

# MASTEROPPGAVE

## School-Cooperation Kenya – Norway: Friendship and Learning Through Social Media?

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## **Abstract**

The main objective of this thesis is to investigate to what extent the use of social media is a workable method to develop friendship and learning between Norwegian and Kenyan students involved in a school partnership. It is based on findings in two previous research projects; one investigating the use of Facebook as a pedagogical tool in intercultural communication (Pedersen 2012), the other a pilot study interviewing four teachers and school leaders about status quo, expectations and the way forward for the cooperation (Pedersen 2013). This time the scope of interviewees was expanded to include one school leader and one teacher from all 12 school partners to investigate whether the tentative conclusions from the pilot study were confirmed. In addition, a communication project investigating the use of email in communication between Kenyan and Norwegian students is included. The methods applied are quantitative survey research and qualitative action research; the main elements being questionnaires, interviews and observations. Results presented in this thesis indicate that the use of social media might be a workable method for some of the school partners, particularly the upper secondary schools. However, for other school partners, particularly the lower secondary schools and the primary schools, social media is not a workable method to promote friendship and learning at the present time.

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# 1. INTRODUCTION

## 1.1 Statement of topic

Over the last decades the globalization process has rocketed, and most of us take part in this global world on a daily basis (Lundahl, 2010, p. 71). Social websites, streamed media and online virtual worlds connect us across the globe, and the Internet provides us with a massive amount of information and new learning opportunities. This change is affecting educational policies, with the United Nations, the European Union and national governments calling for educational institutions to equip young people with skills, attitudes and knowledge to help develop their intercultural competence (Byram, 1997, pp. 34-38; Dypedahl, 2007, p. 5). In the very core of the Norwegian National Curriculum it is stated that: “Education should counteract prejudice and discrimination, and foster mutual respect and tolerance between groups with differing modes of life” (Norwegian Board of Education, n.d.).

In 2010 the Departments of Schools in Kisumu, Kenya, and Porsgrunn, Norway, agreed on cooperation with the theme *Friendship and learning through social media – yes we can!* as its nucleus. Four primary schools and five secondary schools were included in the partnership. The aim for this thesis is to investigate to what extent the use of social media is a workable method to develop friendship and learning between Kenyan and Norwegian students.

## 1.2 Background<sup>1</sup>

The School Cooperation Agreement (2010) between Kisumu and Porsgrunn is a continuation of a Friendship City Agreement between the two municipalities, signed in 2008. Five Norwegian schools are involved, two primary schools, two lower secondary schools and one upper secondary school<sup>2</sup>. From Kisumu, two primary schools and two secondary schools participate in the cooperation.

Kenyan primary schools consist of eight standards, 1-8, and Kenyan secondary schools consist of four forms, 1-4. Norwegian primary schools, on the other hand, consist of seven grades, 1-7, and Norwegian secondary schools are divided into (i) lower secondary,

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<sup>1</sup> The background information is gathered from official documents from Porsgrunn Municipality; the Application Friendship North/South Partnership Grant, signed October 24, 2011, and document 13/00592-1 from the Executive Committee meeting February 14, 2013.

<sup>2</sup> The Norwegian primary and lower secondary schools are run by Porsgrunn Municipality, and the Norwegian upper secondary school is run by Telemark County Municipality.

grades 8-10, and (ii) upper secondary, grades 1-3. In Norway, grades in primary/lower secondary school are age-specific, whereas in Kenya, standards/forms are knowledge-specific.

The schools and the partnerships are presented in the table below. Included in the table is also a student-to-computer ratio for each school.

*Table 1 Relationship between the Schools Involved in the Cooperation*

Kenyan Primary School A: Student-to-computer ratio: 0 to 1	Kenyan Primary School B: Student-to-computer ratio: 0 to 1	Kenyan Secondary School C: Student-to-computer ratio: 6,8 to 1		Kenyan Secondary School D: Student-to-computer ratio: 190 to 1
Norwegian Primary School E Student-to-computer ratio: 1,8 to 1	Norwegian Primary School F Student-to-computer ratio: 1 to 1	Norwegian Lower Secondary School G Student-to-computer ratio: 0,8 to 1	Norwegian Upper Secondary School H Student-to-computer ratio: 1 to 1	Norwegian Lower Secondary School I Student-to-computer ratio: 1,3 to 1

There are four Kenyan schools and five Norwegian schools involved in six partnerships, leaving a total of 12 partners; School A-School E, School B-School F, School C-School G, School C-School H, School D-School H and School D-School I (table 1). By May 2014, all the Norwegian schools involved in the cooperation had hosted a delegation of teachers and students from the partner school. The Kenyan secondary schools and the Norwegian upper secondary school have delegations visiting annually as a part of a Friendship North-South partnership grant. The two Norwegian lower secondary schools benefit from the annual visit from Kenya since they are partners with the same schools. So far there have only been teachers and school leaders from the Norwegian primary and lower secondary schools visiting Kenya, whereas all the Kenyan schools brought small groups of students in May 2014. The Kenyan students stayed with Norwegian students and their families.

### 1.3 Design of the study

Having been involved in the school cooperation from 2011, I have a keen interest in the development of a fruitful relationship for both students and teachers. In 2012 I investigated whether Facebook is an efficient communication channel between students from fairly different cultural backgrounds (Pedersen, 2012). Then in 2013, I interviewed two school leaders and two teachers, representing one Kenyan and one Norwegian school, in a



pilot study, to investigate the underlying expectations and challenges for the partnership (Pedersen, 2013). Based on the results from these two investigations, the idea for this thesis was formed; (i) to extend the scope for the survey by interviewing one school leader and one teacher from all the schools in the cooperation to confirm or refute the tentative conclusions from the pilot study, and (ii) to initiate a new communication project; an email project, involving a small group of students communicating through the social website *ePals*.

The data for this thesis is collected from the four research projects conducted 2012-2014. An overview of these projects is presented in table 2.

*Table 2* Overview Research Projects 2012-2014

Research	Year conducted	Method	Participants
“ICT in Language Learning: Facebook in Real-Life Communication” (Facebook project 2012)	2012	Questionnaires (Appendix 1) Observation of the process Interview with Kenyan teacher	47 students from Kenya/Norway, representing the Kenyan secondary school C and the Norwegian lower secondary school G (table 1)
Pilot: “ICT in Intercultural Communication” (Pilot 2013)	2013	Standardized open-ended interview (Appendix 2)	2 school leaders and 2 teachers from Kenya/Norway, representing the Kenyan secondary school C and the Norwegian lower secondary school G (table 1)
“ICT in Intercultural Communication” (Email project 2013)	2013	Questionnaires (Appendix 3) Observation of the process Interview with Kenyan teacher	64 students from Kenya/Norway, representing the Kenyan secondary school C and the Norwegian lower secondary school G (table 1)
“School Cooperation Kisumu-Porsgrunn” (Survey school leaders/teachers 2014)	2014	Questionnaires (Appendix 4)	20 school leaders and teachers from Kenya/Norway, representing all the schools in table 1.

As table 2 shows, questionnaires have been used in three of the four research projects, and a standardized open-ended interview in the fourth. The results presented in this thesis are based on the participants’ own perceptions of the cooperation in general, and on potential learning outcome from communication in particular. In addition, in the Facebook project 2012 and the Email project 2013, an interview with a Kenyan teacher and my own observation of the processes were included as well.

Yet another important observation in table 2 is that in all four studies, there have been participants from the secondary schools C and G. In the survey conducted in 2014, however,

representatives from all the partnerships represented in table 1 participated; school leaders and teachers specifically.

In all four research projects, the Norwegian participants answered the questionnaires/interviews in Norwegian to avoid problems from lack of English proficiency (McKay, 2006, pp. 55-56). The Kenyan participants, however, answered the questionnaires/interviews in English even though Swahili is their mother tongue. Based on the facts that (i) all the subjects at their school, apart from Swahili, are taught in English, (ii) grades/forms are knowledge based, meaning that the students have to pass examinations in English to proceed to higher classes, and (iii) all the participants attended secondary school, one could conclude that their English proficiency should be sufficient to answer the questionnaires in English.

A general aim for the school cooperation is to develop friendship and learning through social media. *Social media* is to be understood as: “forms of electronic communication (as Web sites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content” (Social media, n.d.). In this thesis, the use of the social websites *Facebook.com* and *ePals.com* will be discussed.

Facebook offers different ways to connect people, however in the Facebook project 2012, a closed group was used, meaning that (i) there were administrators, (ii) members had to be granted permission, and (iii) postings could only be viewed by members (Abram, 2012, pp.147-149). In the Email project 2013, ePals Global Community, a protected learning management platform where teachers monitor email exchanges between students was selected (Rivero, 2012; epals.com).

## **1.4 Research questions**

As mentioned above, this thesis will investigate the school cooperation between Kisumu and Porsgrunn in general and communication between involved participants in particular. The research questions in focus for this investigation are:

1. What is the status quo for the cooperation some four years after the signing of the agreement?
2. What are the different participants' expectations, considered challenges and thoughts about the way forward for the partnership?
3. To what extent is the use of social media a workable method to develop friendship and learning between Kenyan and Norwegian students?

## 1.5 Structure of thesis

Having now presented my research questions, I will first continue with a literary review in chapter two. Second, the methodology chapter will follow. Third, the results from the four research projects in table 2 will be presented in chapter four. In chapter five, the results from the projects will be discussed in light of relevant literature. My thesis will then end with a short conclusion in chapter six.

## 2. LITERARY REVIEW

### 2.1 ICT in education

The rapid changes in Information and Communication Technologies (ICT) influence the educational system by (i) providing complementary teaching material and access to instant information, and (ii) opening new channels for learning and communication through social websites and virtual worlds (Prensky, 2001, p. 1). Ertmer makes the distinction between *low tech* applications like word processing and presentation forms, and *high tech* varieties like social networking websites, discussion forums and synchronous chat (2005, p. 25). Even in countries where the foundations for the integration of ICT in the classroom are installed, research still shows that high tech level technology use is still low (Ertmer, 2005, p. 36; Blattner & Fiori, 2009, p. 17; Granath & Vannestål, 2008, p. 129).

With the arrival of digital media, media content for learning purposes was published online through the use of learning management systems, websites, virtual learning environments and podcasting (Rosell-Aguilar, 2013, p. 74). According to Jhuree, there is a call for change from a teacher-centered model in classroom instructions to a collaborative and constructivist one (2005, p. 471). Investigating the implementation of ICT in the classroom and teachers' pedagogical beliefs, however, Ertmer claims that regarding change in teachers' practice, it is "impossible to overestimate the influence of teachers' beliefs" (2005, p. 36), and his view is supported by other researchers (e.g. Hepp, Hinostroza, Laval & Rehbein, 2004). Therefore it is important to discuss the pedagogical implementation of technology in the classroom to ensure promotion of learning (e.g. Granath & Vannestål, 2008, p. 142; Svensson, 2008, p. 141, 198).

Ess warns against the ethnocentric belief that "the technologies, pedagogies and instructional design techniques of one's own culture are somehow 'universal'" and that such an assumption is "naïve and inevitable fatal to efforts to exploit ICTs for effective cross-cultural communication" (2009, p. 27). Hepp, Hinostroza, Laval and Rehbein, on the other

hand, argue that particularly developing countries experiencing an educational gap due to (i) lack of access to digital resources, and (ii) limited human capacity to take advantage of digital resources, can benefit from multi-faceted research in the field conducted in both developed and developing countries (2004, p. iv). That being said, Hepp et al. also warn against a “universal truth” in relation to applying ICT in education, and that the country’s “reality, priorities and long-term budgetary prospects and commitment” must be taken into consideration (2004, p. v). This view is supported by Jhurree who, when referring to research conducted in e.g. South Africa and Mauritius, claims that although technology, if properly integrated, might help change educational practices in developing countries, approaches must be realistic and feasible, possible for governments to fulfill (2005, p. 467, 471).

## **2.2 ICT in education in Kenya**

In 2009, Swarts and Wachira prepared a situational analysis about ICT in education in Kenya for the UN founded organization, The Global e-Schools and Communities Initiative (GeSCI) (2009). Below is a summary of some of the findings in the analysis, and a more extensive overview is presented in Appendix 5.

Official statements and documents show that the Kenyan government is aware of the potential of ICTs in human development and in the development of a knowledge-based economy (Swarts & Wachira, 2009, p. 2). However, a unified framework and strategy for the implementation of ICT in education is lacking, and generally, the approach is the computer lab model with ICT primarily used for skills training (Swarts & Wachira, 2009, pp. 4-5). Secondary and post-secondary levels of education have been prioritized for utilizing ICTs in education, whereas ICT deployment in primary schools is “almost negligible” (Swarts & Wachira, 2009, p. 3). Still, of more than 6,000 secondary schools, only about 1,300 have computers, 213 of these schools received the equipment from the Ministry of Education, whereas the rest from private and civil society organizations (Swarts & Wachira, 2009, p. 3). Yet, most secondary schools reported to use less than 40% of the available infrastructure and very few actually use ICT as an alternative method to deliver the curriculum (Swarts & Wachira, 2009, p. 3). The researchers found this to be attributed to (i) inadequate ICT equipment, (ii) lack of content, (iii) lack of guidance on how to best utilize the infrastructure, (iv) lack of curriculum support for ICTs use, and (v) lack of maintenance and technical support (Swarts & Wachira, 2009, p. 3).

Another challenge is that despite huge investments in ICT infrastructure and a massive increase in cell phone usage, Internet and broadband penetration levels remain low and ICT

infrastructure and electricity level, particularly in rural areas, is a constant challenge (Swarts & Wachira, 2009, p. 4). Among telecommunication services nationwide, the Internet has been among the least accessible, and in 2008 the Internet penetration rate was at 9% (Swarts & Wachira, 2009, p. 15).

### **2.3 ICT in education in Norway**

In the Norwegian National Curriculum, the Knowledge Promotion Plan, digital literacy is considered one of the five basic skills essential to learning in school, work and social life (Norwegian Directorate for Education and Training, 2012). According to the curriculum, education should enhance the students' digital competence within these subcategories: (i) search and process, (ii) produce, (iii) communicate, and (iv) digital judgment (Norwegian Directorate for Education and Training, 2012). This focus on digital competence is a continuation of previous action plans for incorporating information technology in education from the early 1990s (Søby, 2007, p. 135).

In 2013, a quantitative study about ICT in education in Norway, "Monitor skole 2013", was conducted for the Norwegian Center for ICT in Education, a public administrative body under the authority of the Norwegian Ministry of Education and Research (Egeberg, Guðmundsdóttir, Loftsgarde, Loi & Hatlevik, 2013). Students from 7<sup>th</sup> grade, 9<sup>th</sup> grade, Vg2 (grade 2 in upper secondary school), teachers and school leaders participated. Below is a summary of some of the findings in the study, and a more extensive overview is presented in Appendix 6.

The study shows variations in the students' digital competence, and an overall result is that the competence aims set forth in the curricula are not reached (Egeberg et al., 2013, p. 10). Procurement of computers and interactive whiteboards have been prioritized over (i) training in use, (ii) the development of digital content, and (iii) sharing of digital learning resources (Egeberg et al., 2013, p. 17). The study also shows variations between the teachers' digital competence, and that a greater portion use computers for preparations and follow-up work rather than in teaching (Egeberg et al., 2013, p. 17).

Generally, the older students use computers more frequently in all subjects; 45% of Vg2-students use computers in school more than 10 hours per week, 43,5% of 9<sup>th</sup> grade students use computers in school between 1-3 hours per week, and 45% of 7<sup>th</sup> grade students use computers in school less than 1 hour per week (Egeberg et al., 2013, p. 12). Google search is the resource most commonly used in connection with school work, and 7-10

% of the students use Facebook in connection to school work on a daily basis (Egeberg et al., 2013, p. 12, 14).

Privately, the use of social media and listening to music are the most common online activities among the students, and 95,4% of the 9<sup>th</sup> graders and 96,8% of Vg2 students have Facebook accounts (Egeberg et al., 2013, p. 14). However, the majority are passive users of Facebook; (i) 61,5% of the 9<sup>th</sup> graders and 76,8% of Vg2 students read others' updates on a daily basis, but only 9% and 5,5% update their own profiles, and (ii) 44,4% and 55,5% look at others' pictures daily, in contrast to only 3,7% and 2,1% posting their own pictures (Egeberg et al., 2013, p. 104). 1-3% of the students report digital bullying, with the proportion being higher among the 7<sup>th</sup> and 9<sup>th</sup> graders than among Vg2 students (Egeberg et al., 2013, p. 16).

## **2.4 ICT in intercultural communication**

The Internet opens a wide range of communication options, both within the class, but also outside the classroom setting; providing authentic texts and bringing intercultural communication into the classroom (Chen & Yang, 2014, p. 59). Communications are often categorized as either synchronous, like chat and Skype, or asynchronous, like email or Facebook postings (Vannestål, 2009, p.70). Numerous research projects have been carried out over the last decade investigating the value of online communication in education (e.g. Kim, Kim, Rueckert & Seo, 2013; Rosell-Aguilar, 2013; Polat, Mancilla & Mahalingappa, 2013; Hattem, 2014). In this context, however, the focus will be on research investigating the learning potential in intercultural communication; students communicating with peers in other countries through digital channels.

Alami, Bouachrine, Gunawardena and Jayatilleke conducted a preliminary study involving fifty-five adults in Morocco and fifty adults in Sri Lanka communicating through chat forums at Internet cafés and university computer laboratories (2011, p. 33). Here are some of the findings from the study: (i) in online learning communities expression of identity through introductions is important for relationship building, (ii) posting of photographs with introductions can lead to reduced anonymity important for creating a level playing field, (iii) building trust and relationships is crucial for the well-being of a learning community, (iv) awareness of gender differences in communication patterns is necessary, and (v) facilitators play an important role in community-building activities and in maintaining a safe learning environment, and should therefore be frequently present online (Alami, Bouachrine, Guawardena & Jayatilleke, 2011, p. 51).

Ware focused on “missed” communication and possible tensions in online communication in a project involving 12 advanced-level students of English in Germany and 9 advanced-level students of German from the US communicating through Blackboard, a web-based interface that allows for asynchronous communication (2005, p. 64, 67). Three main contextual tensions are discussed (i) differences in expectations and norms, (ii) social and institutional factors, and (iii) logistical constraints (Ware, 2005, pp. 70-76). According to Ware, teachers must be prepared for unanticipated tensions to develop in online communication, and here is a selection of recommendations based on the research: (i) implementation of carefully constructed tasks, (ii) discussions of episodes of successful and unsuccessful communication with the students, (iii) discussions of usage norms and expectations with their online peers, and (iv) provision of basic discourse analysis tools (Ware, 2005, pp. 77-79).

Thorne discusses how intercultural communication, mediated by Internet communication tools, creates “compelling, problematic, and surprising conditions” for language learning (2003, p. 38). An email project, carried out in 1997, between American and French students proved that the social material conditions were “dramatically at odds with one another”, and the researcher claims that cross-cultural communication also needs to take into account cross-class and cross-social material condition differences (Thorne, 2003, p. 46). Yet another email project, conducted in 2002, involving American and French students ages 18-24, revealed several challenges of using email in intercultural communication; (i) uneven numbers between the two groups, (ii) late replies, (iii) different course requirements in connection to the email-exchange, (iv) monologues rather than dialogic interaction, and (v) differences in previous experiences and expectations (Thorne, 2003, pp. 47-57). However, in one of the case studies in the survey, Thorne reports of a positive language learning outcome for a participant who continued communication with her partner privately on chat (Thorne, 2003, pp. 47-54). All in all, Thorne found that none of the American participants used email to communicate with friends, and that in the intercultural communication process, email was considered a constraining variable for the American students (Thorne, 2003, p. 56).

Mahfouz, on the other hand, had different experiences with email exchanges between Jordanian students and native English keypals (2010, p. 404). Despite more contemporary modalities for communication, asynchronous email communication proved preferable for participants with limited access to digital equipment and Internet connection (Mahfouz, 2010, p. 404). The study also revealed a generally positive attitude towards using email exchanges with native English speaking peers among the Jordanian participants (Mahfouz, 2010, p. 404).

Liaw, however, in her study of email exchanges, is concerned with the connection between culture and language learning, and claims that the first is a central part of the latter (2006, p. 1). Focusing on encounters between the learner's culture and that of the other, the research design of the project attempted to foster Taiwanese EFL students' intercultural competence via English development (Liaw, 2006, p. 4). The Taiwanese students communicated with peers from an American university through email, and one of the reported success factors was that the Taiwanese read articles about their own culture in the target language before discussing the content with their e-pals (Liaw, 2006, p. 5). "[...] the students took a journey of discovery and reflection where their understanding of the behavior, beliefs, concepts, ways of interacting in their own and the other culture was exchanged, discussed, negotiated, and even refined" (Liaw, 2006, p. 9).

## **2.5 Significance**

The amount of literature investigating the relationship between learning and ICT is impressive; different facets of this relationship are under constant research (Hepp et al., 2004, p. iv). Little research has so far been done on implementation of social media in school partnerships between Norway and Kenya, however, and in that respect, this thesis may contribute to existing literature. Three limitations to this thesis must be acknowledged (i) the numbers of participants in the investigations vary, but are generally low, from 4-64 participants, (ii) the participants are not randomly chosen, and (iii) there are limitations connected to both the action research method and the survey research method applied. Consequently, the results are limited regarding generalizability to other school partnerships or communication projects (McKay, 2006, p. 12; Loewen & Philp, 2012, pp. 63-64). Despite this, however, the research conducted will provide some tentative conclusions that will be useful for teachers, school leaders and school administrators that are interested in similar partnerships.



### **3. METHODOLOGY**

In this chapter, the material and the methods used in the four research projects will be presented in separate subchapters. However, each subchapter will start with a documentation of the process.

#### **3.1 Facebook project 2012**

##### **3.1.1 Documentation of the process**

The aim of this project was to assess if Facebook is a useful pedagogical tool in communication between students from quite different cultural backgrounds (Pedersen, 2012), and in this section I will give a brief overview of the process. Later, in chapter 5, observed advantages and challenges will be included in the discussion.

The principal at the Norwegian school approved the project, and the outline was discussed with a Kenyan teacher. Deciding that this would be an interesting project for the Kenyan students as well, she agreed to take responsibility for the practical aspects in Kenya.

The project was estimated to last for a four-week period in the spring of 2012; the students should write comments in a closed Facebook group once a week, discussing pre-planned topics. The Facebook group had been established prior to this project, in October 2011, and there were 215 Kenyan and Norwegian members at the time. The purpose of the group was to enhance communication between the students and the staff at the two partner schools, and all the students were encouraged to join. Members were free to post comments and upload pictures; however, despite the high number of participants, activity in the group had been relatively low prior to the project. The members were mainly students, but also a few teachers and school leaders had joined. The closed group was administrated by Kenyan and Norwegian teachers who monitored communication and accepted members into the group (Abram, 2012, pp.147-149). An already established, closed Facebook group was used for the project for different reasons; (i) several of the students were already members, and therefore somewhat familiar with the setting, (ii) both the Kenyan teacher and I were administrators of the group, and (iii) being a closed group, it provided a safe learning environment where the teachers could take an active part when needed (e.g. Alami et al., 2011, p. 51).

Tornberg (2009) addresses the value of more learner-centered activities contra teacher-centered activities to promote communication, and following her recommendation, the first step was to involve the two groups of students in determining the topics for discussion. Both groups made suggestions, and then two from each group were selected, leaving a total of four

topics, one per week. The chosen topics were (i) “the experiences of teenagers in a mixed boarding school versus the experiences of teenagers in a mixed regular school”, (ii) “the joy of being a Kenyan/Norwegian”, (iii) “how the Internet and social websites affect your day to day life”, and (iv) “your concern about, or interest in, environmental issues and pollution” (Pedersen, 2012).

The next step was to develop a questionnaire (Appendix 1) to map the participants’ (i) background information, (ii) Internet habits in general, and (iii) attitudes towards Facebook, both privately and as a communication tool in the classroom. The plan was that the students should answer the questionnaire once at the beginning of the project, and once at the end. Answering the questionnaires electronically proved challenging for the Kenyan participants, therefore paper copies were sent by mail. The Kenyan group consisted of 24 students answering the 1<sup>st</sup> questionnaire and 28 students answering the 2<sup>nd</sup>, whereas 23 Norwegian students answered the 1<sup>st</sup> questionnaire and 22 answered the 2<sup>nd</sup>, the discrepancy due to one student changing class during the project.

There were a few challenges carrying out the project, firstly, the discussions were delayed; partly because of the post handling, partly because the schools operated with different schedules for examinations and holidays. Secondly, only seven of the 24 Kenyan participants participated in the discussions on Facebook and not all of them every week, with the low being two. Since the purpose of the 2<sup>nd</sup> questionnaire was to measure any changes in the students’ perceptions due to the discussions, only the ones responding that they had been active on the Internet more than once during the last month were included in the results of the 2<sup>nd</sup> questionnaire, totaling 17 Kenyan and 22 Norwegian students. Thirdly, it proved difficult to engage two age-appropriate groups of students. I wanted to involve my own class of 13-14 year olds since I already had an established relationship with them, and I could integrate the project in my own teaching. Including a group the same age-level at the Kenyan school, however, was challenging due to (i) lack of Facebook profiles among that age group, and (ii) limited access to computers to help the students establish such profiles within the limited time-frame of the project. Consequently, the majority of the Kenyan participants were 17-18 year olds.

### **3.1.2 Material**

The primary material in the Facebook project was an anonymous questionnaire (Appendix 1) answered by the students, once at the beginning of the project and once at the end, to measure changes in the participants’ attitudes and perceptions of learning. The

questionnaire consisted of four sets of questions: (i) six general questions on personal status, (ii) four alternative-answer questions on Facebook habits, (iii) seven Likert-scale questions on language use, and (iv) three open-ended questions on various personal reactions (Pedersen, 2012). However, only the answers from the students reporting activity on the Internet during the last month were included in the results from the second questionnaire, and only the Norwegian responses to the open-ended questions in the 2<sup>nd</sup> questionnaire were included, due to the low number of Kenyan students participating in the discussions on Facebook. In addition to the questionnaires, the material also included (i) an interview with the Kenyan teacher to add information about the cultural context affecting the Kenyan participants, and (ii) my own observation of the process, both of the preparation phase and the execution phase.

As mentioned above, 47 Kenyan and Norwegian students participated in the Facebook project and table 3 shows an overview of the participants according to nationality, age and gender. Participants answering the 2<sup>nd</sup> questionnaire are listed in red.

*Table 3* Participants in the Project According to Nationality, Age and Gender

Age:	Kenyan			Norwegian		
	Female	Male		Female	Male	
13-14	0% (0) 0% (0)	0% (0) 0% (0)	0% (0) 0% (0)	52% (12) 50% (11)	48% (11) 50% (11)	100% (23) 100% (22)
15-16	13% (3) 0% (0)	8% (2) 0% (0)	21% (0) 0% (0)	0% (0) 0% (0)	0% (0) 0% (0)	0% (0) 0% (0)
17-18	29% (7) 35% (6)	42% (10) 41% (7)	71% (17) 76% (13)	0% (0) 0% (0)	0% (0) 0% (0)	0% (0) 0% (0)
19	4% (1) 6% (1)	4% (1) 18% (3)	8% (2) 24% (4)	0% (0) 0% (0)	0% (0) 0% (0)	0% (0) 0% (0)
Total:	46% (11) 41% (7)	54% (13) 59% (10)	100% (24) 100% (17)	52% (12) 50% (11)	48% (11) 50% (11)	100% (23) 100% (22)

Table 3 shows that the Kenyan participants are older than the Norwegians, with an age-range from 15-19, and the majority being 17-18 year old. The Norwegians, on the other hand, were all 13-14 year old. Participation is fairly evenly distributed between the genders; however, table 3 displays a decline in the percentage of Kenyan female participation from the first to the second questionnaire, from 46% to 41%, indicating that fewer females than males had been active on the Internet during the last month. In addition, table 3 reveals that only 17-19 year old Kenyans had been active online in the same period.

### 3.1.3 Method

As previously mentioned, the aim of this project was to assess if Facebook is a useful pedagogical tool in communication between students from quite different cultural backgrounds, and the methodology used consisted of qualitative action research; my own

observations and an interview with the Kenyan teacher responsible for overseeing the project in Kenya, and quantitative survey research; 47 students answering questionnaires.

The interview form used with the Kenyan teacher was an informal conversational interview, meaning that (i) she was interviewed on several occasions, and (ii) topics were dealt with as they arose in the situation, with the main purpose of gaining insight into the cultural context of the Kenyan participants, as well as documentation of the process in Kenya (McKay, 2006, p. 51). Being both a participant in the research and the researcher, and the nature of action research being situation-specific, the findings of the action research are limited regarding generalizability (Loewen & Philp, 2012, pp. 63-64).

The two classes involved in the Facebook project were not randomly chosen, exposing their answers to other variables as well, and in turn leaving a low degree of internal validity (McKay, 2006, p. 12). Using the same questionnaire twice, though, strengthened the reliability of the results (McKay, 2006, p. 41). The alternative-answer questions can also be said to have a high degree of inter-rater reliability, since it is likely that someone else analyzing the answers will arrive at the same conclusions (McKay, 2006, p.12). The open-ended questions, however, have a low degree of internal reliability because of my interpretation and categorization of the results. Although the exact wording in the students' responses differed, they were categorized into quite general areas, like "learn about different cultures" or "bullying". Due to the low number of participants, it is unlikely that another researcher would come to the same conclusions if the project had been carried out with different participants, therefore leaving this study with a low degree of external reliability (McKay, 2006, p. 12). Despite the limitations of both the action research and the survey research presented above, the results, discussed in chapter 5, will still provide teachers/school leaders/researchers interested in the same topic useful insights and hints for further studies.

## **3.2 Pilot 2013**

### **3.2.1 Documentation of the process**

The aim of this research was to investigate the underlying expectations and challenges for the school cooperation some three years into the partnership (Pedersen, 2013). Since this was a pilot, only two schools were involved in the study; one school leader and one teacher from each school, leaving a total of four interviewees. The pilot was approved by the school leaders at both schools and presented to the interviewees who agreed to participate.

The one-on-one interviews were conducted during a school visit at the Norwegian school. The participants answered identical questions orally, and their answers were recorded by note-taking. The data gathered were then analyzed in a cross-case analysis (McKay, 2006, p. 57), and results from the Facebook project 2012 were included in the discussion (Pedersen, 2013).

### 3.2.2 Material

As mentioned above, two school leaders and two teachers participated in the pilot. An overview of the participants and their background information is presented in table 4.

*Table 4* Background Information on the Interviewees

Current position	Experiences with the cooperation
Kenyan principal	School visit Norway May 2013
Kenyan teacher	School visit Norway 2011, 2013 Received Norwegian visitors 2010, 2011 Administrator of Facebook group, involved in Facebook project 2012
Norwegian principal	School visit Kenya 2010 Received Kenyan visitors 2011, 2013
Norwegian teacher	Received Kenyan visitors May 2013

Table 4 shows that two of the participants had been involved in the cooperation from the beginning in 2010, the Norwegian principal and the Kenyan teacher respectively, and that the other two participants, the Kenyan principal and the Norwegian teacher, had only recently been involved. The table also shows that all but the Norwegian teacher had visited the partner school.

### 3.2.3 Method

The aim for this pilot was to investigate underlying expectations and challenges connected to the school cooperation by interviewing one school leader and one teacher from two partner schools (Pedersen, 2013). A standardized, open-ended interview (Appendix 2) was used in this research, and the interviewees answered identical questions (McKay, 2006, p. 52). To underline the particular aspects of the study, the analysis of the data, recorded by note-taking, was a cross-case analysis arranging the answers according to specific topics (McKay, 2006, pp. 55-56).

The questions in the interview protocol were formulated to reflect the aim of the pilot in an attempt to maintain construct validity (McKay, 2006, p. 12). The interview consisted of three open-ended questions on personal status and seven open-ended questions about

expectations and challenges in connection to the cooperation. Due to the low number of selected participants, only four, neither external nor internal validity was maintained in the research (McKay, 2006, p. 12). The data, based on open-ended questions and note-taking, also have a low degree of internal and external reliability due to my subjective interpretation and categorization of the results (McKay, 2006, p. 12). However, the interviews still provided some insight into the general aims of the study, and gave guidelines for the Email project 2013, and for the Survey school leaders/teachers 2014.

### **3.3 Email project 2013**

#### **3.3.1 Documentation of the process**

Firstly, the outline for the project was cleared with the Norwegian principal and a Kenyan teacher. Based on results from the Facebook project 2012, and the Pilot 2013, the aim for the Email project was to engage two small, age-appropriate groups of students in a communication project involving email exchanges through the social website ePals. The Norwegian participants in the Pilot 2013 expressed a wish to involve the elective program “Intercultural Cooperation”, and therefore this particular class was selected, consisting of fifteen 13-14 year olds. The Kenyan teacher agreed to engage an age-appropriate group and to manage the research in Kenya. The questionnaires were sent to Kenya in September 2013, and the plan was to initiate the email project shortly after. However, due to a tragic, unforeseen incident at the Kenyan school, the project was delayed with several months.

The Kenyan teacher was successful in engaging an age-appropriate group of students, however, communication through email proved too difficult because of lack of email addresses and access to technical equipment. Therefore the Kenyan students wrote letters by hand, brought back to Norway by a Norwegian delegation in January 2014. So instead of communicating through the social website ePals, the students communicated by letters; the Norwegians’ letters were written on computers and sent as attachments from my email account to the Kenyan teacher’s email, who then in turn printed them out for the students. The costs of sending letters from Kenya are high, and the second batch of Kenyan letters was brought to Norway with the delegation visiting in May 2014. However, the last letters from Kenya, July 2014, were scanned and attached to an email addressed to me.

The Kenyan questionnaires were returned to me in January 2014; however, the background information of the respondents did not match the students involved in the communication project, and instead of 15 respondents, 33 Kenyans, mostly older students, had answered the questionnaire. By then it was clear that there would not be an ePals project

that school year, and therefore including a second questionnaire had no value for research purposes. Instead the original group of 15 Norwegian 8<sup>th</sup> graders was expanded to include a group of 16 9<sup>th</sup> graders, to match the Kenyan numbers.

Parts of the results from the questionnaires are presented in chapter 4, and are included in the discussion in chapter 5. However, questions measuring changes in the students' own perceptions of learning and friendship-building through email exchanges are not included, simply because the ePals-project was not conducted according to plan.

### 3.3.2 Material

The same approach as used in the Facebook project 2012 was initially intended for the Email project 2013; to measure changes in attitudes toward communication online and perceptions of learning by using the same questionnaire twice, once at the beginning of the project, and once at the end. As mentioned above, however, the email project was not successful and therefore a second questionnaire was never included in the research. Despite unsuccessful communication through email, the students' responses to the first questionnaire will be included to add insight into the students' (i) social media habits, and (ii) attitudes towards the Internet; both inside the classroom and privately.

64 Kenyan and Norwegian students participated in this study. All the Kenyans lived at the boarding school during school-terms, and all the Norwegians lived at home. An overview of the participants in the research is presented in table 5.

*Table 5* Participants in the Project According to Nationality, Age and Gender

Age:	Kenyan			Norwegian		
	Female	Male		Female	Male	
13-14	0% (0)	6% (2)	6% (2)	26% (8)	45% (14)	71% (22)
15-16	9% (3)	15% (5)	24% (8)	29% (9)	0% (0)	29% (9)
17-18	9% (3)	58% (19)	67% (22)	0% (0)	0% (0)	0% (0)
19	0% (0)	3% (1)	3% (1)	0% (0)	0% (0)	0% (0)
Total:	18% (6)	82% (27)	100% (33)	55% (17)	45% (14)	100% (31)

58% of the Kenyan respondents are 17-18 year-old males, whereas 71% of the Norwegians are aged 13-14 (table 5). Participation among the Norwegians is more evenly distributed between the genders, with 55% female and 45% male participants, in contrast, only 18% of the Kenyans are female (table 5).

### 3.3.3 Method

The main aim of this project was to examine the value of communication through the social website ePals by measuring the students' attitudes to and perceptions of learning. The

original plan was that the participants should answer the same questionnaire twice, and the survey was designed to gather data on the participants' Internet habits and their attitudes to various online communication means.

Part of the research was action research, meaning that (i) I was both the teacher and the researcher, (ii) the research was conducted in my own classroom, and (iii) informal conversational interviews were conducted with the Kenyan teacher about cultural context affecting the Kenyan participants (McKay, 2006, p. 16; Loewen & Philp, 2012, pp. 63-64). Again, as in the Facebook project 2012; the nature of action research makes the results limited regarding generalizability (Loewen & Philp, 2012, p. 64).

The questionnaire (Appendix 3) consisted of (i) an introductory explanation of the research, (ii) four alternative-answer questions on personal background, (iii) nine alternative-answer questions on Internet habits and attitudes to different communication means, (iv) six Likert-scale questions and six open-ended questions to measure attitudes to and perceptions of learning; through online communication in the classroom in general, and email in particular. However, as mentioned above, the project was not completed according to plan, and therefore only the first questionnaire was implemented.

The questionnaire was designed to measure the general aims of the study, attempting to maintain construct validity (McKay, 2006, p.12). However, the numbers of selected participants are relatively low, 64, and therefore neither external nor internal validity is maintained in this study (McKay, 2006, p. 12). The close-ended questions in the questionnaire, however, have a high degree of internal reliability, but external reliability is not maintained (McKay, 2006, p. 12). The open-ended questions have a low degree of inter-rater reliability due to my categorization and subjective interpretation of the responses (McKay, 2006, p. 12). For example, responses like "One can learn something about their culture and how they live" and "It helps one to know how life is in other places" were both categorized as "learn about different cultures". Despite the limitations, however, the study will still provide tentative conclusions for further research.

### **3.4 Survey school leaders/teachers 2014**

#### **3.4.1 Documentation of the process**

To investigate status quo, expectations, challenges and the way forward, the scope from the Pilot 2013 was expanded to include one school leader and one teacher from each of the 12 school partners presented in table 1, totaling 24 participants. For this survey, the



interview protocol from the pilot was used as a template. Due to the geographic distance between the interviewees, personal interviews were challenging, and the interview protocol was developed into a questionnaire. One Norwegian school leader tested a draft of the questionnaire, and through feedback it was made more user-friendly. An explanation of purpose, a reassurance of anonymity and the questionnaire were sent to each of the participants by email.

As mentioned above, the survey was initially intended to include 24 participants; due to limited activity between some of the schools in the cooperation, however, it proved difficult to find one school leader and one teacher representing each partnership. However, contact information for 20 school leaders and teachers was obtained, and they all agreed to the terms. It is important to note, however, that all the 12 school partners are represented in the survey, eight partner schools are represented with both a school leader and a teacher, and four partner schools are represented by either a school leader or a teacher. All but two of the Norwegian school leaders and teachers answered the questionnaire before a Kenyan delegation visited Norway in May 2014, whereas six of the Kenyans answered the questionnaire during, or shortly after the visit. Two school leaders and two teachers answered the questionnaire twice, since the same school leader/teacher is involved in two partnerships. In addition, being involved in the cooperation, I was one of the participants in the survey, answering the questionnaire myself.

### **3.4.2 Material**

As previously mentioned, an anonymous questionnaire was used to examine status quo, expectations, challenges and the way forward for the school cooperation (Appendix 4). Apart from an introductory explanation of the research, the questionnaire consisted of (i) two close-ended questions on personal status, (ii) five alternative-answer questions to examine status quo, (iii) five Likert-scale questions about status quo, (iv) three open-ended questions concerning aims and expectations, and finally (v) two open-ended questions regarding the way forward (McKay, 2006, pp. 37-38).

20 Kenyan and Norwegian school leaders and teachers participated in the survey. An overview of the participants is presented in table 6.

*Table 6* Participants According to Occupation and Length of Involvement in the Cooperation

Period of involvement	Kenyan			Norwegian		
	School leader	Teacher		School leader	Teacher	
More than 3 years	50% (4)	38% (3)	88% (7)	25% (3)	25% (3)	50% (6)
1-3 years	0% (0)	12% (1)	12% (1)	8% (1)	17% (2)	25% (3)
Less than 1 year	0% (0)	0% (0)	0% (0)	17% (2)	8% (1)	25% (3)
Total:	50% (4)	50% (4)	100% (8)	50% (6)	50% (6)	100% (12)

As seen in table 6, there have been several personnel changes throughout the cooperation, particularly among the Norwegian school leaders and teachers. Only 50% of the Norwegian participants in the survey have been involved in the partnership for more than three years, as compared to 88% of the Kenyans. 25% of the Norwegians have been involved less than one year, whereas all the Kenyans have been involved at least one year.

### 3.4.3 Method

The method used for this study was quantitative survey research, and the results are based on the participants' answers in the questionnaire. Concerning construct validity, the questionnaire was tested on one of the participants, and changed after recommendations, to help reflect the aims of the research (McKay, 2006, p. 12). Due to few, selected participants though, neither external nor internal validity is maintained in the study (McKay, 2006, p. 12). However, the alternative-answer questions and the Likert-scale questions have a high degree of internal reliability, meaning that another researcher analyzing the same data will most likely arrive at the same conclusions (McKay, 2006, p. 12).

In contrast, the open-ended questions have a low degree of internal reliability due to the categorization and subjective interpretation into fairly general categories, even though the responses differed considerably at times (McKay, 2006, p. 12). For example, responses like (i) "learn about the every-day life of young people growing up in another country", and (ii) "to expose pupils of the two schools to an understanding of the larger society beyond their environment" were both categorized as "intercultural awareness" as a desirable aim for the students involved in the cooperation. In addition, external reliability is low since the chances of another researcher undertaking a similar study reaching the same conclusions are slight (McKay, 2006, p. 13). However, the survey will provide insight into these specific school leaders' and teachers' experiences with and attitudes towards the school cooperation in general, and to communication in particular.

## 4. RESULTS

In this chapter, the results from the four research projects will be presented: first, a summary of the results in the Facebook project 2012, second, a summary of the findings in the Pilot study 2013, third, results from the Email project 2013, and finally, results from the Survey school leaders/teachers 2014.

### 4.1 Facebook project 2012

The project “ICT in Language Learning: Facebook in Real-Life Communication” was conducted in 2012, and the aims were to investigate (i) the pedagogical value of Facebook as a motivating factor in language learning and as an efficient means of communication between students from quite different cultural backgrounds, and (ii) whether real-life communication enhances the student’s intercultural awareness (Pedersen, 2012). 47 Kenyan and Norwegian students participated in the project. As mentioned above, the methods used were (i) qualitative action research; my observations and informal conversational interviews with the Kenyan teacher, and (ii) quantitative survey research; a pre- and post-questionnaire answered by the participants. The main findings are presented below.

Results based on the qualitative action research:

- There was a great discrepancy concerning technological equipment available for the two groups of students. The Kenyans had limited access to a computer lab with 20 computers and they were not allowed to bring their cellphones to the boarding school, where a majority of the participants lived during school terms. The Norwegians, on the other hand, had their own computer at school, most of them had access to a computer at home, and they were free to bring their cellphones to school.
- The organization of the school day is quite different in Kenya and Norway. In Kenya, school starts at 5am, and except for a few breaks, runs until 9.30pm. In Norway, however, school starts at 8.30am and ends at 2pm, leaving the Norwegians with significantly more spare time than the Kenyans.
- It proved difficult to involve Kenyan 13-14 year olds in the project since few of them had a profile on Facebook, instead the Kenyans ranged from 15-19 years old.
- Despite the fact that this was a pre-planned project, few Kenyans posted comments during the four weeks of discussions, with the high being seven and the low being two.

- Initially the students were encouraged to become friends outside the closed Facebook group as well, but due to a few unfortunate incidents, communication was restricted to the Facebook group.
- Some of the Norwegian students appeared hesitant and insecure writing for a larger audience in English, assumedly since Facebook operates with real identities.
- The teacher played an important part assisting weaker students with their publications, and ensuring a safe learning environment.
- Some of the comments written by the Kenyans were difficult to understand for the Norwegian participants because some of them used “Sheng” slang, which is composed of elements from English and Swahili.
- The topics for discussion did not engage the students significantly, even though they had been active in the selection of topics.
- Since all the participants could read all the comments, communication was less vulnerable to low participation rate; even the week when only two Kenyans responded, all the Norwegians still received a response.
- In further communication projects, it might be profitable to provide the Norwegian students with reading material about their own culture in the target language.

Results based on the quantitative survey research:

- In general, the Norwegian students established a Facebook profile at a younger age than the Kenyans.
- Most of the Kenyan participants accessed Facebook through cellphones.
- The Norwegian participants mainly used Facebook to communicate with “real” friends in Norwegian; mostly to plan activities and chat.
- The study showed tendencies that the participants perceived the use of Facebook for discussions in a class-activity as more tedious than their normal activities on Facebook.

(Pedersen, 2012)

## **4.2 Pilot 2013**

As previously mentioned, two school leaders and two teachers were interviewed in 2013 in a pilot to investigate some of the underlying expectations and challenges of the school cooperation. The interview protocol used and the results from the pilot helped shape the

Email project 2013 and the Survey school leaders/teachers 2014, and an overview of the main results is presented below.

Results from the pilot:

- The four participants were unanimous in their wish to focus interaction on groups of students to enhance communication. The Norwegians viewed the new elective program “International Cooperation” as a good starting point.
- The interviewees also expressed a wish to expand online communication from the existing Facebook group to also include email and Skype.
- The learning aspect of the partnership was in focus, and not only means of communication, but also the content in the discussions need attention.
- There is a great discrepancy between the technological equipment at the two schools, and the Kenyan principal expressed the need for more equipment to ensure online communication.
- Despite limited activity in the Facebook group, the participants were still positive to continue with the group.
- Experiences so far show the cooperation’s vulnerability to personnel changes, and the interviewees expressed the need to (i) involve more teachers, and (ii) enhance the relationship between those involved.
- A desirable aim for the teachers was to continue with, and expand the scope of, school visits. So far only students from the Kenyan school have been able to visit the Norwegian school, and the teachers would like for Norwegian students to visit the Kenyan school as well.
- The participants wanted to expand the cooperation to include pedagogical discussions and the exchange of teaching ideas.

(Pedersen, 2013)

### **4.3 Email project 2013**

Based on results from the Facebook project 2012 and the Pilot 2013, an email project was planned for 2013, involving 64 Kenyan and Norwegian students. As mentioned above, the methods used were (i) qualitative action research; my observations and informal conversational interviews with the Kenyan teacher, and (ii) quantitative survey research; a questionnaire answered by the participants. However, not all the participants answered all the questions. The answers are presented below.

### 4.3.1 The participants' Internet habits

To find out more about the participants' Internet use, they were asked seven alternative-answer questions. Their responses are presented in tables 7-17.

First, they were asked which language they usually use to communicate on the Internet. The results are displayed in table 7.

*Table 7 Language Used to Communicate on the Internet*

	Mother tongue	English	
Kenyan	0% (0)	100% (32)	100% (32)
Norwegian	69% (20)	31% (9)	100% (29)

Table 7 shows that all the Kenyan respondents use English to communicate on the Internet, whereas only 31% of the Norwegians gave the same reply. A majority, 69%, of the Norwegians responded that they use "their mother tongue" when communicating online.

Second, the participants were asked how they normally get access to the Internet, and they were given three alternatives; cellphone, computer at home and computer at school. They were told to rank the alternatives according to frequency of use, with 1 being the most frequent and 3 the least frequent. If they never used the alternative, they were asked to mark the alternative with an "N". The results are presented in tables 8 and 9.

*Table 8 Access to the Internet*

Kenyan responses					
Alternative	1	2	3	Never	
Cellphone	80% (20)	16% (4)	4% (1)	0% (0)	100% (25)
Computer at home	20% (5)	44% (11)	16% (4)	20% (5)	100% (25)
Computer at school	0% (0)	32% (8)	48% (12)	20% (5)	100% (25)

*Table 9 Access to the Internet*

Norwegian responses					
Alternative	1	2	3	Never	
Cellphone	77% (23)	17% (5)	3% (1)	3% (1)	100% (30)
Computer at home	20% (6)	63% (19)	17% (5)	0% (0)	100% (30)
Computer at school	3% (1)	17% (5)	80% (24)	0% (0)	100% (0)

80 % of the Kenyans listed "cellphone" as the most frequent alternative to get access to the Internet (table 8); a result that is quite consistent with their Norwegian peers, where 77% listed the same alternative (table 9). Only one Norwegian never accessed the Internet through a cellphone, and 20% of the Kenyans never used a computer at home or a computer at school to go online.

Third, in order to find out more about the students' media habits, they were given a list of various media and asked to rank the alternatives according to frequency of use. The students were asked to rank the alternatives from 1-6, with 1 being the most frequent and 6

the least frequent. If they never used the media, they were asked to mark the alternative with an ‘N’.

*Table 10 Media Use*

Media	Kenyan responses							
	1	2	3	4	5	6	Never	
Facebook	92% (21)	4% (1)	4% (1)	0% (0)	0% (0)	0% (0)	0% (0)	100% (23)
Email	0% (0)	58% (13)	30% (7)	4% (1)	0% (0)	4% (1)	4% (1)	100% (23)
Skype	4% (1)	4% (1)	22% (5)	31% (7)	4% (1)	0% (0)	35% (8)	100% (23)
Twitter	4% (1)	22% (5)	13% (3)	18% (4)	4% (1)	0% (0)	39% (9)	100% (23)
Instagram	0% (0)	8% (2)	0% (0)	0% (0)	18% (4)	4% (1)	70% (16)	100% (23)
Blogs	0% (0)	4% (1)	0% (0)	4% (1)	13% (3)	13% (3)	66% (15)	100% (23)

*Table 11 Media Use*

Media	Norwegian responses							
	1	2	3	4	5	6	Never	
Facebook	70% (19)	22% (6)	4% (1)	0% (0)	0% (0)	0% (0)	4% (1)	100% (27)
Email	4% (1)	0% (0)	26% (7)	33% (9)	19% (5)	4% (1)	14% (4)	100% (27)
Skype	14% (4)	37% (10)	19% (5)	14% (4)	8% (2)	8% (2)	0% (0)	100% (27)
Twitter	0% (0)	7% (2)	11% (3)	26% (7)	19% (5)	0% (0)	37% (10)	100% (27)
Instagram	11% (3)	33% (9)	26% (7)	8% (2)	8% (2)	0% (0)	14% (4)	100% (27)
Blogs	0% (0)	0% (0)	11% (3)	4% (1)	19% (5)	11% (3)	55% (15)	100% (27)

Facebook is clearly the most frequently used medium from the list presented to the students, with 92% of the Kenyans (table 10) and 70% of the Norwegians (table 11) identifying this alternative as their first choice. In addition, apart from one Norwegian respondent, all the participants responded that they used Facebook, but with varying degree of frequency.

Tables 10 and 11 also show concurrent results for the two groups; 39% of the Kenyans and 37% of the Norwegians responded that they never used Twitter, and 66% of the Kenyans and 55% of the Norwegians never used blogs. However, regarding Instagram, there was a discrepancy in their responses; 70% of the Kenyans responded that they never used the medium as opposed to only 15% of the Norwegians.

Fourth, the participants were asked how often they normally log on to the Internet in general, and during school hours in particular. Their responses are reported in tables 12 and 13.

*Table 12 Internet Usage*

	Several times a day	Once a day	2-3 times a week	Once a week	Once a month	Never	
Kenyan	59% (19)	9% (3)	6% (2)	13% (4)	13% (4)	0% (0)	100% (32)
Norwegian	94% (29)	3% (1)	0% (0)	3% (1)	0% (0)	0% (0)	100% (31)

*Table 13 Internet Usage during School Hours*

	Several times a day	Once a day	2-3 times a week	Once a week	Once a month	Never	
Kenyan	6% (2)	6% (2)	6% (2)	22% (7)	22% (7)	38% (12)	100% (32)
Norwegian	60% (18)	30% (9)	3% (1)	0% (0)	0% (0)	7% (2)	100% (30)

Table 13 shows that 93% of the Norwegians log on to the Internet during school hours. One would expect this number to be 100% since the learning platform ClassFronter is used on a daily basis. In contrast, however, only 12% of the Kenyans responded that they log on to the Internet during school hours at least once a day and a majority of the Kenyan students, 60%, log on once a month or never.

Fifth, the participants were asked how often they normally log onto Facebook. Their answers are displayed in table 14.

*Table 14 Participants Facebook Habits*

	Several times a day	Once a day	2-3 times a week	Once a week	Once a month	Never	
Kenyan	50% (16)	13% (4)	19% (6)	9% (3)	9% (3)	0% (0)	100% (32)
Norwegian	71% (22)	20% (6)	3% (1)	0% (0)	0% (0)	6% (2)	100% (31)

Table 14 shows that the percentage of the Norwegian respondents that log on to Facebook on a daily basis is higher than among the Kenyans, 91% and 63%, respectively. Yet the number of Kenyans who log on daily is high, considering their lack of access to computers and cellphones during school terms. According to the Kenyan teacher, she expected the number to be zero. Of all the respondents, only two Norwegians replied that they never log on to Facebook.

Sixth, the participants were asked how often they normally use email to communicate, and their responses are presented in table 15.

*Table 15 Frequency of Email-Communication*

	Several times a day	Once a day	2-3 times a week	Once a week	Once a month	Never	
Kenyan	13% (4)	13% (4)	31% (10)	15% (5)	19% (6)	9% (3)	100% (32)
Norwegian	0% (0)	0% (0)	3% (1)	13% (4)	27% (8)	57% (17)	100% (30)

Table 15 shows that 26% of the Kenyan students communicate through email on a daily basis, and 72% weekly. In contrast, none of the Norwegians use email daily, and only 16% report that they use it weekly. 57% of the Norwegians never use email for communication.



The final alternative-answer question for the participants was for what purposes they usually use the Internet. They were given 10 alternatives, and asked to rank them from 1-10, with 1 being the most frequent and 10 the least frequent. If the suggested alternative did not apply, they were asked to mark the alternative with an “N”. The results are presented in tables 16 and 17.

Table 16 Purposes of Internet Use

Purpose	Kenyan responses											
	Frequency of Internet use											
	1	2	3	4	5	6	7	8	9	10	Never	
Search for information	36% (8)	22% (5)	4% (1)	22% (5)	4% (1)	4% (1)	0% (0)	4% (1)	0% (0)	0% (0)	4% (1)	100% (23)
Read newspapers	0% (0)	4% (1)	0% (0)	9% (2)	13% (3)	17% (4)	9% (2)	4% (1)	9% (2)	4% (1)	31% (7)	100% (23)
YouTube	0% (0)	30% (7)	26% (6)	9% (2)	13% (3)	9% (2)	9% (2)	0% (0)	0% (0)	0% (0)	4% (1)	100% (23)
Facebook	57% (13)	22% (5)	17% (4)	0% (0)	4% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (23)
Email	0% (0)	12% (3)	22% (5)	22% (5)	22% (5)	4% (1)	0% (0)	9% (2)	9% (2)	0% (0)	0% (0)	100% (23)
Online dictionaries	0% (0)	4% (1)	4% (1)	4% (1)	9% (2)	9% (2)	4% (1)	9% (2)	13% (3)	4% (1)	40% (9)	100% (23)
Skype	0% (0)	0% (0)	9% (2)	4% (1)	9% (2)	17% (4)	17% (4)	0% (0)	4% (1)	0% (0)	40% (9)	100% (23)
Online gaming	4% (1)	0% (0)	9% (2)	13% (3)	4% (1)	4% (1)	22% (5)	9% (2)	0% (0)	4% (1)	31% (7)	100% (23)
Blogs	0% (0)	0% (0)	0% (0)	9% (2)	4% (1)	4% (1)	4% (1)	4% (1)	0% (0)	13% (3)	62% (14)	100% (23)
Twitter	4% (1)	4% (1)	9% (2)	9% (2)	9% (2)	9% (2)	4% (1)	13% (3)	4% (1)	0% (0)	35% (8)	100% (23)

Table 17 Purposes of Internet Use

Purpose	Norwegian responses											
	Frequency of Internet use											
	1	2	3	4	5	6	7	8	9	10	Never	
Search for information	3% (1)	10% (3)	10% (3)	18% (5)	25% (7)	14% (4)	3% (1)	7% (2)	7% (2)	0% (0)	3% (1)	100% (29)
Read newspapers	0% (0)	0% (0)	3% (1)	0% (0)	14% (4)	14% (4)	14% (4)	14% (4)	14% (4)	3% (1)	24% (7)	100% (29)
YouTube	24% (7)	38% (11)	28% (8)	0% (0)	7% (2)	0% (0)	3% (1)	0% (0)	0% (0)	0% (0)	0% (0)	100% (29)
Facebook	56% (16)	21% (6)	0% (0)	14% (4)	3% (1)	0% (0)	0% (0)	3% (1)	0% (0)	0% (0)	3% (1)	100% (29)
Email	0% (0)	0% (0)	7% (2)	10% (3)	0% (0)	38% (11)	22% (6)	3% (1)	3% (1)	3% (1)	14% (4)	100% (29)
Online dictionaries	0% (0)	0% (0)	3% (1)	18% (5)	7% (2)	14% (4)	7% (2)	17% (5)	3% (1)	3% (1)	28% (8)	100% (29)
Skype	3% (1)	14% (4)	28% (8)	18% (5)	7% (2)	10% (3)	10% (3)	7% (2)	0% (0)	0% (0)	3% (1)	100% (29)
Online gaming	10% (3)	3% (1)	10% (3)	18% (5)	14% (4)	0% (0)	0% (0)	0% (0)	3% (1)	7% (2)	35% (10)	100% (29)

Blogs	7% (2)	3% (1)	3% (1)	0% (0)	7% (2)	3% (1)	15% (4)	3% (1)	3% (1)	3% (1)	53% (15)	100% (29)
Twitter	0% (0)	7% (2)	7% (2)	7% (2)	18% (5)	3% (1)	3% (1)	3% (1)	3% (1)	0% (0)	49% (14)	100% (29)

A majority of the respondents listed Facebook as the alternative they most frequently used when they logged on to the Internet, with 57% of the Kenyans and 56% of the Norwegian giving this reply (tables 16 and 17). There are some similarities between the two groups of alternatives they never use as well; firstly, reading newspapers online: 31% Kenyans and 24% Norwegians, secondly, using an online dictionary: 40% Kenyans and 28% Norwegians, thirdly, online gaming: 31% Kenyans and 35% Norwegians, fourthly, blogs: 62% Kenyans and 53% Norwegians, and finally, Twitter: 35% Kenyans and 49% Norwegians.

Despite the similarities in Internet use, there are a few differences as well. Firstly, 40% of the Kenyans reported that they never used Skype, as opposed to 3% of the Norwegians, secondly, all of the Kenyans used emails with varying frequency, but 14% of the Norwegians never used email, thirdly, 36% of the Kenyans most frequently used the Internet to search for information, as opposed to only 3% of the Norwegians, and fourthly, 24% of the Norwegians responded that their number-one use of the Internet was to visit YouTube, and this alternative was not chosen by any of the Kenyans as their first choice.

#### **4.3.2 Learning and friendship through social media**

In order to map the participants' perceptions of learning they were asked to evaluate six statements. The initial intent was to use a second questionnaire after the email exchanges to see whether there were any changes in the participants' perception. As mentioned above, the email project was not conducted according to plan, and therefore the students did not answer the second questionnaire. The results from the first questionnaire are still included to show similarities and differences between the Kenyan and the Norwegian participants. However, the participants' answers to the statements (i) "I know some young people in Norway/Kenya", and (ii) "I have learned about the everyday life of young people in Norway/Kenya through communicating with them on the Internet" are not included, since the results would only be meaningful in comparison to the results in a second questionnaire.

The first statement the participants were asked to evaluate was: “I enjoy writing in English.” Their responses are displayed in table 18.

*Table 18* I enjoy writing in English.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	48% (16)	45% (15)	7% (2)	0% (0)	100% (33)
Norwegian	13% (4)	68% (21)	19% (6)	0% (0)	100% (31)

The results in table 18 show that the Kenyans are slightly more positive to writing in English in general than their Norwegian peers, 93% and 81% of the participants agreed to the statement.

The second statement was: “I enjoy writing in English on the Internet.” The participants’ answers are reported in table 19.

*Table 19* I enjoy writing in English on the Internet.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	31% (10)	66% (21)	3% (1)	0% (0)	100% (32)
Norwegian	26% (8)	48% (15)	26% (8)	0% (0)	100% (31)

When asked about writing in English on the Internet in particular, the Kenyan responses show a slight increase in table 19 compared to the results in table 18, from 91% to 97% agreeing to the statement. The Norwegian results, however, show a slight decrease, from 81% agreeing in table 18 to 74% agreeing in table 19.

The third statement was: “I want the teachers to include more assignments involving communication through the Internet in the teaching.” The participants’ evaluation is reported in table 20.

*Table 20* I want the teachers to include more assignments involving communication through the Internet in the teaching.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	58% (19)	33% (11)	3% (1)	6% (2)	100% (33)
Norwegian	39% (12)	55% (17)	6% (2)	0% (0)	100% (31)

Table 20 shows that a large majority of both groups of students are positive to more tasks involving communication through the Internet in the classroom, with respectively 91% of the Kenyans and 94% of the Norwegians agreeing to the statement.

The fourth statement was: “I learn about foreign cultures by communicating with people from other countries”. The participants’ answers are shown in table 21.

*Table 21* I learn about foreign cultures by communicating with people from other countries.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	39% (13)	55% (18)	3% (1)	3% (1)	100% (33)
Norwegian	19% (6)	62% (19)	19% (6)	0% (0)	100% (31)

A majority of both groups agrees to learning about foreign cultures when communicating with people from other countries, with 94% of the Kenyans and 81% of the Norwegians responding either “strongly agree” or “agree” to the statement. 19% of the Norwegians disagree, in contrast to only 6% of the Kenyans.

Next, the students were asked what they considered to be the best suited communication alternatives to develop friendship with people in other countries. They were given eight alternatives and asked to rank them from 1-8, with 1 being the best suited and 8 the least suited alternative. Their ranked alternatives are presented in tables 22 and 23.

*Table 22 Best Suited Communication Alternatives to Develop Friendship with People in Other Countries*

Alternative	Kenyan responses								
	1	2	3	4	5	6	7	8	
Blogs	4% (1)	0% (0)	0% (0)	0% (0)	22% (5)	17% (4)	22% (5)	35% (8)	100% (23)
Letters	0% (0)	13% (3)	13% (3)	4% (1)	13% (3)	17% (4)	13% (3)	27% (6)	100% (23)
Facebook	87% (20)	4% (1)	9% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (23)
Email	0% (0)	30% (7)	30% (7)	40% (9)	0% (0)	0% (0)	0% (0)	0% (0)	100% (23)
Skype	4% (1)	22% (5)	22% (5)	35% (8)	13% (3)	0% (0)	4% (1)	0% (0)	100% (23)
Online gaming	4% (1)	4% (1)	0% (0)	0% (0)	35% (8)	31% (7)	17% (4)	9% (2)	100% (23)
Twitter	0% (0)	22% (5)	26% (6)	22% (5)	17% (4)	9% (2)	4% (1)	0% (0)	100% (23)
Instagram	0% (0)	4% (1)	0% (0)	0% (0)	0% (0)	26% (6)	39% (9)	31% (7)	100% (23)

*Table 23 Best Suited Communication Alternatives to Develop Friendship with People in Other Countries*

Alternative	Norwegian responses								
	1	2	3	4	5	6	7	8	
Blogs	8% (2)	0% (0)	4% (1)	15% (4)	8% (2)	12% (3)	41% (11)	12% (3)	100% (26)
Letters	0% (0)	15% (4)	12% (3)	19% (5)	8% (2)	4% (1)	27% (7)	15% (4)	100% (26)
Facebook	62% (16)	20% (5)	0% (0)	12% (3)	0% (0)	0% (0)	8% (2)	0% (0)	100% (26)
Email	8% (2)	15% (4)	23% (6)	8% (2)	19% (5)	27% (7)	0% (0)	0% (0)	100% (26)
Skype	19% (5)	15% (4)	27% (7)	19% (5)	12% (3)	8% (2)	0% (0)	0% (0)	100% (26)
Online gaming	4% (1)	4% (1)	8% (2)	0% (0)	8% (2)	11% (3)	4% (1)	61% (16)	100% (26)
Twitter	0% (0)	12% (3)	15% (4)	23% (6)	15% (4)	23% (6)	8% (2)	4% (1)	100% (26)
Instagram	0% (0)	19% (5)	19% (5)	4% (1)	27% (7)	15% (4)	8% (2)	8% (2)	100% (26)

Facebook is considered to be the best suited alternative to develop friendship with people in other countries by a majority of both the Kenyan and the Norwegian participants, with 87% and 62% ranging this alternative at the top (tables 22 and 23). Considering the top-three alternatives together, the tables reveal that (i) Facebook is chosen by 100% of the Kenyans and 82% of the Norwegians, (ii) email is chosen by 60% of the Kenyans and 46% of the Norwegians, (iii) Skype is chosen by 48% of the Kenyans and 61% of the Norwegians, and (iv) Twitter is chosen by 48% of the Kenyans and 27% of the Norwegians. Letters, however, is only chosen by 27% of the Kenyans and 19% of the Norwegians as top-three alternatives. Instagram is ranked top-three by 38% of the Norwegians in contrast to only 4% of the Kenyans.

When considering the alternatives valued the least suited, tables 22 and 23 show that (i) blogs are chosen by 35% of the Kenyans and 12% of the Norwegians, (ii) letters are chosen by 26% of the Kenyans and 15% of the Norwegians, (iii) Instagram is considered to be the least suited alternative for 31% of the Kenyans in contrast to 8% of the Norwegians, and (iv) online gaming is chosen by only 9% of the Kenyans, but by as many as 61% of their Norwegian peers.

In order to find out more about the students' attitudes towards (i) the Internet, (ii) communication online, and (iii) the incorporation of social media in the classroom, they were asked six open-ended questions. All the respondents, 33 Kenyan and 31 Norwegian, participated, and when the answers were left blank, the response was registered as "left blank". It is important to note, however, that the respondents were allowed more than one answer. The results are presented below in tables 24-36.

Firstly, the students were asked what, in their opinion, are the greatest benefits of using the Internet.

*Table 24* Greatest Benefits of Using the Internet

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Learn about other cultures	67% (22)	33% (11)	100% (33)
Socializing with people around the world	45% (15)	55% (18)	100% (33)
Information	27% (9)	63% (24)	100% (33)
Easy to communicate	18% (6)	82% (27)	100% (33)
Educates	12% (4)	88% (29)	100% (33)
Research	9% (3)	91% (30)	100% (33)
Exchanging/generating ideas around the world	9% (3)	91% (30)	100% (33)
Creates strong friendship	3% (1)	97% (32)	100% (33)
Access to every want	3% (1)	97% (32)	100% (33)
Reliable	3% (1)	97% (32)	100% (33)

Gaming	3% (1)	97% (32)	100% (33)
Fast	3% (1)	97% (32)	100% (33)

Table 25 Greatest Benefits of Using the Internet

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Socializing with people around the world	48% (15)	52% (16)	100% (31)
Information	26% (8)	74% (23)	100% (31)
Easy to communicate	19% (6)	81% (25)	100% (31)
Gaming	16% (5)	84% (26)	100% (31)
Updates	6% (2)	94% (29)	100% (31)
Learn about other cultures	6% (2)	94% (29)	100% (31)
Social media	6% (2)	94% (29)	100% (31)
Left blank	6% (2)	94% (29)	100% (31)
Entertainment	3% (1)	97% (30)	100% (31)
Chat	3% (1)	97% (30)	100% (31)
Social and unsocial	3% (1)	97% (30)	100% (31)
Free of charge	3% (1)	3% (1)	100% (31)

Tables 24 and 25 show that 45% of the Kenyans and 48% of the Norwegians considered “socializing with people around the world” as one of the greatest benefits of the Internet. 67% of the Kenyans considered “learn about other cultures” as one of the greatest benefits, as well, in contrast to only 6% of the Norwegians mentioning this alternative. 27% of the Kenyans and 29% of the Norwegians also valued access to information as one of the greatest benefits of the Internet. 16% of the Norwegians mentioned “gaming”, but only 3% of the Kenyans gave this response. The alternative “easy to communicate” was chosen by 18% of the Kenyans and 19% of the Norwegians.

Secondly, they were asked what, in their opinion, are some of the advantages of incorporating communication through the Internet in the classroom.

Table 26 Advantages of Incorporating Communication through the Internet in the Classroom

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Research	30% (10)	70% (23)	100% (33)
Efficient	21% (7)	79% (26)	100% (33)
Enhances communication	18% (6)	82% (27)	100% (33)
Enhances learning	18% (6)	82% (27)	100% (33)
Sharing of ideas and opinions	6% (2)	94% (31)	100% (33)
Enhances confidentiality	6% (2)	94% (31)	100% (33)
No advantages	6% (2)	94% (31)	100% (33)
Convenient	6% (2)	94% (31)	100% (33)
Learn about other cultures	6% (2)	94% (31)	100% (33)
Reduces monotony in teaching	3% (1)	97% (32)	100% (33)
Motivating	3% (1)	97% (32)	100% (33)
Avoids noise making	3% (1)	97% (32)	100% (33)
Well-contented	3% (1)	97% (32)	100% (33)
Reliable	3% (1)	97% (32)	100% (33)

Learn about other cultures	3% (1)	97% (32)	100% (33)
Updates	3% (1)	97% (32)	100% (33)
Cheap to apply	3% (1)	97% (32)	100% (33)
Information transfer	3% (1)	97% (32)	100% (33)
May lead to less seriousness	3% (1)	97% (32)	100% (33)

Table 27 Advantages of Incorporating Communication through the Internet in the Classroom

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Left blank	29% (9)	71% (22)	100% (31)
Fun	19% (6)	81% (25)	100% (31)
Get to know others	13% (4)	87% (27)	100% (31)
Don't know	13% (4)	87% (27)	100% (31)
Enhances learning	10% (3)	90% (28)	100% (31)
Learn about other cultures	10% (3)	90% (28)	100% (31)
Improves English skills	6% (2)	94% (29)	100% (31)
Improves communicative skills	6% (2)	94% (29)	100% (31)
Information	3% (1)	97% (30)	100% (31)
Variation	3% (1)	97% (30)	100% (31)

When asked what they considered to be some of the advantages of incorporating communication through the Internet in the classroom, the two groups' answers varied: (i) 30% of the Kenyans valued the advantage for research purposes, but this answer was absent among the Norwegian respondents, (ii) 18% of the Kenyans also thought it would enhance learning, whereas this alternative was shared by 10% of the Norwegians, and (iii) 19% of the Norwegians answered that they thought it might be more fun in class with online communication, but this answer was absent among the Kenyan group (tables 26 and 27). 29% of the Norwegians left this question blank.

Thirdly, they were asked what they thought are some of the possible disadvantages of incorporating communication through the Internet in the classroom.

Table 28 Possible Disadvantages of Incorporating Communication through the Internet in the Classroom

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Distractions	67% (22)	33% (11)	100% (33)
Misuse	15% (5)	85% (28)	100% (33)
Monotony	12% (4)	88% (29)	100% (33)
Immoral websites	9% (3)	91% (30)	100% (33)
Encourages laziness	6% (2)	94% (31)	100% (33)
Less face to face interaction	6% (2)	94% (31)	100% (33)
May not operate in class assignments	3% (1)	97% (32)	100% (33)
Exploitation of the poor	3% (1)	97% (32)	100% (33)
Lack of Internet connection	3% (1)	97% (32)	100% (33)
Cheating in examinations	3% (1)	97% (32)	100% (33)
Cultural corrosion	3% (1)	97% (32)	100% (33)
None	3% (1)	97% (32)	100% (33)

*Table 29 Possible Disadvantages of Incorporating Communication through the Internet in the Classroom*

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Bullying	32% (10)	68% (21)	100% (31)
Don't know	26% (8)	74% (23)	100% (31)
Left blank	13% (4)	87% (27)	100% (31)
Distractions	10% (3)	90% (28)	100% (31)
Creepy people	10% (3)	90% (28)	100% (31)
Can be fooled	3% (1)	97% (30)	100% (31)
Time difference	3% (1)	97% (30)	100% (31)
None	3% (1)	97% (30)	100% (31)

Again the responses from the two groups varied when they were asked about possible disadvantages of incorporating communication through the Internet in the classroom (tables 28 and 29). A majority of the Kenyans, 67%, responded that distractions could be a possible disadvantage, whereas only 10% of the Norwegians shared their view. On the other hand, 32% of the Norwegians were concerned about bullying, an alternative absent from the Kenyan responses. 26% of the Norwegians responded that they did not know of any possible disadvantages, and 13% of the Norwegians left the question blank.

Fourthly, they were asked what they considered to be the greatest benefits of communicating through email.

*Table 30 Greatest Benefits of Communicating through Email*

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Efficient	33% (11)	67% (22)	100% (33)
Information	18% (6)	82% (27)	100% (33)
Socialize/make friends	15% (5)	85% (28)	100% (33)
Learn about other cultures	12% (4)	88% (29)	100% (33)
Confidential information	12% (4)	88% (29)	100% (33)
Reliable	12% (4)	88% (29)	100% (33)
Job/business opportunities	12% (4)	88% (29)	100% (33)
Enhances friendship	6% (2)	94% (31)	100% (33)
Easy way to communicate	6% (2)	94% (31)	100% (33)
Improves writing skills	6% (2)	94% (31)	100% (33)
One-on-one feedback	6% (2)	94% (31)	100% (33)
Enhances communication	3% (1)	97% (32)	100% (33)
Pleasure	3% (1)	97% (32)	100% (33)
Direct communication	3% (1)	97% (32)	100% (33)
Exchange ideas	3% (1)	97% (32)	100% (33)
Worldwide	3% (1)	97% (32)	100% (33)
Left blank	3% (1)	97% (32)	100% (33)



Table 31 Greatest Benefits of Communicating through Email

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Don't know	23% (7)	77% (24)	100% (31)
Left blank	16% (5)	84% (26)	100% (31)
Send attachments	13% (4)	87% (27)	100% (31)
Confidential	10% (3)	90% (28)	100% (31)
Specific receiver	6% (2)	94% (29)	100% (31)
Anonymity	6% (2)	94% (29)	100% (31)
Opens for extensive communication	6% (2)	94% (29)	100% (31)
Learn about other cultures	3% (1)	97% (30)	100% (31)
Worldwide	3% (1)	97% (30)	100% (31)
Free of charge	3% (1)	97% (30)	100% (31)
Avoid misunderstandings	3% (1)	97% (30)	100% (31)
Efficient	3% (1)	97% (30)	100% (31)
Communication across borders	3% (1)	97% (30)	100% (31)
Send messages	3% (1)	97% (30)	100% (31)
Make friends	3% (1)	97% (30)	100% (31)
Helpful if one lacks other means of communication	3% (1)	97% (30)	100% (31)

33% of the Kenyans answered “efficient” when asked what they considered to be the greatest benefits of communicating through email, whereas only 3% of the Norwegians shared their view (tables 30 and 31). 39% of the Kenyans answered “information”, but this response was absent from the Norwegian responses. 13% of the Norwegians, however, mentioned the benefit of sending attachments when asked the same question. There were few similarities between the two groups in this question, and 27% of the Norwegians answered “don't know” and yet another 16% of the Norwegians left the question blank.

Fifthly, they were asked what they considered to be possible disadvantages of communicating through email.

Table 32 Possible Disadvantages of Communicating through Email

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Expensive to access	12% (4)	88% (29)	100% (33)
Delayed reply	12% (4)	88% (29)	100% (33)
May lead one into bad relationships	9% (3)	91% (30)	100% (33)
None	9% (3)	91% (30)	100% (33)
Dependent on network coverage	6% (2)	94% (31)	100% (33)
Incorrect information	6% (2)	94% (31)	100% (33)
Time consuming	6% (2)	94% (31)	100% (33)
Boring	6% (2)	94% (31)	100% (33)
Misuse by strangers	6% (2)	94% (31)	100% (33)
Anonymous	3% (1)	97% (32)	100% (33)
May have bad influence on young people	3% (1)	97% (32)	100% (33)
Spams/advertisements	3% (1)	97% (32)	100% (33)

Costly to maintain	3% (1)	97% (32)	100% (33)
Hard to determine somebody's impression of you	3% (1)	97% (32)	100% (33)
Hacking of accounts	3% (1)	97% (32)	100% (33)
Boring if network coverage is low	3% (1)	97% (32)	100% (33)
Limited to writing	3% (1)	97% (32)	100% (33)
Acquisition of bad character traits	3% (1)	97% (32)	100% (33)
Makes one biased	3% (1)	97% (32)	100% (33)
Less effective than other means of communication	3% (1)	97% (32)	100% (33)
Inappropriate sex talk for children	3% (1)	97% (32)	100% (33)

Table 33 Possible Disadvantages of Communicating through Email

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Don't know	26% (8)	74% (23)	100% (31)
Incorrect information	19% (6)	81% (25)	100% (31)
Left blank	19% (6)	81% (25)	100% (31)
Delayed reply	10% (3)	90% (28)	100% (31)
No reply	6% (2)	94% (29)	100% (31)
Easier with oral communication	6% (2)	94% (29)	100% (31)
Inappropriate content	6% (2)	94% (29)	100% (31)
Limited communication	6% (2)	94% (29)	100% (31)
Not serious	6% (2)	94% (29)	100% (31)
Too formal	3% (1)	97% (30)	100% (31)

When asked about possible disadvantages of communicating through email, 12% of the Kenyans and 10% of the Norwegians answered “delayed reply” (tables 32 and 33). In addition, 6% of the Norwegians mentioned “no reply”. Yet another 12% of the Kenyans were concerned about the expenses connected to access, whereas 19% of the Norwegians were concerned about getting incorrect information.

Finally, they were asked what they considered to be the greatest benefits of developing friendship with people from other countries, and their answers are presented in tables 34 and 35 below.

Table 34 Greatest Benefits of Developing Friendship with People from Other Countries

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Learn about different cultures	85% (28)	15% (5)	100% (33)
Sharing of ideas	15% (5)	85% (28)	100% (33)
Trade/business ideas	12% (4)	88% (29)	100% (33)
Friends from all over the world	9% (3)	91% (30)	100% (33)
Enhances interaction	6% (2)	94% (31)	100% (33)
Learn different languages	6% (2)	94% (31)	100% (33)
Learn from them	3% (1)	97% (32)	100% (33)
Interaction with many people	3% (1)	97% (32)	100% (33)
Brings closeness with people from different races	3% (1)	97% (32)	100% (33)

Improve relationship skills	3% (1)	97% (32)	100% (33)
Improve written communicative skills	3% (1)	97% (32)	100% (33)
Motivates for travel abroad	3% (1)	97% (32)	100% (33)
Provides opportunities for tours	3% (1)	97% (32)	100% (33)
Enhances opportunities	3% (1)	97% (32)	100% (33)
Exchange of information	3% (1)	97% (32)	100% (33)
Global peace which may lead to development	3% (1)	97% (32)	100% (33)
Sharing of virtue	3% (1)	97% (32)	100% (33)
Enhances socialization thus improving relationships	3% (1)	97% (32)	100% (33)

*Table 35 Greatest Benefits of Developing Friendship with People from Other Countries*

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Learn about different cultures	45% (14)	55% (17)	100% (31)
Friends from all over the world	26% (8)	74% (23)	100% (31)
Left blank	13% (4)	87% (27)	100% (31)
Improve English skills	6% (2)	94% (29)	100% (31)
The world becomes a better place	6% (2)	94% (29)	100% (31)
Learn different languages	6% (2)	94% (29)	100% (31)
Don't know	6% (2)	94% (29)	100% (31)
Exchange visits	3% (1)	97% (30)	100% (31)
Gaming	3% (1)	97% (30)	100% (31)
Facebook	3% (1)	97% (30)	100% (31)
Exciting	3% (1)	97% (30)	100% (31)
Learn from them	3% (1)	97% (30)	100% (31)
You know someone if you travel to their country	3% (1)	97% (30)	100% (31)

Table 34 shows that a majority of the Kenyans, 85%, consider that the greatest benefit of developing friendship with people from other countries is to learn about different cultures, and their view is shared by 45% of their Norwegian peers (table 35). 26% of the Norwegians also find that having friends from all over the world is a great benefit from developing friendship across borders, and their response is shared by 9% of the Kenyan students.

#### **4.4 Survey school leaders/teachers 2014**

A survey research was conducted in 2014, involving 20 Kenyan and Norwegian school leaders and teachers representing all the schools in the cooperation. The aim was to investigate status quo, expectations, challenges and the way forward for the cooperation, and the survey was a continuation of the Pilot 2013. The participants answered a questionnaire, and the results are presented below.

#### 4.4.1 Status quo

In order to map status quo for the cooperation, the participants were asked two alternative-answer questions about communication between the students and the teachers involved, and their answers are presented in tables 36 and 37. The responses from the school leader/teacher representing the same school in the partnerships have been viewed together and the results are registered per partner, totaling 12.

*Table 36* Communication between Students

Communication student-student	Frequency					
	Regularly	Occasionally	1-2 times	Never	Do not know	
Facebook	8% (1)	42% (5)	0% (0)	50% (6)	0% (0)	100% (12)
Skype	0% (0)	0% (0)	8% (1)	92% (11)	0% (0)	100% (12)
Email	0% (0)	25 % (3)	0% (0)	75% (9)	0% (0)	100% (12)
Letters	8% (1)	34% (4)	25% (3)	33% (4)	0% (0)	100% (12)
Blogs	0% (0)	0% (0)	0% (0)	100% (12)	0% (0)	100% (12)
Other	0% (0)	0% (0)	0% (0)	100% (12)	0% (0)	100% (12)

*Table 37* Communication between Teachers

Communication teacher-teacher	Frequency					
	Regularly	Occasionally	1-2 times	Never	Do not know	
Facebook	42% (5)	8% (1)	8% (1)	34% (4)	8% (1)	100% (12)
Skype	0% (0)	0% (0)	0% (0)	100% (12)	0% (0)	100% (12)
Email	50% (6)	33% (4)	17% (2)	0% (0)	0% (0)	100% (12)
Letters	0% (0)	0% (0)	0% (0)	92% (11)	8% (1)	100% (12)
Blogs	0% (0)	0% (0)	0% (0)	92% (11)	8% (1)	100% (12)
Other	0% (0)	0% (0)	0% (0)	100% (12)	0% (0)	100% (12)

As revealed in table 36, only one school partner reports regular contact between the students on Facebook, and five schools report that their students occasionally use Facebook for communication. However, at six schools, the students do not use Facebook at all for communication with the partner school. Further, the investigation reveals that Skype is rarely used; only one school reports having used Skype in communication 1-2 times. Email has been used by three schools occasionally, but nine schools have never used email in communication between the students. Letters have been used regularly, occasionally and 1-2 times by respectively one, four and three schools, leaving four schools that have never used letters for communication. None of the students involved have used blogs in communication, and none of the participants listed any other means of communication.

Table 37 on the other hand, displays communication between the teachers involved, and shows that letters, blogs and Skype have never been used by any of the teachers. Five schools report regular communication through Facebook and at six schools email is regularly used. All in all, email is the most used means of communication between the teachers, and all

schools report that it has been used at varying frequency. Facebook, however, has only been used in communication between the teachers at seven of the twelve school partners involved.

The results of tables 36 and 37 show that there is a distinct difference in communication between the students involved and the teachers; email is used by all the schools for communication teacher to teacher, as opposed to in only 25% of communication student to student. Letters, however, have not been used by teachers, but 67% of the schools report that it has been used in communication between the students. The results concerning communication through Facebook is more evenly distributed between the two groups, with respectively 58% for the teachers and 50% for the students.

The participants were also asked which students were involved in the cooperation, and in what ways they were involved. Answers from all the 12 school partners are presented below; the Kenyan answers in table 38, and the Norwegian answers in table 39.

*Table 38 Kenyan Students Involvement in the Cooperation*

Involvement	The whole school	One form/grade	Two forms/grades	One school class	Two school classes	1-2 electives	Several electives	A small group	Left blank	
Information about the partner school	33% (2)	0% (0)	0% (0)	17% (1)	17% (1)	0% (0)	0% (0)	17% (1)	16% (1)	100% (6)
Communication	0% (0)	17% (1)	17% (1)	17% (1)	17% (1)	0% (0)	16% (1)	16% (1)	0% (0)	100% (6)
School visits	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	17% (1)	0% (0)	66% (4)	0% (0)	100% (6)
Other	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	83% (5)	100% (6)

*Table 39 Norwegian Students Involvement in the Cooperation*

Involvement	The whole school	One form/grade	Two forms/grades	One school class	Two school classes	1-2 electives	Several electives	A small group	Left blank	
Information about the partner school	50% (3)	0% (0)	33% (2)	0% (0)	0% (0)	17% (1)	0% (0)	0% (0)	0% (0)	100% (6)
Communication	0% (0)	17% (1)	0% (0)	50% (3)	0% (0)	33% (2)	0% (0)	0% (0)	0% (0)	100% (6)
School visits	17% (1)	0% (0)	0% (0)	17% (1)	0% (0)	17% (1)	0% (0)	33% (2)	16% (1)	100% (6)
Other	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (6)	100% (6)

The question concerning students' involvement in the cooperation was unclear, and there should have been further instructions for the participants regarding which year in question. In addition, the alternative "school visits" was ambiguous; some participants interpreted it as to who travelled to the partner school, whereas others as to who were

involved with the group coming. As mentioned in the introduction, by May 2014, all the six Kenyan schools had a small group of students visiting their Norwegian partner school. Only one of the Norwegian schools, the upper secondary school, however, has had groups of students visiting Kenya.

Regarding information about the partner school and communication, tables 38 and 39 show that five schools, three Norwegian and two Kenyan, inform the whole school about the partner school and the cooperation, but neither of the schools involves all the students in communication. The sizes of the groups involved in communication vary from one form/grade to a small group of students.

Next the participants were asked which teachers were involved in the cooperation, and in what ways they were involved. Answers from all the 12 school partners are presented below; the Kenyan answers in table 40, and the Norwegian answers in table 41.

*Table 40 Kenyan School Leaders/Teachers Involvement in the Cooperation*

Involvement	The principal	The entire teaching staff	The principal and/or 3-4 teachers	The principal and/or 1-2 teachers	Left blank	
Information about the friendship school	17% (1)	33% (2)	17% (1)	0% (0)	33% (2)	100% (6)
Communication	17% (1)	0% (0)	17% (1)	66% (4)	0% (0)	100% (6)
School visits	17% (1)	0% (0)	17% (1)	66% (4)	0% (0)	100% (6)
Other	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	100% (6)

*Table 41 Norwegian School Leaders/Teachers Involvement in the Cooperation*

Involvement	The principal	The entire teaching staff	The principal and/or 3-4 teachers	The principal and/or 1-2 teachers	Left blank	
Information about the friendship school	0% (0)	67% (4)	0% (0)	33% (2)	0% (0)	100% (6)
Communication	0% (0)	0% (0)	17% (1)	83% (5)	0% (0)	100% (6)
School visits	0% (0)	0% (0)	50% (3)	50% (3)	0% (0)	100% (6)
Other	0% (0)	0% (0)	0% (0)	0% (0)	100% (6)	100% (6)

The same ambiguity as mentioned above applies to the present question as well, and therefore the results in tables 40 and 41 concerning school visits are unclear. However, tables 40 and 41 reveal that, whereas information about the friendship school is more widespread in the Norwegian schools among the teaching staff, communication is limited to the principal and/or 1-2 teachers in a majority of the Kenyan and the Norwegian schools alike, 66% and 83% respectively.

To investigate the school leaders' and teachers' perceptions of a possible learning outcome for the students involved, they were asked to evaluate five statements about the cooperation. However, not all the 20 participants answered all the questions. The answers are displayed in tables 42-46 below.

The first statement was: "Teachers and students involved in the cooperation have a positive outcome according to the objective." The participants' responses are shown in table 42.

*Table 42* Teachers and students involved in the cooperation have a positive outcome according to the objective.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	63% (5)	37% (3)	0% (0)	0% (0)	100% (8)
Norwegian	40% (4)	30% (3)	30% (3)	0% (0)	100% (10)

Table 42 shows that all the Kenyan respondents agreed that the teachers and students involved had had a positive outcome according to the objective "learning and friendship through social media". Among the Norwegian respondents, however, 30% disagreed, and two participants chose not to answer.

The second statement was: "Students partaking have befriended students from the partner school." The participants' answers are displayed in table 43.

*Table 43* Students partaking have befriended students from the partner school.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	50% (4)	37% (3)	13% (1)	0% (0)	100% (8)
Norwegian	36% (4)	28% (3)	36% (4)	0% (0)	100% (11)

Table 43 shows that a majority, 87%, of the Kenyans agreed that students partaking had developed friendships with students from the partner school, and only one Kenyan disagreed. Among the Norwegians, 64% agreed with the statement, and 36% of the respondents disagreed. One Norwegian participant chose not to answer.

The third statement was: "Students partaking have learned about young people's way of life in the partner country." The participants' responses are shown in table 44.

*Table 44* Students partaking have learned about young people's way of life in the partner country.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	37% (3)	63% (5)	0% (0)	0% (0)	100% (8)
Norwegian	36% (4)	55% (6)	9% (1)	0% (0)	100% (11)

Table 44 shows that both the Kenyans (100%) and the Norwegians (91%) are positive to the statement that the students have learned about young people's ways of life in the partner country, with only one Norwegian respondent disagreeing.



The fourth statement was: “Communication on the Internet has functioned satisfactorily between the participating students.” One Norwegian teacher answered that they had never used communication on the Internet with Kenyan students, and that the statement therefore did not apply, and one Norwegian school leader chose not to answer. The other respondents’ answers, however, are shown in table 45.

*Table 45* Communication on the Internet has functioned satisfactorily between the participating students.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan (8)	0% (0)	37% (3)	63% (5)	0% (0)	100% (8)
Norwegian	20% (2)	20% (2)	20% (2)	40% (4)	100% (10)

When asked whether communication on the Internet had functioned satisfactorily between the students, table 45 shows that a majority of both the Kenyans and the Norwegians were negative, with respectively 63% and 60% of the respondents who disagreed or strongly disagreed.

The fifth statement was: “Communication on the Internet has functioned satisfactorily between the participating teachers.” and the results are presented in table 46.

*Table 46* Communication on the Internet has functioned satisfactorily between the participating teachers.

	Strongly agree	Agree	Disagree	Strongly disagree	
Kenyan	37% (3)	50% (4)	13% (1)	0% (0)	100% (8)
Norwegian	46% (5)	18% (2)	18% (2)	18% (2)	100% (11)

In contrast to the results in table 45, the results in table 46 show that a majority of both the Kenyan and the Norwegian participants agreed with the statement, 87% and 64% respectively.

#### 4.4.2 Aims/expectations

To investigate the school leaders’ and teachers’ expectations of the cooperation, they were asked to answer four open-ended questions. It is important to note that the respondents were not limited to one answer. Their answers are presented in the tables 47-58 below.

Firstly, they were asked what they considered desirable aims for the students involved in the cooperation. Their answers are presented in tables 47 and 48.



*Table 47* Desirable Aims for the Students Involved in the Cooperation

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Intercultural awareness	100% (8)	0% (0)	100% (8)
Acquisition of knowledge and skills	25% (2)	75% (6)	100% (8)
Orientation of the Internet and social media	13% (1)	87% (7)	100% (8)

*Table 48* Desirable Aims for the Students Involved in the Cooperation

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Intercultural awareness	100% (11)	0% (0)	100% (11)
Learn to cooperate under different circumstances	18% (2)	82% (9)	100% (11)
Develop friendship	18% (2)	82% (9)	100% (11)
Commitment to North-South relations	9% (1)	91% (10)	100% (11)
Improve English skills	9% (1)	91% (10)	100% (11)

All the Kenyan and Norwegian respondents consider developing intercultural awareness a desirable aim for the students (tables 47 and 48). In addition, one Kenyan mentioned strengthening the students' digital competence, and one Norwegian focused on improving the students' English skills.

Secondly, they were asked what they considered desirable aims for the teachers involved in the cooperation. Their answers are presented in tables 49 and 50.

*Table 49* Desirable Aims for the Teachers Involved in the Cooperation

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Improve pedagogy	75% (6)	25% (2)	100% (8)
Intercultural awareness	38% (3)	62% (5)	100% (8)
More willingness to do the groundwork required	13% (1)	87% (7)	100% (8)
Interaction	13% (1)	87% (7)	100% (8)

*Table 50* Desirable Aims for the Teachers Involved in the Cooperation

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Intercultural awareness	100% (10)	0% (0)	100% (10)
Improve pedagogy	40% (4)	60% (6)	100% (10)
Acquire administrative knowledge	20% (2)	80% (8)	100% (10)
Improve English skills	10% (1)	90% (9)	100% (10)
Develop friendship	10% (1)	90% (9)	100% (10)

When asked about desirable aims for the teachers involved, 75% of the Kenyans and 40% of the Norwegians focus on improving pedagogy (tables 49 and 50). All the Norwegian respondents, 100%, and 38% of the Kenyan respondents also consider developing the teachers' intercultural awareness as a desirable aim.

Thirdly, they were asked how much time they consider acceptable/desirable to invest in the cooperation on a monthly basis. Their answers are presented in tables 51 and 52.

*Table 51 Acceptable/Desirable Time to Invest in the Cooperation on a Monthly Basis*

Categories	Kenyan responses		
	Giving this response	Not giving this response	
1-4 hours per month	63% (5)	37% (3)	100% (8)
8-12 hours per month	25% (2)	75% (6)	100% (8)
Two days per month	13% (1)	87% (7)	100% (8)

*Table 52 Acceptable/Desirable Time to Invest in the Cooperation on a Monthly Basis*

Categories	Kenyan responses		
	Giving this response	Not giving this response	
1-4 hours per month	55% (6)	45% (4)	100% (11)
5-8 hours per month	36% (4)	64% (7)	100% (11)
No limitation as long as it leads to learning	9% (1)	91% (11)	100% (11)

There is a great variety in the respondents' suggestions; from one hour per month to 12 hours per month (tables 51 and 52). One Norwegian school leader responded "no limitation as long as it leads to learning". However, a majority of the respondents, 63% of the Kenyans and 55% of the Norwegians, found 1-4 hours per month desirable to invest in the cooperation.

Fourthly, they were asked whether all the students at the school should be involved, or only specific groups/classes, and if so, which groups/classes. The results are presented in tables 53 and 54.

*Table 53 Student Involvement*

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Specific groups	50% (4)	50% (4)	100% (8)
Ideally all students	25% (2)	75% (6)	100% (8)
All students, but for exchange visits a small group	25% (2)	75% (6)	100% (8)

*Table 54 Student Involvement*

Categories	Norwegian responses		
	Giving this response	Not giving this response	
All students knowledge about the cooperation, but a specific group active in communication	45% (5)	55% (6)	100% (11)
Specific groups	36% (4)	64% (7)	100% (11)
All students with specific tasks	18% (2)	82% (9)	100% (11)

The response "specific groups" were selected by 50% of the Kenyans and 36% of the Norwegians, but their responses differed concerning the suitable age-level and size of the group involved (tables 53 and 54). 25% of the Kenyans thought that ideally all the students should be involved, and yet another 25% of the Kenyans made a distinction between different

degrees of involvement. This view was shared by 63% of the Norwegians; 45% who wanted all the students to have knowledge about the cooperation, but only specific groups involved in communication; and 18% who wanted all the students involved, but with specific tasks assigned.

#### 4.4.3 The way forward

To map the school leaders' and teachers' wishes for the future of the cooperation, they were asked to answer two open-ended questions about the way forward. Firstly, they were asked which aspect of the cooperation they wished to continue, and their responses are presented in tables 55 and 56.

*Table 55 Aspects of the Cooperation to Be Continued*

Categories	Kenyan responses		
	Giving this response	Not giving this response	
School visits	50% (4)	50% (4)	100% (8)
Communication	50% (4)	50% (4)	100% (8)
Literature exchange programs	25% (2)	75% (6)	100% (8)
Projects	25% (2)	75% (6)	100% (8)
Exchange of education materials like drawings and compositions	13% (1)	87% (7)	100% (8)

*Table 56 Aspects of the Cooperation to Be Continued*

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Communication	55% (6)	45% (5)	100% (11)
Sharing of experiences	18% (2)	82% (9)	100% (11)
A permanent arrangement	18% (2)	82% (9)	100% (11)
Acquired knowledge spread throughout the school	18% (2)	82% (9)	100% (11)
Currently communication is down	18% (2)	82% (9)	100% (11)
All areas, ambitions to expand to include more of the curriculum	18% (2)	82% (9)	100% (11)
Focus on one partner country	9% (1)	91% (10)	100% (11)
Continuance of the Friendship City Agreement	9% (1)	91% (1)	100% (11)
A cooperation partner for the elective "International Cooperation"	9% (1)	91% (1)	100% (11)

Table 55 shows that 50% of the Kenyan respondents wanted to continue with school visits. The absence of this response among the Norwegian answers in table 56 might be due to the fact that the Norwegian participants answered the questionnaire before the school visit in May 2014, whereas several of their Kenyan colleagues answered the questionnaire after the school visit. 50% of the Kenyans also mentioned the communicative aspect of the

cooperation; either through digital channels or by mail. The communicative aspect was also dominant among the Norwegian responses, with 55% of the respondents expressing a wish to continue with communication; both between students and teachers. 18% of the Norwegians, however, reported that, currently, communication was down. 63% of the Kenyans wanted to continue with different projects, like literature exchange programs and material exchanges.

Finally, the school leaders and teachers were asked what they thought could be improved with the cooperation. Their answers are presented in tables 57 and 58 below.

*Table 57 Improvements of the Cooperation*

Categories	Kenyan responses		
	Giving this response	Not giving this response	
Communication	100% (8)	0% (0)	100% (8)
Frequency of school visits	25% (2)	75% (6)	100% (8)
Undertaking of joint projects	13% (1)	87% (7)	100% (8)
Get more teachers involved	13% (1)	87% (7)	100% (8)

*Table 58 Improvements of the Cooperation*

Categories	Norwegian responses		
	Giving this response	Not giving this response	
Communication	73% (8)	27% (3)	100% (11)
Implementation in the school staff	27% (3)	73% (8)	100% (11)
Increased focus on Kenya in the curriculum	9% (1)	91% (10)	100% (11)
The program for the school visit	9% (1)	91% (10)	100% (11)
Organization	9% (1)	91% (10)	100% (11)

A 100% of the Kenyans and 73% of the Norwegians want to improve communication, with their responses ranging from “the need for more technical equipment and Internet services” to “more response/initiative from the partner school" (tables 57 and 58). 25% of the Kenyans express that they want more frequent school visits, and 13% of the Kenyans and 27% of the Norwegians want more teachers involved in the cooperation.

## **5. DISCUSSION**

As mentioned above, the methodology for this thesis had three different elements: questionnaires, interviews and observations from four different research projects; Facebook project 2012, Pilot 2013, Email project 2013 and Survey school leaders/teachers 2014. In this section the results from all the projects will be discussed in an attempt to find some tendencies regarding the research questions:

1. What is the status quo for the cooperation some four years after the signing of the agreement?
2. What are the different participants' expectations, considered challenges and thoughts about the way forward for the partnership?
3. To what extent is the use of social media a workable method to develop friendship and learning between Kenyan and Norwegian students?

### **5.1 Status quo**

#### **5.1.1 Communication**

Results from the Survey school leaders/teachers 2014 revealed that status quo for communication between students is that (i) few schools are involved in communication on a regular basis with their partner school, (ii) 50% of the schools never communicate through social media, (iii) Facebook is the only social media used either regularly or occasionally, and (iv) the most commonly used communication means for the students are letters. A majority of the teachers, on the other hand, communicate regularly or occasionally through Facebook and/or email, with email being the most commonly used communication means.

Letters being the most commonly used communication means for the students is an interesting observation, particularly considering that the participants in the Email project 2013 did not have a high ranking for letters as a suitable means to develop friendship with people in other countries. The students' most favored communication means for this purpose was Facebook. But how suitable is Facebook as a communication means between Kenyan and Norwegian students? In the Facebook project 2012, the results revealed that the Norwegian participants primarily used Facebook to check updates, plan activities, and chat with their "real" friends in Norwegian. These findings coincide with results from the study "Monitor skole 2013" where most Norwegian students reportedly are "passive" users of Facebook (Egeberg et al., 2013, p. 104). Although several researchers advocate non-anonymous, asynchronous fora and a larger audience as motivating and rewarding for students' production

in the target language (e.g. Polat et al., 2013; Svensson, 2008), these were not the experiences of the Facebook project 2012. Observations of the Norwegian students posting comments in the closed Facebook group with 215 members revealed that some became hesitant and insecure when posting comments in English for a larger audience.

The Facebook project 2012 also revealed a low participation rate among the Kenyan participants with only 2-7 students posting comments on Facebook weekly through the 4-week project. In addition, some of the Kenyan comments were difficult to understand for the Norwegians since some of them used “Sheng” slang, composed of elements from Swahili and English, in their postings on Facebook. Results in the second questionnaire also showed that the Norwegian students found school-related activities on Facebook more tedious than their normal use of Facebook.

However, despite low participation rate, the Facebook project 2012 disclosed some positive effects of communicating through Facebook as well by providing a safe learning environment monitored by teachers, and by making communication less vulnerable to low participation rate since all the participants could read all the comments (Alami et al., 2011). Therefore, considering the positive attitude displayed by (i) the students in the Email project 2013, (ii) the school leaders/teachers in the Pilot 2013, and (iii) results from the Facebook project 2012; Facebook as a communication means should be further researched and possible learning opportunities explored. The use of extended Facebook groups, open for all the students at the partner schools, includes all the students in communication; however, the use of smaller groups, limited to the actual participants in communication projects, should be investigated to see whether this will increase the students’ productions in the target language.

Yet another important discussion concerning communication is content; what should the students discuss with their partners? The Facebook project 2012 revealed the challenge of finding interesting, manageable content to discuss, even though the participants were active in determining the selected topics. In the study of email exchanges between Taiwanese and American students, Liaw reported that one of the success factors in communication was providing the students with material about their own culture in the target language before discussions (2006, p. 1). This was initially planned for the Email project 2013, however, as mentioned above, the project was not conducted according to plan, and therefore a communication project providing the participants with literature in the target language should be further investigated.

### **5.1.2 School visits**

In May 2014, all the Norwegian schools had a delegation of 2-6 students and one school leader/teacher from Kenya visiting their school. The two Kenyan secondary schools and the Norwegian upper secondary school have, over a three year period, regularly arranged school visits with a small group of students and two teachers. The exchange visits are part of a program funded by a Friendship North/South Partnership Grant. The schools run by Porsgrunn Municipality, the primary and lower secondary schools, have applied for a similar grant, but their application was rejected. So far, only school leaders and teachers from Porsgrunn municipal schools have visited the partner schools in Kenya, in 2010 and 2011, respectively. Results in the Survey school leaders/teachers 2014 reveal that not all the Norwegian participants have been involved in the cooperation since 2011, and consequently have not visited the partner school in Kenya.

## **5.2 Expectations, challenges and the way forward**

### **5.2.1 Communication**

A majority of the school leaders/teachers in the survey do not find that communication through the Internet has functioned satisfactorily between the participating students. The results are as expected given that (i) letters are the most frequently used means of communication, and (ii) a high percentage of schools never use digital communication means in student-communication. When asked what they wanted to improve with the cooperation, all the Kenyan school leaders/teachers, and a majority of their Norwegian colleagues, expressed that they wanted to improve communication. Some of the responses were: “frequency of communication” and “set dates for communication and project-work”. However, regarding online communication between the participating teachers, a majority of the school leaders/teachers report that communication has been satisfactory.

In general, the Kenyans portray a slightly more positive attitude to the different statements about the cooperation and the learning outcome for the students. The more positive attitude among the Kenyan school leaders/teachers could indicate different expectations to the cooperation in general and digital communication in particular. There are challenges related to computer access at the different schools, particularly for the partnerships involving the primary schools, since neither of the Kenyan primary schools have computers available for their students. This correlates with results in the situational report of ICT in education in Kenya, where it is documented that secondary and post-secondary levels of education have been prioritized for utilizing ICT, and that ICT deployment in primary schools is “almost

negligible” (Swarts & Wachira, 2009, p. 3). In contrast, their Norwegian partners have a student-per-computer ratio of 1,8:1 and 1:1.

One scenario that might be investigated is whether it would be possible for the students in Kenyan primary schools to access Internet through cellphones. In the Email project 2013, 80% of the Kenyan participants reported that cellphones were their most frequently used alternative to access the Internet. Two considerations have to be taken into account, however, firstly, background information from the Kenyan teacher revealed that the Kenyan students were not allowed to bring their cellphones to school, and since all of the Kenyan students lived at the boarding school, they had no access to cellphones during school terms. It is important to note, though, that not all the Kenyan schools are boarding schools, and it would be interesting to include students from other school partners in further research to explore their access to cellphones and computers at home. Secondly, the participants in the Email project 2013 were students in secondary school, and in further studies younger students’ media habits should be investigated as well.

Yet a challenge connected to communication through social media in primary schools is Facebook. Although being the preferred digital communication means among the students participating in the Email project 2013, as well as the most frequently used digital media in student-communication, there is a 13-year-old age limit for joining the website (Abram, 2012). Background questions in the Facebook project 2012 also revealed that, generally, the Norwegian participants established Facebook profiles at an earlier age than their Kenyan peers; ranging from the age 10-13. In contrast, the majority of the Kenyans were 16 when they established a Facebook profile.

The Survey school leaders/teachers 2014 also disclosed that few digital communication means had been used in communication. Apart from one school reporting using Skype 1-2 times, Facebook was the only reported social medium used, and regular email was the only other digital communication means used. For future communication projects, therefore, other means of digital communications should be explored as well. The students’ top-three choices for “alternatives best suited to develop friendship with people in other countries” were, apart from Facebook; email, Skype and Twitter. Instagram was rated high among the Norwegian participants, but not among their Kenyan peers.

Besides Facebook, email is the most used medium for communication among the Kenyan participants in the Email project 2013. Among the Norwegian participants, however, email was not ranked high, and only 4% had this alternative as top-two. These results coincide with research conducted by Thorne and Mahfouz, investigating email exchanges



between groups of students with differing digital material conditions; Thorne found email an awkward medium for age-peer interactions among the American students who were well equipped with digital equipment, and Mahfouz found that email was preferred by the Jordanian students because they had limited access to computers and the Internet (Thorne, 2003; Mahfouz, 2010).

The Pilot 2013 showed that all four participants wanted to focus on groups of students to enhance communication, and the results in the Survey school leaders/teachers 2014 reveal that this is in fact so, with no school partner reporting that the whole school is involved in communication. The sizes of the groups differ though; from one form/grade to small groups, but all the participants in the survey want to limit communication to specific groups. The participants have differing views on how much time is desirable to spend on the cooperation per month, however, and a clarification between the different partners as to frequency of communication, communication means and group sizes is recommendable to avoid frustration.

When asked about possible disadvantages for incorporating communication through the Internet in the classroom, the Kenyan and the Norwegian participants in the Email project 2013 had different concerns. A majority of the Kenyans were concerned that it would lead to distractions, whereas only 10% of the Norwegians shared their view. However, 32% of the Norwegians were concerned about bullying, a response absent from the Kenyan group. Seen in light of the report “Monitor Skole 2013”, digital bullying is relatively frequent among the 9<sup>th</sup> graders in the survey compared to Vg2 students, who are three years older (Egeberg et al., 2013). The Norwegian participants in the Email project 2013 were 8<sup>th</sup> and 9<sup>th</sup> graders, and their concern must be taken seriously, and teachers involved must secure a safe learning environment online (e.g. Alami et al., 2011).

Thorne, in his research, reported a positive language learning outcome for one of the students that continued the intercultural relationship on private chat (2003). Given the students’ young age, and a few unfortunate incidents during the Facebook project 2012, however, my experience is that communication should be restricted to a learning environment monitored by teachers. The Facebook project also proved that the teacher played an important part assisting some of the students with their publications.

### **5.2.2 School visits**

Based on the results from the Pilot 2013, involving two school leaders and two teachers, it was evident that the teachers wanted more frequent exchange-visits with both

students and teachers. Their view is shared by 50% of the Kenyan school leaders and teachers participating in the Survey School leaders/teachers 2014 who wanted to continue with school visits. When asked what they wanted to improve about the cooperation, 25% of the Kenyan participants wanted more frequent visits. School visits were not mentioned specifically by the Norwegian participants; however, two Norwegians expressed a wish to continue with all areas of the cooperation as it was today. One possible explanation to the divergence between the Kenyans' and the Norwegians' wish to continue/expand school visits could be that the Norwegians, in general, answered the questionnaire a few weeks prior to the school visits in May 2014, and that a majority had little experience with exchange visits. Most of the Kenyan participants, on the other hand, answered the questionnaire either during or a few days after the school visit.

The question about school visits involving Norwegian students from primary and lower secondary schools should be investigated further. Important considerations are (i) appropriate age-levels of students, (ii) group size (iii) group selection, and (v) funding. The school visit in May 2014, involving all the partner schools, should also be examined in order to map out positive outcomes and challenges that need to be addressed at later visits.

### **5.2.3 Cooperation between teachers**

In the Pilot 2013, the participants expressed concerns regarding the cooperation's vulnerability to personnel changes, and results in the Survey school leaders/teachers 2014 confirm their concern, particularly among the Norwegian participants. Only 50% of the Norwegian school leaders/teachers have been involved in the cooperation for more than three years, in contrast to 88% of the Kenyans. Results from the survey also revealed that at a majority of the partner schools, communication is limited to the principal and/or 1-2 teachers. The participants in the Pilot 2013 expressed the need to (i) involve more teachers, and (ii) enhance the relationship between the ones involved.

Research shows that teachers' pedagogical beliefs are crucial for changing teaching practices (Ertmer, 2005; Hepp et. al., 2004), and that the implementation of ICT in teaching is not solely restricted to access to technical equipment (Granath & Vannestål, 2008). It is therefore important to discuss pedagogical implementations of ICT to ensure promotion of learning (Granath & Vannestål, 2008; Svensson, 2008). In the Pilot 2013, the participants wanted to expand the cooperation to include pedagogical discussions and the exchange of teaching ideas. Results from the Survey school leaders/teachers 2014 show that a majority of the Kenyan participants found "improve pedagogy" a desirable aim for the teachers involved

in the cooperation, and their view is shared by 40% of the Norwegian participants. A majority of the Kenyans also wanted to continue with different projects involving literature exchange programs and education-material exchanges. This was not mentioned explicitly by the Norwegian participants, however, 18% expressed that they wanted to continue with all areas of the cooperation that they were involved in today, and 18% wanted to continue sharing experiences with their Kenyan colleagues.

### **5.3 Friendship and learning through social media?**

When asked about communication between students involved, the school leaders and teachers in the survey revealed that few schools are involved with communication on a regular basis, and only one school reported regular communication through Facebook. 42%, however, reported occasional communication through Facebook. At the same time, 50% of the schools reported never to have used Facebook, and only one school had used Skype once or twice. Apart from Facebook or Skype, no other social medium was reported used in communication between the school partners. Based on these results one can assume that the aim “friendship and learning through social media” is not an achievable aim for at least 50% of the schools involved in the school cooperation. Looking at the student-per-computer ratio for the schools, one can also assume that this involves the primary schools.

In the Email project 2013, the attempt was to measure the students’ own perceptions of learning and friendship through the social website ePals. Unfortunately, the project was not implemented as planned, and there were some challenges connected to involving students from Kenyan forms one and two. There are, however, students from Kenyan forms three and four and Norwegian upper secondary school involved in the partnership as well, and based on the results from the four research projects discussed in this thesis, one could assume that the reports of successful communication and project work stem from cooperation involving these groups of students. Further studies involving students in forms three/four/upper secondary school would be needed in order to measure whether they have developed friendship with students at the partner school through social media, and to measure whether communication through social media has promoted learning.

As discussed above, it is of importance that the school leaders/teachers involved develop friendship and learning as well as the students, and 58% of the school leaders/teachers report that they communicate through Facebook with colleagues at the partner school, and 42% on a regular basis. In regard to the discussion above about (i)

involving more teachers, and (ii) enhancing their relationship, Facebook might be an important arena for developing friendship and learning for the school leaders/teachers.

In the Survey school leaders/teachers 2014, the participants were generally positive to the statement “Teachers and students involved in the cooperation have a positive outcome according to the objective”. All of the Kenyans agreed to the statement, followed by 70% of the Norwegian participants. As already mentioned, however, there has been limited contact through social media for 50% of the schools, and other variables like school visits, letters or email exchanges might have influenced the participants’ perceptions.

Based on the research presented in this thesis, there is some evidence indicating that the use of social media is a workable method to develop friendship and learning for some of the students/teachers/school leaders involved. However, 50% of the schools report that there is no communication through social media between students, and presently, for these schools, the aim “Friendship and learning through social media” is not achievable.

## 6. CONCLUSION

The status quo for the cooperation some four years after the signing of the agreement is that few schools are involved with student-communication on a regular basis, and that 50% never use social media in communication. Facebook is the only social medium used either regularly or occasionally by some of the school partners. However, letters are the most commonly used communication means for the students, and email is the most commonly used communication means for the school leaders/teachers. Generally, communication with the partner school is limited to the school leader and/or 1-2 teachers, and experiences with the cooperation so far show its vulnerability to personnel changes, particularly at the Norwegian schools. All the Kenyan schools have had delegations of school leaders/teachers/students visiting their partner school in Norway, whereas, apart from the Norwegian upper secondary school, only Norwegian school leaders/teachers have visited the Kenyan schools.

The different participants' expectations, considered challenges and thoughts about the way forward for the partnership are dominated by the need to improve communication, particularly between the students involved. There are challenges related to computer access at some of the Kenyan schools, particularly the primary schools, but also appropriate communication means should be investigated further. All the participants agree that communication should be limited to specific groups of students; however, group sizes and the amount of time desirable to spend on the cooperation per month vary. The school leaders/teachers view "improve pedagogy" a desirable aim for the teachers involved in the cooperation.

Based on the research projects presented in this thesis, there are indications that the use of social media is a workable method to develop friendship and learning between particular groups of Kenyan and Norwegian students, presumably students in forms three/four/upper secondary school. However, particularly among the students in primary school, social media is not a workable method at the present time due to lack of access to computers at the Kenyan schools, and also because Facebook is not a suitable social medium for their age-group. Only one partnership involving levels one/two/lower secondary school have been explored, however, experiences so far give evidence that there are challenges connected to engaging age-appropriate groups of students in communication on social media.

The field of ICT in education is under constant development, however, and there are strong incentives from both the Kenyan and Norwegian governments to further pursue learners' digital and intercultural competence. Based on observations and results from this

thesis, there are some topics that would be interesting to examine in further research; (i) the use of cell phones in communication, (ii) further use of Facebook as a pedagogical tool in communication, and (iii) suitable social media for primary school students.

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## Appendices

### Appendix 1: Questionnaire – Facebook project 2012

The same questionnaire was used twice, once at the beginning of the project and once at the end. Apart from some introductory information and the thank-you note, the content in the two are identical. Therefore, only the first questionnaire is included.

#### Project:

#### Facebook in Language Learning and Intercultural Communication

As part of my Master's Degree in Foreign Languages in School, I am attending a course in Project Methodology at the University of Gothenburg, Sweden this semester. As a part of this course I will conduct an investigation about the value of using Facebook in language learning and in intercultural communication.

The participants involved are a group of students from \_\_\_\_\_, Kenya, and a group of students from \_\_\_\_\_, Norway. The participants will post comments concerning four specific topics on Facebook and they will comment on other participants' contributions as well over a four week period. The participants will answer a questionnaire prior to the group discussions and then at the very end of the discussions.

Participation in this project is voluntarily and the answers will be treated anonymously. There is no right or wrong answer to the questions.

#### Questionnaire

Background information, please circle the correct answer:

- Male            Female
  
- Age: 12    13    14    15    16    17    18    19
  
- Where do you live during school terms?  
  
At home            At school

- Do you have a profile on Facebook?

Yes                      No

If the answer to the above question is “no”, thank you so much for your cooperation. If your answer is “yes”, please continue.

- Which language do you normally use to communicate on Facebook?

Your mother tongue                      English

- At what age did you establish a profile on Facebook: .....

**Answer the following questions based on your activities on Facebook during the last month. Circle the correct response:**

1. How often do you normally log on to Facebook?

Several times a day                      Once a day                      2-3 times a week  
Once a week                                      Once a month                      Never

2. How often do you normally log on to Facebook during school hours?

Several times a day                      Once a day                      2-3 times a week  
Once a week                                      Once a month                      Never

3. How often do you normally use Facebook because of a mandatory assignment at school?

Several times a day                      Once a day                      2-3 times a week  
Once a week                                      Once a month                      Never

4. How do you normally get access to Facebook? You may circle more than one alternative.

Cellphone                      Computer at home                      Computer at school

**To what degree are the following statements true?**

5. I enjoy writing in English.

Strongly agree                      Agree                      Disagree                      Strongly disagree

6. I enjoy writing in English on Facebook.

Strongly agree                      Agree                      Disagree                      Strongly disagree

7. I want the teachers to include more assignments involving Facebook in the teaching.

Strongly agree      Agree      Disagree      Strongly disagree

8. I learn about foreign cultures by communicating with people from other countries.

Strongly agree      Agree      Disagree      Strongly disagree

9. I know some young people in Norway/Kenya.

Strongly agree      Agree      Disagree      Strongly disagree

10. I have learned about the everyday life of young people in Norway/Kenya through communicating with them through Facebook.

Strongly agree      Agree      Disagree      Strongly disagree

11. I find communication through Facebook meaningful and interesting.

Strongly agree      Agree      Disagree      Strongly disagree

**At last I want you to write a short answer to the following questions:**

12. In your opinion, what are the greatest benefits of Facebook?

.....  
.....  
.....  
.....

13. In your opinion, what are some of the advantages of incorporating Facebook in the teaching and homework assignments?

.....  
.....  
.....  
.....

14. In your opinion, what are some of the possible disadvantages of incorporating Facebook in the teaching and homework assignments?

.....  
.....  
.....  
.....

Thank you so much for your participation!

Porsgrunn, March 2012

Hege Pedersen

## **Appendix 2: Interview protocol – Pilot 2013**

### **Project: ICT in Intercultural Communication**

As part of my Master's Degree in Foreign Languages in School, I am attending a course in intercultural learning, "Interkulturell læring", at Østfold University College, Norway, this semester. As a part of this course I will conduct an interview-based investigation into the school cooperation between \_\_\_\_\_, Kenya and \_\_\_\_\_, Norway.

Four interviews will be conducted and the interviewees are the principal and a teacher from the two schools in question. Because the names of the schools are revealed, and due to the low number of participants, this is not an anonymous investigation, but the names of the interviewees will not be disclosed.

### **Interview protocol**

#### **Background information**

1. What is your position in school?
2. How long have you had your current position?
3. In what ways have you been involved in the cooperation so far?

#### **Answer the following questions based on your experiences with the cooperation.**

4. What do you consider the most important aspects of the cooperation between the schools?
5. What, in your opinion, are desirable aims for the friendship?

For the teachers:

For the students:

6. How do you picture the further relationship between the two schools?
7. What do you think works well today?
8. What measures can be done to enhance communication?
9. Approximately how much time do you consider acceptable/desirable to invest in this relationship on a monthly basis?
10. Which students should be involved?

Thank you so much for your participation!

Porsgrunn, May 2013

Hege Pedersen

## Appendix 3: Questionnaire – Email project 2013

### Project; ICT in Intercultural Communication

In my master's thesis in the program "Foreign Languages in School" at Østfold University College, I will investigate the use of ICT in intercultural communication. This particular project will examine the value of using emails through the website ePals.com.

The participants involved are a group of students from \_\_\_\_\_, Kenya, and a group of students from \_\_\_\_\_, Norway. The participants will decide on specific topics for communication, but they will also be able to communicate freely with their keypal. The participants will answer the same questionnaire twice, once at the beginning of the project and once at the end.

Participation in this project is voluntarily and the answers will be treated anonymously. There is no right or wrong answer to the questions.

### Questionnaire

#### Background information, please circle the correct answer:

- Male          Female
  
- Age: 12    13    14    15    16    17    18    19
  
- Where do you live during school terms?  
At home          At school
  
- Have you used the Internet before?  
Yes                  No

If the answer to the above question is "no", you do not have to answer question 1-8 and 10.



**Answer the following questions based on your activities on the Internet during the last month. Circle the correct response:**

1. Which language do you normally use to communicate on the Internet?

Your mother tongue    English

2. Which of the following media do you use the most? Rank the alternatives from 1-6, with 1 being the most frequent and 6 the least frequent. Write an “N” if you never use the alternative.

Number	Media
	Facebook
	Email
	Skype
	Twitter
	Instagram
	Blogs

3. How often do you normally log on to the Internet?

Several times a day                  Once a day                  2-3 times a week  
 Once a week                          Once a month                  Never

4. How often do you normally log on to Facebook?

Several times a day                  Once a day                  2-3 times a week  
 Once a week                          Once a month                  Never

5. How often do you normally use email to communicate?

Several times a day                  Once a day                  2-3 times a week  
 Once a week                          Once a month                  Never

6. How often do you normally log on to the Internet during school hours?

Several times a day      Once a day      2-3 times a week  
 Once a week      Once a month      Never

7. How do you normally get access to the Internet? Rank the alternatives from 1-3, with 1 being the most frequent and 3 the least frequent. Write an “N” if you never use the alternative.

Number	Media
	Cellphone
	Computer at home
	Computer at school

8. For what purposes do you usually use the Internet? Rank the alternatives from 1-10, with 1 being the most frequent and 10 the least frequent. Write an “N” if the alternative does not apply.

Number	Activity
	Search for information
	Read newspapers
	YouTube
	Facebook
	Email
	Online dictionaries
	Skype
	Online gaming
	Blogs
	Twitter

**To what degree are the following statements true?**

9. I enjoy writing in English.

Strongly agree      Agree      Disagree      Strongly disagree

10. I enjoy writing in English on the Internet.

Strongly agree      Agree      Disagree      Strongly disagree

11. I want the teachers to include more assignments involving communication through the Internet in the teaching.

Strongly agree      Agree      Disagree      Strongly disagree

12. I learn about foreign cultures by communicating with people from other countries.

Strongly agree      Agree      Disagree      Strongly disagree

13. I know some young people in Norway.

Strongly agree      Agree      Disagree      Strongly disagree

14. I have learned about the everyday life of young people in Norway through communicating with them on the Internet.

Strongly agree      Agree      Disagree      Strongly disagree

15. Which of the following communication alternatives do you think are best suited to develop friendship with people in other countries? Rank the alternatives from 1-8, with 1 being the best suited and 8 the least suited.

Number	Activity
	Blogs
	Letters
	Facebook
	Email
	Skype
	Online gaming
	Twitter
	Instagram

**At last I want you to write a short answer to the following questions:**

16. In your opinion, what are the greatest benefits of using the Internet?

.....  
.....  
.....

17. In your opinion, what are some of the advantages of incorporating communication through the Internet in the classroom?

.....  
.....  
.....

18. In your opinion, what are some of the possible disadvantages of incorporating communication through the Internet in the classroom?

.....  
.....  
.....

19. In your opinion, what are the greatest benefits of communicating through email?

.....  
.....  
.....

20. In your opinion, what are some of the possible disadvantages of communicating through email?

.....  
.....  
.....

21. In your opinion, what are the greatest benefits of developing friendship with people from other countries?

.....  
.....  
.....

Thank you so much for your participation!

Porsgrunn, September 2013

Hege Pedersen

## Appendix 4: Questionnaire – Survey school leaders/teachers 2014

### Master’s thesis: School Cooperation Kisumu – Porsgrunn

A Friendship City Agreement between Kisumu, Kenya, and Porsgrunn, Norway, was established in 2008. Two years later, in 2010, the relationship was extended to an agreement between the Departments of Schools in the two municipalities involving eight schools: \_\_\_\_\_ Primary School – \_\_\_\_\_ Primary School, \_\_\_\_\_ Primary School – \_\_\_\_\_ Primary School, \_\_\_\_\_ Secondary School – \_\_\_\_\_ Lower Secondary School and \_\_\_\_\_ Secondary School – \_\_\_\_\_ Lower Secondary School. In addition to the schools run by the municipality, \_\_\_\_\_ Upper Secondary School cooperates with \_\_\_\_\_ Secondary School and \_\_\_\_\_ Secondary School.

I am currently attending the Master’s Program “Foreign Languages in School” at Østfold University College, Norway, and in my master’s thesis I will write about the school cooperation between Kisumu and Porsgrunn. By interviewing school leaders and teachers from the schools in question, I intend to survey (i) status quo, (ii) aims/expectations, and (iii) thoughts regarding the way forward. In addition, two surveys mapping students’ use of social media will be discussed.

24 school leaders and teachers will be interviewed. No names will be disclosed, and it will not be possible to trace answers back to individual respondents.

Please answer the questions below and return the questionnaire to:  
[hege.pedersen@porsgrunn.kommune.no](mailto:hege.pedersen@porsgrunn.kommune.no)

### Questionnaire

#### Background information – mark the correct alternative with an x mark

- School leader                       Teacher
- How long have you been involved in the cooperation?  
More than 3 years       1-3 years       Less than 1 year

#### Status quo – insert an x mark for the best suited alternative

1. In what ways have your school been involved in the school cooperation from 2010-2014?

Activity	Frequency					
	1	2	3	1 per year	2-3 per year	Never
School visits at partner school						
School visits from partner school						

Communication student-student	Frequency				
	Regularly	Occasionally	1-2 times	Never	Do not know
Facebook					
Skype					
Email					
Letters					
Blogs					
Other					

Communication teacher-teacher	Frequency				
	Regularly	Occasionally	1-2 times	Never	Do not know
Facebook					
Skype					
Email					
Letters					
Blogs					
Other					

2. Which students are involved in the cooperation, and in what ways?

	Information about the partner school	Communication	School visits	Other:
The whole school				
One form/grade				
Two forms/grades				
One school class				
Two school classes				
1-2 electives				
Several electives				
A small group of students				
Other				

3. How many school leaders and teachers are involved in the cooperation, and in what ways?

	Information about the friendship school	Communication	School visits	Other:
The school management				
The headmaster/principal				
The entire teaching staff				
3-4 teachers				
1-2 teachers				

Other				
-------	--	--	--	--

*In the School Cooperation Agreement signed in 2011 it is stated that the cooperation should promote «friendship and learning through social media». Based on your experiences with the cooperation, to what degree are the following statements true? Insert an x mark in the appropriate box.*

4. Teachers and students involved in the cooperation have a positive outcome according to the objective.

Strongly agree  Agree  Disagree  Strongly disagree

5. Students partaking have befriended students from the partner school.

Strongly agree  Agree  Disagree  Strongly disagree

6. Students partaking have learned about young people's way of life in the partner country.

Strongly agree  Agree  Disagree  Strongly disagree

7. Communication on the Internet has functioned satisfactorily between the participating students.

Strongly agree  Agree  Disagree  Strongly disagree

8. Communication on the Internet has functioned satisfactorily between the participating teachers.

Strongly agree  Agree  Disagree  Strongly disagree

**Aims/expectations – please write a short answer to the following questions:**

9. What, in your opinion, are desirable aims for the school cooperation?

For the students:

For the teachers:

10. Approximately how much time do you consider acceptable/desirable to invest in this cooperation on a monthly basis?



11. Should all the students at the school be involved or only specific groups/classes? If so, which groups/classes?

**The way forward – please write a short answer to the following questions:**

12. Which aspects of the cooperation do you wish to continue?

13. What could be improved?

Thank you so much for your participation!

Porsgrunn, April 2014

Hege Pedersen

## **Appendix 5: Overview ICT in education in Kenya**

In 2009, Swarts and Wachira prepared a situational analysis about ICT in education in Kenya for the UN founded organization, The Global e-Schools and Communities Initiative (GeSCI) (2009). Here is an overview of some of the findings in the analysis (Swarts & Wachira, 2009):

- Historically, education and training at all levels has always been prioritized by the Kenyan government as it is considered the foundation for social and economic development (p. 1). Education aim at building the human resources necessary to ensure development and national wealth creation (p. 1).
- However, the government faces challenges in reaching this aim which can broadly be categorized as access, quality, equity and relevance (p. 1).
- Official statements and documents show that the government is aware of the potential of ICTs in human development and in the development of a knowledge-based economy (p. 2).
- Initially, the focus on ICTs in education was aimed at developing ICT skills; however, there has been a shift over time to leverage ICTs to address issues of quality and improving teaching and learning (p. 2).
- Secondary and post-secondary levels of education have been prioritized for utilizing ICTs in Education, whereas ICT deployment in primary schools is “almost negligible” (p. 3).
- Despite the interest and commitment, there are discrepancies of the availability and use of ICTs at various levels; of more than 6,000 secondary schools, only about 1,300 have computers, 213 of these schools received the equipment from the Ministry of Education, whereas the rest from private and civil society organizations (p. 3). Yet, most secondary schools reported to use less than 40% of the available infrastructure and very few actually use ICT as an alternative method to deliver the curriculum (p. 3). The researchers found this to be attributed to (i) inadequate ICT equipment, (ii) lack of content, (iii) lack of guidance on how to best utilize the infrastructure, (iv) lack of curriculum support for ICTs use, and (v) lack of maintenance and technical support (p. 3).
- Despite huge investments in ICT infrastructure and a massive increase in cell phone usage, Internet and broadband penetration levels remain low, and ICT infrastructure and electricity level, particularly in rural areas, is a constant challenge (p. 4). Among

telecommunication services nationwide, the Internet has been among the least accessible, and in 2008 the Internet penetration rate was at 9% (p. 15).

- A unified framework and strategy for the implementation of ICT in education is lacking; of the 3 government Ministries responsible for the education and training sector i.e. Ministry of Education (MoE), Ministry of Higher Education, Science and Technology (MHEST) and Ministry of Youth Affairs and Sports (MOYAS), only MoE has a developed policy and strategy framework (p. 4).
- Research show that institutions with ICT plans and objectives are more likely to effectively use ICT, and although there are some developed guidelines for schools, these have yet to be implemented (p. 4).
- Generally, the approach is the computer lab model with ICT primarily used for skills training (p. 5).
- Due to costly computer equipment and limited access to electricity and connectivity coverage, exploring alternate affordable solutions would be prudent, however there is no such strategy in place (p. 4).
- Regarding Teacher Professional Development (TDP), there is no baseline data on teacher ICT competencies, and a coordinated, comprehensive framework for TPD for ICT integration and use is lacking (pp. 5-6).
- The curriculum needs a framework to guide the integration of ICTs in teaching and learning, and the curriculum needs to be reviewed (p. 6).
- The ICT staffs within the Ministries are IT professionals; however, they generally lack experience and training connected to education and technology use in education (p. 7).
- Research show that there is a gap between educational policy and attained goals; particularly in the field of ICT (pp. 17-18).
- A critical success factor in determining the use of ICTs for development is government and political commitment to the cause (p. 58).
- From official documents and plans, there is evidence that the Kenyan government is committed to the exploitation of ICTs for education and development (p. 58).
- However, lack of capacity to integrate ICTs effectively at all levels, is a major concern throughout the Situational Analysis (p. 60).

## **Appendix 6: Overview ICT in education in Norway**

In 2013, a quantitative study about ICT in education in Norway, “Monitor skole 2013”, was conducted for the Norwegian Center for ICT in Education, a public administrative body under the authority of the Norwegian Ministry of Education and Research (Egeberg, Guðmundsdóttir, Loftsgarde, Loi & Hatlevik, 2013). Students from 7<sup>th</sup> grade, 9<sup>th</sup> grade, Vg2 (level 2 in upper secondary school), teachers and school leaders participated. Here is an overview of some of the findings in the study (Egeberg et al., 2013):

- There are variations in the students’ digital competence (p. 10).
- An overall result is that the competence aims set forth in the curricula in not reached (p. 10).
- Students with good grades have higher scores in digital competence (p. 10).
- The students’ evaluations of their own digital skills show a general satisfaction, however, there are differences depending on activities in question (p. 10).
- Factors found to affect the participants digital competence are: (i) family background, (ii) school results, (iii) confidence regarding own skills, and (iv) strategies for finding and processing information (p. 11).
- There are variations between the schools represented; a result which is confirmed by findings in PISA 2009 for Norway showing a greater variation between schools in digital reading scores than in paper reading scores (p. 11).
- 45% of Vg2 students use computers in school more than 10 hours per week (p. 12).
- 43,5% of 9<sup>th</sup> grade students use computers in school between 1-3 hours per week (p. 12).
- 45% of 7<sup>th</sup> grade students use computers in school less than 1 hour per week (p. 12).
- Computers are more frequently used in the humanities compared to scientific subjects, with Math being the subject with the least use of computers (p. 12).
- Generally, the older students use computers more frequently in all subjects (p. 12).
- Google search is the resource most commonly used in connection with school work, second by encyclopedia on the Internet, and in third place, traditional textbooks (p. 12).
- Textbooks still have a strong position in Norwegian schools (p. 12).
- There is an overall positive effect between students’ use of textbooks and digital competence (p. 13).

- Personal digital equipment for students in 7<sup>th</sup> grade: 67,8% laptop, 17% desktop computer, 39,3% tablet (p. 13).
- Personal digital equipment for students in 9<sup>th</sup> grade: 78,7% laptop, 25% desktop computer, 36,5% tablet (p. 13).
- Personal digital equipment for students in Vg2: 93,3% laptop, 26% desktop computer, 28,7% tablet (p. 13).
- The study shows that 15% of 7<sup>th</sup> graders, 14,8% of 9<sup>th</sup> graders and 11,3% of Vg2 students have used tablets in school, however, only a small amount report systematic use (p. 14).
- Privately, the use of social media and listening to music are the most common online activities among the students, followed by chat programs like Skype (p. 14). A significant amount of Vg2 students in the study also report use of computers/tablets for school work and for reading online newspapers (p. 14).
- 95,4% of the 9<sup>th</sup> graders and 96,8% of Vg2 students have Facebook accounts (p. 14).
- However, the majority are passive users of Facebook; (i) 61,5% of the 9<sup>th</sup> graders and 76,8% of Vg2 students read others' updates on a daily basis, but only 9% and 5,5% update their own profile, and (ii) 44,4% and 55,5% look at others' pictures daily, in contrast to only 3,7% and 2,1% posting their own pictures (p. 104).
- Apart from reading others' updates, the most common use of Facebook is receiving and sending chats; 57% of the 9<sup>th</sup> graders and 72,7% of Vg2 students reportedly on a daily basis (p. 104).
- 7-10 % of the students use Facebook in connection to school work on a daily basis (p. 14).
- There is no evidence that young peoples' extensive use of social media or online gaming automatically qualifies them for school-related use of ICT as described in the competence aims in the curriculum (p. 14).
- Nine of ten teachers use ICT in their teaching to increase the students' interest in the subject and to ensure a more varied teaching (p. 15).
- Eight of ten teachers claim that the use of ICT in teaching helps activate the students and differentiate according to personal needs (p. 15). A result that is in line with the students' answers; eight of ten students agree that the use of computers/tablets in school (i) is useful, (ii) makes it easier to learn, and (iii) increases their desire to learn (p. 15).

- Students in 7<sup>th</sup> and 9<sup>th</sup> grade are significantly more positive to ICT in teaching than Vg2 students (p. 15).
- 1-3% of the students report digital bullying, with the proportion being higher among the 7<sup>th</sup> and 9<sup>th</sup> graders than among Vg2 students (p. 16).
- The study shows variations between the teachers' digital competence and that a greater portion use computers for preparation and follow-up work than in teaching (p. 17).
- The school leaders participating in the study report that they find the use of ICT in school important, and many of the schools represented focus on the implementation of ICT, however, there are variations concerning resources available to develop the teachers' digital competence (p. 18).
- Procurement of computers and interactive whiteboards have been prioritized over (i) training in use, (ii) development of digital content, and (iii) sharing of digital learning resources (p. 18).