

The Use of Active Learning in Kenyan Education:  
A Qualitative Study of Teachers' and Management's Perceptions and Practices Towards  
Active Learning and the Perceived Outcomes of the World Teacher Programme in Kisumu  
County



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### **Summary**

Major steps have been made in the enrolment of pupils in Kenyan primary schools, though quality of education is still critical. Improvements are partly to subscribe to the implementation of programs that aim to improve teachers' practices. One of these programs is the World Teacher Program (WTP) of Edukans which is, together with Pamoja Child Foundation (PCF), targeting Kenyan teachers and schoolmanagement to improve the learning of children. Teachers from the Netherlands travel to Kenya and exchange ideas on active learning methods. In order to evaluate the working elements of the WTP, firstly in-depth interviews were held with twelve teachers, 3 headteachers and one deputy. Secondly, observations were held by teachers to get a view of perceptions and practices towards active learning and the environmental factors teachers encountered. Finally, the perceived outcomes were measured using outcome-indicators. Results indicated a gap between perceptions and practice. Whereas teachers' perceptions matched the active learning pedagogy, practices remained mainly teacher-led in which pupils had a passive role. Especially the lack of support from parents and environmental constraints like the lack of learning material seemed to be a barrier for teaching. Teachers felt strengthened by the WTP, therefore some recommendations were established for Edukans and PCF to further improve the program.

### **Samenvatting**

Grote stappen zijn gemaakt in de toegankelijkheid van het basisonderwijs in Kenia, maar de kwaliteit van het onderwijs is nog steeds kritiek. Verbeteringen worden deels toegeschreven aan programma's die Keniaanse leerkrachten helpen effectieve onderwijskundige methoden te ontwikkelen. Een programma waarin deze methodieken worden aangeboden is het World Teacher Programma van Edukans. Edukans organiseert, in samenwerking met Pamoja Child Foundation (PCF), een uitwisseling tussen Nederlandse en Keniaanse leerkrachten, waarin het implementeren van active learning methods wordt gestimuleerd. Om de werking van het World Teacher Programma te evalueren werden 12 leerkrachten, drie schooldirecteuren en een onderdirecteur bevraagd naar hun visie en praktijken met betrekking tot active learning. Resultaten lieten een discrepantie zien tussen de visie en praktijk van leerkrachten. Een mogelijke reden hiervoor is de ontbrekende steun van ouders en het ontbreken van effectieve leermiddelen. Gedacht wordt dat het versterken van de rol van de schooldirecteur en het versterken van ouderbetrokkenheid kan leiden tot een verdere implementatie van active learning methoden. Leerkrachten voelden zich gesterkt door het World Teacher Program en voor de verdere verbeteringen zijn aanbevelingen gemaakt voor zowel Edukans als PCF.

### **The use of active learning in Kenyan education**

In 1990 the United Nations Convention on the Rights of the Child (CRC) was formed, stating that every child deserves the right to be educated. This agreement was established in almost every country (Ansell, 2005). Following the CRC, Kenyan government implemented the right of every child on free and compulsory basic education in 2003. Nevertheless, one in ten of Kenyan youth have never completed primary school and over a quarter of Kenyan youth has less than a lower secondary education diploma (Unesco, 2012). A possible explanation for the drop-out rate might be that quality of education is still critical (MoE, 2012; Metto & Makewa, 2014). Kenyan government aims to change education, which is stated in a document with the vision for 2030. Amongst other things, they aim to engage citizens in lifelong learning, learn new knowledge quickly and be capable of more convoluted problem-solving and understanding of what they are working on (MoE, 2012).

In order to make changes in Kenyan education, it is important to know how the society conceptualises childhood. According to Ansell (2005) the nature of education emerges from an interplay between culturally and historically situated beliefs and the practices that are being promoted internationally. In that light, it is important to consider both Western-style schooling and the culture and history of Kenyan education. Originally, education started informally where children learned in interactions with peers and adults and later on Western-style schooling came. Many countries that have a colonial past continue to use the educational system of their colonisers, which results in academic and examination oriented curricula, regardless of whether that knowledge is useful outside schools. Moreover, the colonial language is generally used in the classroom, which often coincides with higher dropout rates (Ansell, 2005).

Though many challenges exist in Kenyan education, big accomplishments were made in the entering and completing of primary school while in the same time improving learning outcomes. According to Unesco (2015) these achievements are partly assigned to programmes that help teachers to adopt effective educational approaches. Approaches that improve quality of education are often associated with child-centred methods (De Kock, Slegers, & Voeten, 2004; Vavrus, Thomas, & Bartlett, 2011). A child-centred approach allows children to actively participate in class and engages children to make their own meaning of what they are learning. This is in line with the Vygotskian theory that children form their attitude and behaviour by experiences in the social context (Vygotsky, 1987). However, the nature of Kenyan education nowadays is mainly teacher-centred; teachers are the primary source of knowledge and children learn by memorizing lectures. It is therefore

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questionable whether child-centred methods fit the Kenyan context which is characterized by the ‘transmission of knowledge’ whereby not actively involving pupils (Hardman & Pontefract, 2005). Nonetheless, it is the wish of the Kenyan government to increase students’ critical thinking and problem-solving. Skills that are often associated with the active involvement of pupils (Metto & Makewa, 2014; Prince, 2004).

One of these child-centred methods is active learning. This is an instructional method in which children have an active impact on their learning and construct knowledge in interaction with others (Bonwell & Eison, 1991; Niemi, 2002; Prince, 2004; Stephen, Ellis, & Martlew, 2010). To implement active learning students must be involved in more than listening. Active learning emphasizes the exploration of students’ attitudes and values. Teachers are expected to put less emphasis on transmitting information and more on the development of skills by engaging pupils in activities and higher-order thinking tasks (Bonwell & Eison, 1991).

The method of active learning is mainly implemented in Western schooling systems. Ansell (2005) speaks of being cautious of culture when it comes to transferring educational concepts from one context to another. Nsamenang (2008) expressed concerns regarding the implementation of decontextualized ‘best practices’ of Western experts. According to him organisations implementing developmental initiatives are only sustainable when they do not intend to replace and exclude but to enhance and improve Africa’s un-Western approaches. One of the NGO’s that is trying to implement a developmental initiative is the Dutch educational organisation Edukans.

Edukans, the principal of this study, is a civil society organisation that attempts to improve education in developing countries. Edukans (2010) facilitates the exchange of knowledge through connecting people around the world. One of the projects that aims to improve quality of education is the World Teachers Program (WTP) which connects teachers from the Netherlands and Finland to teachers from the South (e.g., Kenya, Malawi and Oeganda) to exchange knowledge and experiences in order to improve the quality of education. Edukans’ main goal for Kenya is changing teacher-centred education towards a more child-centred education by exchanging knowledge and practice on active learning methods (Edukans, 2017c). Edukans works together with the local partner Pamoja Child Foundation (PCF) (2017) who has the mission to create a safe environment for children to grow up in so that they develop into responsible and self-reliant citizen. In 2007 PCF started with trainings to teach teachers how to use child appreciative teaching methods and in the extension of that they adopted the active learning-approach of Edukans.

The general aim of this study is the evaluation of the WTP that aims to develop perspective and practice of teachers and management through exchanging active learning-methods. The insights of this study could display the working elements of the WTP and could lead to implications for the improvement of the WTP in Kenya. Furthermore, it could provide suggestions for other countries that wish to adopt child-centred approaches like active learning-methods. A study from Pluijmen (2017) is parallel to this study and provides an in-depth discussion on child-centred behaviour in Kenyan education from the perspective of teachers and children. Important actors in the implementation of active learning methods are primary school teachers and the school management. If their perceptions and practices do not match the active learning pedagogy the WTP might be less effective. Therefore it is important to explore what teachers and school management's perceptions and practices are towards the learning of children. This leads to the central question: "What are the perceptions and practices of primary school teachers and school management on active learning and how has the WTP contributed to that?" The central question can be operationalised in four questions: (1) What are teachers' perceptions (attitude, perceived social influence and experienced self-efficacy) towards active learning?; (2) What environmental conditions do teachers experience? (3) What are the practices of teachers towards active learning and how has the management contributed to that? (4) What are the perceived outcomes of the participants of the WTP regarding satisfaction, goal realization and wishes and needs?

### **Theoretical framework**

#### **Teachers' perceptions on active learning**

The first question of this study is: 'What are teachers' perceptions towards active learning? First a working definition of active learning and will be discussed together with the beneficial effects. Followed by expectations on the attitude, perceived social influence and experiences of teachers.

Different terminology is used in literature for active learning, for example self-regulated learning, independent learning or problem-based learning (Bonwell & Eison, 1991; Niemi, 2002; Prince, 2004; Stephen et al., 2010). The common features are the greater emphasis on developing students' skills and exploration of their own attitudes and values instead of the transmission of knowledge, and students' engagement in activities. It suggests that students engage more actively when they are writing, reading or discussing, as opposed to passively listening to lectures. Moreover, active learning is associated with higher-order thinking tasks like analysing, synthesizing and evaluating (Bonwell & Eison, 1991; Niemi, 2002). The different terminology for active learning, and the higher-level outcomes that

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active learning is targeting makes it overall hard to find data that confirms beneficial effects. However, research suggests that core elements from active learning improve the attention span during classes, improves the recall of information, encourages verbalisation and is associated with higher academic achievement of pupils. Furthermore, it is thought to raise learning outcomes (Prince, 2004; Hattie, 2009).

In this study the working definition of Bonwell and Eison (1991) will be used, defining active learning as: “active learning involves students in doing things and thinking about the things they are doing”. Active learning consists of different methods that can modify traditional lecturing to increase students learning, for example applying tests, demonstrations, effective techniques of questioning, discussions, problem solving, cooperative learning, debates, peer teaching etc. (Bonwell & Eison, 1991). Highly-valued reformers in education state the importance of active learning. According to Freire (1970) teachers should stop expecting students to memorize ‘static content’ which misses concreteness and is far removed from the reality of the student. Instead dialogue between teachers and children should be stimulated. Dialogue exists when teachers take up the role of co-investigator in which they examine problems related to pupils’ lives (Shim, 2008). Teachers have the important role to get to the same level with children and attuning their instruction to the potential competence of students called the zone of proximal development. Learning in the zone of proximal development can be enforced by using collaborative group work and peer assistance (Vygotsky, 1987; Pontefract & Hardman, 2005).

Although active learning is believed to enhance learning, it might be challenging for teachers to move to a predominantly active learning pedagogy, because it asks for a change in vision on their own role (Stephen et al., 2010). Research suggests that perceptions teachers have about teaching and learning affects their teaching practices (Mwangi, 2013). Therefore, the ASE-model of De Vries, Dijkstra and Kuhlma (1988) can be used. The model can be used to understand behavioural patterns and get insights in the factors that influence behaviour. Actual behaviour will be discussed later on. The perspective on active learning can be explained by the attitude, perceived social influence and experienced self-efficacy expectations. Background variables like individual factors, sociodemographic and knowledge are thought to influence behaviour through those three determinants (Brug, Van Assema, & Lechner, 2012).

Attitude could be described as the way someone judges certain behaviour, the knowledge one has of that phenomena and the outcomes one expects. Attitudes are often based on earlier experiences. If earlier behaviour in the past has led to positive outcomes it is

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expected that it will result in a mainly positive attitude. The same goes for negative attitudes (Brug et al., 2012). Furthermore, attitudes are based on habits and beliefs. Beliefs can be cognitive (knowledge one has on the concept of active learning), affective (feeling one has when using active learning) or conative (desire to use active learning). Beliefs can furthermore be divided in the advantages and disadvantages one relates to certain behaviour. For example, a teacher can see mainly advantages in the use of active learning (active learning makes teaching easier) or see disadvantages (active learning makes it difficult to control the class). As Massouleh and Jooneghani (2012) named it can be expected that teachers feel they are the ones to determine what and how children learn which might clash with the way active learning requires children to participate in their own learning process.

Perceived social influence is defined as the direct influences that others can have on individual behaviour by their normative beliefs, social support or pressure and their modelling. It is important to consider how teachers experience the normative expectations that they think others have of them (Brug et al., 2012). Discouraging opinions of the management, parents or the government will most likely have an impact on teachers' perceptions about it (Metto & Makewa, 2014). It can be expected that teachers will not take the risk to change their teaching methods if they feel parents, headteachers and inspectors do not support them (Ackers & Hardman, 2001).

According to Bandura (1987), the experienced self-efficacy is the capability that a person feels to act in certain ways. The expectations that a person has of his own efficacy can differ in magnitude, generality and strength. It respectively points out how teachers rate the necessary skills in difficulty (magnitude), how they think certain behaviour will cause problems in different situations (generality) and how much confidence they feel to use certain behaviour (strength). Research showed that teachers need organising, differentiating and tutoring skills to teach actively (Niemi, 2002). Research suggests that teachers have not been trained and often never had personal experiences on how to use the method (Metto & Makewa, 2014). Furthermore, according to the government teachers still have major difficulties with changing instructional practices in more collaborative forms between them and pupils (MoE, 2012). It is therefore expected teachers might have a low sense of self-efficacy towards the use of active learning.

### **Environmental factors**

The second research question was: What environmental conditions do teachers experience? Even though teachers may have the intention to incorporate active learning methods it does not necessarily mean they act on it (Brug et al., 2012). The perceptions on

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behaviour can be a prediction of the actual behaviour, but the environmental conditions can hinder (barriers) or contribute (protective factors) to the implementation of active learning methods. Though many teachers may agree that students' learning requires active participation, there may be several obstacles that prevent them from using it. Kenyan teachers are working in an environment with considerable constraints due to poverty. Common barriers for using active learning methods are: availability of time during class, the lack of time to prepare, larger classes and lack of materials (Bonwell & Eison, 1991; Metto & Makewa, 2014; Unesco, 2014). The latter has been expressed as a barrier to teach, whereby not recognizing how teachers could use their competences to change education for the better (Heijker, 2012; Otten, 2012). Therefore it can be expected that teachers will attribute any failure with regard to active learning methods to these barriers and with that believe in an external locus of control.

Factors that could contribute to the implementation of active learning were also found. Availability of materials was suggested to be encouraging in using different forms of differentiations (Pontefract & Hardman, 2005). Furthermore, Ackers and Hardman (2001) state the essence for teachers to have supportive interactions with peers through modelling and feedback to break down the mainly teacher-led recitation to a more responsive way of teaching. Unesco (2015) found empowered school committees with teachers, supportive parents and managing teachers also improve quality on schools. Previous research on the WTP suggested that headteachers are likely to have impact on the didactical and the educational vision and the practice of teachers (Blanckstein & Bos, 2014).

Provided that it is effective, the schoolmanagement is believed to activate teacher motivation and to facilitate school administration and staff and steer them towards a common goal (Mwangi, 2013). Thoonen et al (2011) emphasize the significance of leadership. Three core dimensions were identified: identifying a vision for the school's future, providing individual support and providing intellectual stimulation. Through initiating and identifying a vision school leaders may increase the identification of teachers with the school. Teachers may internalize the goals and that may increase their experienced efficacy to attain that vision. Next to that school leaders should try to understand teachers' needs and treat them uniquely and try to enhance teachers' sense of self-efficacy. Lastly through intellectual stimulation school leaders should aim to help teachers develop the ability to solve individual and group problems. Thoonen et al. (2011) suggest that school leaders should combine these behaviours in order to improve teaching and learning. The expectation is that headteachers might have a leading role in steering the school to an active learning pedagogy.



### **Teachers' practice towards active learning**

The third question is: 'What are the practices of teachers towards active learning and how has the management contributed to that?'. The actual practice of teachers in African countries is usually dominated by a directive form of teaching based on rote memorization of facts (Lockheed et al., 199; Nyaga, 2013; Pontefract & Hardman, 2005). Overall research suggested that Kenyan education merrily consists out of teacher explanation emphasized by a question and answer approach, whole class recitation, written exercises and pupils copying from the book or chalkboard (Ackers & Hardman, 2001; Pontefract & Hardman, 2005; Metto & Makewa, 2014). It seems like teachers are asked to abandon the teacher style where students mostly copy from the blackboard by implementing the active learning method.

However, from 2001-2005 the Ministry of Education ran a national program called School-based Teacher Development (SbTD) that aimed to improve quality and cost-effectiveness of teaching and learning in primary schools through the promotion of active learning and use of new textbooks (MoE, 2006). Research showed that the use of group work had increased significantly and lesson planning seemed to be done more systematically. Moreover, teachers appeared to be more enthusiastic about teaching and would create therefore a more positive classroom climate (Hardman et al., 2009). Therefore, it can be expected that teachers still use their ritualized participation strategies while incorporating more group work.

### **Outcome evaluation WTP**

The fourth and last question of this study is: What are the perceived outcomes of the participants of the WTP regarding satisfaction, goal realization and wishes and needs? WTP is thought to be a preventive intervention focusing on strengthening protective factors. Three output-indicators, namely satisfaction, goal realisation and wishes and needs, will be used to measure the effectiveness of the WTP (Yperen, De Wilde, & Keuzenkamp, 2014). The first output-indicator relates to the satisfaction of the users. A high level of satisfaction may legitimize further use of these methods, while a low level of satisfaction may provoke further improvement. Teachers can be satisfied about certain parts of the program that have not been listed as goals. In 2012 several studies were done in Kenya and Malawi and it showed that the WTP was highly valued and appreciated (Van Monsjou & Metsemakers, 2012). It is expected that these teachers once again will feel satisfied by the program.

Using the second output-indicator this study attempts to gather data indicating which goals have been realized during the two sessions of the WTP, according to the teachers. The WTP has been conducted twice and the last session will be held shortly after the completion

of this study. Therefore, it is important to assess whether the project has achieved its intended goals and to explore how sustainable and meaningful the program was for the teachers and the school management. The initial goal of Edukans was to change educational practices from teacher-centred to an child-centred. The last WTP session specified these goals for the Dutch and Finish teachers to make them think on: ‘how to deal with slow learners, averaged and fast learners in one class?; How do young children learn in an effective way?; How can we introduce new methods of active learning?’ (Edukans, 2016; Edukans, 2017a). The last goal is in particular for the world teachers and because of the focus on Kenyan teachers, will therefore not be discussed. Furthermore, the mission of Edukans and PCF was to exchange knowledge amongst teachers that did not participate in the WTP. It can be expected that teachers perceive that their practices have also changed in a child-centred manner around Kisumu County after participating in the WTP twice. Teachers that did not participate in the WTP are expected to be more aware of active learning methods. In addition teachers are expected to be aware of differentiation methods as it has been a goal the last session. Finally, the wishes and needs of participants can lead to further implications for the WTP.

## **Method**

### **Type of research**

In this study a qualitative approach is used in order to get understanding of the meanings which people attach to certain phenomena (Boeije, 2014). The aim was to get an in-depth understanding of the social world of the participants by learning about their perspectives and experience regarding active learning methods. The form of the research was evaluative, because information was needed about the outcomes of the WTP. Qualitative research can be a useful design, because of its flexible methods of investigation, it can contribute to the understanding of outcomes and the different ways in which they are achieved or occur (Lewis, 2003). In particular a summative mode of inquiry has been used to find the different outcomes of the intervention. In this study the focus lay on the outcomes of the program and therefore implied fieldwork sometime after the event. This study was conducted after two program sessions and was held before the final session started (Lewis, 2003). Furthermore, in accordance of the holistic nature of this study information was attained from teachers, management and PCF. This study used triangulation by adopting both observing and in-depth interviews as methods. Interviews were held with PCF members to serve as a ‘member check’. This contributed to the reliability of the study as it enhanced the likelihood respondents were understood as intended (Baarda, De Goede, & Teunissen, 2013).

### **Participants**

Participants were teachers and headteachers, selected from six rural primary schools in the region of Kisumu County. Because of the in-depth nature of this study a non-probability sample was used, wherein the units have been deliberately selected to reflect the group of the WTP (Ritchie, Lewis, & Elam, 2003). The sample is chosen in cooperation with PCF as they have experience with the target group and have knowledge of the particular characteristics enabling understanding of the outcomes of the WTP. The sample consisted of six schools connected to PCF, of those four schools were participating in the WTP and two were not (number 9 and 11). The group participants consisted of 12 teachers, three headteachers and one deputy. Amongst them there were ten teachers, two headteachers and one deputy that participated in the WTP. Of all the teachers there were eight female teachers and four male teachers, three male headteachers and one male deputy. Their age varied from 23 to 45 years. Their years of experience in teaching varied from two to 40 years. Although this study used a small sample, efforts have been made to enable representational generalisation. The sample encompasses diversity by using different teachers from different grades and of different ages (Lewis & Ritchie, 2003). Moreover, a knowledgeable informant confirmed the representability of the target schools for other schools within the area.

### **Instruments**

In order to investigate phenomena in their natural settings different methods have been used. By means of triangulation of sources it is possible to capture both intended, like the implementation of active learning methods, and unintended outcomes, like changes in vision (Lewis & Ritchie, 2003; National Centre of Sustainability, 2011).

**In-depth interviews.** Individual in-depth interviews have been conducted following an understanding of the personal context of the teachers. In-depth interviews were used to assess teachers' attitudes and practices regarding active learning methods. The four research questions of this research were made operational in a topic list. The topics consisted of different open-ended questions. The interviewer would start with explaining the research objectives, structure and content of the interview. Moreover, the participants were ensured to be anonymous, which also contributes to the validity and reliability of the data (Lewis & Ritchie, 2003). The topic list was mainly derived from previous research (Blanckstein & Bos, 2014; Heijker, 2012). The topic list consisted of five parts, respectively quality of learning, general ASE-model, environmental factors, specified ASE-model and outcomes of WTP. The first part contained a broad question in order to understand underlying values, concepts and norms with regards to education, without directing the answers too much. This part was included to counter socially desirable answers. The question was: 'According to these cards

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what do you think is needed to improve the quality of education?'. The cards consisted arguments like: 'preparing children for the 21<sup>st</sup> century by working on skills such as creativity, problem solving, ICT, structuring knowledge, etcetera' and 'disciplining is the heart of education'. The second part was equal to earlier research and was more directed by using questions that were focused on the ASE-model. Examples of questions were: 'What is needed in the lessons for children to learn?' (attitude); 'What are the demands of the inspection?' (social influence); 'Are these skills easy or difficult to acquire?' (self-efficacy). The third part focused on the environmental factors which included questions like; 'What makes it hard for you to teach?'. The last part was on the outcomes of the WTP. Examples of questions were: 'Did you learn something from the world teachers?' 'What do you do with the knowledge and practice you've learned from the WTP'? The fourth and last part was directed at *active learning*. There were two reasons why this addition was introduced, its first purposive was to cover any parts that were not mentioned in the general part and its second purposive was to see whether goals of WTP were internalized. The assumption was that teachers and management would answer the general part in a sincere way, without being directed to the knowledge from the WTP. When the specific part would match with the general part it was to assume that the obtained knowledge would be internalized (Arthur & Nazroo, 2003).

**Observation.** The second method was used to answer research question number three regarding the practices of teachers. The researcher has recorded actions and interactions in the natural setting of the teacher. Observation can be useful in a research whereby behavioural consequences of events are being studied (Ritchie, 2003). A semi-structured observation was used on basis of the assessment-tool key-indicators of teaching (e.g., encouraging learners' confidence) and learning (e.g., applying different learning activities) (Edukans, 2017b). To increase the reliability two researchers have observed the same lesson. During the observation, each researcher kept own notes and after every observation separately a descriptive report was written. Subsequently the researchers compared their notes and similarities and used them to fill in the assessment-tool. The internal validity was increased by using both observations and interviews to measure teachers' practices (Celestin-Westreich & Celestin, 2012).

### Procedure

The data has been gathered in a period of five weeks, from the end of February until the end of March. This short period of time for interviews was due to school holidays which began end of march. Teachers and headteachers were approached through suggestions of

PCF. All participants gave their informed consent to participate in the study. First a trial observation and interview was held with a school outside the sample in the same area of Kisumu County. A staff member of PCF joined the interview and was asked for feedback to make the list of questions cultural sensitive. The internal validity was enhanced by adapting the questions to the daily ‘language’ of the participants (Lewis & Ritchie, 2003). Every school has been visited for three days in which the first day was usually used for observations and the second and third day was used for interviews. The interviews took approximately 60 minutes and were held in or outside classrooms. The reliability was taken in account by recording all interviews of the participants and using operative elements from previous research to form the topic list. To improve reliability a holistic approach was used, instead of using one observation as a snapshot, the observations have been done simultaneously with the interviews, three times per school. Though observations were only done once per teachers, therefore observational descriptions will only be used with support of interviews. The internal validity was enhanced by consistently summarizing participants’ answers and ask questions when things were not clear (Lewis & Ritchie, 2003).

### **Data analysis**

The verbatim transcripts were analysed according to the qualitative analysing methods of Baarda et al. (2013). Inductive coding techniques (i.e., comparing statements of respondents and open labelling) were used to generate explorative categories referring to the research questions of this study. To increase the construct validity and reliability of this study two researchers compared labels and categories and were consulting each other on the final analysis scheme. Labels were kept as close as possible to the original statements of the participants in order to increase internal validity.

### **Results**

The result section expands on the perceptions that teachers had towards active learning, the environmental factors teachers faced, the practices that were observed and the perceived outcomes of the WTP. Statements of participants were analyzed and categorized and the most important results will be discussed per aim. The categories are displayed in italic and the dimensions including citations stand between quotations marks. Observational notes were also analyzed and will be displayed by using ‘[...]’ brackets. Behind every quote or observational note the participants’ number and sex will be stated between brackets.

### **Teachers’ perceptions on active learning**

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The first question regarding the perceptions on (active) learning will be discussed by the three determinants of the ASE-model respectively attitude, perceived social influences and self-efficacy expectations.

**Attitude.** The interviews revealed cognitive, affective and conative beliefs of teachers with regard to active learning. Teachers regarded both active learning and child-centred as methods whereby the *most is done by children*. Some felt active learning required more time, but it was the best method to use. The analysis showed that teachers believed active learning involves children to do more than listening. Teachers often associated active learning with *learners' participation*. According to them children should learn in dialogue with the teacher and they *should not keep quiet*.

Generally speaking teachers supported children working together. Most teachers believed every individual has different capacities and that *children with different learning capacities should learn from each other*. Furthermore, most teachers were putting emphasis on the development of skills. Interestingly they felt that in particular underperforming or 'slow' learners could benefit from learning skills. Their outcome expectation was that emphasizing skills would help children survive in the community and help them to *become someone in society*.

Many teachers mentioned active learning involves *using different methods* like practical teaching. They felt children master more if they are involved in different activities. Most teacher wanted to *use groupwork* and discussion, through using question and answer sequences. They felt it eased their work and children were more involved. Also demonstrating and taking real things in class to *make learning real* were named. Teachers expected that *practical activities made children involved in class* and that *practical activities reduced drop-outs*.

Some comments were made regarding the exploration of children's own values and attitudes. Teachers mentioned the importance of talking to children about their vision whereby encouraging discussions and no opinions are rejected. Teachers often named the importance of *empowering individuality*, because they expected children with a strong individuality able to work independent and less likely to be persuaded by external influences.

Furthermore, some comments were made with regard to higher-order thinking. Teachers felt children should be prepared on skills like creativity and problem-solving. All teachers mention they *were having an important role in children's learning*. They felt it is important to *level with children* and *helping them instead of teaching*. Teachers often mention

not wanting to be the *centre of the class*. They wanted children to work independently and teachers recalled themselves as a guide.

Some teachers had affective beliefs with regard to active learning. They liked to use methods like groupwork and practical activities. They also thought learners welcome active learning methods. Also, one teacher named the wish to cooperate more child-centred methods in his teaching. Consistent to teachers, all headteachers were naming child-centred methods to be the best. Though one headteacher stated childcentred education giving children the right to say they are tired, which he felt made it harder to teach. He felt previous education was stronger than today, but child-centred education should still be implemented: “Yes, child-centred is the best education, because children learn when they touch”. (13MHT)

**Perceived social influences.** Teachers mostly experienced social influences from the government, parents and colleagues. Teachers mentioned they felt normative beliefs of the government were pressuring both positively and negatively. According to some teachers the *government was result-oriented*, they expected teachers to finish the syllabus and help children to get high marks in the end of the year. A teacher mentioned getting the feeling that her performance was being ranked according to the mean score of her class:

They should not be low, (...), the ones that have just arrived, they will drop it, because they will get that low marks. There will be that pressure at a meeting, you will be told to explain why the math's as posted are very low meanscore. (5FT)

Some teachers also mentioned the way the *government has tried to improve the education*. Teachers experienced support from the government as they wanted lessons to be child-centred and aimed to change the system to a more practical-oriented curriculum. For example, they aim to take away tests in the end of the year.

Also the influence from parents was both pressuring and supportive to teachers. Teachers mentioned most parents wanted their *children to do well in academics* and their demand was less focused on co-curricular activities. Most teachers however mentioned *parents were not available*. They felt parents had high expectations from the school, but did not enforce learning at home. Some parents were never seen at school and others did not support financially since they were thinking education is free. More teachers mentioned that children often *cannot participate freely at home*. Both informants confirmed parents usually did not discuss or reason with children about problems.

But now, at home, the way they approach on this at home is different. For example at home it is more of giving orders. (...) But, the activeness at home is more of doing the task to accomplish. (16MI)

**Experienced self-efficacy.** There were little comments made on the experienced self-efficacy of teachers with regard to magnitude, generality and strength. With regard to using skills to teach actively (magnitude) most teachers named they were *able to teach* but felt it was *challenging to teach*. One teachers stated she *missed important skills* like creativity and problem-solving. And others felt it was hard to level with children and teach on their pace meanwhile giving room for slow and fast learners. Strengths that teachers named that made them *feel confident to teach* where the ability of being consistent, passionate about teaching and able to take control. A *good pupil-teacher relation* was also mentioned multiple times as a factor that made teachers feel confident to use (active) learning. Teachers felt that active teaching was not possible in every situation. Sometimes it was causing problems in a situation where there is less time or the teacher is tired. But when asking teachers if they are able to teach children in every situation, they responded with: *teachers are flexible* and they *are able because they have to*.

The management had both managerial as teaching tasks. Apart from teaching in class the headteacher was responsible for managing resources and finances, administration, curriculum, a link between external partners, being a teacher in class and being the secretary of the Board of Management (BOM). All the headteachers named their job very *demanding and hard*. The deputy was to *assist the headteacher*. He was the one to take over all activities of the headteacher when the headteacher was not around. All headteachers felt they should delegate their tasks to others.

### **Environmental factors**

**Barriers.** Kenyan education is dealing with a lot of barriers that made it hard for teachers to (actively teach). Often the *academic system* was named as a barrier for teaching. Teachers felt that the curriculum was too wide and too difficult, which made practical teaching hard. Teachers mentioned it was hard to use (active learning) methods when a lot of content must be covered: “It takes a lot of time, content covered is just a bit small. You cannot go big”(8MT). Teachers felt they have *too little time* to use other methods. Normal lessons took 35 minutes. According to some teachers it did not provide sufficient time to spend on the individual learner, take children outside, talk to them about their vision or the use of other methods. Next to the system and time teachers often named the difficulty of *large class numbers* and *lack of learning materials*. Even if some teachers had learning materials, the big number of children made it difficult for them to use it. Observations indeed showed that classes were cramped, sometimes consisting out of 80 pupils. It was mentioned they wanted to use materials to demonstrate, but all the children would gather around that one



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material and it would overwhelm the teacher. Also the informant confirmed that these barriers were taken in consideration when preparing the lecturing method or a more active method in class. Another factor that made it hard to teach was *children having difficulties with national language*. Children were being forced to speak either Kiswahili or English. However, most of the time they did not like it, since they preferred to speak Luo which is the local language. According to some teachers it was the reason why children did not participate in class. Lastly some teachers felt *children were dependent* and they requested direct instructions:

There are certain areas where it cannot be learnercentred, It is you to give the instructions. (4MT)

**Protective factors.** There were less protective factors for active learning named by the teachers. Some teachers felt the introduction of tablets was going to make active teaching easier. Others named they felt *supported by the colleagues*. Teachers felt teaching became easier when colleagues are there to in taking care of problems. Also the community was named as a protective factor. They felt teaching became easier when the community took the responsibility for taking care of quality of education like strengthening facilities.

The headteacher and the deputy were named *to take care of wellbeing* of teachers and learners. They felt the *headteacher improved the learning in the school*. The deputy is often named to be the bridge between headteacher and teachers, as some teachers were not feeling comfortable to talk with their boss:

We should give him that freedom. That state of headship. (...) He is close to some teachers, old teachers.(...) So we are not free to ask him anything. (4MT)

Some older teachers mentioned feeling fine to talk to the headteacher about anything. Also headteachers noticed that some teacher may feel free while others talk to the deputy “Some, not all, because by human nature” (15MHT).

### **Practice of teachers and how the management contributed to that**

The third question was focused on the practice of teachers towards active learning. The actual behavior had some agreement with the teachers’ views but there were also major differences. Teachers aimed to guide children instead of teaching them but in practice there was often teacher-led recitation whereby the teacher used a textbook and/or a chalkboard to impart and recall knowledge.

Firstly, most teachers made an occasional *connection to the life* of the pupils, but mostly teachers named facts that children had to recall. Although teachers mentioned to *use different methods*, in practice mostly teacher explanation and question and answer sequences

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were observed. Teachers were frequently asking ‘open’ questions to the whole class and sometimes to the individual. Teachers were using ‘cued elicitation’ frequently whereby teachers raised their voices in the middle of the sentence to get a response from the pupils. The pupils seemed to know when they or the teachers were expected to answer. The questions that teachers asked were frequently designed for children to answer in few words to recall facts. There were only few questions observed whereby teachers were asking pupils to think or reason. An example is during CRI (religious education) whereby the teachers stimulate pupils’ participation by asking them if God can hear them through prayers.

Other activities that were observed included groupwork, doing things practically, discussing, drawing and writing. Mostly practical activities were observed, namely in five lessons. For example, a teachers went out of the classroom and pupils were encouraged to construct numbers with counters (small stones). Observations revealed that children were sitting in groups and had possibilities to work together. However, it seemed that both teacher and pupil expected it to be done in silence.

[They are sitting in groups but there is hardly any discussion going on. There is only some whispering now and then, which is hard to understand.] (6FT)

Two lessons were observed in which activities, apart from listening and reciting originated. Both of those lessons were from teachers that did not participated in the WTP. Most lessons did not use books. In some lessons books were on the table but they we’re not actively used. Teachers were mainly using the blackboard and children copied. In some lessons the books were more often used, but there were not enough books for all children.

Even though, teachers put a lot of emphasis on participation in their interviews, there was little participation in practice. The lack of questions asked by children was especially noticeable. In all observed lessons children did not or barely ask questions.

Many teachers felt the *headteacher improved the school* and enhanced practices. They felt the *headteachers encouraged them to use active learning methods*, although explicit examples were not named. Also headteachers felt they were responsible for ratifying the methods, some did it through observations and some divided the task:

It is my task, it is in the classes, it is especially done by the class teachers. Especially if that class teacher was a partner to the WTP. (15MHT)

### **Perceived outcomes of the World Teacher Program**

The outcomes of the World Teacher Program will respectively be discussed trough satisfaction, goal realization and wishes and needs.

**Satisfaction.** Overall teachers felt the WTP *was a success*. For some teachers it is the *training they were wishing for*. They felt encouraged by the co-teachers who taught them new methods and tools like using the placemat and the mindmap. Some teachers however mentioned they felt the new methods took up too much time or tired them. Moreover, teachers felt some active learning methods needed (learning-)material that is not always available. A teacher mentioned he would use the placemat method when there would be enough paper available. Teachers felt the interaction between them and the co-teachers to be *reciprocal*. They saw co-teachers “as colleagues who can tell you something you might learn from” (7FT). According to teachers, the co-teachers would come and look at the areas that were well done and the area that required more strength. Headteachers mentioned that the WTP has *improved image of the school*. Children were happy to make international friends to exchange with. Children have told the stories back home and others have heard it:

I think it is because of one, because of this program. Which has made the learners very active. And as we even compete with other schools, they find that our school is one of the schools trying doing better, on that the learners are attracted. (15MHT)

One school has even seen an increase in numbers of pupil which the headteacher attributed to the WTP.

**Goal realization.** The WTP aims to improve child-centred education by introducing active learning methods. Therefore it was important to find out if teachers understood the meaning of active learning. As was discussed earlier in the results (attitude) teachers mentioned various characteristics that connected to the concept of active learning. Teachers were advocating children to have an *active role in class*, because they expected children to retain knowledge better when using active learning methods. Teachers mentioned they use it *only when appropriate* which meant mostly half of the time. However, they did mention they are willing to use it more often. “Yeah. My ideal would be maybe 90/10. 90% active.” (8MT). Active learning methods were not completely new to teachers. Most felt the WTP *was a reinforcement* of some methods. They felt the WTP *changed them*, they learned how to give instructions in parts so that slow learners could catch up and learned to use songs and drama to activate children. But overall they mention it changed their attitude about teaching. Teachers mention they are more child-centred now and some of their lessons are done very actively. Teachers *saw co-teachers interacting warmly with children* and try to do that more for themselves. On the other side the teachers mentioned how the co-teachers would learn from them about disciplining the class and handling bigger numbers.

With regard to differentiation methods teachers mentioned the necessity to *provide a learning environment* in which every pupil can learn. Some teachers have organized the sitting arrangement in a way *fast and slow learners are mixed* and strong learners can assist the slow learners. Children are encouraged to *help each other* in class by correcting each other's mistakes in class. Two teachers from ECD were interviewed and named that active learning is *especially efficient for younger ones*. They felt young children should be taught by doing demonstrations and doing things practically in teamwork. Some teachers mentioned they aim to *continue using active learning*. Although some might be tempted to go back to the old ways, teachers believe other teachers and the senior teachers will bring them back on track. Pamoja Child Foundation *does a follow-up* on the WTP once in a while. They usually talk to the headteacher about integrating the WTP.

**Wishes and needs.** When asking the teachers if they had any recommendations most teachers felt the program did not need to improve. The WTP should only have "maximum support to succeed" (6BT). Few teachers however conveyed some wishes and needs. Teachers felt they would like to *visit the co-teachers* as they were inspired by them. In that light teachers also wished for co-teachers to *stay longer*. Furthermore they wished to learn more teaching methods, but also thought that it required having materials.

In as much as they want us to use those teaching methods in that book. They can also help us with those materials. So that we now do it practically to the children. (12MT) Lastly a teacher felt there were too much outdoor activities. The teachers felt it was very time-consuming, although they felt the children love it. An informant recognizes that and imagines more teachers feel that way. The informant took it a bit further and suggest that Kenyan children are not used to going outside to learn, but viewed the two weeks of WTP as a possibility to play.

### Discussion

The general aim of this research was to evaluate the WTP that aims to develop perspectives and practices of teachers and management through exchanging active learning-methods. Firstly, expectations regarding teachers' perceptions will be compared with the observed practices whereby environmental factors will be taken in account.

#### Teachers' perceptions on active learning

Based on literature teachers and management were expected to have perceptions that would contradict the active learning pedagogy. However generally speaking the results showed teachers' perceptions matched the active learning pedagogy. In line with Vygotsky (1987) teachers felt children should actively construct knowledge in interaction with others.

Although their perceptions were not in contradiction with the active learning pedagogy, some main characteristics of the pedagogy were not explicitly named by teachers. For example, students involvement in higher-order thinking and the active exploration of pupils' own attitudes and values are characteristics that are often associated with active learning (Bonwell & Eison, 1991; Niemi, 2002; Prince, 2004; Stephen et al., 2010). There are a number of reasons that might explain why teachers did not name these facets; it is possible it has not been discussed in the program yet or teachers did not understand the full meaning of it. However, these facets should be given more notice since they are associated with problem-solving skills that the Kenyan government is promoting (Stephen et al., 2010).

It was expected that teachers would experience some pressure from parents, headteachers and inspectors when implementing new methods. The social influences of others were indeed found to be pressurizing, but at the same time of support to teachers. A remarkable result to emerge from the data was that parents seemed to have a considerable social influence on teachers. Teachers tried to elicit more engagement from children, which was not enforced at home. Implying that children do not learn active participation at home, resulting in less active participation in the classroom. Literature suggests that the knowledge and skills that children have when they enter the school are an important predictor of what children know and can do at the end of school (Anderson, 2004). Furthermore, studies found that children from homes where parents encouraged verbal engagement and interaction do better at school than their peers who did not experience the same interaction (Unicef, 2012). Lastly, it was expected that teachers' perceptions were influenced by lower levels of experienced self-efficacy with regard to their competences of speaking English. Where language was a serious constraint for pupils according to teachers, teachers themselves did not mention having any difficulties with teaching. Moreover, teachers did not expand in detail on their skills and experienced self-efficacy. Answers remained mainly superficial in the way that they felt able to teach because they had to. According to Bandura (1986) self-efficacy is more positively developed in a setting where there are attainable goals with specific standards. Active learning methods as introduced however are very broad and might be abstract to teachers. Short-term objectives might be missing for teachers to develop a positive sense of self-efficacy. Furthermore, in cultures with a more collectivistic nature, interpersonal coherency might be higher valued than the reflection on individual competences (Hofstede, 1980). Which might be an indication for teachers' answers to remain on the surface.

**Practice of teachers and how the management contributed to that**

It was expected that teachers were still using ritualized participation strategies while incorporating more group work. Contrary to what was expected on the basis of teachers' perceptions it was indeed found that teachers were still mainly using ritualized participation strategies which required pupils to give either affirmative or negative responses. These practices were also found in other studies (Lockheed et al., 1991; Pontefract & Hardman, 2005). Teachers might be scared to incorporate active learning methods when they think children will not participate. However, research from Pluijmen (2017) found that children did not associate child-centred aspects with their lessons. It is assumed that opinions of children are not yet incorporated in lessons. These assumptions should be further investigated by looking into children's' perceptions of active learning.

Additionally, all teachers that participated in the WTP were using methods that required children to do more than listening and chorally respond. It is interesting to note that especially two teachers who did not follow the WTP were only using activities that required children to listen or chorally respond. However, given that these findings are based on a limited number of participants the results should be treated with considerable caution.

It was expected that headteachers might have a protective influence on the implementation of active learning. Results however, showed that headteachers' perceptions match the active learning pedagogy, but do not take the role of steering the school in that direction. Headteachers often named to be occupied with administrative and managerial tasks, which is conform previous research (Hardman et al., 2009). However, some small steps seem to have been made, because most headteachers form a role model for other teachers. Furthermore, headteachers incorporate teachers by delegate challenging tasks within the school, which is associated with transformative leadership (Thoonen et al., 2011). But being a rolemodel and delegating tasks alone is not sufficient. Having a transformative role means also stimulating intellectual development, giving individual support and creating a vision in collaboration with teachers (Geijsel, Slegers, Stoel, & Kruger, 2009). When headteachers link the needs to the schools' goals it is thought to enhance teachers' sense of self-efficacy (Geijsel et al., 2009; Thoonen et al., 2011).

### **Environmental factors**

It was expected that teachers would have a low intern locus of control (Ajzen, 2002) and this was supported by the results from this study. Teachers often named it was hard for them to practice active learning due to large classes, little time that is available, a big syllabus and lack of learning materials. The environmental factors might be a reason for teachers to choose the lecturing method, which was confirmed by informants. It is confirmed by

literature that the lack of materials and pressure to cover all content can lead teachers to use teacher-directed methods that take away pupils' own responsibility (Ackers & Hardman, 2001). The low intern locus of control may be an indicator for the gap between teachers' perceptions and the actual practices. This was also found in previous research and should therefore be given considerable notice in het WTP (Heijker, 2012; Otten, 2012). According to Freire (1970) teachers must overcome their oppressing environment. He calls for *conscientization* in education whereby individuals create a deeper understanding of the social and cultural reality and the ability to change this reality.

### **Outcome WTP**

The last aim was to explore the perceived outcomes of Kenyan teachers towards the WTP. It was expected that teachers would be satisfied with the program, teachers felt the WTP changed their perceptions and practices in a child-centred manner and that participants who had not been involved in the WTP were aware of the methods. However, their opinions might change since the programme has only been conducted twice and teachers might still have some expectations of the last session. By the finish of this report the WTP will have been conducted in Kisumu County trice. It is hoped that WTP has established some grounds for teachers to make sustainable change to the quality of education. The collaboration with PCF and their facilitating role might be an indicator of continuation of active learning. Teachers have mentioned Pamoja has done yearly follow-ups. Furthermore an informant mentioned PCF will organize an exchange-knowledge session between WTP and non-WTP participants. PCF strives to achieve more and less similar goal which might be an indicator for these new approaches to be sustainable.

Finally, as previously mentioned it is important to view both Western-style schooling and the culture and history of Kenyan education. The active learning pedagogy might involve some major changes in education since learners in collective cultures, like Kenya, are more accustomed to listening quietly (Metto & Makewa, 2014). However it is a change the government are willing to make. Active learning has already been incorporated by government and therefore it seems Edukans is strengthening and enhancing national wishes. However, Freire (1970) mentioned teachers are often oppressed by the government, which is confirmed by results from this study. Teachers often have to follow set policies and curriculum. Freire (1970) believes teachers will get passive when they are not free to teach and as a result so will their pupils. It seems of utmost importance that ngo's like Edukans and PCF help teachers analyse how these factors restrict them from teaching and encourage them

to participate in the development of school policy. In which in particular the headteacher needs to be supported.

In sum, how can the considerable difference between perceptions and practice be explained? First of all it is important to notice that the intention to behave in a certain way is believed to predict actual behavior when a sufficient amount of determinants are positively related to that behavior. Whereas teachers generally had positive beliefs towards active learning, the experienced social influences were varyingly positive and negative. Although self-efficacy was not measured adequately, it might be that teachers do not feel confident to use it since it is a big change in the environment. The findings of this study suggest that facilities, parents and children are not yet ready for the implementation of active learning and it might therefore have a considered influence on teachers. Furthermore working in an environment with genuine constraints like the lack of materials might be a factor. Overall teachers seem willing to use active learning strategies. The perceived outcomes of the WTP suggest some step has been made and that the WTP positively contributes to improving the quality of education. The present findings have some important implications for further adjustment of the program.

### **Limitations**

It is plausible that several limitations might have influenced the results obtained. To begin with the in-depth interviews. Efforts have been made to get a view of teachers' perceptions on children's learning which was not affected by the ideas from the WTP. However, considering the fact that the researcher was also an European teachers might have felt the need to share opinions that were obtained in the WTP. Although the researcher explicitly named to work independently from Edukans, Kenyan teachers would sometimes ask for feedback as they were only used to world teachers observing their lessons. Also the behaviour teachers showed might have been influenced, because teachers mostly knew beforehand that researchers would attend their lessons. However sometimes schedules had to be changed which made it possible for researchers to attend classes unexpected.

An additional source of error was the use of unstructured observations. Due to the inductive nature of this study an unstructured way of observing was used and time-restrictions forced researchers to only observe teachers once. Not all subjects might be easily lent for the implementation of more activities (Pontefract & Hardman, 2005). Therefore results should be considered with utmost caution. A structured and systematic observation might have improved the reliability of the results. However the holistic approach of this study



has enhanced understanding of the classroom discourse by eliciting teacher beliefs through the use of in-depth interviews.

Another limitation in this study is that the researcher was not able to get a clear view of teachers' experienced self-efficacy. It seemed teachers were not accustomed to talking about their own competences. It might however be a matter of cultural differences. The researcher might have asked questions that teachers did not understand well or interpreted differently. Therefore it is recommended that further research uses psychometric approved tools like the General Self-Efficacy Scale which is believed to be universally applicable (Scholz, Doña, Sud, & Schwarzer, 2002).

The current study attempted to do a comparative study between WTP and non-WTP schools. These results have not been discussed in this discussion due to a number of reasons. First of all, it is hard to assess the impact of the WTP due to the lack of baseline data. Though Edukans is already working on developing a STAR-model which aims to assess the starting point of a school, it has not been used in Kenya yet. It was hard to find out which outcomes were attributable to the implementation of WTP, because it was not clear which factors were moderated by the efforts of PCF. Finally it was hard to assess the goal realization, because the WTP had not yet finished its three sessions and therefore teachers might have felt some goals will be realized during the third session.

Finally the inductive nature of this study made it possible to get an view on the whole situation in Kenya. The results indicated that the implementation of active learning is more and less dependent on the role of parents and headteachers. Therefore, further research is recommended to explore the extent to which parents support active learning and how headteachers could be given a more prominent role in the implementation of active learning.

### **Implications**

The aim of this study was to evaluate the WTP that aims to develop perspectives and practices of teachers and management through exchanging active learning-methods. The evaluation of WTP has led to some implications for the sustainability of the WTP and the continuation of active learning methods for both Edukans and PCF.

**Edukans.** One of the recurring issues in the WTP is teachers' perceptions of environmental factors. All previous studies and the current study brought forward the need of teachers to have learning material. According to Bonwell and Eison (1991) it is possible to overcome these barriers when new strategies are introduced gradually and selected on a personally comfortable level of risk. This for example relates to small changes as pausing

during lecturing, brainstorm activities and asking open-ended questions in which learners first discuss in small groups while building to a group based presentation. These strategies can then be used when appropriate, using a careful planning which takes in account time and materials.

The effectivity of a preventive program is assumed to enhance when knowledge, beliefs, needs, expectations and skills of the target group match the content. First of all a working definition should be defined in order to set measurable targets. Furthermore, to enhance the effectivity of the program it is important to demarcate objectives to the specific target group (Baar, Wubbels, & Vermande, 2007). Firstly objectives should be formed in a SMART (smart, specific, measurable, achievable, realistic and time bound) way. Moreover it is advised to work with performance indicators. A performance indicator points out to what extend a mission or purpose is realized, for example 'the amount of teachers that incorporate more activities'. The indicator should go with a standard in order to know when a goal has been realized, for example: '80 percent of the World Teachers in cooperate more than two activities in their lessons'. Essential in the use of performance indicators is monitoring. Someone should be appointed to have responsibility and power to control the indicators and to invert actions (Van Yperen et al., 2014).

The responsibility and power could be given to PCF for further sustainability of the program. Literature promotes the understanding of local capacities like African indigenous knowledge to reach sustainable development (Nsamenang, 2008; Owuor, 2007). Therefore the bottom-up approach, as Freire (1970) recommended, could even be given more emphasis by giving PCF a more central role in the development and implementation of active learning methods. The evaluation of the program and its objective are consequently the responsibility of the local partner.

**PCF.** To increase further sustainability of the WTP, PCF could organize a knowledge-exchange meeting in their network of schools. WTP and non-WTP schools could be encouraged to exchange knowledge and practices on active learning methods. Furthermore teacher trainings could be incorporated. A recommendation for PCF is to incorporate interns from teacher training. Literature suggests that teacher trainees might have the knowledge on active learning methods, but lack experience in how to use these methods (Metto & Makewa, 2014)

Finally this study has revealed the importance of a supportive network. The ancient African saying is particularly applicable in the implementation of active learning methods: 'it takes a village to raise a child'. It is recommended that Edukans and PCF invest in the

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perceptions of the community as a whole. There is already a considerable notice for improving the attitude and skills of teachers. These practices can be enhanced by creating opportunities for parents to come together and discuss the (active) learning of the child. PCF could, in line with Freire's pedagogy, enhance the dialogue between parents and children and therefore stimulate democratic citizenship by children. For suggestions on the further involvement of parents in Kisumu County the studies of Van Os (2017) and Vermeulen (2017) are recommended. The schools have already made a good start by incorporating the 'child elections'. By involving all different actors in the field of child development a responsible and supportive environment can be created (Van Dijk & Gemmeke, 2008; De Winter, 2012).

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