Summary of Coaching Conservation's
Monitoring and Evaluation 2017-2019

This report serves to outline the work Coaching Conservation (CC) has done regarding monitoring and evaluation (M&E) with the support of National Geographic and Tusk Trust

1. Introduction

M&E is crucial for organisations to extract relevant information from their past and ongoing activities on how the program can be improved and to use for future planning. Without sound planning, monitoring and evaluation, an organisation would not be able to judge if the program is having the desired impact, whether progress and successes can be claimed, or how future efforts can be improved (United Nations, 2009:5). With this in mind, CC busied itself with several M&E activities. This exercise included an analysis of the quantitative data collected up to date as part of the six-week afterschool program, an analysis of qualitative data gathered from a sample of participants in the Eastern Cape, an impact evaluation conducted in Botswana, and upgrading the M&E framework that is used by CC. This report will give a brief outline of these activities and the progress up to date.

The report will first give an overview of the quantitative results obtained from ongoing pre- and post-surveys since the inception of the program in 2013. Then an overview will be given of the results of an analysis of data collected from participants in the Eastern Cape who had been part of the follow-up programs offered in grade 6 and grade 7. Then a brief overview will be given on the impact evaluation conducted in Botswana. Then, an outline will follow on the new M&E framework that is currently being developed.

2. QUANTITATIVE RESULTS

Since the inception of the program in the Eastern Cape, CC has been collecting quantitative data as part of their ongoing monitoring and evaluation. The quantitative data focused on baseline assessment before the participants participated in the six-week program and a follow-up survey that measure how their knowledge and attitudes towards nature and themselves changed over the course of the program. Baseline assessments serve as a reference point for organisations on the changes that occurred in people's lives and the impact the program had on them. The data from a baseline assessment provide program staff with a reference point to evaluate the effectiveness of a program (United Nations, 2012). This section will present the results from this quantitative data collected as part of the pre- and post-survey. This survey aimed to collect baseline and follow-up data to measure what changes have occurred in

participants knowledge about wildlife, attitude towards wildlife and the environment, as well as attitudes towards themselves.

Questions repeated in the surveys across the different years were compared with each other. The researcher wanted to know whether more participants gave the correct or desired responses after participating in the program, compared to before. The results from each question are discussed below. The data is presented in three categories: knowledge about animals and the environment, attitudes towards wildlife and the environment and attitudes towards themselves.

2.1 Knowledge about animals and the environment

- Think about and list all the things that animals, plants and people need to survive.

Only 5.5% of the participants could answer this question correctly before participating in the program. This number significantly increased to 72.6% in the post survey.

- Wildlife conservation means:

Before participating in the program, 42.5% of the participants could correctly identify the definition of wildlife conservation. This number increased to 53.7% who could accurately define wildlife conservation after participation in the program.

- A predator means:

In the pre-survey, 61.5% of the participants correctly identified the definition of a predator. After involvement in the program, 68.6% of the participants were able to determine the definition of a predator accurately.

- The main cause of habitat loss in the world is:

Before participating in the program, 48.8% of the participants correctly identified the primary cause of habitat loss in the world. This number increased to 63.4% after participation in the program.

For all the questions asked, participants had better knowledge of animals and the environment after participating in the CC six-week after-school program than before participation.

2.2 Attitudes towards wildlife and the environment

- Animals have the same needs as people do.

Before participating in the program, 69.14% of the participants agreed with this statement. After taking part in the program, this number increased to 85.9%.

- Wild animals need people to help protect them.

Prior to participating in the program, 66.9% of the participants agreed with this statement. This number increased to 80.2% after taking part in the program.

- Destroying wild animals' habitat is okay if it is used for cattle or farming or people.

During the pre-survey, 58.4% of the learners disagreed with this statement. Upon completing the program, 69.3% of the participants did not agree with this declaration.

- There are good things about all animals, even those I don't like

In the pre-survey, 84.1% of the participants agreed with this statement. After participating in the program, this number increased to 86.1% of the participants agreeing with the statement.

- I feel it is important for the government to give land for wildlife to live safely.

Before participating in the program, 91.9% of the participants agreed with this statement. This number increased slightly to 93.1% of the participants agreeing with this after taking part in the program.

- Rhino poaching is wrong.

Before participating in the program, 63.6% of the participants agreed that rhino poaching is wrong. After taking part in the program, 83.8% of the participants agreed with this statement.

- I would like to be a person who takes care of animals when I grow up.

Results from the pre-survey indicated that 77.6% of the participants said that they would like to take care of animals when they grow up. After completing the program, 79.7% of the participants agreed with this statement.

- We can learn things from animals.

Before participating in the program, 89.2% of the participants agreed with this statement. Upon completing the program, 96.2% of the participants agreed with this.

- I think we can stop rhino poaching.

In the pre-survey, 77.5% of the participants agreed with this statement. This number increased to 90.4% after participating in the program.

- Do you think that the world would still be a nice place if all the animals in the world were gone?

Before participating in the program, 92.9% of the participants disagreed with this statement. After involvement in the program, only 90.9% of the participants did not agree with this.

- It makes me sad when I see animals that are hurt.

Before participating in the program, 93.5% of the participants agreed with this statement. This number increased to 94.5% after participation in the program.

- I feel sorry for the rhinos that have their horns cut off.

In the pre-survey, 92.1% of the participants agreed with this statement. In the post-survey, 92.8% of the participants agreed with this.

- It is okay to step on an ant hill to watch the ants run around.

Results from the pre-survey indicated that 84.3% of the participants stated that they do not believe it is okay to step on an ant hill to watch the ants run around. This number slightly decreased to 84.2% in the post survey.

For eleven out of the thirteen question asked that relate to participants' attitudes towards wildlife, participants had more positive attitudes towards wildlife and the environment after participation in the program compared to before their enrollment.

2.3 Attitudes towards themselves

- I feel that I am equal to everyone else.

Results from the pre-survey indicated that 66.9% of the participants agreed with this statement. In the post-survey, 72.9% of the participants agreed with this.

- I feel I do not have much to be proud of.

Before participating in the program, 62.9% of the participants disagreed with this statement, indicating that they do feel they have something to be proud of. Upon completing the program, 66.25% of the participants did not agree.

Only two questions that relate to participants' attitudes towards themselves were consistently asked. Results from these two questions, also indicate that participants had more positive attitudes towards themselves after participation in the program, compared to before.

2.4 Conclusion

Based on the results from the quantitative surveys, it appears that participants' knowledge of wildlife and the environment improves. Together with this, they also seem to develop more positive attitudes towards wildlife and the environment as well as towards themselves. However, though this quantitative data is valuable in providing CC with an overview of what happens during the program, it does not provide an in-depth description of how participants' behaviour and attitudes change because of what they have learned or how this change takes place. Data from interviews conducted with fourteen participants who were part of the six-week afterschool program, as well as the follow-up programs during grade 6 and 7 were analysed was used to get a better understanding of this. The capability approach was used as a theoretical background to get a better understanding of the impact the program has on the lives of the participants and the changes that take place in their lives that are related to their experiences in the program.

3. QUALITATIVE RESULTS FROM THE EASTERN CAPE

Qualitative data were collected using semi-structured interviews with fourteen participants who participated in the Grade 7 Wildlife Walk and Ambassador Program. An interview guide consisting of open-ended questions was used to facilitate the interview, and the interviewer was able to make use of probing to elicit information from the participants further (Babbie & Mouton, 2011:233; Cohen & Crabtree, 2006; Foster, 2006; Silverman, 2011:162). This method of data-collection was deemed the most suitable because it enabled the researchers to obtain rich descriptions of the life-worlds of the participants that were necessary to interpret the meaning of the phenomena being studied (Brinkmann & Kvale, 2015:6).

For the data analysis, the capability approach framework was selected because it provided the researcher with the ability to take a holistic look at the lives of the participants. The capability approach has its origins in the work of Amartya Sen who was predominantly concerned with the element of choice and people's freedom to exercise choice based on the capabilities and the functioning they can achieve. Sen argued that people's ability to choose specific combinations of functionings offer them" the freedom to lead one type of life or another" (Sen, cited in Nambiar, 2013:222). Thus, the more capabilities (abilities) a person has, the more choice the person can have over what functionings (actions) he or she wants to take. Having more capabilities gives a person more freedom to choose the life he or she values.

Development is then an individuals' freedom to act as agents when making choices from among the different opportunities available to them (Alkire & Deneulin, cited in Buzzelli, 2015:207). A capability, according to the Sen, is the ability to 'choose a life one has reason to value'(Buzelli, 2015:207; Crabtree, 2012:26; Croes, 2012:543; Glassman & Patton, 2014: 1358; Hart, 2012:267). Capabilities are therefore a person's ability to achieve valuable functionings and the freedom to choose between them (Buzelli, 2015:207; Crabtree, 2012:26; Hatakka & Lagsten, 2012:24). Capabilities are opportunities and the potential to achieve. The significance of capabilities is that it can lead to functionings. Thus, having capabilities represent having options for individuals (Buzelli, 2015:207; Clark, 2005: 1343; Croes, 2012:543; Walker, 2008:152). An individual's capability can, therefore, be described as "the various combinations of functionings that a person can achieve" (Hatakka & Lagsten, 2012:24). Thus, a capability can give an indication of an individual's functionings that they can reach and reflects an individual's freedom to lead one type of life or another (Hatakka & Lagsten, 2012:24; Walker, 2012:453). Having the capability to care for the environment can, therefore, give an indication of an individual's potential to achieve the functioning of caring for the environment and the freedom the individual has to lead a life in which he or she cares for the environment or not.

Sen's concept of functionings is best described as the being and doing of everyday life (Glassman & Patton, 2014: 1357; Hatakka & Lagsten, 2012:24) "that are the outgrowths or realisations of capabilities" (Naussbaum, cited in Buzzelli, 2015:207). Thus, functionings are the 'beings' and 'doings' that is achieved by the individual (Clark, 2005: 1343) and is valued by him or her (Crabtree, 2012:28). For Sen (cited in Hart, 2012:275), it is "the possible combinations of functionings (actual being and doings) that are crucial and not only the potential to achieve an individual functioning". These beings and doings determine and often limit people's capabilities to recognise and make choices about the lives we value and want to pursue (Glassman & Patton, 2014:1357). Walker (2012:453) argues that functionings are essential for an individual's well-being and quality of life.

With this in mind, the study set out to determine whether the program enabled the development of the participants' capabilities and functionings according to the goals and learning outcomes of the program. The researchers wanted to determine whether participating in the program increased participants' freedom to choose to live lives they value.

The bulk of the data for this study was obtained after participants were engaged in the Grade 7 Wildlife Walk and Ambassador Program. Data were analysed according to the goals and learning outcomes of the After School Program, for which both the Grade 6 Continue to Care and Grade 7 Wildlife Walk and Ambassador Program were follow up programs. This was done to determine whether participants were able to develop new capabilities after participating in the initial program and how this was translated into enhanced capabilities and functionings. Based on this, the study set out to determine whether participants were able to develop the capabilities knowledge, empathy, confidence and pride, respect for self, respect for others, respect for the environment and having responsibility, having balance in their lives,

collaborating with others, and being kids who care while listening to what they voiced as valued capabilities and functionings.

3.1 Having a unique experience was valuable

From the interviews that were conducted by the participants, it was evident that merely being able to participate in the program was perceived to be a positive experience for them. Involvement in the program offered learners the opportunity to experience something new and learn different things about themselves, others, sports, soccer and animals. Having had the chance to see animals in their natural environment on a game drive is especially valuable to many of the participants. Experiences like this are regarded as learning in the environment. Learning directly from your experiences in the natural environment, Ballantyne and Packer (2005:248) has found to have a significant emotional impact on participants. These experiences also contribute to the basic knowledge, understanding, awareness and beliefs of participants regarding wildlife, the environment and the conservation challenges we face. Learning in the environment was described by one of the participants as follow:

> "We got to go to Amakhala Game Reserve. It was my first time; it felt amazing because I got to learn about animals and how they live in the wildlife areas. My favourite memory was seeing a rhino because there are two different types of rhinos, a white and black rhino. They are powerful too". (Kagiso, SM14)

Therefore, by merely participating in the program and having the opportunity to take part in new experiences and gain knowledge which they otherwise would not have had access to, was valuable to the participants. Making learning opportunities and experiences available to participants thus enhanced their' ability to translate their functionings to broader capability sets (Marguirea et al., 2012:372).

3.2 Knowledge

A big part of the CC program focuses on awareness and increasing participants knowledge about wildlife and the challenges they face. Connectivity is one of the core messages stressed throughout the program. This message appeared to have been well understood by the participants. Throughout their responses, this theme of connectivity reappeared continuously. Understanding this basic core message of connectivity and the interdependence between humans and the environment appeared to have been helpful in facilitating the learning experience of the rest of the program.

> "I respect the environment by if I go past a paper, I don't go past it, I will pick it up and put it in the bin. I don't litter because littering causes a lot of pollution. For example, the papers flow down the river and the animals, the animals drink form the rivers, and then they eat that plastic/paper and then they can die. Before CC I didn't know that was important". (Thandokazi, NM39)

Knowledge of this connectivity also helped participants to understand the importance of creating a healthy habitat for all.

> "I learnt about our environment that we must take care of it. We must pick up the papers everywhere we go and not throw papers around because the animals could eat the papers and get infected. I have learnt to take care of plants because they give us oxygen. I learnt by playing with my friends because we had to help each other". (Kagiso, SM14)

Having the enhanced capability of knowledge of wildlife and the environment, thus enabled participants to choose functionings that they now value and which is also in line with a more sustainable lifestyle that cares for wildlife and the environment.

3.3 Empathy

Based on the participants' responses, they were able to develop knowledge about the needs of animals and the importance to take care of them. Having this knowledge enabled them to develop the capability to be empathic towards others, including animals, and they were empowered to make the choice of converting this capability of knowledge and empathy into the functioning to take care of others, including animals.

> "I used to treat animals badly. At CC I learned that we need animals, so I started treating them better. I used to kick my dog and not give it food on Sundays and push it around. Now I feed it regularly, make sure it always has water and play with him. His name is Alex, and I gave him that name when I started caring for him better". (Anas, GS35)

This change in behaviour went further than only having knowledge of the needs of animals, having empathy towards them and being empowered to take care of animals. Participants also indicated that they now have the capability to be empathic towards other people and have been enabled to convert this capability into an achieved functioning of demonstrating empathy towards others.

> "I respect others by helping other people. I went to an old age home to look after old people and went to Home of Joy which is an orphanage. I played puzzles and read stories. They never knew that people cared for them, CC taught me to care for other people". (Siyamthanda, NM3)

Participating in the program and having access to new knowledge and information previously unavailable to participants acted as a crucial conversion factor in enabling participants to develop these new capabilities as well as to work on these capabilities and make a choice to achieve newly valued functionings. Therefore, by obtaining the basic capability of education and understanding the core message of interdependence in connectivity, it enabled the participants to expand their capabilities even further.

3.4 Confidence and pride

Participants also learned to value themselves as is demonstrated in the statements illustrating an increased capability of having confidence, being proud of themselves and having strength.

> "Self-respect- I used not to like looking at myself, I look ugly or something but now I look at myself in the mirror and smile and think that's me, and I love myself and self-confidence". (Linathic, GD6)

Participating in new activities and having the experience of achieving success helped to facilitate the development of these new capabilities of having confidence and pride in your abilities.

> "When we played soccer because I didn't like soccer, in the beginning, we knew the boys would beat us. But then at the end, it was fun- I liked to play soccer. The other day the girls beat the boys- we scored more goals than them, it was 6 for girls and 2 for boys". (Linathi, GD6)

Once these new capabilities of having confidence and being proud of your achievements were achieved while participating in the program, the participants were able to also convert these capabilities into achieved functionings in other areas of their lives, as was mentioned by the following learner.

> "I have learned to be more confident. For example, when we read in the assembly in front of the school I used to be very scared and shy but now I can read in front of the whole school and not be nervous. I believe in myself that I can do it". (Enestine, SM1)

In addition to these new capabilities leading to enhanced functionings in the lives of the participants, some also now verbalised an enhanced belief in their capabilities of what they can achieve in the future.

> "I want to be a lawyer –the CC program can help people to make the right choices, and it made me decide I want to be a lawyer so I can help people do the right thing". (Vivian, KKF8)

The participants were therefore empowered to be able to feel more confident in themselves and their abilities as well as to envision a more positive future.

3.5 Respect yourself, respect each other, respect your environment and being responsible

Ingrained in this lesson was the message that we should respect others, including all animals because every animal has the right to be here as much as humans do. Responses from participants indicate that this message was well understood.

> "We were learning about rhino poaching. We learned to respect the environment and keep it clean and yourself too". (Avela, KKT28)

Understanding these messages of the importance of respecting others, including other animals, together with knowledge and skills on how to do this, enhanced the participants' capabilities and functionings to defend themselves and their environment, be adaptable and take responsibility for themselves and the environment in which they live.

> "Respecting my environment. I am not littering anymore. Before CC I didn't care, I used to throw rubbish on the floor, mostly in my mother's room. I don't litter anymore; I throw the rubbish in the rubbish bin. Littering will harm the animals and the people because we live in the same environment". (Janine, SM)

Developing new skills thus enhanced the participants' freedom to choose among a wider set of options to lead a life they value that goes beyond what they were directly taught about animals and the environment in the program.

3.6 Having balance in your own life

The participants were also able to apply this understanding of the importance of being fit and balanced to their personal lives and were able to translate these capabilities into achieved functionings by making choices that enable them to live balanced lives and be fit and healthy.

> "Not to spend lots of time with my friends. Work when work time and break time; play with friends. Marks have improved. My parents like the new Kamve, they are proud of me". (Kamvelihle, GD20)

3.7 Collaboration

The participants learned to respect themselves and to use their skills to their advantage and share these skills with their team, community, society or nation. These messages were well understood by the participants, and they demonstrated that they developed the personal skills and capabilities of collaboration, ability to celebrate diversity and opportunism.

> "I changed my manner. I didn't always see the needs of other people. I was aggressive and didn't want to listen. Now, I did learn not to be so aggressive and to take other people's emotions into account and listen to them". (Tyron, KKF3)

Participants of the CC program indicated that they had an understanding of relationships and an increased capability to collaborate with others and to celebrate diversity.

3.8 Kids who care

Inspiring Kids who Care is one of the primary goals of the CC program. Participants demonstrated that they did not only developed the capacity to care for animals and respect their environment, but they also valued the environment and animals to the extent that they chose the functioning of making other people aware of the needs of animals and the importance of caring for our environment.

> "I am telling people not to poach rhinos and telling my family that the coaches care about the rhino. I talk about this socially with friends at school and home". (Simphiwe, KKT18)

Participants expressed that they value animals and the environment to the extent that they wish to continue practising their agency to help make others aware of the needs and importance of wildlife and the environment.

> "I am going to keep telling people about rhinos. I might go to school in PE then I can tell those people". (Simphiwe, KKT18)

3.9   Discussion and conclusions

Based on the evidence presented above, it is evident that merely participating in the program and being exposed to new ideas and information commonly not available to the participants was of immense value. The educational value of taking part in this program alone was of paramount importance to the participants. It facilitated their growth and development as human beings who can actively engage with the world in which they live. Having been able to acquire additional knowledge that was previously unavailable and unknown to the participants thus enhanced their development as human beings. It is commonly agreed upon by researchers and development agencies that education is vital for development (Hatakka & Lagsten, 2012:24). Having access to quality education is crucial for human development and is regarded as a major factor in reaching the UN's sustainable development goals (SDG).

Giving people access to information that goes beyond traditional, social and cultural boundaries, Glassman and Patton (2014:1363) write, offer people the opportunity to expand their capabilities both individually and collectively. Thus, by participating in the CC program that focuses on developing skills, sharing information and educating participants on issues that do not receive much attention in the mainstream classrooms, it offered them the opportunities to expand their capabilities beyond what they would have been able to without having access to the program. Capabilities which can play a crucial role in creating a prosperous and sustainable future for all.

Acquiring a wider range of knowledge and skills increases the potential capabilities of an individual. Skills are fundamental ingredients of capabilities. They act as sources of well-being that enable growth in society. Low levels of skills can cause several social problems, such as dropping out of school and engaging in criminal activities (Heckman and Corbin, 2016:8). However, skills are not fixed and can be enhanced by investments made by society, such as educational programs like CC.

Providing participants with an education that directly speaks to issues concerning the environment in which they live is especially valuable in respect to narrowing the gap of information available to them that directly affects the context in which they live. Having access to information and knowledge about issues that can directly or indirectly affect you is important for individuals to be able to firstly develop the

capability to address these matters and secondly to achieve the functionings of successfully addressing these issues. This is also highlighted by Unterhalter (cited in Hart, 2012:279) who notes "that often those with least access to commodities and capital may also be least able or likely to raise concerns about their circumstances". She found that students' ability to articulate their capabilities was actively constructed by what they see around them, and the extent to which they have access to the possibility of change.

Based on the findings of this report, it is, however, clear that the program did enhance the capabilities and functionings of the participants. The scientific information and knowledge that was shared with the participants played a crucial role in enabling them to develop skills on which further capabilities could be built. Integrating this scientific knowledge with practical skills appeared to have been of particular value to the participants in developing new capabilities as well as enabling them to achieve valued functionings in their lives. More research is however still needed to get a clearer understanding of the conversion factors that play a role in facilitating and hindering the development of capabilities as well as individuals' ability to achieve their chosen functionings.

4. BOTSWANA IMPACT EVALUATION

Simply put, an impact evaluation provides information about the impact of a program on the participants of the program. This can include both positive and adverse impact, direct or indirect results, as well as intended and unintended outcomes (Peersman, G. 2015; United Nations, 2013:6). An impact evaluation was conducted in Botswana to determine what the impact of the program there has been over the past decade. This research took on a multi method approach to use the strengths of both quantitative and qualitative methods to answer the evaluation questions of whether the program outcomes were reached and how. It also looked at the influence of the participants' context on achieving the results. Participatory methods were used during the focus-group discussions to learn from the beneficiaries what their experiences were and how they think the program can be improved. Two-hundred-and-seventy-one past participants were surveyed, 12 focus group discussions were held, and 12 individual semi-structured interviews were conducted.

Research participants ranged from participating in one to seven years before the impact evaluation was conducted. Two-hundred-and-ninety-one past participants were interviewed and surveyed for the research. Twenty had already completed or left school. In total, 94% of the respondents were still in school, and 6% had already left school. Male and female participants were roughly equally presented with 49% of the participants being male and 51% being female. Off the out of school participants, 41% completed school, Form 5. Of this 41%, 12% had post-secondary education. More than half of the adult participants, 59%, had Form 3 as their highest level of education. In Botswana, the first ten years of school is compulsory. However, according to Nation Master (sa), in the year 2000, the average number of years adults spend in school was 6.3. Thus, the participants who were part of CC completed the minimum ten years of school and did not drop out before Form 3. It is furthermore estimated that only 1.5% of the population in Botswana attends tertiary education. The percentage of out of school adults who were enrolled in the CC program and attending higher education was much higher, at 12%.

4.1 Results

Meeting the animal coaches and learning new facts, concepts and generalizations about and from these animal coaches and the environments in which they live increased the participants' knowledge base about it. The animal coaches shared knowledge and information with the learners which were previously unavailable to them.

FG6: I have learned how to take care of animals and the environment, not to burn the environment because the animals will be affected when we burn the environment. We should not throw litter into the environment. And we should not kill animals.

Having access to this information and gaining new and crucial knowledge about the wildlife and environment of Botswana raised their awareness about conservation and other issues facing the animal coaches and their environment.

With this knowledge and increased awareness, participants were able to understand that it is their responsibility to care for wildlife and the environment to ensure that it will be conserved for them and the future generations to enjoy the benefits of such a unique natural resource. In learning about animals and their conservation challenges, the participants also learned about human interference with the ecosystem and the direct and indirect impact of their behaviour on these natural resources.

FG5: I think maybe between some human can hunt in the food web. When we do that [hunt] the animals' numbers in the food web decrease. Then there will be no animals left.

Again, having knowledge of these matters enabled them to become aware of what they can change to improve the situation.

FG6: We should not cut trees because some trees are the habitat for some animals.

Getting access to this information at a young age also enabled the participants to incorporate this knowledge with other subsequent knowledge they gained later in school or through other organisations. It appears that it provided the participants with a good foundation of how the ecosystem works that enabled them to incorporate new, subsequent knowledge as they learned more. The above agrees with Ballantyne and Packer's (2011:210) suggestion that environmental education programs should be conceptualised in such a manner that it provides the motivating force that encourages further information seeking, which can, together with other reinforcing events, eventually lead to long-term behaviour change. Quoting Dewey (cited in Packer and Ballantyne, 2010:30), "No experience lives and dies to itself". Thus, from a constructivist perspective, all learning experiences have an impact on the learner because new learning builds on and revises prior learning that has taken place. Packer and Ballantyne (2010:30) thus say that "any small increase in environmental awareness gained through one visit [to an environmental education centre] will contribute to new learning in the next visit."

Becoming immersed in the life worlds of animals appeared not only to add value regarding improving the knowledge base of participants but also in facilitating the process of developing a deeper appreciation for these animals and the valuable contribution they make in the ecosystem. According to the environmental behaviour model, experiences in nature improves environmental sensitivity. To develop environmental sensitivity as a child is an important significant variable for producing adults who care for the environment (Jeronen et al., 2009:6). Playing games as part of learning about wildlife and the environment is a fun experience with which participants readily associate and whereby they get fully immersed in the experience, adding to the value and impact of the activity.

FG9: In CC I remember learning about how animals depend on each other from the games we played. I learned how animals influence each other through the examples set by the games we were playing like lions versus hyenas. From this game, I learned that the more the number of hyenas increased the harder it would be to get the ball [kill] from the hyenas. I found out that if there is a limited number of animals they can see their enemies by looking in different directions. From this game, I also learned that if you are many people in the family you can do duties easily.

Playing while learning is a form of informal education. Informal education is any teaching that takes place outside the classroom that cultivates spontaneous, wise and respectful learning (Blankenbicker, 2012; Jeffs & Smith, 2012). Within informal learning environments, free choice learning often takes place. Free-choice learning is a type of learner-centered learning that is driven by the needs and interest of the learner (Ballantyne & Packer, 2005:283). It is a constructivist pedagogy where students' construction of their knowledge is emphasised. Such an approach to education also has an important future orientation because in this way participants will become active citizens in their society (Jeronen et al., 2009:5). Learners thus get the opportunity to make sense of the information they learned when they met their animal coaches where the learners are 'meaning-makers' rather than 'meaning-takers'.

Recently, CC has also had the opportunity to enable participants further to become immersed in the live worlds of their animal coaches by going on game drives and seeing these magnificent animals in their natural habitat. For those who had this once in a lifetime opportunity, it made a lasting impression on them, and the experience made a significant emotional impact on them. Seeing and interacting with wildlife in their natural settings, Ballantyne and Packer (2005:284), found can have a substantial emotional impact on participants. Such experiences, they argue can contribute to participants' basic knowledge, understanding, awareness and beliefs regarding wildlife and the conservation challenges they face. Encounters with wildlife are more likely to encourage learners to question and rethink their attitudes and behaviour regarding conservation issues and participants are more apt to adopt environmentally sustainable practices after they have had encounters with wildlife in their natural settings. Experiences with wildlife in their natural environment allow learners to apply theoretical knowledge with real life examples and engage emotionally with their animal coaches and their natural habitat.

> FG8: They say seeing is believing. So, like, when we saw those things [animals], every time we saw those pictures we wanted to see the real thing [animal]. If you see the real thing [animal], you learn more from seeing it rather than being told. It makes the experience more real.

In addition to this, using soccer as a medium for teaching also developed participants' football skills. A skill that is now utilised by some to earn an income by playing tournaments. For others, being introduced to the concept of a sport that can be fun and healthy, helped and encouraged them to start following healthier lifestyles. In addition to this, playing games and soccer was also valuable in facilitating the process of developing participants' life skills. Playing these games taught them how to cooperate with one another and work together as a team, both on and off the field.

> FG5: I liked football because it helped me to learn how to relate to others.

> FG7: [Playing football helped me to learn] how to communicate with teammates.

Inspiring Kids Who Care is CC's overarching goal. CC's philosophy is, if children care about themselves, others and their environment they will protect it and look after their natural resources. To achieve this first step is to foster a culture of respect among participants where they respect themselves, each other and their environment. In the program, this is referred to as the three R's. One of the participants described how she now practices the three R's and why it is important for her.

> A04100317: I remember that we used to sing respect yourself, respect each other and respect your environment. Today I respect myself by not getting involved in bad things, like dating. I respect others by not swearing, and I greet elders. I also like helping other people. When someone needs help, I assist them with whatever they need. I respect the environment by not littering. Not littering

is important because we should live in a healthy environment because mosquitoes can breed there and we can get diseases from them.

In addition to fostering a culture of respect throughout the program, each lesson incorporates a section where the participants learn how they can help the animal coaches. The goal of this is to make children aware that they have the ability to help save these magnificent animals. Based on participants' responses, this message was well understood, and beneficiaries are not only aware of it that it is their responsibility to protect these animals and the ecosystems on which they are dependent but that they also have the ability to do so. By reaching the objectives of increasing participants' knowledge, awareness and understanding of the animal coaches, and to improving their life skills, as well as to developing their soccer skills and fostering a culture of respect for themselves, others and the environment, the overarching goals of Inspiring KIDS WHO CARE was successfully reached. It appears that the fun learning environment where kids got to learn through fun and play while being immersed in the life worlds of the animal coaches, either through imagination, or physically on a game drive, significantly contributed to achieving these results compared to merely learning factual information in a classroom. One participant explained it as follow:

> FG6: [I] had fun learning, interacting with others, rather than sitting in class and taking notes. Because [I] had a more fun time learning [I] was able to learn better and quicker because what you do practically gets in your mind and it gets into your memory, so you remember it for longer.

Participating in the program had a lasting impact. Years after taking part in the program, many past participants still played soccer or others sports to practice the healthy, balanced lifestyle they adopted when participating in CC. Participants also indicated that they continued to respect and care for animals and the environment in general based on the knowledge, understanding and awareness they gained while participating in the CC program. Agreeing with this, Ballantyne and Packer (2005: 288) writes that emotion acts as a motivational force in learning and it influences what people choose to attend to and view as important to explore. Furthermore, feelings also help people to remember what they learn and improve their ability to recall what they learned at a later stage. Ballantyne, Fiend and Packer (cited in Ballantyne & Packer, 2005:288) also argued that emotion may be a major factor in helping EE to achieve their goals. Thus, engaging participants in activities that immerse them in the live worlds of their animal coaches and fully engage their senses and emotions play a significant role in helping CC to achieve its goals. According to Short (2010:8), one of the main focal points of EE has been to develop "environmentally literate and active citizenry capable of thinking critically about environmental issues to work toward improvement or maintenance of environmental conditions". Aiming to encourage participants to be co-engaged in the learning process and facilitating the process where they can learn-to-change is also in line with the progression of EE from its early foundations to the United Nations' (UN) framework for Education for Sustainable Development today (O'Donnaghue, 2014:14). Environmental education, therefore, should stimulate active involvement by individuals in shaping their destiny (Duneulin, 2012:75).

Participants have demonstrated changes in their behaviour and attitude by adopting the values of the three R's and believed in the real value and benefit of respecting themselves, respecting others and respecting the environment. These values were translated into acts of caring, mainly for the immediate surroundings, as well as the animals in it. Though these actions might seem small and seemingly insignificant, it does demonstrate that a seed was planted and has sprouted and by continuing to nurture this seedling, we can have a new generation of people who care for and protect wildlife and their habitats. Short (2010:9), argues that the significance of the immediate environmental action by participants may be a poor indicator of the educational significance that has taken place. He writes that "the path to the most strategic actions is often a long one in the complicated, personal development of the individual" (Short, 2010:9). Therefore, these small actions of participants can be regarded as significant steps in the path to learning how to care for

wildlife and their habitats effectively. In the next section, we will look at how these achievements are related to SDGs.

4.2 Conclusion

Based on the results of the impact evaluation, being part of the program substantially increased participants' knowledge and awareness of wildlife and the environment. The program exposed participants to knowledge and information that is otherwise unavailable to them. This new knowledge made learners aware of the conservation challenges we face today and the impact that people have on the environment. Not only did participants learn about these challenges, but they also learned that they can do something about it and how they can address these challenges to make a difference.

The program also exposed participants to experiences where they were directly learning from the environment. This experience proved to be a significant and extremely valuable for the participants. In addition to this, using sport as a learning aid also helped to facilitate the development of life skills. Furthermore, being introduced to sport as a fun activity and developing their natural athletic abilities encouraged participants to continue practicing sport later on in life. Finally, many of the past participants started to take steps to start caring for the environment actively. Demonstrating that they were empowered and had an increased sense of agency over their actions and what they can do to help protect the environment.

5. UPGRADING THE MONITORING AND EVALUATION FRAMEWORK.

After conducting all these assessments and analysing the results, the CC team set out to improve the M&E framework used by the organisation. As mentioned earlier, M&E is essential in an organisation to ensure that the organisation remains on track. M&E is geared towards generating better programs. Currently, CC is mainly focused on improving its process evaluation framework. Process evaluation looks at evaluation in environmental education. It is concerned with the operations of the program, the implementation thereof and how well it is delivered to the program participants.   This framework aims to continuously monitor and evaluate whether the program is reaching its intended goals and objectives. Such an exercise allows the organisation to act swiftly and make the necessary changes when it becomes evident that targets and objectives are not met. Data that is gathered with the ongoing process can also be used to inform impact evaluations.

The process of upgrading the monitoring and evaluation framework is still in progress, but a short overview of the process in action will be given below.

5.1 Reviewing Goals and Objectives to ensure accurate monitoring and evaluation

A workshop was conducted to review the goals and objectives of the CC program and to identify what the organisation would like to evaluate. Stipulating this was an important part of the exercise to ensure that relevant data is collected that speaks to the aspects of the program that program staff want to evaluate.

The goals that were identified were:

- To inspire kids who care.

- To stimulate opportunities or facilitate the building of relationships with the environment and the animal coach.

The objectives of the program that is to be evaluated are:

- To increase knowledge, awareness and understanding about wildlife and the environment.
- To develop participants' life skills.
- To develop participants' soccer skills.
- To encourage active, democratic citizenship.
- To build relationships with teachers and other stakeholders in the community.

With these goals and objectives in mind, the team upgraded the existing monitoring and evaluation framework to gather more relevant data that speaks to the evaluation questions asked by the organisation.

5.2 Sources of data

A wider collection of data sources has been put into place to collect data on the ongoing delivering and reception of the program. Multiple sources help to gather richer data with more depth that provides insight into the challenges and successes from a variety of angles. Participatory data collection methods were also introduced as data collection methods. This data collection process also acts as a technique to enhance participants' sense of agency and ownership over the program and the actions they take. It includes capturing certain activities such as the collective agreement and using it to inform the researcher about the process that takes place during the program. The collective agreement also provides some insight into participants expectations of the day and how they would ideally like to be treated by others. By being able to actively participate in making the rules for the day and deciding how they should conduct themselves, participants also get exposure to and an experience of what it is like to have ownership over actions taken. Furthermore, it is also an experience that exposes them to the idea that they have the power and ability to be in charge of the actions that are being taken. This experience can help prepare them for the actions they want to take after participating in the program to help conserve wildlife and the environment.

Another source of information that has been added is a coaches' debrief at the end of each session. Thie debrief aims to serve as a reflection of the facilitators and coaches on what went well and what was challenges during the day. This also gives the coaches the opportunity to share their experiences with one another and learn from their own and other coaches' experiences. Several small changes have already been made to the everyday running of the program based on these reflections and observations. This process informs program staff on what is going well and where are the obstacles that need to be addressed to ensure that the program runs more smoothly and reach its goals and objectives.

CC is also busy with ongoing training to develop the coaches' ability to do observations during the program, as well as how to ask questions to participants that can help to inform M&E. Developing the skills of the coaches in this regard can also contribute to gather richer data that better informs the program staff and researcher about the process of the program.

5.3 Upgrading surveys

 A survey is a structured way to ask people to tell us about themselves (Cozby, 2005:124; Ergu & Kou, 2012:5; Weyers, 2011:166). A survey is an ideal research tool to use when the researchers are interested in measuring attitudes or orientations in a large population (Babbie & Mouton, 2004:232). The surveys

were reviewed and updated to explicitly collect data on the goals and objectives that the organisation wants to evaluate. Great care was taken to ensure that the surveys can consistently be administered and get the same results. Thus, that the questions are not confusing with multiple potential interpretations that can lead to inconsistent data. The questions were also reviewed to focus specifically on gathering information that directly speaks to the program and not to external influences. A guide was also developed to introduce the interview to participants to ensure that all the participants get the same information about the surveys and that they have the same understanding of the intents and purposes of the survey. The pre-survey has been administered. However, since the six-week program is still running, the post survey has not been conducted and results from this survey are still outstanding.

Currently, the team is busy collecting data from the six-week program and Bush Days with the new tools. Data gathered with the new tools still need to be analysed.

6. Conclusion

Since March 2017, CC has been actively engaged in an exercise to thoroughly evaluate the work that has been done by the organisation up to date, as well as to upgrade its current M&E framework. Based on the results from the analysis of both quantitative and qualitative data, CC can safely say that it has been reaching its goals and objectives of inspiring kids who care and facilitating the development of a relationship with the animal coaches and their environment. In addition to this, valuable lessons were learned from these analyses on how to improve the M&E framework to ensure that relevant data is being gathered that can inform the program staff of the program's progress and achievements.

References

Babbie, E. & Mouton, J. 2011. *The practice or social research*. Cape Town: Oxford University Press.

Babbie, E, and Mouton, J. 2004. *The practice of social research.* Chapter 9: Surveys. Oxford: Oxford University Press.

Ballantyne, R & Packer, J. 2005. Promoting environmentally sustainable attitudes and behaviour through free choice learning experiences: what is the state of the game? *Australia Environmental Education Research.* 11(3): 281-295.

Blankenbicker, A. 2012. *Informal Science Education in Museums – Learning by accident.* http://blogs.plos.org/scied/2012/12/17/unintentional-learning-benefits-of-informal-science-education/ (Online) [Accessed on 14/06/2017].

Brinkmann, S & Kvale, S. 2015. *Interviews: Learning the craft of qualitative research interviewing.* London: SAGE Publications.

Buzelli, CA. 2015. The capabilities approach: Rethinking agency, freedom, and capital in early education. *Contemporary Issues in Early Childhood.* 16(3):203-213.

Clark, DA. 2005. Sen's capability approach and the many spaces of human well-being. *The Journal of Development Studies.* 41(8): 1339-1368.

Cohen, D. & Crabtree, B. 2006. *Qualitative research guidelines project.*
http://www.qualres.org/HomeSemi-3629.html (Accessed 18/03/2016).

Cozby, PC. 2005. *Methods in Behavioural Research, Ninth Edition*. New York: McGraw-Hill.

Crabtree, A. 2012. A Legitimate Freedom Approach to Sustainability: Sen, Scanlon and the Inadequacy of the Human Development Index. *International Journal of Social Quality.* 2(1): 24-40.

Croes, R. 2012. Assessing Tourism Development from Sen's Capability Approach. *Journal of Travel Research.* 51(5): 542-554.

Duneulin, S. 2012. Promoting Human Freedoms under Conditions of Inequalities: a procedural framework. *Journal of Human Development,* 6(1): 75-92.

Ergu, D & Kou, G. 2012. Questionnaire design improvement and missing item scores estimation for rapid and efficient descision making. *Ann Open Res,* 197:5-23.

Foster, A. 2006. *Counselling microskills.* [Online]. From:
www.thewaywithinn.com.au/docs/Counselling_Microskills (Accessed: 30 /07/2014).

Glassman, M & Patton, R. 2014. Capability Through Participatory Democracy: Sen, Freire, and Dewey. *Educational Philosophy and Theory.* 46(12): 1353-1365.

Hart, SC. 2012. The capability approach and education. *Cambridge Journal of Education.* 42(3):275-282.

Hatakka, M & Lagsten, J. 2012. The capapbility approach as a tool for development evaluation – analyzing student's use of Internet resources. *Information Technology for Development.* 18(1): 23-41.

Jeffs, T & Smith, MK. 2012. *What is informal education?* http://infed.org/mobi/what-is-informal-education/ (online) [Accessed on 14/06/2017].

Jeronen, E, Jeronen, J & Raustia, H. 2009. Environmental Education in Finland – A case study of environmental Education in Nature Schools. *International Journal of Environmental and Science Education,* 4(1): 1-23.

Maguirea, C, Donovanb, C, Mishookc, J, De Gaillanded, G & Garciae, I. 2012. Choosing a life one has reason to value: the role of the arts in fostering capability development in four small urban high schools. *Cambridge Journal of Education.* 42(3): 367-390.

Nambiar, S. 2013. Capabilities, conversion factors and institutions. *Progress in Development Studies.* 13(3): 221-230.

Nation Master. 2017. *Botswana Education Stats*. http://www.nationmaster.com/country-info/profiles/Botswana/Education [Online] (Accessed 01/06/2016).

O'Donnaghue, R. 2014. Think Piece Re-thinking Education for Sustainable Development as Transgressive Processes of Educational Engagement with Human Conduct, Emerging Matters of Concern and the Common Good. *Southern African Journal of Environmental Education.* 30: 7-26.

Peersman, G. 2015. *Impact Evaluation.* Better Evaluation. [Online] http://www.betterevaluation.org/en/themes/impact_evaluation (Accessed on 16/08/2017).

Short, PC. 2010. Responsible Environmental Action: Its Role and Status In Environmental Education and Environmental Quality. *The Journal of Environmental Education.* 41(1): 7-21.

Silverman, D. 2011. *Interpreting Qualitative Data.* London: SAGE Publications.

United Nations. United Nations Development Program. 2009. *Handbook on Planning Monitoring and Evaluation for Development Results*, New York: United Nations

United Nations. 2012. *What is a baseline assessment?* [Online] http://www.endvawnow.org/en/articles/1323-what-is-a-baseline-assessment.html (Accessed 15/08/2017).

United Nations. United Nations Evaluation Group. 2013. *Impact Evaluation in UN Agency Evaluation Systems: Guidance on Selection, Planning and Management.* [Online] https://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0ahUKEwj_is6Hqtv VAhUkAcAKHQ5iBsoQFggwMAI&url=http%3A%2F%2Fwww.uneval.org%2Fdocument%2Fdownload%2F1880&usg=A FQjCNEXF_EUzc4MSnPcY9485rQl8cwWuQ (Accessed on 16/08/2017

Walker, M. 2012. Universities and a Human Development Ethics: as capabilities approach to curriculum. *European Journal of Education.* 47(3): 448-461.

Walker, M. 2008. Human capability, mild perfectionism and thickened educational praxis. *Pedagogy, Culture & Society.* 16(2): 149-162.

Weyers, ML. 2011. *The Theory and Practice of Community Work: A Southern African Perspective.* Potschefstroom: Keurkopie.