parents lack the requisite capacity on the issue it would be controversial to implement it.

- ***Lack of time as a resource*** – The way programming has been organized in CBC does not seem to provide enough leeway to implement additional curricular even for teachers who are overstretched are inadequate in most schools.
- ***The class sizes and numbers of learners*** – One teacher is expected to not only teach all the subjects but also run classroom management which leaves them no time to engage in anything extra. The learners on the other hand are forced to fit in less than a comfortable position and this discourages additional learning
- ***Limited Exposure and awareness*** – The study found some capacity gaps in Entrepreneurship as a subject among the learners and teachers especially in relation to the product value chains used in the existing projects in the related subjects.
- ***Guided and guarded learning*** – The delivery of the different subjects is restricted to a Government distributed reference (textbook) and each Grade is limited to only that. Anything above or outside this is questioned: "This one can only be taught at Grade 4" etc.
- ***Money 101 Knowledge missing*** – In promoting financial literacy - Where does money come from? What is the value of our currency? Is money from *wazungu* - tourism? What is the origin of money and its use? What are the most relatable values presented at different levels? and so on. This seems to be lacking in one package but is distributed across the subjects and grades.

Conclusions and Recommendations

- In the end, the study found that there was a general positive attitude in the teaching fraternity that the proposed entrepreneurship mind-set approach will definitely enhance their delivery.
- The Grade 3 and Grade 5 learners expressed their gratitude and joy about the CBC lessons and activities. They were happy with the new engagement that brought in a wider view in terms of their lessons, more so how learning is integrated and linked. For example, "how fresh vegetable grown in Environmental Studies would bring in good income in Mathematical terms."
- Currently CBC seems to place emphasis on creativity and innovation, which are strong traits that would motivate learners to become entrepreneurs. In all the schools the researcher visited, a huge proportion of learners avoided the Science Technology Engineering and Mathematics (STEM) fields with this new propulsion. Unless they were nudged towards STEM and practical fields in later classes, they might be unable to link their lessons with practice.
- The general work demands in the school by both the education regulator and the management, seem to place huge pressure on the teachers to deliver. It might be prudent to build more delivery capacity on the teachers (to align them more to the new ways of doing things) and increase their numbers so as to ease the learner numbers and enhance increased learner attention.
- There is a drive to get teachers to deliver on the tenets of CBC. This tends to 'box' them from identifying other available knowledge opportunities as well as resources in the process. Teachers might also fail to take advantage of the new space to improve themselves as they have so much and so little time.
- There is need to create feedback mechanisms that will enhance delivery amid this pressure-ridden environment both in-house and outside (using the school heads) to afford the adoption and entrenchment of best practice.
- The media plays a crucial role in promoting required perceptions about different subjects in the society. At times presentations paint a dire picture and they promote a negative presentation of the product or service from it messaging. The media is a perfect partner when talking to children at this level and will be a great ally in identification of opportunities at local level and global level. This might even end the perpetrated belief that novel ideas can only be implemented far away from home.
- One method through which the proposed initiative might adopt would be through forming an entrepreneurship club in the schools. Any monies raised by the club operations would

then be channelled to a charity kitty to assist the less fortunate children or to buy the resources needed to facilitate learning.

- A recommendation would be to broadly conceptualize entrepreneurship tennets, e.g. saving should be conceptualized not just from the perspective of money but also of time, water, food etc. Teaching of the concepts should be gradually done and appropriate activities customized to fit each age.
- Parents and the community should take responsibility and be proactively involved in the learning process of their children. School management should continuously engage the parents and the general community to provide sufficient information on CBC to encourage a positive change.
- The delivery of entrepreneurship mind-set will encourage the use of both competitive and collaborative learning methods in order to influence a positive outcome in line with the CBC methodology.

PART B: ANNEXES:

Detailed findings for Schools Visited

New Kihumbuini Primary School

	HOST: Tr. Beatrice Njoroge - Deputy Head	
CLASS	3rd GRADE	5th GRADE
	Tr. Mary Mbugua	Tr. Teresia Nyaga
A1: Classroom Observation		
A1-1. Classroom Environment	The class set-up was crowded. The teacher explained that the class was combination of two classes, that they are yet to get an extra teacher. The walls only had the Colgate poster advertisement, posters on handling food and cleaning teeth on the walls of the classroom; most of the other learning resources are mostly for learning the languages: English and Kiswahili. No class artifacts were present. The classroom environment mainly fostered competition. learning was teacher centred. No learning aids were provided, teaching was done mainly with textbooks and recall answers.	The class set up is standard - with a black board, desks for each pupil, table for teacher. The seating arrangement promoted collaboration between the pupils. On the walls were painted charts and murals demonstrating the creative strengths of the pupils. On the teachers table were lesson learning aids including textbooks, charts, chalk, tins, printed demos for the lesson and various other stationery
A1-2. Teacher's Preparation	The lesson observed was environmental studies: culture and cultural activities	The lesson observed was Home Science and the topic was Consumer awareness, under the Consumers education strand. The teacher followed a logical flow in the delivery of the class and used the provided text book for referencing the pupils
A1-3. Teaching Process	Teaching process was teacher oriented- rote learning was highly used. The teacher distributes food voucher cards for learners to have lunch. Half of the learners did not get the food voucher cards, some of the learners had carried their snacks. The teaching of entrepreneurial concepts is at exposure level through magazines, looking at pictures and recall experiences. The teacher gives learners the assignment to " look for magazines	The teaching process remained teacher centric at the beginning of the class. It delved in to collaborative exercises and discussions for the rest of the lessons time. The teacher would use Q&A to address the understanding of the pupils. The teacher gave very pellucid examples related to the lesson e.g. What is the color of the vegetables in our garden? How would you advertise for the produce available? (The pupils were

	where people are working together, playing football, dancing, having a ceremony, and grouping the different pictures into categories of environmental or cultural activities" The girls in the classroom informed to clean the class after the lesson. There is an attitude that money can be used negatively through buying things like drugs.	happy to describe the advertisement methods they would use) What would you do with the money you got? (The students provided needs and wants they would acquire. However, any profits they got would be shared equally among them)
AI-4. Specific Teacher Characteristics	The teacher encouraged rote learning and frequent raising of hands to respond to questions. The teacher gave examples of when learners master their craft of drumming they can dance to politicians who can in turn give them money to pay school fees. The lecturer method is the preferred mode of teaching with occasional review of the textbooks. The textbooks are shared between two to three learners per desk. the learners volunteer to distribute books among their classmates. the teacher checks frequently on students handwriting and their accuracy in copying notes from the blackboard. the teacher engages in conflict resolution, when a learner has her pen picked by another. The teacher's attitude towards money is that it is transactional. The teacher teaches on recycling of waste as a means of providing value that can then be sold for a profit. illustrations such as how learners can use their environment to get money through selling spinach within a school club.	The teacher remained steadfastly passionate and on topic throughout the lesson. The strengths of the teacher drove the pupils to stay completely involved every step of the way. She also cited personal examples to illustrate the some of the uses of money. The lesson reiterated the importance of only acquiring useful things e.g. Are biscuits good for our teeth? (To which the pupils were totally in agreement that there were better things to purchase). The teacher allowed the pupils to interject with appropriate examples from previous lessons e.g. remind them the difference between "safe" and "save". She also stirred debate and encouraged the pupils to draw creative responses together.
AI-5. Learner's Characteristics	The learners are mostly docile as most of the illustrations are provided by the teacher. Learners are interested to study content in the class textbooks and they use the books to discuss among themselves. Learners drum their desks when given the example of drumming as a cultural exercise. Learners engagement in class is on recall basis. Their answers do not reflect anything outside the scope of what they have been taught. Learners do not ask questions. They mostly respond to the teachers queries.	Extremely inquisitive and responsive pupils warming up the class. The learners viewed Ksh 1000 as the best note 'as it is the only one that could afford the fun things they all wanted". The pupils confidently presented their opinions and responses. There was a unified reaction at every desk between both boys and the girls. At their age the pupils are exposed to various IGAs and this was evident from the examples they shared in different scenarios. They are aware and can relate the school's core values.
A2: Focus Group Discussion		
A2-1: Money	Pupils are aware of the value of the different currencies especially the currencies below 200 Kenyan shilling.	The pupils are aware of currency and the values of different notes and coins. Most had the opportunity to handle all the notes provided. They were able to make additions and know

		what change they would get upon shopping.
A2-2: Making Money	The concept of source of money was not clear among pupils in grade 5. Most did not know the history of money and how money came to be	The pupils believed that the main way of making money was by working for someone (individual or company). They could not tell where money came from, but mentioned barter trade as something they learnt.
A2-3: Money Experience – Spending / Saving / Sharing	The concepts of spending/saving and sharing not well conceptualized.	A majority of the pupils wanted to become business people. The drive for this however rose from a belief that "the rich are business people" are business people. The results of the simulation exercise showed that the pupils were comfortable with money. Decision making was however not unified with some thinking "self" while others drove a charity angle. A majority of pupils had a memorable shopping experience. They mentioned shops they had shopped in either alone or with their parents. These included: Naivas Supermarket (because it presented everything that they felt they needed); and Mpesa shops (they had friendly attendants). They however, mentioned bad experiences they had had: at Fair Value - Kangemi (the extra fleecing and monitoring measures made their experience extremely uncomfortable) "They search you, make you leave your phone at the security desk, and then they follow you throughout making you feel like a shop-lifter". This presented the level of awareness they all had, as well as the responsibilities they were in charge of at home.
A2-4: Entrepreneurship	The learners in grade 5 understood entrepreneurship from the concept of transacting. They did a role play of selling books as we were in a library setting. In the book shop, there was a sales person who kept pursuing buyers to get into the shop to buy. A lot of collaborative exercise and group work seen among the fifth graders.	This was a difficult case as it was a new subject. The researcher thought not to pursue.
A2-5: Concept of Time, Money, Collaboration and Planning	There was a strong collaboration among the class mates. However, the concept of saving, spending and sharing were not well conceptualized by majority of the learners. Sharing for most learners meant, them sharing between themselves. Most of the learners did not have the concept of saving money in a bank. The concept of spending was pre-conceived to mean wasting.	There was a strong collaboration between the pupils. They were able to define and budget for the allocated money. They spend the time provided effectively (this is driven by the school pattern with the bell defining each session). However, the pupils were not able to make forecasts or propose plans for future use of money - Today is the day!

Ruai Primary School

	HOST: Tr. Anne Muthii - Headmistress	
CLASS	3rd GRADE	5th GRADE
	Tr. Lucy	Tr. Paul Omukaga
AI: Classroom Observation		
AI-1. Classroom Environment	The class set up was crowded, learners learnt facing the teacher/blackboard. There was availability of charts and artifacts such as beaded necklaces that were hanged on the class walls and also some of the learners had accessorized with their own beaded necklaces.	The class set up is standard - with a black board, desks for each pupil, table for teacher. On the teachers table were lesson learning aids including textbooks, charts, chalk, tins, printed demos for the lesson and various other stationery. The seating arrangement promoted collaboration between the pupils. On the walls were painted charts and murals demonstrating the creative strengths of the pupils.
AI-2. Teacher's Preparation	The lesson observed was environmental activities: Enterprise projects- exploring environments for income generating activities (waste management)	This was a Mathematics class and the lesson was taxation. The pupils had prior preparation and had a related skit for presentation. The skit was on what the effects of taxation do for the traders and their customers, seeming to create a conflict with the authorities when there is non-compliance. This smoothened delivery of the lesson.
AI-3. Teaching Process	The teaching process was balanced, with an emphasis on learner centred approached. The teacher came with old buckets, waste buckets to illustrate the concept of waste management in class. The teacher had tissue papers and cello tape on the desk. She had an elaborate lesson guide that she followed to the latter.	The teacher remained comfortable with the subject although the learning was textbook centred. He did not seem to digress either on the examples used in the subject or in the language used. The delivery was clear and in both English and Swahili

AI-4. Specific Teacher Characteristics	<p>The teacher was very passionate about the learners. She involved the learners and allowed learners to integrate different learning areas within the subject she was teaching. E.g. some learners integrated their CRE lesson on the disciple who betrayed Jesus over 30 pence with a concept of how money is used. (negative). The attitude of money is largely fostered from a religious and moral perspective. The teacher provokes learners to illustrate ways in which they can earn an income through waste. Learning is mainly competitive because of the large class sizes. learners encouraged to do hand gestures to illustrate the process of sorting out waste. The attitude towards money is so as to "be rich " when you are rich, you are good to go!", being rich is seen as a goal to itself. The teacher helps learners recall a subject on saving and how they can open bank accounts. The teacher uses a lot of Bible Illustrations to provide the value of money e.g. the story of Judas, Joseph. The teacher uses an inquiry based learning approach to enable the learners evaluate the pictures on the books. The teacher integrates a lesson learnt from Kiswahili lesson on "Mzee Johari" to teach on how farmers can add value to the farm manures to make fertilizers. The teacher encourages learners to inform their parents on ways they can make money from waste at home. learners given an extension exercise to have three separate dustbins at home that they could use to separate the organic litter, paper litter, and glasses/ metal. The visuals on the books should waste being placed in compost pits. The teacher focusses on encouraging learners to read and comprehend.</p>	<p>Owing to the fact that Tr. Paul has a physical disability, he presented a strength in ensuring the participation of the pupils from all corners of the class. Being that the class set-up encourages participation, the researcher could feel the warmth of the learners throughout the session on the subject. The mathematics class never presented just figures on the black board, but phrases e.g. the definition of taxation, where taxes go, why it is important and so on. The students were encouraged discuss their answers before presenting them to the teach making the learning collaborative. There was however as limitation as to how long the sharing minutes would last seemingly leaving a visible thirst for more time.</p>
--	--	---

A1-5. Learner's Characteristics	<p>Most of the learners were inquisitive, provided out of the class answers, integrated their answers with other subjects learned (tacit knowledge). The attitude towards money by learners is mostly negative, money is seen to corrupt people, money is also seen to be a tool used to lure children into the hands of kidnappers- the learners inform that the kidnappers sell children so that they buy cigarettes., the illustration of Judas in the Bible shows money to be seen as a tool for betrayal. The teacher works very hard to change that narrative by informing the learners that the "whole world need money so as to meet our basic needs." A positive counter statement on the use of money from a religious perspective was used in illustrating the story of the Good Samaritan. learners were prompted to think about the needy people in the society and sensitized on the need for empathy and discouraged from making fun or ridiculing the needy people in the society. Seems the learners know some deep knowledge about how money can be used negatively, however, there are few positive role models or positive modelling of how money can be used positively. Seems the responses provided by the adults in this case teachers, is over-simplified and unconvincing to most of the learners as they have had experiences of the power of money from what they have heard outside the school confines e.g. money can be used to kidnap children among other vices. Learners use hand gestures to signify money by tapping their index and middle fingers slightly using their thumb finger. Learners are taught on needs and how to prioritize on the different needs with food, clothes, and shelter being prioritized over all the other items.</p>	<p>The class set-up created an environment for competitive learning. The pupils were honest with their answers (right or wrong). They confidently presented their answers. The level of exposure to aspects related to planning, budgeting and accounting was evident. The pupils could easily say where the best hardware shops were and how well stocked they were when it comes to construction works. They could speak about their understanding of why their neighbourhoods had stunted development (no streetlights, water storm drains, insecurity etc.) "We shall tell our parents to elect the best leaders to sort out our neighbourhoods" one said. "I am going to follow in my father's, grandfather's and great-grandfather's footsteps of becoming a real patriot for my country" another said.</p>
A2: Focus Group Discussion		
A2-1: Money	<p>The pupils were aware of the currency and name the notes provided. They were also able to identify the coins presented. At this age, the research felt that it was not appropriate to introduce budgeting and accounting, because this skill was not evident.</p>	
A2-2: Making Money	<p>Most pupils had a vague idea about where money came from. Examples given included: the bank, from work, selling sukuma wiki, from CBK, printed from USA etc.</p>	<p>During the simulation exercise, the pupils demonstrated the ability to identify and relate the various denominations given to them. They had a remote idea as to where money came from e.g.</p>

		it was given by the President, the bank, from work, from business etc.
A2-3: Money Experience – Spending / Saving / Sharing	The pupils were able to define what spending (from Enterprise Projects), saving (from Home Science), and sharing (from CRE) meant. The application however was not evident in the simulation exercise.	Spending, saving and sharing was not a new concept to the pupils. However, in their understanding, you spend everything you have been given, save only what has been gifted to you, and you share only among your loved ones.
A2-4: Entrepreneurship	The researcher never introduced this as a concept, but defined it in business practice	The researcher did not want to delve in to entrepreneurship as a concept but at the introductory stage of buying and selling a product.
A2-5: Concept of Time, Money, Collaboration and Planning	This is driven by the teachers and the lesson times defined by the bell. The pupils are still learning the applications of most aspects related to time, money and planning	On the concept of time, the pupils understand this from the way their timetables are prepared, both at school and at home. But on the aspect of money, their understanding seems to be tied to only what they are guided to by their parents or teachers

Karen 'C' Primary School

	HOST: Tr. Anne Adagala - Headmistress; Tr. Peninna - Deputy Head	
CLASS	3rd GRADE	5th GRADE
	Tr. Mrs Nyamu	Tr. Kavosa
AI: Classroom Observation		
AI-1. Classroom Environment	The class set up was crowded.	The class setup was crowded, learners learnt facing forward. A desk had four to five learners who shared textbooks. The classroom had an artefacts corner where they displayed the handcrafted ornaments.
AI-2. Teacher's Preparation	The teacher was comfortable with the subject easily catching the attention of the children at every stance.	The lesson observed was mathematics. The strand was money, sub-strand Budgeting. The class timing took longer than usual for about two hours. The teacher covered the concept of budgeting and taxation in one sitting.
AI-3. Teaching Process	The teaching process was teacher-centric, albeit with the use of the subject textbook. The teacher presented examples cited from the bible	The teaching seemed balanced save for the large class numbers. The teacher involved the learners in making calculations on the class blackboard. The assignments were mostly recall based.

AI-4. Specific Teacher Characteristics	<p>The teacher demonstrated teaching experience with the children feeling very comfortable in class. This being a religious lesson, there was a bias towards promoting morally guided habits in relation to biblical principles. For example, the story of Ananias and Saphirra encourages and rewards honesty, but also cultivates fear to every dishonest behaviour. The pupils presented prior knowledge of the Ananias story, but were not able to easily generate the lessons from it. The teacher cited giving tithes and offerings in church saying that this should be the rule. "Do not steal from God" she says. In the researcher's opinion this does not instil or motivate the aspect of giving from the heart, but more so, giving as a legal rule. The lesson did not provide sufficient time for questions and answers. In the end though, the pupils said that they understood honesty as an important life virtue, from their comments to the researcher.</p>	<p>The teacher was calm. She mostly used the examples from the text books to illustrate her points. The teacher's perspective towards money was that it was a medium of exchange and was mainly used to buy food stuff or other basic needs. The learners did arithmetic on the board. They made a shopping list for items worth one hundred shillings. The learners had their own self-created a hundred-shilling note. The discussions were made in groups of three. The discussions were student led, with the teacher only asking them to include the "items that they really need" on the shopping list. "The teacher asked the learners why they didn't include extra things in their shopping list, of which they responded that the money was so little. the teacher asserted: " when you have little money, you only buy the things you need". " when you have some money to sae, you don't go inviting your friends to buy sodas" The concept of saving and buying within your means was over exerted. They decided what items to include in their budget. Most of them included food items e.g. steel wool, two matchboxes, mandazis, tea leaves, and milk. Money is seen from the perspective of fulfilling needs. The teachers use a mixture of teaching styles: group work, rote (recall based) learning. Most of the learners' responses reflect only what they have been taught. " when you have a lot of money, you will use aircrafts not matatus" (perspective) " every person who works has to pay money to the government that money is called tax, it is used to do different projects in the country e.g. road construction. The teacher reminded the learners that the pencils in their hands were bought using the tax payers' money. Of which she guided the learners to recite " the government is good" There was a sense of government loyalty among the learners. Most learners perceived the government to be supportive and helpful.</p>
--	---	--

A1-5. Learner's Characteristics	Although this was a crowded class, the pupils seemed to have found their comfort zones and are seen to enthusiastically participate overall. The pupils didn't have prior knowledge of the research so were much more curious about what the lesson and the research would present.	The learners were competitive. They wanted to have a chance to illustrate their examples on the blackboard. They also were learning collaboratively. The learners made their own dummy currency. The learners did not perceive entrepreneurship as a career one can explore exclusive of employment. Most of them preferred to begin their businesses after they gained some form of employment. starting a business is viewed from the perspective of "side hustle". The learners were asked to do a budget assignment: "in a museum, an adult is charged Ksh. 200 as entry fee and a child is charged Ksh. 150. prepare a budget for your family and show the source of income"
A2: Focus Group Discussion		
A2-1: Money	Based on its location (upmarket region of Karen) and school's population, (a middleclass neighbourhood). The kids demonstrated good exposure to the subject of money and its uses in day-to-day activity.	The pupils are aware of the different currencies.
A2-2: Making Money	Most of the pupils did not know where money comes from but knew where it is used	The learners believed money was minted by the government and specifically by the CBK governor- Patrick Njoroge. They also had exposure to fake money and thought it could be manufactured by Chinese.
A2-3: Money Experience – Spending / Saving / Sharing	Based on the story in the subject (CRE) it was clearly not possible for pupils to identify the importance of saving, spending or sharing.	The concept of spending, saving and sharing was somewhat understood. Most learners had piggy banks at home and hence understood the concept of saving. However, the concept of sharing was not well understood, most of the learners perceived sharing from the perspective of sharing among themselves more like sharing profits equally among themselves. Most learners would wish to solve problems of street children, build homes for the less fortunate, build more public schools and ban "manyanga" the loud buses, but when given money and asked how much they could share, it didn't come to mind that they could share with those less fortunate among us.
A2-4: Entrepreneurship	The pupils understood that entrepreneurship remains the ability to do business. At this level the researcher felt that it is quite at intro stage and not much detail can be emphasised. The pupils demonstrated a thirst for learning especially for "making much	They have an understanding of business, good business ethics. E.g. they suggested that one thing they could improve about their shopping experience is to provide clean shelves, wash the vegetables, cement the walkways and make the shopping area

	money" and "self-employment". One pupil said, "I want to be my own boss in the future and employ many people"	attractive. Most have been exposed to the market areas within their vicinity.
A2-5: Concept of Time, Money, Collaboration and Planning	The researcher felt that this level was not exposed to this concept, although the school bell and normal class schedules seems to develop a habit in practice	Learners had a strong collaboration, however, they seemed shy at first in sharing their thoughts save for two pupils who were very outspoken. They were however not able to relate the concept of value for money and their choice of careers. The girls had aspirations to work in the medical fields while the boys aspired to play for professional football. They all chose those careers because they were lucrative

Kongoni Primary School

	HOST: Tr. George Njau - Headmaster; Tr. Dorothy Amayo - Deputy Head	
CLASS	3rd GRADE	5th GRADE
	Tr. Anne	Tr. Keziah
AI: Classroom Observation		
AI-1. Classroom Environment	The class set-up is both practical and orderly. It is not too crowded and the students have enough room to move to and fro. The class also utilises the space outside the classroom to perform other practical activities and especially their environmental exercises.	The class has a reasonable class size- not too crowded, the teacher could walk along the class aisles without disturbing the learners. There were shopping lists provided on the wall, clay pots displayed in the class
AI-2. Teacher's Preparation	The teacher had teaching materials (textbook, charts, pens, chalk, container with waste materials, labelled containers for the practical exercise). She was well prepared.	The teacher was little distant and indifferent.
AI-3. Teaching Process	The lesson was Environmental Studies, covering waste management projects for income generating activities. The teaching process begun with definitions related to the subject from the rest of the subjects covered - easily creating a link with the rest of the teaching. Although it remained teacher centric in its delivery, there was room to manoeuvre when it came to the curious nature of the learners.	The teacher mainly used recall exercises. He also used mops, waste buckets to teach. The teacher guided the learners to reason on waste management practices. The assessments were mainly done on question and answer and the competitive learning encouraged.

<p>AI-4. Specific Teacher Characteristics</p>	<p>The teacher demonstrated teaching prowess and understanding of the subject. She could even list the different types of wastes and how each could make money (guided and guarded learning). The researcher found the subject to be a good link to practical IGAs which the pupils could easily relate to. The pupils were ready with a skit where they presented what poor waste management does in the home, market and generally to the neighbourhood. The researcher felt that this being a majority religious neighbourhood (equal proportion of Muslim and Christian) the emphasis on "cleanliness is next to Godliness" was easier to promote. The teacher was comfortable discussing the importance of identifying the nuisance waste type that can also bring in money.</p>	<p>The class was very diverse culturally with learners belonging to different cultural and religious backgrounds. The learners mainly provided recall responses whereas the teacher provided illustrations (guided and guarded learning) the class was highly teacher focussed and learners were not engaged in the classroom activities.</p>
---	---	---

A1-5. Learner's Characteristics	The pupils were inquisitive and curious about subjects outside the box. For example, "How long can it take me before I can afford to purchase a Mercedes for my parents with my savings?" "Can I become a great business person if I become a doctor in the future?" The pupils were also happy to help the teacher prepare their lesson (dusting the board, collecting and distributing subject related textbooks etc.) The class representative was both in charge and willing, a great character instilled both at school and at home. The pupils were all ready and quick to volunteer for any opportunity to perform a duty or (in the research). By the time the class was over, there was a pupil who had completed making a recycled plastic pen-top belt which he wanted the researcher to buy.	
---------------------------------	--	--

Group Discussions

A2: Focus Group Discussion

A2-1: Money	The pupils were aware of money and local denominations. They too were able to identify the varied characteristics on the Kenyan denominations and what each value would afford.	
A2-2: Making Money	Making money was not a new concept to the students and neither were the denominations presented. They however could not tell where money and its use started.	
A2-3: Money Experience – Spending / Saving / Sharing	The pupils were able to describe their money experience. The experience was from purchasing their school stationery, home groceries, clothes, and wholesale with their parents. However, the concept of spending, saving and sharing was still difficult to relate, although the definition of terms was good.	
A2-4: Entrepreneurship	The pupils have an understanding of business and its employment in meeting daily needs	
A2-5: Concept of Time, Money, Collaboration and Planning	The link between how their daily schedules in terms of lessons (guided by the bell in school), and the concept of time and money is still developing. The pupils were happy to perform their activities and present their findings together.	

PART C

Study Exercise Images



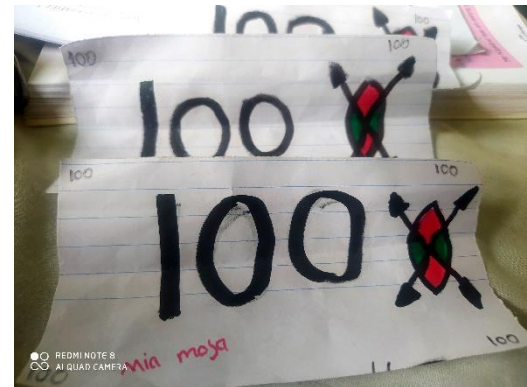
Picture 1: While the learner numbers have increased, the sizes of the classrooms remain the same.



Picture 2 & 3: The delivery of the curriculum has allowed room for creativity displayed around most of the classrooms the researcher visited



Picture 4: The discussions with the enthusiastic and curious learners yielded much in terms of both exposure and feedback.



Picture 5 & 6: These are some of the tools used during the lessons relating money. The learners' conversance about Kenyan currency and its unique details was enlightening.



Picture 7: The learners used the walls and even the pillars around the classrooms to display the learning charts and products from the creative exercises that had been carried out



Picture 8: During the simulation exercises, the learners expressed good understanding of some of the aspects of budgeting and accounting.



Picture 9 & 10: The classrooms provide an environment for learning and during breakaway sessions, the learners also have an opportunity to interact in a safe space in their halls