HOLISTIC INNOVATIONS FOR KENYA'S EDUCATION (HIKE):

Catalyzing locally rooted solutions to Kenya's Education

A Summarized Version

Contents

Introduction

1.0 Background information

Zizi Afrique Foundation (ZAF) and Idara o Taleem e Aagahi (ITA) with the support of Aga Khan Development Network (AKDN) are implementing Schools 2030 project in Kenya and Pakistan respectively. Schools 2030 is a 10 year participatory learning improvement program reaching 1,000 government schools across 10 countries. With her focus on the key transition years of ages 5, 10 and 15 , the program applies the principles of human-centred design to support teachers and learners to design and implement education micro-innovations.

For three decades now, the world has become increasingly aware of the need of non-academic learning. More specifically, the labor market has attached significant importance to values and life skills. Covid19 pandemic further catapulted the exigency for non-academic skills, including values and life skills. The incorporation of non-academic learning in curriculums canhelp equip children and youth with the necessary skills to navigate through future crises in life and pandemics. In response to this, Kenya is implementing a competence-based curriculum which has integrated 8 values and 7 core (21st Century skills) competencies.

However there is little clarity on the pedagogy and assessment of the values and life skills hence catalyzing a big gap between the 'written intentions' and the 'classroom practices'. There exists low awareness and inadequate attention among parents and teachers of the worth of values and life skills in driving the success of children through the schooling, working and life cycles hence academic scores have been prioritized at the expense of these skills. There are also limitations and ambiguities in conceptualizing linkages between non-academic skills and academic learning outcomes. As a result, there are critical lags within schooling systems in their provision of values and life skills across.

This report documents a summary of the findings of the baseline survey conducted in year April 2022 in Mombasa County.

1.1 Overall Goal

The central aim of the research study was two - fold. It sought to

1. To contextualize and examine the relationship between academic learning outcomes and values and lifeskills as offered currently in targeted program schools;
2. To generate robust evidence on school (leader) and teacher-led intervention that effectively develops and incorporates values and lifeskills into the existing schooling system to provide an overall holistic learning experience.

2.0 Methodology

The research adopted mixed methods approach. Data were collected at the household level by research assistants. The research assistants were exposed to the study tools and procedures during 2-day training workshop. The training was critical given the focus on assessing problem solving and collaboration skills that are not directly observed – hence the need for the assistants to be adequately tooled on the intent of the project, the assessment tool and its administration. Problem solving and collaboration were assessed using Assessment of lifeskills and Values in East Africa (ALIVE) assessment tool which was collaboratively developed by Kenya, Uganda and Tanzania.

In addition, the tool also included items on oral reading and comprehension tests, numeracy and digital literacy tests. Numeracy was assessed using International Common Assessment of Numeracy (ICAN) tool, oral reading and comprehension were assessed using UWEZO's Beyond Basics Literacy tool which dives into comprehension, from a 100-word story of Primary 4 level. Comprehension involved 3 questions; a direct question assessing recall, an inferential question (that required interpretation) and an application question. Digital literacy was assessed using a tool developed by the Organization.

The survey targeted 10 (7 primary and 3 secondary) public schools located in Mvita, Likoni and Jomvu sub counties in Mombasa County. Quantitative data was generated from 213 learners, 78.9% from primary school and 21.1% from secondary school. Further, 61% were female while 39% were male. The data collected from the baseline survey was triangulated during analysis and supplemented by secondary data collected through review of existing literature. This literature provided insights about the topic and documentary review.

Qualitative interviews were conducted with 177 parents, teachers and opinion leaders who often interact with learners in the course of their work. Respondents for the qualitative study were sampled using purposive sampling and snowball techniques. Qualitative data was generated through Focus Group Discussions (FGDs) and key informant interviews (KIIs).

Qualitative data was analysed using NVIVO software in which data were coded using both deductively and inductively - through use of predefined themes guided by the study tools as well as based on emerging themes. Quantitative data were managed and analysed using STATA 17.1. Descriptive statistics including means, frequencies and

3.0 Key Findings

This presents the results of this study. It begins with the quantitative findings organized per each of the study area: literacy, numeracy and Assessment of collaboration and problem-solving skills. This is followed by outcomes of assessment of digital literacy and the qualitative assessment which are organized by the research objectives.

3.1 Quantitative assessment

3.1.1 Literacy

Literacy assessment focused on a learner's ability to read and comprehend. Of the 213 adolescents, 86.9% were able to read the text while the remaining 13.1% could not. Those who were able to read accurately continued and were asked follow-up comprehension questions. Only 6 out of 10 of the adolescents answered the three questions correctly.

It was noted that while 14% of the learners were reading sentences a string of words, 26% of the adolescents were omitting/skipping reading some words/sounds, 28% were stopping often or hesitating while reading and lastly 32% were reading while replacing words or sounds that they could not read correctly.

3.1.2 Numeracy

In numeracy, unlike in literacy, the learner was expected to attempt all questions. Each learner had adequate space on the question paper to work out the sums. Competencies assessed included number recognition, basic operations and word problems. Findings showed that 41% were able to answer all 7 questions correctly. The chart below details the outcome of this competence, while 2.8% could not score a single sum correctly, 5.2% could not recognize numbers.

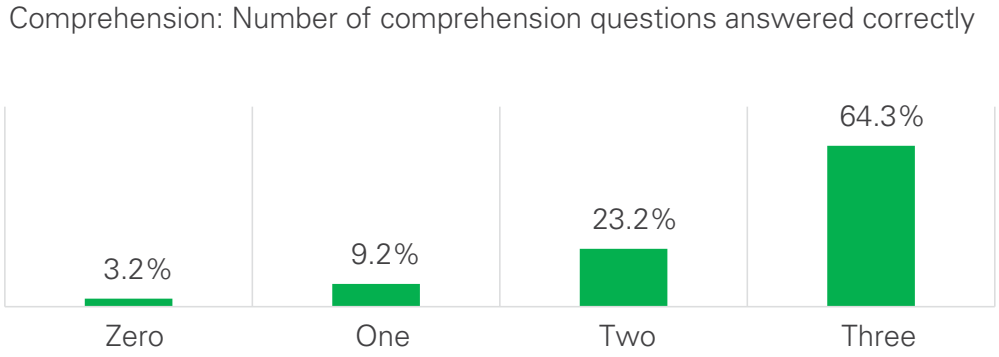


Fig. 1: Number of comprehension questions answered correctly

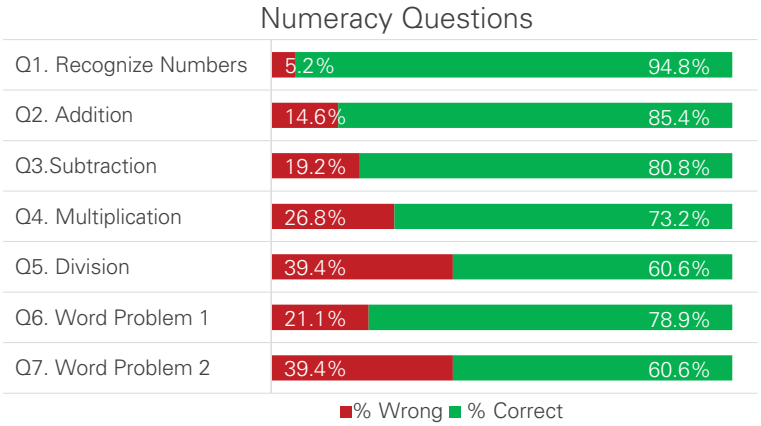


Fig. 2: Outcomes of Numeracy assessment

3.1.3 Digital literacy

The tool assessed the learner's ability to navigate digital devices and access apps with ease. This assessment revealed that a vast majority (83%) of learners have never used computers or tablets. However, at least 67% used smartphones at least once a month, while 27% used them every day. The use of smartphones was high than that of feature phones (53% at least once a month). The use of feature phones and smartphones could be attributed to the fact that most households owned at least a phone.

Having affirmed prior access to a phone, the learner was presented with a phone and asked to access their favourite site. Of the adolescents who participated 65.7% were able to operate them with ease while 17.8% had difficulties in doing so. However, 16.4% could not operate the devices.

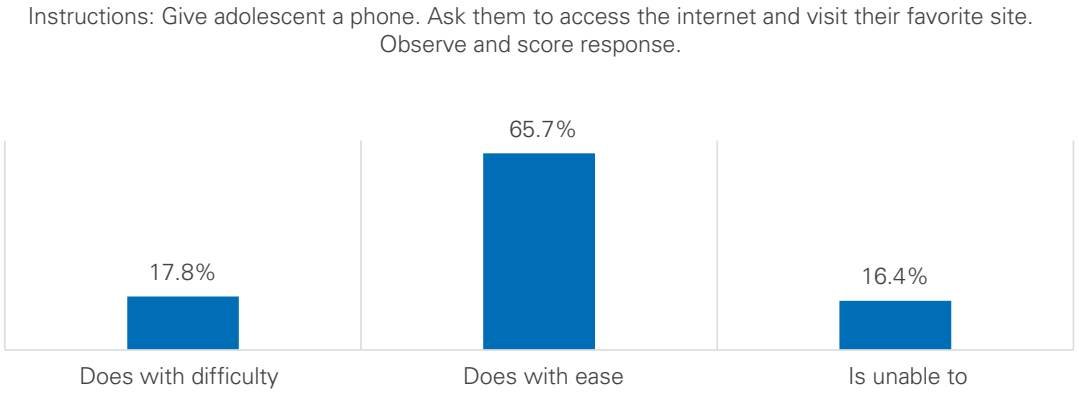


Fig. 3: Outcomes of digital literacy assessment.

3.1.4 Problem Solving

Most learners were at Level 2 (40.9%) meaning that they were able to recognise the existence of a problem from one perspective and act on that to identify a possible solution. However, 30.5% of the learners were able to identify the existence of a problem and multiple approaches to solving the problem (Level 4). There are no significant gender differences in problem-solving.

When compared with the results of the Assessment for Life Skills and Values (ALiVE) in Kenya, Mombasa County, we observe a shift in the distributions of scores, with low levels of problem-solving among the ALiVE participants. The ALiVE study involved adolescents aged between 13 to 17 while in the current study individuals aged between 10 to 15. It is not clear why the results are distributed (skewed) differently but we think because the cut points were generated using a larger population that may not be biased, unlike the current study that focused on few schools and with all school-going children.

	Level 1	Level 2	Level 3	Level 4
Adolescent is….	Struggling to recognize a problem or its nature and therefore unable to identify possible solutions	Able to recognize the existence of a problem from one perspective, and act on that to identify a possible solution	Able to recognize a problem from one perspective, able to identify the main approach to solving the problem, and can justify it	Able to recognize a problem from multiple perspectives; knows that there may be multiple solutions
Overall	6.1%	22.5%	40.9%	30.5%
Male	8.3%	25.0%	34.5%	32.1%
Female	4.7%	20.9%	45.0%	29.5%
ALiVE				
Mombasa	21.6%	59.2%	16.1%	3.2%

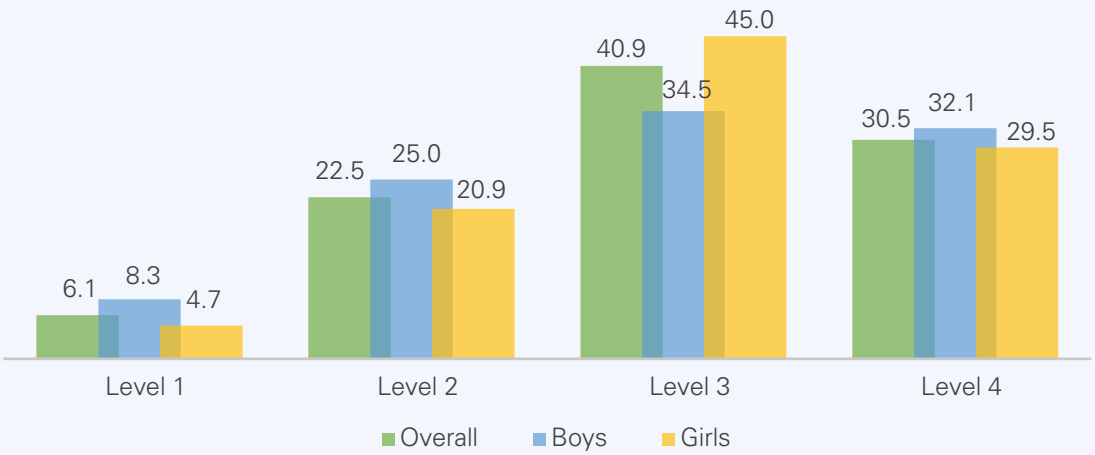


Fig. 4: Problem-solving levels by gender

3.1.5 Collaboration

Most of the learners were at level 3 (52.1% overall, 53.6% among males and 51.2% among females). This implies that the learners were able to collaborate through speaking, being attentive in discussions, and engaging actively in performance tasks but were unable to take a position, contribute ideas, and prompt others. Only 13.6% of the learners were able to collaborate (speak, being attentive in the discussions and engaged), take a position and contribute to ideas.

Like in problem-solving, the results of collaboration from the ALiVE study also show a shift, with more individuals placed at the lowest level (Level 1).

	Level 1	Level 2	Level 3	Level 4
Adolescent is….	Does not engage either by being attentive to a discussion, speaking, or through action	Is attentive to the discussion and may query the views of others, but does not contribute in word or action	Collaborates through speaking and being attentive in discussions, and engaging actively in performance tasks	Collaborates through taking positions and contributing ideas, prompting others, and being attentive to others' inputs
Overall	9.9%	24.4%	52.1%	13.6%
Male	11.9%	20.2%	53.6%	14.3%
Female	8.5%	27.1%	51.2%	13.2%
ALiVE				
Mombasa	62.6%	16.6%	19.9%	0.9%

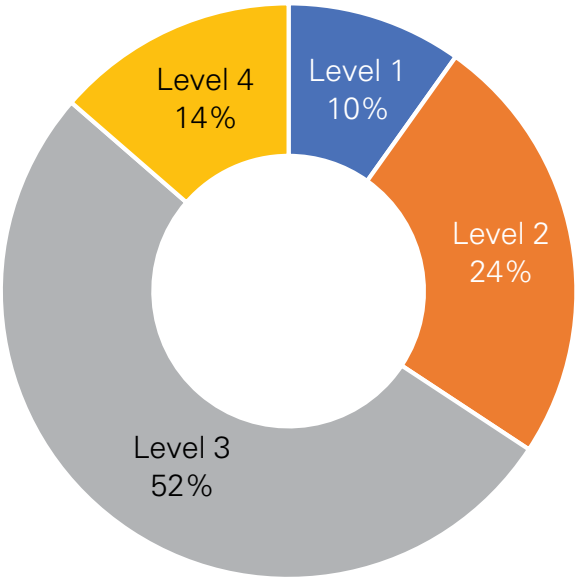


Fig. 5: Collaboration

3.2 Association between cognitive and non-cognitive skills

The following emerge when the cognitive and non-cognitive skills are associated:

Problem-solving was significantly associated with proficiency in reading comprehension. That is learners who were able to read a paragraph and respond to the three items correctly were also likely to exhibit higher levels of problem-solving (39.5% were in level 4 compared to 19.2% of those unable to read).

Numeracy was measured by the ability of the learner to perform tasks based on the four operations (addition, subtraction, multiplication, and division) and numbers. Like in literacy, we observe a significant association between the levels of problem-solving and the ability of the learner to correctly undertake numeracy tasks. A higher proportion of the learners who were scored as correct in the numeracy tasks were in levels 3 and 4 of problem-solving.

Further, results of regression analysis show a positive and significant association between problem-solving and both literacy and numeracy controlling for digital literacy, child gender, age, and level of schooling (Fig 5). Collaboration, gender of the child, level of schooling and the use of digital learning devices were not significantly associated with numeracy and literacy outcomes.

For the regression analysis, numeracy and literacy were weighted to a maximum score of 10 i.e. multiplied the raw score by 10 and divided by the number of items for each domain (literacy – 8 items and numeracy – 7 items). This was to allow for a comparison of the regression coefficients across the two learning outcomes.

Problem-solving seems to be more strongly related to numeracy than literacy given the large coefficients that are highly significant (despite the small sample size). In addition, we observe somehow a linear relationship between the levels of problem-solving and numeracy and literacy outcomes. That is learners who demonstrated high levels of problem-solving also tended to score significantly higher in literacy and numeracy as compared to those ranked at lower levels.

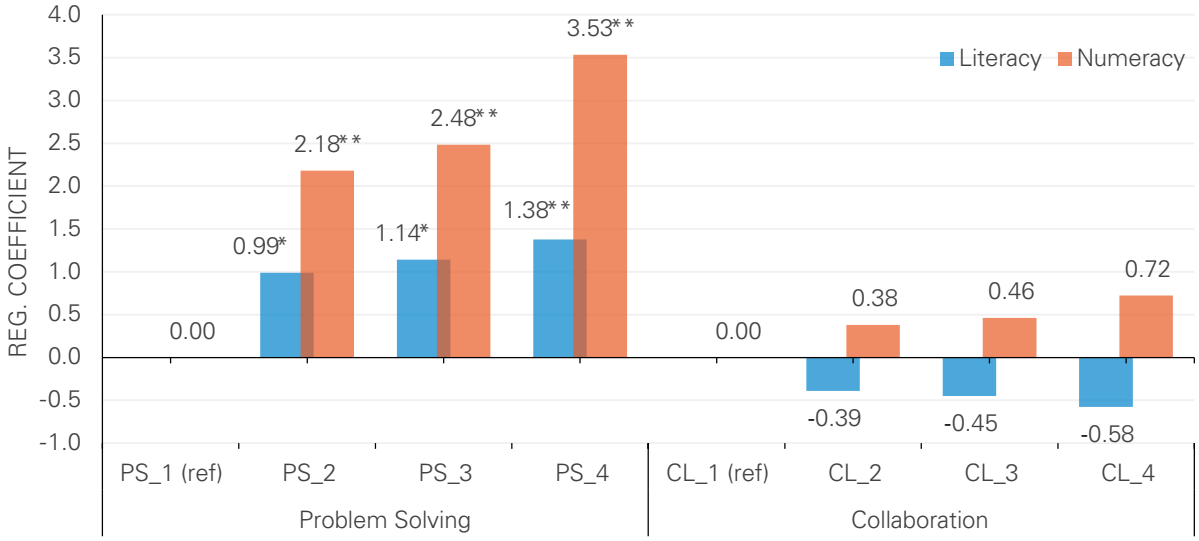


Fig. 6: Regression coefficient on the association between problem-solving and learning outcomes

There is no significant association between reading comprehension and collaboration. In addition, collaboration was also not associated with numeracy achievement.

3.3 Current approach to the teaching of values and lifeskills

The FGD participants and KIIs were asked about the approaches used to promote learning of values and lifeskills in their schools. According to parents' and teachers' focus group discussants, their head teachers instituted programs or initiatives such as guidance and counselling, school clubs or partnerships with other resource persons outside the normal academic system including practitioners lifeskills. Further, they reiterated the different ways of teaching life skills such as direct training by teachers, through assignment of tasks and roles, learning through models, guest speakers and mentors and as part of curricula and co curricula activities.

Teachers from Jomvu added that the skills were also taught informally through performance tasks. Within the academic system, skills such as communication and collaboration were taught by grouping children together and assigning them tasks. During the assignments the children are taught how to treat each other with respect. As a result they acquire many values and lifeskills.

One KII respondent was of the view that through academic learning, children automatically developed life skills and values such as time keeping, hard work, discipline and respect.

A Parents FGD in Jomvu and another in Mvita revealed that learning of values and lifeskills was promoted by instilling discipline. According to a teacher in Mvita, punishment was necessary for learner acquisition of discipline:

> Punishment is another method of teaching children; the punishment does not have to be corporal, but rather soft punishment that ensures the child understands why the behavior is unacceptable."
>
> **Teacher in Mvita FGD**

On the other hand, teachers employ a rewarding system for the best behaved learner every term thus keeping the learners striving to display the best behave=iour possible. An interviewee said,

"For our school here the class teacher will normally keep a private record of learner's behaviour based on his/ her observations. Then during closing day the teacher gives us the names of top 3 well behaved learners and we recognize them. By this we encourage development of good morals or values. Otherwise we have not developed other mechanisms because assessment rubrics for CBC have already been incorporated in the syllabus." JT2

In addition, they noted that apart from teachers, schools involve other mentors such as chaplains, former school alumni and professionals like lawyers who coach and advice the learners. This was verified by a participant in Likoni who averred that some NGOs partner with schools to train the pupils on life skills.

*"I want to add, in this school, there are so many programs that teach life skills which are sponsored by other NGO's. So the learners are taught life skills so many times in all the classes, beginning from grade 4 up to class 8."**Teacher in Likoni***

Extracurricular and co-curricular Activities

The learning of values and lifeskills was promoted via extracurricular activities such as physical education (PE), sports and drama.

The children can also be engaged in tasks such as environmental clean ups, where they learn how to be responsible. Other teachers added that Sunday schools and clubs were also instrumental in imparting life skills and values to children with a teacher in Mvita adding that "if the school is religious-based, the learners are likely to be taught values and life skills more often."Another teacher in the Mvita group pointed out that she engages girls mostly because, "I am in charge of a club related to peer mentorship of

girls supported by another Organization." FGDs with parents shared similar sentiments, with some adding that activities such as debates and storytelling were avenues of cultivating life skills and values such as leadership, communication as well as good morals.

Further information of the existing conceptualization and implementation of values and lifeskills includes the following;

3.3.1 Understanding of values and lifeskills

Most participants (73.1%) in the FGDs and Key informants stated examples of values to be honesty, integrity, cooperation, discipline, trustworthiness, respect and skills such as critical thinking, innovativeness, creativity, collaboration, communication, leadership, time management and entrepreneurship which they reported to have learned largely through real life experiences. In addition, 13% of the respondents included the ability to do certain chores like housecleaning, laundry and cooking as well as engagement in sporting activities such as swimming as necessary skills for life. A paltry 6.3% s talked about knowledge on hygiene, sexuality and mental wellbeing as part of non academic skills.

"Being able to keep time will help the child to report to work as an adult in future.To be truthful helps one to develop honesty and many people will associate themselves with a like-minded person and also helps to secure good job in future." ***Parent from TP2***

3.3.2 Relationship between Academic and Non Academic Learning

A significant number of the participants in the FGDs and KIIs agreed that learning of values and life-skills goes hand in hand with academic learning. Findings from 40% of these respondents indicated that the academic work consisted of non-academic learning such as collaboration, problem solving and critical thinking.

"Yes. They go hand in hand... Education normally teaches good moral skills and that helps in implementation of academics. I bet good performance will depend largely on good life skills and values. Many times a hardworking person will also be holder of life skills. He needs them for reasoning and decision making or something like that." Head Teacher in Mvita FGD

According to most of the discussants, the teachers were responsible for inculcating values as that creates the environment for academic learning.

A KII respondent said that through academic learning, children automatically develop life skills and values such as time keeping, hard work, discipline and respect.

> Academically, school has an impact on knowledge, some values and life skills emerge naturally as a result of that impact. besides that the school is a community from where children learn the hidden curriculum. Values like hard work, respect, punctuality are learnt through hidden curriculum. These life skills can be taught both in and out of the classroom."
>
> **Head Teacher in Likoni**

3.3.3 Key actors and their roles in learning of values and lifeskills

Key players named by the research participants included Boards of management (BoM), the ministry of education, the County education department and the ministry of internal security through administrators such as village elders, chiefs and assistant chiefs as well as parents, relatives, religious leaders, community members, Non-Governmental Organizations (NGOs). While the education officers play and parents a direct role in this subject, all others on this list were indirectly involved in learning of values and lifeskills.

"….. Chiefs and assistant chiefs have to ensure that all the children go to school. So they are the ones who go door to door to ensure kids go to school. They are very important people. The other one is supposed to be the parents and guardians of course. We also have non-governmental organizations which support education programs. They fund schools facili-

ties. There may also be local support. The other one is also media to disburse different messages to the community but we have also barazas and I also look at them sometimes" CCK

However, only three respondents named the media as a critical player in education. One key informant noted that social media and radio stations such as Pwani FM were very important in relaying key educational messages and programs.

Further, the study realized that religious leaders were actively involved in teaching of values and lifeskills. One participant from Likoni reported … *"Si kwa church na mosque pia wanafunzahizo…'* A parent form Mvita also hailed the role played by the church sponsors in the school.

3.4 Obstacles in learning of values and life skills

3.4.1. Low parental involvement

Most parents in Kenya are yet to understand and embrace holistic learning. Although an overwhelming majority of respondents reported that CBC is gaining root, albeit slowly and with weak policy support, most parents are yet to internalize how CBC is a holistic approach to learning. Parents are themselves are not able to instill life skills accordingly, as confirmed from one of the parents:

Where parents are called in school when a child has done wrong or have indiscipline case. Very rare. As a village elder sometimes I handle cases at the community level of the same but very few parents came to me when the child has already gone overboard. That's parents cannot handle the child." EVE.

3.4.2. Inadequate resources

Parents and leaners alike were still challenged by lack of basic necessities like water and that the children, on coming home after school have to engage in fetching water among others. With the ranging poverty, some children do this job for wages to supplement family income. This inhibits holistic learning, in that the learner parent desired interaction is limited. A significant 43% of parents also registered that they lack the money needed to support the demands raised by their children, especially when CBC related materials have to be bought regularly.

On the part of schools, most of them lacked apt facilities to support CBC thus holistic learning. Teachers are still more focused on learner performance in academic learning.
Discussants from Mvita indicated that teachers barely got time to teach life skills:

"To be honest the answer is very little learning of life skills is taking place because we teachers are all focusing on TPAD and performance appraisal."Teachers FGD in Mvita

A head teacher from Mvita was also skeptical whether children learnt life skills in school:

"Yes and no: Yes, because during the normal lesson a teacher can incorporate values and life skill to children e.g. telling the children to keep quiet as the teacher is teaching. No, because some of them are very difficult to teach and a child just has to learn by interacting with other human beings e.g. self-confidence and positive self-image cannot be taught." Headteacher in Mvita.

3.4.3 Inadequate teacher training

Notably, at least 52% of the teachers interviewed had not been trained on the instructional pedagogy of values and life skills. According to a head teacher in Mvita *"apart from non cooperative parents and contradicting values taught by the religious leaders in Mombasa, only few teachers are adequately*

"I Believe values are learnt under 6 years. However life skills are learnt over time. That makes parenting of children under 6 years very important. Their parents and teachers need some training. School should be an environment for learning and catching values. So everyone in the school community should be trained in their role in building such an environment."

AKM

trained on the implementation of CBC."

Similar views were shared by other key informants:

"I Believe values are learnt under 6 years. However life skills are learnt over time. That makes parenting of children under 6 years very important. Their parents and teachers need some training. School should be an environment for learning and catching values. So everyone in the school community should be trained in their role in building such an environment." AKM

However, his counterpart in the group was quick to share a different opinion insisting that the teachers should bear the burden of instilling these skills. He said …

"Through the Education minister, Magoha, I hear he is very strict. He can force teachers to teach these things. We are behind him. All parents want their children to be taught good life skills." EVE.

One discussant bemoaned the inability to measure the lifeskills acquisition citing lack of appropriate tools. He explained that values and life skills were traditionally non-examinable…. *"there is no structured protocol or mechanisms to assess life skills." (MT3)*

However, of the ten schools, 3 (30%) do not have a functional guidance and counseling department. Furthermore, in 6 schools, the teachers in charge of the department have not been trained in counselling.

3.5 What are the feasible methods of conceptualizing, delivering, monitoring and assessing values and lifeskills?

Findings of this survey were not able to ascertain clearly if the methods were feasible enough to be recommended for conceptualizing, delivering, monitoring and assessing values and lifeskills. However, below are some respondent's views of what could be tried.

An NGO representative who was interviewed, reiterated that all actors were critical in supporting the conceptualizing, delivering, monitoring and assessing of values and lifeskills.

Parents were responsible in making sure children attended school while the ministry of education employed qualified teachers who would impart values and skills in school. The religious leaders also played their part in teaching values and morals:

"In school there are teachers, at home parents, uncles, aunts and other children to learn from and even in church and mosques…you can say parents, teachers and relatives... Each has a role to ensure value and life skills are delivered." NGO Representative.

3.6 What effect do language and localization have on incorporating values and life skills learning into schooling systems?

According to CCK, language also played a major role in passing information or communicating effectively. Qualify this statement. In what ways is language important in passing values?

"Therefore language is very key, and therefore to pass the message you must ensure it's understood so it's very key. So it's key. But luckily here people speak Kiswahili, it is the language here and it's very very key." ***CCK.***

In another dimension of language, the way parents speak to their children affects the values they acquire as revealed by one respondent:

"Language factor is a major thing in this Mombasa. Insults are like greetings. Parents talk to their children in a no respect manner hence children tend to imitate disrespect from their parents."

The two statements suggest that for easy and positive learning, the language of communication has to be localized, easy to understand and respectful. Therefore the context and the way in which language is used can affect the acquisition of values and life skills.

3.7 What is the scale of technology used in delivering values and life skills? Does it accelerate overall learning?

A text search query on NVIVO for words such as internet, technology and computers revealed that very few interviewees i.e. one village elder, CCK and one head teacher mentioned the issue of technology, a possible sign that technology was under used in delivering values and life skills.

A few parents in Jomvu and Likoni reported that some children learned values and life skills via the internet or phones especially when at home during the COVID 19 pandemic. According to a parent from Likoni,

"Children had an opportunity to learn and explore social media such as Viusasa, Twitter, WhatsApp, TikTok among other applications. They viewed cooking videos, dancing videos and even talking videos from the internet. Yet another added, *"nowadays children use phones to know how to do something, they Google. My child uses my phone to find out things on her own."**Parent in Likoni***

The main challenge however was the , unavailability unaffordability and fear of the unknown especially in rural or peri urban settings. Further a CCK noted that technology was only available for children in urban areas despite the government promoting the use of ICT.A head teacher in Mvita underscored the challenge of use of technology as it was not only inaccessible but also expensive. He noted thus,

*"teaching of life skills take some extra time and financial costs within the institutions since we are required to schedule for the training in our lessons while in teaching skills like computer it's expensive hence it requires resources to purchase and maintain the computers."**Mvita Head Teacher***

On the flipside, a parent from Likoni observed that technology had led to the erosion of cultural values. To back this up, she noted thus …

"Sisi hapa hatuna culture [We no longer have a culture], our children live as if they belong to Swahili or urban set up. Maybe they only read those things from the internet and old books."

4.0 Conclusions & recommendations

This section documents conclusions and recommendations arising from the findings above. They are useful for informing the educational discourse especially policy formulation, implementation and review of values and lifeskills learning at school level.

- Current approach to teaching of values and lifeskills: Evidence gathered shows that values and lifeskills are often mentioned but barely taught or assessed. The reality of Kenyan's education is such that whatever is not measured does not count. This study recommends urgent intervention to address this. An easy-to-administer assessment tool developed for the region is highly recommended.

    - Obstacles in learning of values and lifeskills: Based on the data generated on the hinderances to learning of values and lifeskills, it can be deduced that most parents and teachers view it as the others responsibility. Besides, teachers are yet to internalize and actualize what it means to provide classroom instruction in a more holistic way.

    - Inadequate teacher training: The survey reckons that the solution to inadequate teacher training lies in marshalling massive teacher training and coaching forums. Besides, it is recommended that the teacher training institutions offer values and life skills training prioritize and optimize these skills as core competencies so as to enable the teacher graduates internalize and live them.

- Low participation of stakeholders: Findings unmask inadequate involvement of parents in the development of values and lifeskills. This could be partly blamed on their ignorance of the worth of these skills in impacting academic learning outcomes.

- The situation is worsened by the teachers little commitment to teach these skills. The few lessons allocated to these skills largely happen more informally especially through co-curricular activities.

- Given the foregoing, there is a felt need to have other education stakeholders, other than education administrators and teachers, to be formally recognized, trained and charged with the developing and sustaining life skills among learners. Further, a coaching structure would catapult the religious leaders' usefulness in playing a complimentary role.

- Findings reveal that, at school level, the administrators, thus education officials and teachers are yet to achieve clarity of framework of involvement of the community as a learning resource for these critical skills. It is hereby recommended that education officers educate the school communities on the adaptation of the Parental engagement and empowerment framework developed by KICD in 2017.

- This study recommends deliberate selection and training of parents in creating a conducive environment from where children can catch the desired values. A few volunteer parents should be trained in mentorship of learners with the aim of broadening the values and life skills champions. For sustainable outcomes from both non-academic learning and academic learning, it is important to factor in the home environment.

- As indicated above, holistic approaches seek to include family and community members out of recognition of the importance of family and community partnerships as children spend most of their time either at home or in school.

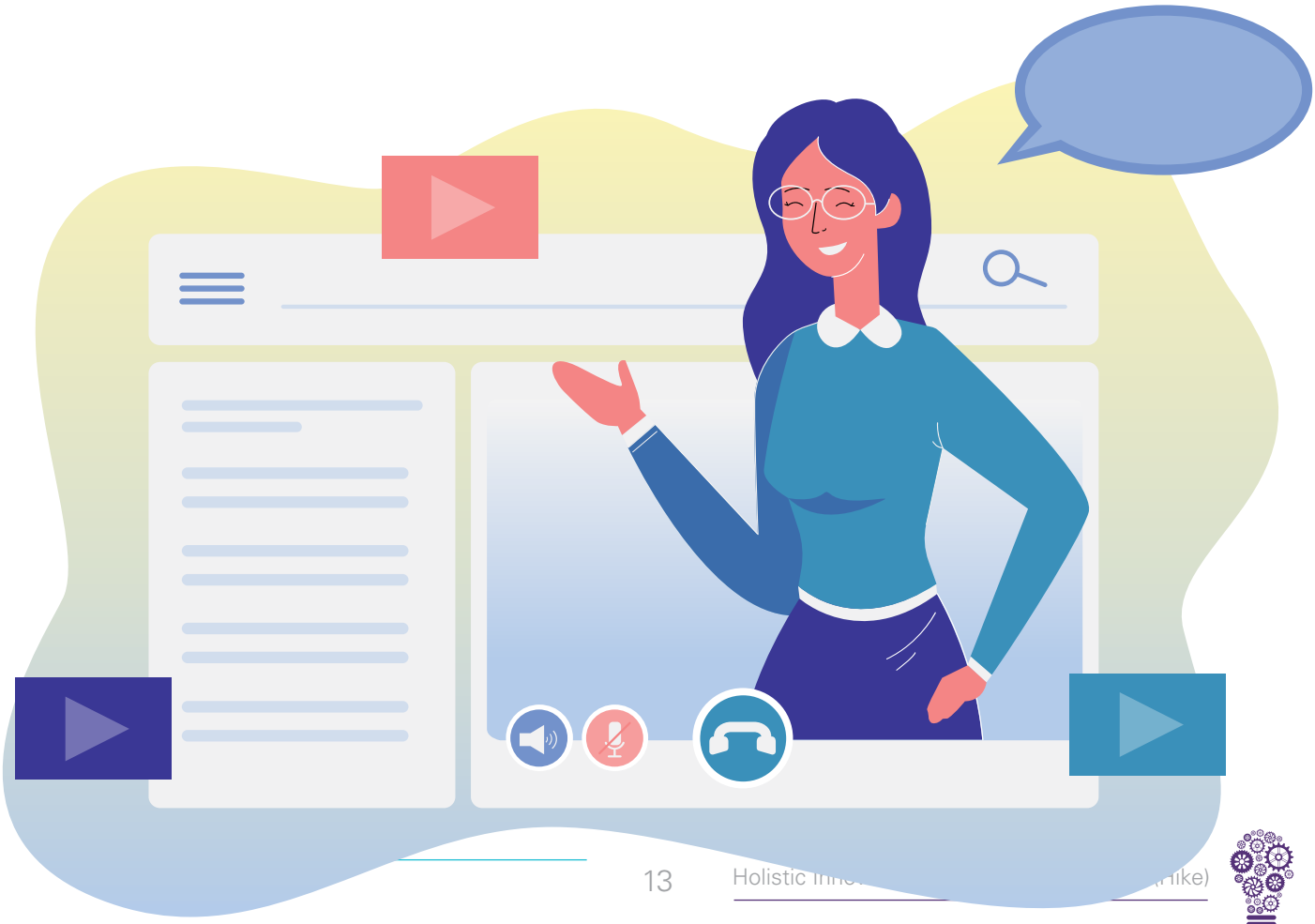
- Further, schools should guide and encourage parents to integrate values and lifeskills discussions firmly in their family routines. Parents should be encouraged to co-create these routines with their children for increased ownership.

- **Increasing the application technology in teaching values and lifeskills:** Although majority of the households assessed owned a television set, analysis of data uncovered low recognition of media as a key tool of influencing values.
Local MOE office is encouraged to involve the media in crafting a sustainable matrix for imparting values and lifeskills. Involvement of the most popular local media and media personalities will

be useful in extending messages of sensitization of the importance of the skills to the children and youth.

- Methods that could improve conceptualization, delivery, monitoring and assessment of values and lifeskills: The study recommends a model of excellence from where the school communities would be able to learn practices that work. Trainers in the identified model should be values and lifeskills champions drawn from a combination of teachers, learners and parents from that particular school.

- In conclusion, a more structured network of the values and lifeskills actors in the County would help harness and collate the efforts and gains made by each individual. Through the ministry of Education, the combined effort of non-governmental Organizations would be more impactful than the individual uncoordinated projects currently in place. In a broader perspective, MOE should marshal a strong collaborative network between curriculum developers, national examining body and school teachers so as to support schools interpret, diagnose and assess the subject matter.



Appendices

Sample tasks to assess Collaboration

TASKS (Scenario)	Sub-skill and performance indicator
C 1. As a group, discuss and agree on available materials that can be used in making a ball. (Take a pause to allow this to happen). Now proceed to make a ball (Time=10 Mins) [Do not provide materials – assign adolescents according to education level]	
C.1a) Discuss on materials to be used in making the ball	1.1Communication 1.1.1 Ability to speak and listen
C.1b) Agree on materials to be used in making the ball	3.2 Negotiation 3.2.1. Ability to express own opinion and ability to accept others' opinion
C1.c) Make the ball	2.3. Working together 2.3.1. Participation in making the ball

Sample tasks to assess Problem Solving (PS)

TASKS (Scenario)	Sub-skill and performance indicator
Task/Scenario: Fire has broken out in your house.	
PS. 1A) Is this a problem? [YES/NO]	Not to be scored BUT adapt the (b) item appropriately i.e., base on the [Yes] and [No] to ask the (b) item.
'Yes' to 1A) **PS.1B)** Can you explain how it is a problem?	A. Defining the problem
'No' to 1A) **PS.1B)** Can you explain how it is not a problem?	A. Defining the problem
If 'NO' to PS.1A), discontinue the task at this step	
PS. 1C)c If you are asked to solve this problem, what else do you need to know about it?	A. Defining the problem A.2 Inform gathering
PS. 1D)Suggest some ways to solve this problem	B. Finding a solution B.1 Exploring alternative solutions
PS. 1E) Of all the suggested ways this problem, what is the best and why?	B. Finding the solution B.3 Selecting the solution

PS. 1D) Suggest some ways to solve this problem

PS. 1E) of all the suggested ways of solving this problem, what is the best and why?