

The Use of Cartoons in Promoting Ecological Organic Agriculture among Children and Youths in Smallholder Farming Communities

Julius T. Mwine,
Marius F. Murongo
and Joseph Ssemakula

Uganda Martyrs University,
Uganda

Corresponding author:
mwinetj@gmail.com

Keywords:
12 EOA cartoon books,
children, farming, youths

Abstract

This paper aims to showcase the functionality of a cartoon in promoting ecological organic agricultural knowledge among youths in smallholder farming communities. A pretest and post test quasi experimental design was used on a group of urban, peri-urban and rural primary school children of age 5-12 years between 2015 and 2016. The 12 EOA cartoon Book topics upon which the tests were made on the school children were developed in a participatory manner involving scientists, farmers, cartoonists, youths and animators. Observations indicate that using a cartoon in teaching EOA knowledge provided a relaxed learning mode, while the learners are entertained. The interactive and entertaining environment enhances the retention of the ecological organic agriculture principles and practices embedded in the cartoon images, sounds and symbols, hence a conclusion that cartoons in whatever format, are important tools in promoting EOA practices through increasing youth academic achievement and the level of knowledge retention in ecological organic agriculture.

Introduction

There are diverging definitions of what a cartoon is really about, with some lexicologists defining a cartoon as a form of expression and communication that takes several arrangements of art, together with humorous captioned illustrations, ironic political drawings, and animated films. It is believed that in the mid-19th century, the cartoon acquired the meaning of a pictorial imitation, entertaining, jokey and often satirical in its portrayal of social and political events. Cartoons have been instrumental in monitoring and impacting the social and political lives of those in positions of power and influence. Lively cartoons cater more to younger audiences, entertaining children with the adventures of sentimentalized animals, champions, superheroes, and child characters but also for teaching and learning (Girija, 2016). If the cartoon has been instrumental in checking and impacting the socio-political influence, one may wonder then, why the same cartoon cannot be used to impact on the practices in ecological organic agriculture across the generational divide!

Biblical wisdom writings were explicit on the importance of training young people especially children. In the book of proverbs 22: 6, is written, "Train up a child in the way we should go, and when he is old, he will never depart from it" The verse is out rightly open on the outcomes of training the child, but it is rather silent on the training methods. The cartoon could be marvelous methodical approach to teaching young people the concepts that seem to be neglected and or abused by the society . One of such concepts could be ecological organic agriculture.

Ecological organic agriculture is a farming system that sustains the health of the soils, ecosystems and people (Lammerts van Beuren *et al.* (2002). This practice relies on natural processes and respects specific principles of ecology, ecological health, eco-fairness, ecological care and ensures equity and

integrity of the ecosystem practices. In the current era, where the above principle practices have been abused, ecological organic agriculture is increasingly becoming the solution to problems resulting from this dilemma. The best solution should lay its ground from the young generations so that the concept of ecological organic agriculture is enkindled among young people at a tender but exploratory age.

In the rest past, Agriculture was used as a punishment for something done wrongly at home, in school or both. Parents would deny food to erratic children. School teachers would give agricultural related punishments to errant children, while the non-errant ones observed. These kinds of activities developed a trajectory that culminated into hatred for agricultural practices. The children never look at Agriculture as a cool practice. The whole idea seems unlikeable to them and therefore never a preferred occupation but a last resort. Agriculture in general has therefore of late turned out to be a trade of the 'academically unable' and the elderly (Karega, L.N. 2017; FAO 2014) yet some agricultural forms like EOA requires scientific knowledge the former do not possess. There is therefore need to make Agriculture in general and EOA in particular such an appealing business that can attract youth at an early age (Leavy, J. and Smith, S. 2010). The early introduction of EOA through Cartoons is meant to do this.

Uganda Martyrs University cartoon series

The rationale

The background laid out in this paper forms part of the rationale for Uganda Martyrs University launching into developing the cartoon series. Besides, the university, particularly through the initiative of ecological organic agriculture is cognizant of the fact the largest population in Africa and Uganda in particular is basically agrarian and therefore, youths and children should be initiated into the best practices that characterize ecological organic agriculture. Once the youths and children are properly oriented, it would pave way for sustainable agriculture in the future. There is awareness that ecological organic agriculture has become a major analytical and strategic platform for promoting better practices in agriculture. The practices that are socially acceptable, economically friendly, and locally appropriate are the basis for providing solutions for climate change challenges.

The methods

The current hand book is a collection of 12 subtopics. Each subtopic was designed to introduce a peculiar ecological organic agricultural practice. Each subtopic will be animated into a cartoon series and later on released to the media; most preferably those that target children.

The cartoons were developed in a participatory manner involving the scientists, children educators and Cartoonists engaged at local, national, and international forums. The product was tested with children educators and the children of age 5-12 years old, both from urban and rural primary schools.

Preliminary results and discussion

Preliminary results show that 94% of the children between the ages 5 – 12 years keep alert and focused when viewing a cartoon compared to 62% alert ratio when learning agriculture related material in normal pupil- teacher narrative session. It was also observed that 96% of the pupils showed interest to read the EOA cartoon book again compared 52% who showed interest to revise class notes given by the teacher.

Agro ecological information embedded within the cartoon can be easily detected by the young children. It was observed that in the process of denotation of the cartoons, children first focused on the

lines in the cartoon, thought over every detail, and established connections and comments in contrast with the cartoon objects. This approach is believed to facilitates agro ecological critical thinking at an early age.

Children have a very short attention span. Their ability to concentrate is quickly distracted, and they get bored very fast, . A clear observation was that presentation of ecological agriculture knowledge in form of cartoons disallowed this boredom. The children, both from the rural and urban schools remained focused for a long time as the cartoon presenters went through the topics. Concentrated attention is a requisite factor in liking the content within the subject being promoted.

During the pre-tests and in tests of the cartoon, it was observed that a cartoon is a powerful tool that enables children of different ages to learn in a "relaxed mode" This mode enables a positive contribution to the development of the thinking and comprehension skills of ecological agriculture concepts by young people.

It should be noted that this is still work in progress and final findings will be released after testing with animated cartoons.

The cartoon is a tool that provides an "impeccable edutainment" where children (and adults) learn in an entertaining atmosphere (Normaliza *et al.* 2014). Cartoon pictorials enabled the children to realize the events in different topical aspects while they were made to smile. The children entertainment during agro ecological lessons and the Cartoon has the power to achieve this through the language of humor that enables young people to learn. A positive classroom environment created in the course of teaching and demonstration by smiling is far more beneficial than the lesson taught by narration.

The above observations connote that cartoon makes it easier for the children and [adult learners] to memorize the agro ecological messages related with the target objectives. It can be concluded that the humor approach is attractive while communicating with the learners. Communicating with the cartoon is an easy way that is not complex, with a side kept in mind. The cartoon discourages memorizing, instead, the different interesting images, sounds and symbols remain in the minds of children along time. As a result, it is easy to remember the knowledge learned when they have become old .

Conclusion

The relaxing mode, and the entertaining environment are important aspects in delivering ecological organic agriculture information among the children and the youths. It can further be concluded that EOA knowledge provided in a relaxed learning mode, while the learners are entertained is retained for a long period of time when it is embedded in the cartoon images, sounds, and symbols. Adoption of cartoons as a teaching method for the young in learning Agriculture and EOA in particular should be recommended.

References

- Alaba, S., 2007. The Use of Educational Cartoons and Comics in Enhancing Creativity in Primary School Pupils in Ile-ife. Osun State, Nigeria. *Journal of Applied Sciences Research*, 3(10), pp.913–920.
- Chen, W.C., H., K.C. & Ho, Y.C., 2009. Applying the strategy of concept cartoon argument instruction to empower the children's argumentation ability in a remote elementary science classroom. In *13th European Conference for Research on Learning and Instruction*. pp. 201–256.
- Eker, C., 2014. The Effects of Educational Practice with Cartoons on Learning Outcomes. *International Journal of Humanities and Social Science*, 4(14), pp.223–234.
- FAO (2014). Youth and Agriculture: Key challenges and concrete solutions. A publication of the Food

- and Agriculture organization. <http://www.fao.org/3/a-i3947e.pdf>; Retrieved on 27 June 2018.
- Girija, N. Srinivasalu, 2016. Using Cartoons as effective tools in teaching learning process of social science. *Scholarly Research Journal for Interdisciplinary studies*, 3(23) pp.1893 - 1905.
- Karega, L. N. 2017. Youth in Agriculture; Perceptions and Challenges for Enhanced Participation in Kajiado North Sub-County, Kenya. *Greener Journal of Agricultural Sciences*, 7 (8) pp 207.
- Lammerts van Bueren, E.T; Struik, E.P; Jacobeson, E. 2002. Ecological concepts in organic farming and their consequences for an organic crop ideotype. *Wageningen Journal of Life Sciences* 50(1) pp. 1-26J
- Leavy, J. & Smith, S. 2010. Future farmers? Exploring youth aspirations for African agriculture. *Future Agricultures, Policy Brief*, No. 037.
- Normaliza Abd Rahim, Hazlina Abdul Halim & Roslina Mamat . 2014. Learning via Television Cartoon. *Asian Social Science*; 10, 15.