

## **ICT-based, cross-cultural communication: A methodological perspective**

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### **ABSTRACT**

The article discusses how cross-cultural communication based on information and communication technologies (ICT) may be used in participatory health promotion as well as in education in general. The analysis draws on experiences from a health education research project with grade 6 pupils in Nairobi (Kenya) and Copenhagen (Denmark) addressing the topic of physical activity in everyday life.

The article outlines a sequence of educational events (the Cross-Cultural Communication (3C) model) comprising exchange of letters, recording and exchange of films<sup>1</sup> and Skype communication sessions interchanging with reflection sessions in the classes. The educational rationale for using cross-cultural communication is that meeting the unfamiliar (different children, cultures, schools and contexts) leads to curiosity and reflection about one's own situation; and subsequently that reflexivity builds action competence. In the present case study, the 3C model was used as a means of health promotion, but the approach may be used in relation to almost any topic. The 3C model is discussed in relation to theories of co-learning, knowledge guiding and sharing and participation. The article discusses methodological potentials and challenges.

**Keywords:** *Co-learning, cross-cultural communication, health promotion, ICT, participation, self-reflection, social learning.*

*“When sitting only in computers using electronic things, when sitting down and not doing anything that can make you active, I would advise you to even make them active and they will be able to prevent the lifestyle diseases. ... I would like them to stop being lazy to know how to work to wash the house, to wash the utensils, to clean the house and do the house chores. I would like to advise them because most of them waste a lot of time at computers and phones. I'm afraid that if they continue like that it may spoil them. [Kenyan pupil reflecting on his new insights into Danish pupils' lives. 16<sup>th</sup> March 2012]*

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<sup>1</sup> Film in this article means short film shot by non-professionals with a handheld camera.

## 1. INTRODUCTION

On a global level teachers are aware of the potential of introducing children to other cultures than their own. Pupils have pen pals in other schools, to start with within their own country, but as they grow older, also with children in other countries – either within Europe (<http://www.etwinning.net/en/pub/index.htm>) or around the world (<http://www.theglobalexperience.org>). There are a number of experiences with using Information and Communication Technology (ITC) to facilitate these meetings. Two ICT-related communication platforms, KIDLINK and iEARN, have been running for many years. The KIDLINK was established by professional educators in Norway in 1990 (Burleigh & Patti, 2011). The iEARN, established in 1988, is a non-profit organization in contact with more than 30,000 schools from more than 130 countries (<http://www.iearn.org>). Both projects help students and teachers to make friends around the world and build up a global network, enhance learning and improve writing and reading skills – especially in English.

### 1.1 Cross-cultural, ICT-based education and learning in European schools

In a European context, cross-cultural dialogue in health promotion is a relatively novel approach. The Young Minds projects 1 and 2 demonstrated web-based, cross-cultural dialogues to be a strong tool when working to reduce alcohol consumption among young people in European countries, and improve the pupils' well-being and the school environment (Simovska & Jensen, 2003; Jensen et al, 2005). Some of the recommendations in Young Minds 2 were that ICT could be used in concrete and effective collaborative learning environments and that the "interplay between cross-cultural collaboration, taking action and participating in online learning environments contributes to students' increased sense of self-determination and control over their activities" (Jensen et al, 2005, p.127). The Young Minds projects concluded that international cooperation increased the commitment among pupils and teachers and encouraged them to view their environmental and health problems and conditions in a broader perspective. In addition, the pupils' English skills were improved (Jensen et al, 2005, p. 106). The experiences with cross-cultural collaboration from Young Minds continued in the Shape Up project (Simovska & Jensen, 2003; Simovska et al, 2006). The rationale was that health problems were both local and global. Furthermore, it was a motivating factor to integrate an international dimension in schoolwork addressing health issues.

### 1.2 ICT-based education and learning in Africa

In the African context, experiences with integrating ICT in action-oriented and cross-cultural communication projects have been developed later than in high-income countries. A review on cross-cultural communication documented the integration of ICT in educational and learning processes in Africa (Ocholla, 2003), and others have demonstrated the presence of a 'digital divide' including barriers in low-income countries' weak infrastructure, lack of skills, lack of relevant software and limited access to the Internet (UNDP 2001; UN 2003; Aduwa-Ogiegbaen & Iyamu, 2005). Recently another cross-cultural communication project has integrated mobile technologies as awareness and communication tools (Botha et al, 2009). Today countries like Kenya have a fairly well functioning ICT-structure and the technical challenges in cities like Nairobi are limited (<http://www.un.org/africarenewal/Africa-Renewal-May-2013>).

Based on the work mentioned above, the present article describes the further development of an ICT-integrated, Cross-Cultural Communication (3C) model for learning practice. This has been developed on the basis of a study linking grade 6 primary school pupils in Nairobi and

Copenhagen. The focus of the study was everyday movement as an element in health promoting school teaching.

## 2. METHODOLOGY

### 2.1 Theoretical perspectives

The argument for cross-cultural education models builds on a conceptualization of learning as a dynamic social process. Social learning is a key component in several central theoretical approaches to learning. Daw (2005) argues for the concept of co-learning between teachers and pupils in a classroom setting. With reference to Vygotsky, he asserts that children's participation in the dialogue and the communicative process is essential for their understanding, i.e. socialization and learning are integrated. On that basis it can be argued that sharing of knowledge is essential for cross-cultural communication projects.

Rogoff (1990) further developed Vygotsky's (1978) approach to guiding and sharing knowledge: "Children enter the world embedded in an interpersonal system involving their caregivers and others who are already involved with societal institutions and technologies. Through guided participation with others, children come to understand and participate in the skilled activities of their culture" (Rogoff, 1990, p.191). Rogoff states that through shared problem solving or communication (guided participation), the learner is involved beyond the individual level: "it is an appropriation of the shared activity by each individual that reflects the individual's understanding of and involvement in the activity" (Rogoff, 1990, p.195).

The social learning theories contend that knowledge and learning are related to interaction between pupils, and further that understanding and reflections come out of shared problem solving and communication. Co-learning can be described as: "... a process of interactive and experiential dialogue and collaborative interaction in a particular field with specific objectives" (Law, 2011, p.4). The characteristics of a classroom environment with a co-learning approach are: 1) shared power among co-learners, 2) social and individual learning, 3) collective and individual meaning-making and identity exploration, 4) "community of practice" with situated learning and 5) real world engagement and action (Law, 2011, p.5).

The main principle of co-learning related to cross-cultural communication is that pupils do not only acquire knowledge *about* pupils from another culture, but attain knowledge and understanding *with* pupils by sharing, exploring and reflecting in an equitable participatory process. Facilitating and guiding learning with the perspective described by Law (2011) indicates a genuine participatory approach. Hart (2008) and Simovska (2009) both analyze the way children's participation frequently is either non-participatory (first steps of the participation ladder from Hart, 2008) or only symbolic (Simovska, 2009). This pilot study aimed to use the cross-cultural dialogue as the motivating factor for health promotion and learning based on a synthesis of the theories described above.

### 2.2. Design

The pilot study was conducted from October 2011 till June 2012. Two primary schools in Copenhagen, Denmark and one in Nairobi, Kenya participated. The main theme for the activities was movement and physical activity. Data on the educational processes were generated using: 1) films as a way to display non-formal physical activities like playing, walking and cleaning (apart from formal activities like Physical Education in schools); 2) participant observation especially on

what kind of physical activities pupils do in and outside schools; 3) semi-structured interviews with teachers and headmasters on the learning processes; and 4) group interviews with the pupils with the purpose of reflecting on the relation between bodily activities and health issues.

The pupils were informed verbally and in writing about the study. In addition, parents and teachers received letters explaining details about the project including aim, educational methods and steps. Informed consent was obtained from parents as well as children.

The pilot study is part of the 'Children Across Cultures Tackling Unhealthy Settings' (CACTUS) programme which is driven by Steno Health Promotion Center, Kenyatta University and Roskilde University. Parallel to the present study on cross-cultural communication, other related studies are being conducted on pupils' perceptions of food and movements with the long-term view to prevent diabetes and other non-communicable diseases<sup>2</sup>

### 3. THE CROSS-CULTURAL COMMUNICATION (3C) MODEL - STEP BY STEP

Based on the experiences of the project, an educational ICT-based, Cross-Cultural Communication (3C) model has been developed. It comprises 14 steps (see Table 1).

**Table 1:** The 14 steps and key learning points of the Cross-Cultural Communication (3C) model.

Steps	Content	Main points and comments
Step 1	Selection of schools	<ul style="list-style-type: none"> <li>• Important to find right match based on explicit criteria</li> <li>• Dedication and sound pedagogic environment are crucial</li> <li>• Access to the Internet</li> <li>• Basic ICT skills among the teachers</li> </ul>
Step 2	Introducing the model to the schools	<ul style="list-style-type: none"> <li>• All relevant stakeholders (management, teachers, parents) should be involved</li> <li>• Purpose and methods should be explained thoroughly</li> <li>• Transparency related to learning (co-learning)</li> <li>• Activities to be coordinated with school year and terms</li> </ul>

<sup>2</sup> The CACTUS programme focuses on risk factors for diabetes and other non-communicable diseases. An estimated 366 million people live with diabetes worldwide of which 80% live in low- and middle income countries (IDF, 2011). Overweight, obesity and sedentary lifestyles are increasing on a global scale leading to rises in cardiovascular and other lifestyle-related diseases (IDF, 2009). Educating children is an entry point to reduce the increase in obesity prevalence rates, and schools have been pointed to as a setting for health promotion (WHO, 2005, Currie et al, 2012).

<b>Steps</b>	<b>Content</b>	<b>Main points and comments</b>
<b>Step 3</b>	<b>Introducing the model to the classes</b>	<ul style="list-style-type: none"> <li>• Activities to be harmonized with teaching plans (curricular or extracurricular activities)</li> <li>• Assessment of language skills</li> <li>• Learning outcomes should be explicit</li> </ul>
<b>Step 4</b>	<b>Writing and exchanging letters</b>	<ul style="list-style-type: none"> <li>• Matching pupils to each other in friendship classes</li> <li>• Talks about 'ethics'</li> <li>• Logistics of exchanging the letters</li> </ul>
<b>Step 5</b>	<b>Reflection one in the classes</b>	<ul style="list-style-type: none"> <li>• Class-based discussion of main learning points, similarities and differences</li> </ul>
<b>Step 6</b>	<b>Ensuring ICT equipment and skills are available</b>	<ul style="list-style-type: none"> <li>• Extent of ICT literacy among teachers and pupils</li> <li>• Knowledge culture related to integrating ICT in teaching and learning</li> </ul>
<b>Step 7</b>	<b>Planning the films</b>	<ul style="list-style-type: none"> <li>• Pupils selecting themes for filming (facilitated by teachers)</li> <li>• Pupils planning the films (facilitated by teachers)</li> </ul>
<b>Step 8</b>	<b>Filming the scenes</b>	<ul style="list-style-type: none"> <li>• Pupils conducting the actual filming (if necessary assisted by 'experts')</li> </ul>
<b>Step 9</b>	<b>Editing and exchanging films</b>	<ul style="list-style-type: none"> <li>• Editing is time consuming and requires know how and specialized software</li> <li>• Should ideally be done by the pupils (if necessary assisted by 'experts')</li> <li>• Logistics of exchanging the films</li> </ul>
<b>Step 10</b>	<b>Reflection two in the classes</b>	<ul style="list-style-type: none"> <li>• Class-based discussion of main learning points, similarities and differences</li> </ul>
<b>Step 11</b>	<b>Preparing the Skype sessions</b>	<ul style="list-style-type: none"> <li>• Based on content of letters and films, what important questions and themes should be discussed?</li> <li>• Agreement on way to present the questions and answers</li> </ul>
<b>Step 12</b>	<b>Skype sessions in the classroom</b>	<ul style="list-style-type: none"> <li>• The two classes agreeing on the choreography of Skype sessions</li> <li>• Check all the technology before kick off</li> <li>• Allow for time (whole sessions) for pupils to get acquainted before selected educational themes can be dealt with</li> </ul>

Steps	Content	Main points and comments
Step 13	Reflection three in classes	<ul style="list-style-type: none"> <li>• Class-based discussion of main learning points, similarities and differences (co-learning)</li> <li>• Deciding on next step in relation to friendship class</li> </ul>
Step 14	Reflection at school level	<ul style="list-style-type: none"> <li>• Sharing experiences and lessons learned among all teachers, parents and management teams</li> <li>• Next steps</li> <li>• How can the experiences be integrated into the visions, missions and structure of the future school plans?</li> </ul>

### 3.1 STEP 1-3: Selecting schools and introducing the methodology to schools and classes

The schools in Nairobi and Copenhagen were sampled seeking representation from both higher, middle and lower socio-economic parts of town. The school in Nairobi was selected on the basis of its conducive learning environment, the cordial relations between pupils and teachers and its access to the Internet. Though all schools were urban, their catchment areas were more or less extended causing pupils to use different means of transport to school (walking, cycling or being driven by car). Approximately 104 Kenyan and 41 Danish grade 6 pupils took part in the various phases of the project.

The selection process in Nairobi took about two weeks. First the class teachers were contacted by the headmistress, and subsequently the researchers introduced the study principles and procedures in more detail to the class teachers. Finally, the pupils were introduced to the project.

### 3.2 STEPS 4-5: Writing and exchanging letters and reflection in classes

In order to prepare the pupils for communicating online, introduction letters were exchanged between the two countries. In one hour's time, every Kenyan pupil wrote 2–3 pages about themselves, their families, where they lived and their free time hobbies. In Copenhagen, the process of writing letters was slightly different. In the first school the class teacher took it upon himself to produce the letters with the class as part of his English teaching. In the second school, the researchers joined the class together with the teacher and supported the writing process. The Danish letters were generally shorter than those from Kenya and contained information about families, hobbies, idols and material possessions. Most of them contained a photo.

The letters from Nairobi were distributed among the pupils in Copenhagen and vice versa. Because of the high numbers of pupils per class in Nairobi as compared to Copenhagen, the Danish pupils had 2-3 Kenyan pen pals each. After having received and read the letters from their friends in the friendship classes, it was possible for the teachers to use the letters as a means of teaching and reflection. Letters are personal statements on personal issues, family, local society and also reflections on personal feelings about the importance of communication and in general become friends. The pedagogical outcomes were to develop writing skills and competences in expression of thoughts and ideas (Intercultural competences). The work with the letters took about two month altogether. However, it may be feasible to complete this phase within a much shorter time span, if the logistic is clear from the beginning.

### 3.3 STEP 6: Ensuring that ICT equipment and skills are available

The research group decided to base the cross-cultural communication on an online platform. After a period of investigating different options, the Skype platform was chosen because it is free and relatively easy to access and use. This was deemed to be crucial for the sustainability of the approach in low- and middle-income countries.

In Nairobi, only few of the teachers were experienced in the use of computers and they were not used to integrating ICT in their teaching. The Kenyan school had no Internet access and only one computer was working. In that sense the Kenyan school was IT illiterate and the process had to start from scratch. The school offered the project to refurbish a room dedicated to the project only. The project contacted an ICT engineer who established internet access via a broadband connection, and provided the school with one stationary computer, projector and all necessary equipment for a Skype session.

In Copenhagen, both teachers and pupils were computer literate and both schools used ICT in their teaching. Furthermore, both Danish schools had all the basic equipment installed in the classrooms.

### 3.4 STEP 7-10: Making, editing and exchanging films; and reflection in classes

As a next step films were produced about being physically active in everyday life. The purpose was to introduce the discussion themes by showing the films before the Skype dialogues. First, the films should introduce the broad subject of being physically active in everyday life as the subject of the communication. Second, reflections on the films were meant to form the basis of the questions for the Skype session; making it easier for pupils who did not know each other to communicate. Finally, the subjects of the films were largely influenced by the pupils' choices in order to encourage participation.

In Kenya, the themes for the films were debated in the class. Five groups were formed in which ideas for short films about physical activity in everyday life were discussed. The following themes were chosen in discussions between the pupils, the teachers and the research team: 1) "being active by working" (e.g. cleaning the classroom), 2) "being active at home and on the way to and from school and during housekeeping", 3) "being active in physical exercise lessons in schools", 4) "being active in the classroom", 5) "being active during school breaks". In Nairobi, the researchers went together with some of the Kenyan pupils to their homes on a Saturday and made the Kenyan film about their housework and families. Later, scenes from the school focused on break time activities and cleaning the classroom. A handheld compact Canon LEGRIA FS307 camera was used.

In Copenhagen, after having read the letters, the pupils, class teachers and researchers discussed and chose four themes for the films. The themes were meant to describe the physical activities and places of the pupils' everyday lives, such as "the club and the stone", "the street and city life", "the skater park" and "football". There were 4-6 pupils in each group. They prepared the film in detail as to what lines and actions and places to film within the school neighbourhood. The filming in Copenhagen took place over the course of two half school days. The researchers operated the cameras and the pupils directed and acted their stories. In one of the schools, the pupils requested that a soundtrack of their favourite songs should be added to the activities in the film.

The films from both Copenhagen and Nairobi were edited by the researchers into short films of approximately 3-5 minutes in accordance with the pupils' scripts. This was done in Copenhagen using the software, Windows Movie Maker®.

During the observations and in the following interviews it was documented that all the Kenyan pupils watched and were excited to see the Danish short films. They were surprised to see how Danish pupils were allowed to walk around in the streets looking into the shops. They found the skating park presented in a film to be very attractive. Furthermore, they were surprised to see the Danish pupils playing football in the rain. Generally the free behaviour of the Danish pupils and their access to city spaces were surprising for the Kenyan pupils. This differs from the Kenyan pupils who live a somewhat more restricted life, due to long school hours and less safe city environments.

The Danish pupils really liked the Kenyan pupils' display of songs and dance and their play during school breaks. They were also somewhat shaken by the way the Kenyan pupils would spend hours of hard labour to clean their class room twice a week using small hand brooms and buckets of water. More generally, they were surprised to learn that the lives of the Kenyan pupils did not differ radically from their own; their clothes were neat and clean, they had modern technologies and they looked happy and healthy. The Danish pupils reflected that this picture contrasts the image displayed in the Danish media of African children being hungry and miserable. The Kenyan pupils were surprised that their daily life activities and cleaning in classes was of interest to their Danish friends.

The film production steps were time consuming and the exchange (sending the videos to each other) caused problems. It was not easy to send the films via the Internet, and the drop box application was not functioning in Kenya. Consequently, the films were hand-carried on CD-ROMs to the Kenyan school. Some more sustainable way of handling this was subsequently discussed among the researchers.

### **3.5 STEPS 11-13: Preparing and conducting the Skype communication and reflection in classes**

After editing the films, the researchers visited the Danish schools once again to show the final result. The films from Nairobi were shown afterwards. Inspired by the films the pupils formulated two questions for their Kenyan and Danish friends respectively. Preferably the questions should relate to the theme everyday physical activities and places.

The Danish films were shown to the Kenyan pupils just before the Skype session, so they did not have much time to reflect on them, though some comments were made.

In Nairobi, there were a number of technical problems. During the first Skype session, the low quality of the microphone made it very hard for the Danish pupils to hear and understand the Kenyans. One of the Skype sessions also involved a failure of the electricity supply, a problem which was solved by using a generator that was fortunately nearby.

In Copenhagen, the contact via Skype to Nairobi was easily established. The Danish and Kenyan pupils were divided into groups and asked each other two questions in turn. The opposite group replied after each question. In Nairobi two spokesmen were chosen, who stood in front of the webcam and replied to the questions asked. In Copenhagen, the pupils who were most confident in the English language usually spoke.



There was some difference between the two sessions in Copenhagen. The lessons learned from the first session informed and improved the second one in terms of organising and steering the conversations and improving the sound. During the second Skype session, the dialogue and questions had a special style, the sound was better and the Danish pupils talked as one big group. We conclude that only one Skype session is not enough if the pupils should get the full benefit of the communication process. Pupils from the two countries first need to become accustomed to each other and find a way to communicate clearly on a media like Skype.

### **3.6 STEP 14: Concluding reflections at school level**

After the last Skype session pupils and teachers were interviewed to evaluate the process, and in Kenya a meeting took place with all teachers and the school management. The meeting summarized the lessons learned and strengths and weaknesses of the pilot project. It was also discussed how the interventions could have long term effects – even in subjects that were not included in the pilot. The involvement of teachers, the very comprehensive curriculum and frequent testing of the pupils were discussed as barriers to the new ideas. All the teachers stated that they liked the project and asked for further involvement with more classes and more 3C activities with Danish classes.

In Denmark all pupils from the two classes were divided into two groups in order to discuss the process. The two class teachers made comments about their involvement as well. Pupils from the Danish classes were very excited about the Skype meetings. They all wanted it to last even longer because it was fun and not too 'school-like'.

## **4. CROSS-CUTTING THEMES – ANALYSIS AND DISCUSSION**

### **4.1 Potentials**

The project was conducted in order to gain experiences with cross-cultural communication as a learning approach using and integrating ICT in health promotion. The educational rationale of cross-cultural communication is mainly that sharing and dialogue – co-learning - expand the understanding of one's own situation and the socio-spatial context. The recent technological advances in ICT have increased the possibilities for cross-cultural communication. The study findings showed that the cross-cultural communication process, using letters, film and the Skype sessions, was exciting and a great motivation factor for participatory learning.

According to Jensen (2004), pupils will be more engaged and motivated if they feel responsible and are involved in a participatory way. Even though the Kenyan pupils were not involved according to the top category of Hart's (2008) ladder of participation, the level of participation was high compared to the normal teaching situation in the Kenyan classes. Despite the fact that Kenyan schools generally are more disciplinary and teacher-driven in their educational approach, the study showed that both Danish and Kenyan pupils experienced the participation in the steps of the 3C model as more engaging and closer to real life learning than traditional class room learning. This is in line with Law (2011) who recommends "real life engagement and action" and Glasser (2007) who argues for co-learning based on non-hierarchical relationships, collaboration, trust, full participation, and shared exploration. Simovska (2009) states that it is possible to establish genuine and real participation if pupils are taken seriously. The 3C model has proven to be motivational and an initiator of participatory reflections. The study observations and interviews showed that the project made a great impression and created enthusiasm and fun among the pupils. It is therefore essential that pupils should be actively involved in the communication and exploring process. Not only the pupils but also the teachers were engaged in sharing knowledge,

experiences and comments across the borders. With guided participation mediated by the researchers and the teachers, the communication had an impact on the pupils in both Nairobi and Copenhagen. The pupils and the teachers developed ownership the project as it progressed. They exchanged comments about their lifestyle and local contexts and the pupils became more and more informed about each other's culture. The concept of 'guided participation' refers to Rogoff's research (1990) and involves both the formal and informal ways in which teachers, researchers and pupils were interacting as well as the social settings that shaped the pupils physical activities.

The reflection sessions are conducted in steps 5, 10, 13 and 14 of the 3C model (Table 1). The co-learning approach leads to learning about oneself and one's place in the world by sharing with others and then again looking at oneself in a new perspective (Law 2011). This might lead to new insights and provide new opportunities. In the present study self-reflection was applied to issues of health promotion and physical activities, but it may be used in relation to almost any other theme such as human rights or environmental sustainability.

Generally, the study resulted in various degrees of participation and learning from the real life experiences – increasing as the project progressed. From an educational point of view the learning outcomes of the pilot study were development of knowledge, skills and competences. The pupils gained more knowledge about each other's countries and the daily life of their friendship classes. During the process and following the various steps in the 3C model, especially the Danish pupils acquired and enhanced their language skills by speaking and writing in English. Displaying one's own communication skills and courage to stand in front of all the others was also a learning experience. This is in line with Jensen's (2004) argument that action-oriented experiences are important and will be further developed if the experiences are rooted in a real life setting.

## **4.2 Challenges**

Research in Kenya has shown that integrating ICT into educational institutions is not easy due to absence of educational software, lack of internet access and the teachers' computer illiteracy (Wims & Lawler, 2007). Due to lack of ICT equipment and expertise at the Kenyan school, it proved necessary to have a consultant facilitating the project in Kenya (Step 6 in the 3C model). The stability and supply of the electricity in a country like Kenya has to be taken into account as well. Even though both Danish schools had previous experiences with different kinds of cross-cultural communication, this way of cross-cultural communication was new to both the Danish and the Kenyan teachers.

Another challenge was the different curricula, educational plans and teaching approaches in the two countries. While the Danish curriculum has some space to integrate external projects during school hours, the Kenyan curriculum is very condensed and examination-oriented. As a consequence, educational plans are strictly adhered to. Hence, it is hard for the Kenyan teachers to work with the 3C model during the school hours. Curriculum development work has to be planned in advance and it has to be in line with other curricular demands (Step 3 in the 3C model). However, during the intervention the Kenyan headmistress and class teachers were very flexible and they became increasingly involved and interested. Nevertheless, the project would not have been possible, if the research team were not facilitating the process. A suggestion is to have this kind of activity as an extra-curricular activity for the Kenyan pupils and then have the Skype session during the afternoon for the Danish pupils as well. The time difference between the two countries is 1-2 hours depending on summer time (daylight saving time), so it should be feasible for the schools to plan.

The time limit of the project also appeared to be a challenge. The pupils needed more time to communicate to get accustomed to each other and make friends. Thus, more than one Skype session is needed (Step 12 in the 3C model).

Ensuring ownership already starts in step 2 of the 3C model, where the schools should obtain a clear understanding and acceptance of the aims of the project. The level of mental ownership is also related to participation. More participation leads to stronger feeling of ownership (Breiting, 2008, p. 173).

It was mainly the participating class teachers who had ownership to the project, because the project was introduced as a class-related project rather than as a whole school project. However, in future rounds this can easily be adapted. During the process, and especially at the end, it became increasingly clear, that the sustainability aspect needs to be more integrated from the onset of the project, meaning that all teachers in the school should be informed and involved as much as possible – as mentioned in Step 14 of the 3C model.

The present study, during which the 3C model was developed, was based on an amount of resources that is not feasible under real life circumstances. Subsequently, time and economy could be a barrier to up-scaling the model in its present form.

Negative side effects should also be considered. More specifically it should be considered how children from low- and middle-income countries react to being exposed to relatively prosperous conditions in high-income countries (Step 4 about ethics in the 3C model). Furthermore, the films produced during Step 8 often included scenes from the children's private homes. This raises the issue of privacy. However, the experiences from the project indicate that pupils were not that concerned about sharing private issues. On the contrary, the Kenyan pupils purposively and proudly chose to show their homes with their friends in Denmark.

## **5. CONCLUSION**

This article has described an ICT-based, Cross-Cultural Communication (3C) model developed from a pilot research project involving Kenyan and Danish primary schools. A detailed manual, the 3C model, was provided (Table 1) and potentials and challenges were explored along with general theoretical considerations and practical educational points. The 3C model is based on a theoretical foundation combining notions of social learning, co-learning and participation. The educational rationale for using cross-cultural communication is that meeting the unfamiliar leads to curiosity and reflection about one's own situation and subsequently increased action competence. It is the hope that others will feel inspired to use the method and develop it further.

Further research is needed on the ways in which the model may be improved and adapted to various settings and countries with disparate availability of time, skills, traditions and financial resources and learning targets in relation to health promotion in particular and education in general.

From a practical perspective, teachers are provided with an innovative educational tool. The 3C model may be used not only in health education but in other subject as well. It is important to emphasize that the procedure described here is by no means fixed and may be modified and adapted to local circumstances.

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