Kenyan Self-perceived Teacher Competence

Cross-cultural adaptation of an instrument used in a practice-based evaluation of Edukans'
World Teacher Programme in Kajiado County, Kenya

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Abstract

This research aimed to produce a cross-culturally adapted instrument to measure self-perceived competence of 32 teachers from Kajiado County, Kenya using a pre-posttest design. In in-depth interviews and focus group discussions quality education and the role of teachers were discussed. Participants were teachers and head teachers whose schools had joined the World Teacher Programme, which aims to encourage child-centred teaching. Participants showed significant negative change on 'professionalism' and significant growth on 'ability to learn and self-reflection'. Head teachers stated teaching has become more child-centred since WTP with an observable increase in team work. Interviewee' descriptions of competencies did not match questionnaire descriptions. A questionnaire revision is advised, with inclusion of culture specific competencies.' Kenyan educationalists stated 'empathy', 'role model', and 'loyalty' are key in quality teachers. Quality education can be achieved through team work by professionals.

Key words: cross-cultural, self-perceived competence, teacher, Kenya, Edukans
Samenvatting

Dit onderzoek beoogde een cross-culturele adaptatie van een vragenlijst te gebruiken om zelfervaren competentiebeleving van 32 leraren uit Kajiado County, Kenia te meten aan de hand van
een voor- en nameting. In interviews en groepsdiscussies werden de rol van leraren en kwaliteitsonderwijs besproken. Participanten gaven les op scholen die meededen aan Werelddocent dat
kindgericht onderwijs wil bevorderen. Scores verlaagden significant op 'professionalisme' en
verhoogden significant voor 'leervermogen en zelfreflectie'. Schoolleiders namen meer
kindgerichte lessen en teamwork waar. Beschrijvingen van competenties kwamen niet overeen
met vragenlijstdefinities. Een herziening van het instrument wordt aanbevolen, waarbij rekening
wordt gehouden cultuurspecifieke competenties. 'Empathie', 'role model' en 'loyaliteit' werden
belangrijk gevonden. Door samenwerking van professionals komt kwaliteitsonderwijs tot stand.

Sleutelwoorden: cross-cultureel, vragenlijst, competentiebeleving, leraar, Kenia, Edukans

Kenyan Self-perceived Teacher Competence

Research from various parts of the world agrees that the quality of education largely depends on the quality of teachers (Absiye, 2013; Akyeampong, Lussier, Pryor, & Westbrook, 2013; Hardman, Abd-Kadir, Agg, Migwi, Ndambuku, & Smith, 2009; Korthagen, 2004). To verify quality of education, teacher quality needs to be evaluated (Wanzare, 2002). In order to do so, one needs to know what being a 'good teacher' entails. Notions of 'good education', 'quality education', and 'good teaching' are culturally loaded and vary across contexts (Ansell, 2005; Tschannen-Moran & Hoy, 2001; Van Monsjou & Metsemakers, 2012). Similarly, not one singular definition of a 'good teacher' can be given (Korthagen, 2004).

However, teachers universally aim to enact effective practices that result in positive outcomes for learners. To generate these outcomes, teachers need necessary pedagogic skills and content knowledge, as well as confidence in their own abilities (Duffin, French, & Patrick, 2012). A belief in one's own capabilities to organise and take courses of action required to accomplish a specific teaching task is what is labelled teacher efficacy (Duffin et al., 2012; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). In other words, teacher efficacy is a teacher's judgement of his or her own capabilities that has powerful effects on teaching behaviour and learners (Tschannen-Moran & Hoy, 2001).

Whilst self-efficacy focuses on future-oriented processes, self-concept is concerned with "the past and current self." Self-efficacy is defined in terms of "can" where self-concept is prompted by questions referring to "being." Though most research distinguishes both constructs, some studies have found that self-efficacy and self-concept are not distinguishable. Common to both constructs is a sense of competency (Hughes, Galbraith, & White, 2011).

Personal teaching competence entails judgements made by teachers about their own capabilities based on an assessment of internal strengths and weaknesses (Tschannen-Moran & Johnson, 2011). These thought patterns influence which behaviour a person expects to display in a given situation and the actions taken (Bandura, 1997; Thoonen, Sleegers, Oort, Peetsma, & Geijsel, 2011; Tschannen-Moran & Hoy, 2001). In more recent years, research has increasingly noted how contextual factors influence teachers' perceived competence. Factors such as instructional resources available, curriculum quality, leadership, and interpersonal support have been shown to influence perceived competence (Odhiambo, 2008; Tschannen-Moran & Johnson, 2011; Yara, 2010). Subsequently, effective action depends on the mobilisation of perceived competence Likewise the enactment of new instructional methods also depends on perceived competence. (Tschannen-Moran & Johnson, 2011).

Popular motivation theory adds to this that teachers' willingness to use different instructional methods depends on motivational factors. Self-perceived competence, goals of teachers, and the importance teachers attribute to a task are such factors. Further findings indicate that internalisation of the school's goals into personal goals, influences teachers' professional learning (Thoonen et al., 2011). In order for teachers to be able to internalise school goals and develop professionally, it seems essential that it is elucidated what a school's goals are and that communication thereof is facilitated by the school management.

The head teacher is held responsible for this facilitation (Mwangi, 2013; Thoonen et al., 2011). Thoonen and colleagues (2011) explain how it is widely agreed that transformational leadership leads to school improvement. Transformational leadership embodies capacity development and commitment to organisational goals by followers. Recent Kenyan research agrees that transformational leadership of head teachers can activate teacher motivation and steer school administration and staff towards a common goal (Mwangi, 2013). It states that management styles in Sub-Saharan African countries such as Kenya tend to be authoritarian, with little attention paid to teacher participation and (internal) communication (Bennell, 2004). The importance of effective school management and leadership is, however, recognised more and more as it can lead to noticeable improvements in school performance and teacher' motivation and behaviour (Bennell, 2004; Bennell & Akyeampong, 2007).

While Western education policies have started focusing on quality improvement a long time ago, access to education has been of main concern in African education policies (Absiye, 2013). International treaties emphasise the need to provide education, but remain silent about the quality of educational systems (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2005). Meanwhile, quality of education seems to have made it onto national agendas worldwide. Alongside providing access to free primary education (FPE), Kenya's government aims to raise the quality of education (Miller & Elman, 2013). Though efforts have been made by the government, it is widely agreed that a lack of resources, a lack of sufficient teacher training, and a lack of quality education still remains (Absiye, 2013; Bennell, 2004; Bennel & Akyeampong, 2007; Hamano, 2011; Hardman et al., 2009; Miller & Elman, 2013; Odhiambo, 2008; Oketch & Somerset, 2010; Pontefract & Hardman, 2005); resulting in low self-assessment of effectiveness (Onderi & Croll, 2009). Non-governmental organisations (NGOs) are now working alongside the Kenyan government to help improve the quality of education by employing interventions targeting resource availability and professional development of teachers (Hardman et al., 2009; Miller & Elman, 2013; Onguko, 2012). One such NGO is Edukans.

World Teacher Programme

Recognising there is a large gap in the quality of education worldwide, the NGO Edukans has set up World Teacher Programme (WTP) which aims to close this gap. By letting Dutch and other European teachers participate in and generate funds for its WTP, Edukans forms a platform for interaction and knowledge exchange between European teachers and teachers in developing countries. The WTP has put forth two main objectives that focus on (1) motivating and inspiring participating teachers, headmasters, and other educational professionals while also (2) analysing and implementing ideas for changes and improvements to the educational system by means of long-term plans (Chielens, 2010). WTP builds on the 'Star-school model' (Edukans, 2012b). A quality Star-school pays attention to the learning environment, students, parents, the community and the school management. Herewith, Edukans places education in a broader context.

WTP comes in a variety of shapes and forms. Alongside the regular WTP, Edukans has developed WTP XL and WTP school leader. School leaders can opt to take part in WTP school leader (Edukans, 2014c). As part of WTP XL an educational specialist travels to a developing country to exchange knowledge and visions in order to improve professionalism of local students and teachers (Edukans, 2014d).

One of the areas targeted by WTP is the Kajiado district in Kenya. As of 2010, WTP has been implemented in this area, with plans to terminate WTP in Kajiado after 2014 according to M. I. M. Klarenbeek (personal communication, October 29, 2013). In its four years of existence, WTP has contributed to the provision of teachers' professional development through knowledge exchange. Interestingly, this type of provision in Kenya is largely undertaken by NGOs, because the government fails to institutionalise professional development (Onguko, 2012). The involvement of local experts is essential to the success of programmes aimed at quality improvement of education (Onguko, 2012); this is reflected in WTP's bottom-up approach wherein problems as identified by Kenyan teachers are targeted (Chielens, 2010). Also, educational experts who are part of Edukans' partner organisation Dupoto-e-Maa are involved in WTP. Dupoto-e-Maa is a Kenyan NGO that promotes sustainable development; e.g., by improving (access to) education among the Maasai tribe in Kajiado (Dupoto-e-Maa, 2014).

Former WTP participants have indicated that most problems identified by teachers from the Kajiado district are related to two different didactical approaches: child-centred and teacher-centred teaching (Edukans, 2012b). Child-centred teaching focuses on the role of the learner, wherein interaction and sharing of experiences is stimulated by the teacher (Vavrus, Thomas, & Bartlett, 2011). The focus is on individual learners with their unique characteristics and needs and on different kinds of learning and teaching methods that are most effective (Henson, 2003).

This differs from teacher-centred teaching, in which the teacher instructs and teaches his students without adapting to different knowledge levels or learning styles (Vavrus et al., 2011). Educationalists seem to agree that creating a learner-centred classroom environment is best suited to learners' needs and facilitates their personal growth best (Weimer, 2013).

This idea has also gained ground in Kenya (Absiye, 2013; Hardman et al., 2009). While Kenya continues to be faced with the challenge of assuring access to education, its government also wants to guarantee quality education (Miller & Elman, 2013; Wanzare, 2002). With 42% of its population below primary school age (UNESCO, 2014), providing quality education has become one of Kenya's primary concerns (Miller & Elman, 2013). To secure quality education, it is important that individual attention is paid to learners (Edukans, 2012b; UNESCO, 2005; Weimer, 2013). Child-centred teaching best matches this ideal (Edukans, 2012b; Harden & Crosby, 2000; Henson, 2003; Vavrus et al., 2011). Henceforth Edukans' WTP aims to assist teachers in the development of competencies needed in child-centred teaching. As teachers' self-perceived competence determines teaching behaviour (Bandura, 1997; Thoonen et al., 2011), the current research aims to gain insight into self-perceived competence of Kenyan teachers.

Aims

The general aim of this research was to gain insight into teaching competence in the Kenyan context. To achieve this goal the current study was split up into two separate studies. The first study aimed to adapt an existing questionnaire on teaching competence to the Kenyan context in which it would later be used (as part of study 2). Guiding researchers was the question (a) what does the teaching competence construct entail in the Kenyan context and how should Edukans' self-assessment competence questionnaire be adapted to the Kenyan context based on gained insights? The second study aimed to investigate the meaning of competence in the Kenyan context and also to measure whether and how self-perceived competence of Kenyan teachers changed after participating in WTP. Herewith a practice-based evaluation of WTP could be carried out. In trying to achieve its aim, the second study tried to answer the following three questions (b) what and who is included in quality education? (c) What does the concept of a 'good teacher' include according to Kenyan head teachers and teachers? (d) Do competencies of teachers change after partaking in WTP and if so, how? Based on findings from prior research and advice given by experts, expectations were formulated for each of these questions.

As part of study 1, the objective 'to develop Edukans' self-assessment competence questionnaire into a more culturally specific instrument so as to measure self-perceived competence of Kenyan teachers (1)' would allow researchers to answer question (a).

In study 2, it was expected that for question (b) 'Teachers and head teachers would state that in order for quality education to be achieved, all five Star-school pillars have to be present (1)'. Edukans' Star-school model recognises that quality education can only be achieved when resources and infrastructure are in place. Furthermore, the organisation stresses the importance of involvement of various stakeholders such as the pupils, teachers, school management, and community (Edukans, 2011; Edukans, 2012b). The necessity to involve several stakeholders has been documented by and large (Absiye, 2013; Barber & Mourshed, 2007; Goodwin, 2010; Kimu, 2012; Larocque, Kleiman, & Darling, 2011; Machen, Wilson & Notar, 2005). Like Edukans, Absiye (2013) claims that the enforcement of quality education in Kenya does not only depend on the availability of resources, but also on parental support, school-community relations, and favourable learning environments. Both Absiye (2013) and Edukans (2011) base their ideas on the global monitoring report published by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) (UNESCO, 2005); emphasising the need to improve quality of education by 'enabling inputs' (making sure resources are available) and considering the context of learners (meaning other stakeholders). Therefore, teachers and head teachers who have taken part in this study were expected to state that the availability of resources and involvement of various stakeholders are essential in achieving quality education.

For (c), it was assumed that 'While all interviewees were expected to identify etic and emic competencies, matching those mentioned in study 1, head teachers were likely to name more competencies related to leadership skills than were teachers (2)'As part of study 1, experts and teachers would identify etic (universal) and emic (culturally specific) competencies. It was expected that teachers and head teachers would put forth very similar propositions of etic and emic competencies. International educational literature correspondingly asserts that some teaching competencies are universal and some are more context and culture specific (Goodwin, 2010; Onderi & Croll, 2009; Wanzare, 2002).

Just like more and less culture specific teaching competencies were expected to be mentioned, researchers presumed that teachers with administrative functions – head teachers – were likely to stress the importance of competencies related to leadership skills. This assumption was based on findings from prior Kenyan research (Ibrahim, 2011). Local Kenyan head teachers included supervisory skills, problem solving skills, understanding people when dealing with them, and public relations in their explanation of important leadership skills. Researchers then considered which of the competencies included in the current research matched described skills. 'Leadership', 'ability to make decisions', 'policy development', 'entrepreneurship', 'networking', 'monitoring of progress', 'context focused', 'maintain relationships with

parents/guardians' and 'empathy' were identified as competencies representative of skills important for head teachers. It was hypothesised that head teachers, who are coming from a leadership perspective, would identify leadership related competencies as valuable teacher' qualities in giving descriptions of a 'good teacher'.

Additionally, 'Head teachers and teachers belonging to the same school were expected to identify similar competencies most important to good teachers; linking these descriptions to 'good' teacher motivation (3)'. This expectation was based on the knowledge that all schools considered in this research had taken part in WTP at least once. Among other things, WTP targets school management involvement by working one-on-one with head teachers in WTP school leader and WTP XL. In WTP XL, emphasis is added to internal communication and other leadership skills (Edukans, 2014d). Research shows that head teacher' attitudes and skills influence student' outcomes and school performance positively, when shared by other key stakeholders (Mwangi, 2013). Researchers were informed that many of the schools (previously) partaking in WTP have shown improving mean scores. Therefore researchers speculated this was an indication of shared views of teachers and head teachers.

Furthermore, shared visions of school management and teaching staff have been shown to have an impact on teacher movation (Thoonen et al., 2011). Studies on motivational theory state that teacher motivation can influence teaching competence, teaching behaviour, and school performance (Burney & Widener, 2007; Gorozidis & Papioannou, 2014; Thoonen et al., 2011). Recent research carried out in Africa (Selemani-Meke, 2013) asserts that teachers cannot effectively implement what they learn in professional development programmes (such as WTP), if they are not motivated. Motivation depends on the availability of resources, which is especially challenging in African education and could thus lead to lower levels of motivation (Absiye, 2013; Bennell, 2004; UNESCO, 2005; Selemani-Meke, 2013). With Kajiado County being a very rural area which is lesser developed than other parts of Kenya (Warrington & Kiragu, 2012), teachers and head teachers are expected to expand on factors negatively influencing teacher motivation. In giving descriptions of a 'good teacher', they are henceforth expected to directly link good teaching to 'good' motivation.

For question (d) it was expected that: 'Kenyan WTP participants would show negative change on the intervention domain, whereas non-participants self-perceived competence would not change (4)'. WTP aims to contribute to the quality of education (Klarenbeek & Beekwilder, 2012) by encouraging participants to change and improve their teaching methods (Chielens, 2010). Direct exposure to and participation in WTP, was expected to lead to different change in self-perceived competence, as such programmes are known to enhance professional development

influencing a teacher's believes about his or her competence (Ndeto & Bwisa, 2013; Onguko, 2012). Most change was expected on the intervention domain, as WTP focuses on improving teaching methods and advocates for child-centred teaching, active learning, and multi-class teaching – topics related to competencies central to the intervention domain (Chielens, 2010; Van Gennip & Vrieze, 2008). Kenyan teachers indicate that they have been taught about these methods in college, but have never learnt to implement these (Absiye, 2013; Hardman et al., 2009). Therefore, no change was expected on the professional domain. Change on the personal domain is also unlikely to be significant, because they (contrary to Dutch WTP participants) do not travel abroad and thus are not exposed to a different context (Van Dinteren, Huisman, & Buissink, 2010). The change on the intervention domain was expected to be negative for Kenyan participants of WTP. Kenyan WTP participants were asked to implement their knowledge on child-centred didactical methods, which they were not used to using in their daily teaching routine, they would need time to adjust to and acquaintance themselves with such methods. This can be a very demanding process; challenging one's self-perceived competence (Hardman et al., 2009; Veenman, Denessen, Gerrits, & Kenter, 2001). Non-WTP participants would be exposed less to the WTP ideas and their scores were therefore expected not to change on this domain.

Furthermore changes in self-perceived competence were likely to be influenced by demographic backgrounds of teachers. The amount of times participating in WTP and participation in WTP 2014 were expected to have an impact on change scores. Kenyan literature describes how the Kenyan Government's educational policies expect teachers to move from one school to another every few years. This is said to have a negative influence on the quality of education (Wanzare, 2002). Therefore, the number of years teachers had been teaching at their current school was considered as one of the demographic variables likely to influence findings.

Alongside teaching experience, the number of times a teacher had participated in WTP was likely to influence self-perceived competence of Kenyan teachers. Taking part in professional development training programmes such as WTP can have a positive impact on self-perceived competence (Onguko, 2012). As explained previously, WTP embodies child-centred learning asserting its use will lead to improvements in teachers and quality education. Kenyan education is generally teacher-centred (Hardman, Ackers, Abrishamian, & O'Sullivan, 2011), despite more training colleges employing more learner-centred methods (Hardman et al., 2009). When a teacher is faced with the idea that implementation of child-centred teaching is desirable, while he or she is using more teacher-centred teaching may leave this teacher struggling to adjust and feeling incompetent. (Veenman et al., 2001). However, when taking part in professional development trainings several times teachers familiarise with new teaching methods. Therefore,

researchers expected an initial drop of self-perceived competence for first time WTP participants with scores increasing for participants who had joined the programme more often.

Whether teachers had taken part in WTP 2014 was expected to impact change scores as well. Schools not partaking in WTP 2014 had previously joined WTP thrice. After enrolling in WTP, it was left up to schools to develop, strengthen, fully adopt, and make child-centred teaching their own. Now that a year had passed since WTP's active involvement at these schools, researchers expected non- participating schools to have internalised the principle of child-centred teaching (Daamen, 2013). Moreover, because these participants' teaching was not evaluated, these teachers were not exposed to criticism that could potentially lower self-perceived competence. Therefore 'taking part multiple times, having more teaching experience at the current school and non-participation in WTP 2014 was expected to lead to higher change scores on self-perceived teaching competence (5)'.

Method Study 1

Research Design

The focal point of study 1 was the cross-cultural adaptation of an existing questionnaire to the Kenyan context in which it would later be used. The existing Dutch self- assessment competence questionnaire as developed by Edukans (2012a) served as a starting point, because of its prior use in the evaluation of self-perceived competence of Dutch WTP participants (Edukans, 2012a). This way a future cross-cultural comparison can be carried out, which is in Edukans' interest. To allow for use of the questionnaire in the Kenyan context, it was likely that alterations would have to be made. To be able to pinpoint which parts of the questionnaire would need to be altered, interviews were held with two educational experts.

Firstly, cross-cultural research expert and former Kenyan teacher A. Ali Abubakar was consulted. Secondly, head teacher and fivefold WTP participant F. Riemersma was interviewed. Experts were asked questions on similarities and differences between Kenyan and Dutch education, use of the English language in Kenya, use of questionnaires in Kenya and how to avoid bias. Subsequently, the employability of the adapted questionnaire was tested in a pilot study. Herein, non-WTP participants were asked to evaluate the instrument. Nine head teachers of WTP schools were then interviewed and presented with a list of competencies to verify their relevance to the Kenyan context. Based on gained insights from all eleven professionals, the questionnaire was tailored to the Kenyan culture.

Participants

Expert interviews on cross-cultural adaptation of questionnaires and similarities and differences between Kenyan and Dutch education were held with Kenyan cross-cultural research

expert A. Ali Abubakar and Dutch head teacher and frequent WTP participant F. Riemersma. Three teachers from the Nakuru district, Kenya were consulted in a pilot study so as to test the suitability of the questionnaire in Kenya. Later, nine head teacher interviews (HTIs) were held, in which head teachers of primary schools that had ever partaken in WTP in Kajiado were presented with a segment of the questionnaire – the list of competencies – and were asked which teaching competencies they found most important.

Measure

Evaluation questionnaire WTP. Edukans' self-assessment teaching competence questionnaire (Edukans, 2012a) is an instrument that measures self-perceived competence. A more elaborate description of the questionnaire and its foundation will be given under 'Method Study 2'. The questionnaire includes sections on demographic background variables, teaching aspects, personal characteristics, teaching competencies, other relevant teaching aspects divided into two parts, a 100-points scale on teaching competencies, and the satisfaction that teachers experience in different roles of a teacher (see Appendix A).

Procedure

To measure the self-perceived competence of Kenyan WTP participants, an instrument had to be developed that was sensitive to the Kenyan culture. A four staged systematic approach (Abubakar in press) was used to adapt the Dutch instrument to the Kenyan context. Additionally, cross-cultural research expert Abubakar was interviewed on how best to translate and further adapt the Dutch instrument to the Kenyan culture.

The first stage (1) embodied clarification of the construct of self-perceived competence. Using the Dutch instrument (Edukans, 2012a) as point of reference, *etic* (universal) and *emic* aspects (culturally specific) of the construct were taken into consideration. Etic aspects were identified using existing literature and expert interviews. Likewise, emic aspects were distinguished using the literature and were identified in interviews with experts.

The second stage (2) consisted of translation and formulation of the items. Both researchers independently translated the existing Dutch competence questionnaire into English. These two translations were compared and after reaching consensus, one final translation ensued. Additional items that emerged from the first adaptation stage were added to the original instrument and items that were irrelevant in the Kenyan context were excluded.

The third stage (3) entailed scale development. This involved decision-making on how items were to be presented to participants. The researchers used information gained from an interview with Abubakar and the consulted literature to make these decisions. By sticking to the

original version as much as possible, a cross-cultural instrument emerged that ensures equivalence of the developed test scores.

The fourth stage (4) was the test evaluation stage. A pilot-study was conducted with three Kenyan teachers from Nakuru District and nine head teachers of WTP schools, so as to establish the relevance of items. All voluntarily participated in the study and gave verbal consent for the recording of interviews. They were informed that all interviewees would remain anonymous; names of teachers and schools were removed from interview transcripts.

Researchers took on the role of test administrators, taking observational notes during the survey administration. Participants were asked about their test experiences. This information was then used to refine the questionnaire. The discussion with teachers from Nakuru took 72 minutes, while HTIs lasted 48 minutes on average. A component of the questionnaire – the list of 32 competencies/characteristic – was shared with head teachers, so as to establish which competencies were more and less relevant and important in the Kenyan context. Head teachers who asked for a copy of this list, were only given after completion of study 2 so reliability of study 2 findings would not be jeopardised. In HTIs additional topics were discussed, which will later be considered in study 2; HTIs are part of both study 1 and 2.

Method Study 2

Research Design

The second study employed a mixed-method design, in which both qualitative and quantitative measures were used to record and explore the (meaning of) competence (Baar, 2002; Baarda, 2010). Collected data were used as part of a practice-based evaluation commissioned by Edukans. In Kajiado, WTP took place for two weeks between April and May 2014. The programme included workshop days and days on which Dutch and Finnish participants visited schools. The workshops were organised by Dutch and Finnish participants. A number of Kenyan head teachers and teachers from schools that had ever taken part in WTP joined in. Topics discussed during the workshops included 'active and cooperative learning', 'role modelling', 'child-centred teaching', 'pedagogical leadership', 'monitoring of progress', 'networking', and 'internal cooperation' (Edukans, 2014a).

The main aim of this second study was to investigate the meaning of competence in the Kenyan context and to measure whether and how self-perceived competence of Kenyan WTP participants changed. In order to achieve this, interviews with nine head teachers (also part of study 1) and nine Focus Group Discussions (FGDs) with groups varying in number from one to six teachers were carried out. While HTIs took place before the pretests were executed, FGDs took place after the posttests. For schools not visited by WTP in 2014 the interval between

pretest and posttest was two weeks; it was eight weeks for schools partaking in WTP 2014. This allowed for a two week interval between the actual visit of Dutch and Finnish WTP counterparts and the posttest on these six schools. During school visits, HTIs, and FGDs, unstructured observations were made and noted down. By employing various research methods, researchers sought to generate more reliable findings. As Edukans' partners had warned of frequent teacher transfers in (WTP) schools, researchers tried to make up for a probable loss of participants by communicating with schools frequently and establishing methodological triangulation.

A pretest - posttest design using comparison groups was employed to indicate whether and how self-perceived competence of Kenyan teachers had changed. WTP participants constituted one group and non-participants the other. For those who did participate in WTP, some took part in WTP 2014 and some did not. Schools were categorised as follows: schools that were not visited in 2014, schools visited for the third time in 2014, and schools visited for the second time in 2014. In the current study, these three categories of schools were compared. A comparison between participants and non-participants of WTP was also made.

Participants

Three out of twelve schools ever having taken part in WTP in Kajiado County, Kenya, were excluded from the research to maximise its feasibility. Out of nine remaining schools, three took part in the WTP from 2010/2011-2013 (3-4 times), three from 2012-2014 (thrice) and three in 2013 and 2014 (twice); this also allowed for a more reliable comparison between equal numbers of groups of schools. The decision to leave out three schools located furthest away from Kajiado town was made after consultation of Dupoto-e-Maa's education officers.

Nine head teachers were interviewed, of whom four were new to their schools and had never participated in WTP. Head teachers were asked which teachers took part in WTP. These teachers were then requested to participate in the pretest, posttest and FGD. Teachers were also asked individually (verbally and in the questionnaire) if they had ever joined WTP. All participants joined voluntarily and gave verbal consent. Its recording was also consented.

In total, 37 teachers took part in the pretest and 39 in the posttest. 32 teachers filled out both the pretest and posttest questionnaires. 37 teachers took part in the FGDs (with six being non-WTP participants). Overall, the number of participants totals 44 different individuals. As the current study aimed to establish self-perceived competence of participants before and after WTP 2014, most analyses considered the group of teachers who filled out both the pretest and posttest questionnaire. Therefore, the sample of 32 participants was described in more detail.

The number of teachers excluded from the pretest – posttest analysis totalled twelve. Eight of these teachers were absent from school during either the pretest or posttest. One

participant had never joined WTP before 2014 and during the pretest it was still unknown whether he or she would participate in WTP 2014. One participant transferred in between the pretest and posttest. Another participant intended to join the posttest but had to leave soon after its start to attend to other duties. Finally, one participant did not attend the pretest because neither the head teacher nor the other staff was aware of his or her participation in WTP.

75% of the remaining participants had taken part in WTP (n=24); 25% had never taken part in WTP (n=8). For both WTP and non-WTP participants, there were more females than there were males. Whilst there was only one non-WTP participant with a bachelor degree (12.5%), nine WTP participants had this degree (37.5%) (see Table 1).

Table 1

Descriptives 32 Participants Change Analysis; Gender, Age in Years – Categories, Level of Education

Gender		Age in years – categories			Level of education			
	WTP	Non-WTP		WTP	Non-WTP		WTP	Non-WTP
N =	24	8		24	8		24	8
Male	11 (45.8%)	3 (37.5%)	21-30	9 (37.5%)	5 (62.5%)	Certificate	9 (37.5%)	5 (62.5%)
Female	13 (54.2%)	5 (62.5%)	31-40	8 (33.3%)	2 (25.0%)	Diploma	6 (25.0%)	2 (25.0%)
			41-50	4 (16.7%)	1 (12.5%)	Bachelor degree	9 (37.5%)	1 (12.5%)
			51-60	3 (12.5%)	0 (0.0%)	_		

Out of 32 teachers, 75% were class teachers (n=24). 100% of non-WTP participants (n=8) were class teachers as compared to 66.7% of all WTP participants (n=16). 100% of non-WTP participants and 54.2% of WTP participants had taught at their current school less than 5.5 years. Most teachers had 0-10.5 years of work experience (n=25; 78.1%) (see Table 2).

Table 2
Descriptives 32 Participants Change Analysis; Position, Teaching Experience Current School in Years – Categories, Work
Experience in Years - Categories

Position			Teaching experience current school in years – categories			Work experience in years - categories			
	WTP	Non-WTP	-	WTP	Non-WTP		WTP	Non-WTP	
N =	24	8		24	8		24	8	
Class teacher	16 (66.7%)	8 (100.0%)	0-5.5	13 (54.2%)	8 (100.0%)	0-5.5	9 (25.7%)	3(37.5%)	
Senior teacher	3 (12.5%)	0 (0.0%)	5.6-10.5	9 (37.5%)	0 (0.0%)	5.6-10.5	10 (28.6%)	3 (37.5%)	
Deputy head teacher	5 (20.8%)	0 (0.0%)	10.6-15.5	2 (8.3%)	0 (0.0%)	10.6-15.5	5 (14.3%)	1 (12.5%)	
teacher			15.6-20.5	0 (0.0%)	0 (0.0%)	15.6-20.5	5 (14.3%)	1 (12.5%)	
			20.6-25.5	0 (0.0%)	0 (0.0%)	20.6-25.5	3 (8.6%)	0 (0.0%)	
						25.6-30.5	2 (5.7%)	0 (0.0%)	
						30.6-35.5	0 (0.0%)	0 (0.0%)	
						35.6-40.5	1 (2.9%)	0 (0.0%)	

Not all of the nine WTP schools were represented in the sample of non-WTP teachers. Five schools were while four schools were not. The sample of WTP participants did represent all schools. Most teachers were part of schools visited by WTP in 2014 (75%, n=24) (see Table 3).

Table 3

Descriptives 32 Participants Change Analysis; School, School WTP 2014

School			School WTP 2014		
	WTP	Non-WTP		WTP	Non-WTP
N =	24	8		24	8
WTSchool_01	3 (12.5%)	0 (0.0%)	WTP-school 2014	15 (62.5%)	6 (75.0%)
WTSchool_02	2 (8.3%)	2 (25.0%)	Non-WTP-school 2014	9 (37.5%)	2 (25.0%)
WTSchool_03	4 (16.7%)	0 (0.0%)			
WTSchool_04	4 (16.7%)	1 (12.5%)			
WTSchool_05	2 (8.3%)	1 (12.5%)			
WTSchool_06	1 (4.2%)	0 (0.0%)			
WTSchool_07	3 (12.5%)	2 (25.0%)			
WTSchool_08	3 (12.5%)	0 (0.0%)			
WTSchool_09	2 (8.3%)	2 (25.0%)			

Measures

Teaching Competence Questionnaire. Competencies of Kenyan WTP participants were measured using the newly developed self-assessment competency questionnaire that resulted from study 1 (Edukans, 2014b). Little is known about the psychometric properties of the instrument or its foundation (Van Gennip & Vrieze, 2008); internal and external validity of the instrument have never been tested. Norm group descriptives have not been published.

The Teaching Competence Questionnaire (Edukans, 2014b) measures self-perceived competence. It is based on a categorical system better known as the VIP model which has been developed by Van Gennip and Vrieze (2008). The VIP model subdivides self-perceived competences relevant to teaching into three domains: professional knowledge (V), intervention (I) and personal domain (P) (Edukans, 2012b).

The professional knowledge domain is understood as 'the training and intellectual knowledge of a teacher.' The intervention domain is described as 'the instruments and qualities used by a teacher to convey lesson content.' The personal domain entails 'the character of a teacher and how he or she handles his or her job' (Van Gennip & Vrieze, 2008). Each of these domains has four subdomains, totalling twelve subdomains.

Professional knowledge consists of educational level of the teacher, subject control, recertification, and reflective and developmental competence. The intervention domain entails didactical, pedagogical, organisational, and interpersonal competence. The personal domain includes pedagogic skills, interpersonal competence (2), motivation, and personal characteristics/traits and development (Edukans, 2012b) (see Appendix B).

The instrument considers several demographic background variables; age, gender,

educational level, position, work experience, school teachers are based at, and how many years of teaching at current school. Sixteen personal characteristics are then measured. Examples include "enthusiastic" and "inconsistent". The instrument continues with a list of 32 teaching competencies/characteristics. The personal characteristics as well as the teaching competencies/characteristics are measured on a five points Likert scale (1 = this competency/characteristic does not apply to me at all, 5 = this competency/characteristic applies to me completely). Next, teachers are asked to name the five competencies they feel are most important in teaching, explaining why these are most important. Following are eight questions on teaching. E.g., 'how often is your lesson plan child-centred?' This is also measured on a five points Likert scale (1 = never, 5 = very often).

The questionnaire consists of quantitative and qualitative questions. Every part of the questionnaire includes sections where competencies which are not currently described in the questionnaire can be named. In Study 2 "Demographic Information", "Competencies and Characteristics", and "Most Important Competencies" were considered in analyses (see Appendix C for the questionnaire).

In-depth HTIs. HTIs were used to answer research questions (a), (b), (c), and (d). Faceto-face interviews were held with head teachers. Researchers made efforts to remain objective and participants were approached at their schools. During introductions, researchers emphasised that the research was being carried out as part of a master programme and that anonymity would be guaranteed. Using a topic list, both researchers asked questions on quality education, its feasibility in the Kenyan setting, the role of a head teacher in quality education, and which competencies and characteristics a good teacher should possess were asked. To finalise, head teachers were asked to give opinions on intercultural knowledge exchange programmes such as WTP and changes seen as a result of WTP (see Appendix D). After every topic was discussed, researchers paraphrased the answers given by head teachers, to verify their understanding of answers was correct.

In-depth FGDs. FGDs were employed to answer research questions (b) and (c). In FGDs, teachers were interviewed collectively. Head teachers were left out of FGDs to allow teachers to speak freely. A benefit of these group discussions was that it allowed participants to discuss and relate their views to one another's. Teachers were encouraged to discuss topics between themselves. Researchers took on the role of discussion leaders, intervening when certain participants did or could not participate actively when they may have been out shadowed by colleagues. This way, researchers tried to minimise social bias often seen when a mix of more and lesser dominant participants join an FGD. It was also emphasised that the research was being

carried out independently from Edukans and that recordings or names would not be shared. Using a topic list the role of teachers in quality education - ways in which they can positively and negatively influence quality education -, description of a good teacher, description of a not so good teacher, and the five most important competencies were discussed. After each answer, researchers paraphrased what was said and - if a discussion did not ensue - asked other teachers whether they agreed with their colleague. Answers generated in FGDs were written down on a set of three posters focusing on each of the aforementioned topics (see Appendix D).

Procedure

Before onset of the research, researchers were formally introduced at schools by Edukans' partner organisation Dupoto-e-Maa. As Dupoto-e-Maa has been working in close contact with the schools for a number of years, this formal introduction was recommended by education officers at Dupoto-e-Maa and adopted in an effort to reduce bias. During formal introductions, researchers discussed their research plans with head teachers. Appointments were made to conduct in-depth HTIs. Head teachers were asked to provide names of WTP participating teachers. The administration of pretest questionnaires was also scheduled.

By first speaking with head teachers, researchers were enabled to familiarise with schools and staff, contributing to a reduction of bias. During introductions, it was made clear that researchers are not educational experts and came to gain knowledge from participants. All HTIs were conducted in the head teachers' offices. Head teachers voluntarily participated in the research and gave verbal consent for the recording of interviews. They were informed that all interviewes would remain anonymous; names of head teachers and schools were removed from interview transcripts. HTIs lasted 48 minutes on average.

For schools that were located in interior areas far removed from tarmac roads, pretests were sometimes carried out on the same day as the formal introductions. For more accessible schools, two separate visits were planned. Teachers put forth by head teachers as being WTP participants were included in the pretest as well as teachers named by other sources (other staff and Dupoto-e-Maa' education officers). These participants were presented with the Teaching Competence Questionnaire (Edukans, 2014b). At a later date, the questionnaire was presented to these teachers again (posttest). In order to safeguard the reliability of given answers, participants were spread out across the room as much as possible. When participants discussed items out loud, researchers urged them to remain quiet and assisted them. During the pretests and posttests notes and observations were made.

Directly after posttest administrations, FGDs took place. FGDs were held in staff rooms, head teacher offices, or empty classrooms. On average, FGDs lasted 55 minutes. Participating

teachers verbally consented to the interviews and participated on a voluntary basis. Teachers were informed about anonymity procedures; their names were erased from interview transcripts and quantative data was also made anonymous. Each of the researchers was responsible for leading half of the FGDs, while the other researcher took notes. At the start of interviews it was emphasised that researches wanted to learn from participants. Participants were encouraged to discuss topics between themselves rather than simply answering to the questions posed by the researcher. For every FGD, participants filled out the posters. After finalising the FGDs, participants were presented with appreciation tokens.

Qualitative data taken from HTIs and FGDs and open questions from the questionnaire were analysed to allow researchers to conclude on the nature and the meaning of competence in the Kenyan context. After typing up the HTI and FGD verbatim transcripts, researchers exchanged transcripts and double-checked these for errors guaranteeing inter-rater reliability.

Analyses

Quantitative data derived from the questionnaires were entered into SPSS. Using SPSS, statistical analyses were conducted to establish change of the perceived teaching competence of Kenyan teachers, while controlling for demographic variables. Paired samples t-tests (Field, 2009) were employed to compare pretest and posttest scores. The paired samples t-tests were run to check for a change in total score, change in scores on the domain level, change in scores on the subdomain level, and a change in scores between the 33 competencies. Tests were run separately for WTP participants and non-WTP participants. Comparisons regarding categorical variables were made, though these were not tested for significance. Independent t-tests with demographic variables (e.g., gender, age categories, level of education) were used as independent variables (Field, 2009). General linear models' (GLM) repeated measures were used to establish whether or not the variance in scores on VIP domains differed significantly for pretest-posttest; demographic variables were used as independent variables (Baarda, 2010; Field, 2009). The five most important competencies mentioned by head teachers and teachers in FGDs were compared qualitatively, to determine consistency in school staff's views.

HTI and FGD transcripts were analysed using inductive coding techniques (Baar, 2002; Baarda, 2010). The coding was theory-driven; based on the VIP model and its domains (Van Gennip & Vrieze, 2008). The 33 competencies described in the Teaching Competence Questionnaire (Edukans, 2014b) served as predetermined categories. Which competencies were assigned to which domains has been put forth in Klarenbeek and Beekwilder (2012) (see Appendix B). This way, researchers ensured a comparison between interview statements and questionnaire scores could be made.

The quantitative analysis method that was employed consists of three stages: (1) open labelling and coding of text (selecting relevant information, dividing this information up into smaller fragments and labelling of these fragments). After the first few transcripts were coded, researchers put together a list of labels in which predetermined categories and other categories were described. This served as a coding manual to ensure inter-rater reliability. The second stage included (2) organising, reducing and defining labels into categories. To account for any possible errors, researchers exchanged the transcripts in order to establish inter-rater reliability (Baarda, 2010). The third stage included (3) integrating and relating of categories in order to realise the aims of the study (Baar, 2002; Baarda, 2010). Researchers decided to add a fourth stage (4) in which label content was compared to 33 questionnaire competencies. This allowed researchers to quantify the number of times competencies were mentioned in FGDs and HTIs and in how many out of nine HTIs and FGDs they were mentioned. This will also allow for a later cross-cultural comparison between Dutch and Kenyan WTP participants' self-perceived competence. Lastly, aspects and competencies described in HTIs and FGDs not currently part of the questionnaire or VIP model, were matched to domain contents and labelled at the domain level (see Appendix D).

Results

Results Study 1

In study 1, researchers were guided by question (a) for which an objective was put forth: to develop Edukans' self-assessment competence questionnaire into a more culturally specific instrument so as to measure self-perceived competence of Kenyan teachers.

Objective - Cross-cultural adaptation.

During stage one (1), adaptations were made to the questionnaire, based on insights gained from the interviews with educational professionals. Through consultation of local experts, emic aspects of competence were identified (Abubakar, in press). Educational experts and local head teachers indicated that all competencies and characteristics are relevant in the Kenyan context. However, how competencies/characteristics are defined differs across cultures. "Context focused" initially talked of organisations that were deemed irrelevant for and by Kenyan teachers. Henceforth "community centre, middle class and local media" was replaced by "elders and scouts", as these are important groups of people within Kenyan society. Etic aspects were also discussed in interviews.

In stage two (2) the originally Dutch questionnaire was translated into English. The layout of the questionnaire was altered to simplify the administration of the questionnaire. Where the "list of competencies" formerly did not include definitions of competencies, these were added. Further simplifications were made to ensure that the English language would be

understandable enough for primary school teachers, as advised by Abubakar. "The fact that primary school teachers may have low grades and are not very good in English have to be taken into account. Especially in rural areas." Some wordings used to describe characteristics were not understandable enough, e.g., "nonchalant" which was replaced by "don't care attitude". As advised, names of competencies were not altered while definitions were adjusted. E.g., "didactic methods" was changed to "various teaching methods".

In stage (3) the 100-points scale was removed as Abubakar indicated that this would likely be confusing for Kenyan teachers who are unfamiliar with this type of scale. "It seems complex, that's why some teachers will not do it correct or won't assign points at all." The component 'Pleasure and Teacher Satisfaction' was removed, to decrease the likeliness that the lengthiness of the questionnaire would lead to lesser reliable results. It was decided that it would be preferable to gain more qualitative information. This resulted in the addition of a table in which teachers are asked to identify the five competencies that are most important to them and explain why these are more important. Finally, the order of the questionnaire's components was changed. First, demographic information is gathered. Next, the questionnaire looks at "Personal Characteristics", "List of Competencies", "Five Most Important Competencies", and "Teaching".

Pilot stage (4) participants pointed out that certain instructions or wordings were unclear. Suggestions for alternative wordings resulted in modifications. Teachers also mentioned that it was advisable to add examples to "additional training". Other recommendations included a revision of the layout and addition of instructions at the top of pages. The three Nakuru based teachers agreed with the educational experts and head teachers that all competencies were relevant to the Kenyan context. The most important addition to the "List of Competencies" was that of the competency "role model". Abubakar suggested this addition first and after three out of nine HTIs it became evident that this is seen as an all-important competency in Kenya. Other findings from HTIs are discussed as part of study 2. After the fourth stage, the modification of the questionnaire was finalised in preparation of study 2 (see attachments).

Results Study 2

The aim of study 2 was 'to investigate the meaning of competence in the Kenyan context and also to measure whether and how self-perceived competence of Kenyan teachers change after participating in WTP'. Based on research question (b) the first objective was to map out the views on quality education of Kenyan head teachers and teachers and to look into the feasibility of quality education in Kenya. Based on question (c) the second objective explored which teaching competencies are important and feasible in Kenyan education. To answer the last question (d), the third objective was to generate head teachers' views on intercultural exchange

programmes, more specifically WTP, and into the influences of such programmes on the school or teachers. The most important and striking findings are discussed below.

Objective one: quality education.

Ways of improving; goals and outcomes. Teachers revealed that quality education should put forth a person who displays good behaviour and has extensive knowledge and skills to be used in future to contribute to society. Quality education should be available to both boys and girls, talented and disabled children. Research participants indicated that quality education can be achieved when child-centred teaching methods and extra-curricular activities are employed, pupils will be enabled to explore and develop their talents. The presence of quality education can be deduced from increasing performance of schools/mean score and national developments.

Resources. Quality education is not easily achieved. It was stated that its presence depends on availability of resources and facilities. Access to text books, other learning materials, and infrastructure appeared to be key. Having enough class rooms and desks was said to be a condition in establishing quality education. The amount of available learning materials, class rooms, and desks is currently not sufficient. Moreover, there is a lack of teachers. Teachers are employed by the Kenyan government. The government is responsible for sending teachers to schools; it decides where each teacher will be located, as teachers sign a contract stating they are willing to work anywhere in the country. The amount of qualified teachers is not sufficient to bring the teacher-pupil ratio up to the desired standard. "Like now, in my school you'll see that the government has sent only three teachers. Against eight classes" (HT_2014_05).

Parents step up and cover the costs of employing teachers. As employment costs are high, rather than hiring qualified teachers, parents opt to hire unqualified personnel. HTIs and FGDs emphasised the need for trained teachers, who have the skills to nurture students. The importance of taking the home environment into account was underlined too. More often than not, parents are not able to provide lunch for their children. This has a negative impact on quality education.

Involved stakeholders. Aside from teachers, pupils, parents, the community, the school management, NGOs, and the government play a part in quality education. The government has a key role. Its job is to provide free education by giving out a certain amount of money to schools for each child, by helping to fund class rooms, and by sending qualified teachers to schools all over the country. Opinions on how well the government carries out its tasks varied. Some interviewees were positive and stated that the government had reduced parents' burdens to provide school facilities. Others emphasised that the government is not doing enough to contribute to quality education. Not so much the lack of teachers was blamed on the government, but the unequal division of teachers across schools was. Teachers felt urban schools have more

than enough staff while interior schools do not. Because governmental provision is insufficient, the role of parents expands. Meeting the child's needs is their responsibility; they need to provide school items, food, water, and teachers in schools where there are not enough. Teachers are responsible for implementing quality education, by teaching well, maintaining relationships with involved stakeholders, and having positive attitudes. Lesser attention is paid to the role of pupils, the school management, NGOs and the community.

Role head teacher. The responsibility to implement policies and monitor the progress of the school is the head teacher's. A way of doing this is by managing time and resources and stepping in when there is a need for new teachers because teachers present at the school are not functioning well. However, the head teacher cannot independently make these decisions.

Head teachers supervise the work delivered by teachers. Head teachers try to enhance the quality of this work in order to enhance the quality of the school. One way of doing so is by stimulating team work and motivating teachers. Another way is by setting the right example so that teachers know how they are expected to behave. Punctuality is an important part of this. Moreover, the head teacher is the key figure in contact between different stakeholders. He or she tries to use relationships with stakeholders to achieve the school's goals. "If you don't have good communication, then your goals cannot be achieved" (HT_2014_05).

Relationships between stakeholders. Key to quality education is team work by stakeholders. By having disciplined individuals working together, 'smooth running' of the school can be realised. Another important relationship is the one between teachers-pupils; a good teacher-pupil relationship leads to more effort made by pupils.

When teachers and head teachers cooperate with parents, parents are more likely to contribute to the school' goals. Ways of doing so include provision of teaching-learning materials or paying for additional teachers. Henceforth, it is very important that no problems in the relationship with parents exist. A number of head teachers pointed out that there are problems in the relationship with the community. Tribal inclination was said to have a negative influence on this relationship. "You might be the same tribe but you don't come from that area. (...) The parents and the parents will start demonstrating. Not because you have done anything wrong, but just because they don't want you there" (HT_2014_01). Mutual understanding is important in communication between the community and the school.

Feasibility. According to various head teachers and teachers, quality education was not yet available in Kenya. Other head teachers and teachers stated that education is far from ideal. However, most teachers did believe quality education can be achieved. Good will, motivation and dedication to education were said to lead to quality education. An obstacle to establishing

quality education is the high number of pupils per class. Some schools have up to 117 pupils per class.

Objective two: teaching competencies. Table 4 maps out how often any of the 33 questionnaire competencies were mentioned in FGDs and HTIs. The first two columns show in how many HTIs and FGDs certain competencies were discussed. This serves as an indication of which competencies are viewed as most important.

Table 4
Number of HTIs and FGDs Mentioning Competencies; Total Number of Times Competencies Mentioned

	In nr of HTIs	In nr of FGDs	Total nr of times mentioned
Working systematically	8	9	60
Ability to learn and self-reflection	4	4	11
Professionalism	8	8	43
Ability to cope with stress	5	3	19
ICT skills	2	3	6
Internal communication	3	3	6
Working together	7	8	41
Guidance	2	5	11
Coaching	3	2	9
Empathy	9	9	60
Loyalty	8	9	66
Representativeness	2	5	8
Ability to make decisions	1	1	3
Monitoring of progress	8	6	38
Focusing on quality	7	7	36
Organisational skills	1	2	3
Leadership	3	3	7
Pedagogic skills	5	5	18
Group management	3	1	13
Didactic skills	4	9	49
Dealing with differences	2	8	29
Outcome focused	4	4	22
Maintain relationships with parents/guardians	6	1	16
Context focused	1	1	4
Networking	4	2	13
Entrepreneurship	0	0	0
Vision	3	6	17
Innovativeness	2	8	40
Role model	6	9	60
Policy development	0	1	2
Ability to put things into perspective	0	0	0
Taking the initiative	3	1	9
Inspire	2	6	12

Professional knowledge domain.

Working systematically. In all but one interview head teachers and teachers made statements indicating that 'working systematically' was an all-important competency for teachers. Good teachers should always prepare their lessons. In Kenya teachers are obligated by the government to keep these records and provide them when governmental officials come to

evaluate the school. "Those are the ones we call professional records. Schemes of work, lesson plans, register, personal time table and class time table" (HT_2014_08).

More than half of head teachers felt working systematically is one of the most important competencies for teachers. Interestingly, in none of the FGDs this was the case. Working in a systematic way was often seen as a component of 'professionalism.' "We are saying that professionalism is one. (...) You're able to cover the syllabus. In a systematic way. Systematic and operational. You cannot separate" (FGD_2014_13). A teacher is both a manager and an administrator. Resource and time management is important, moreover a teacher should see to it that his planning is implemented.

Professionalism. In sixteen out of eighteen interviews, 'professionalism' was named as an important teaching competency. Head teachers and teachers of WTSchool_02 and WTSchool_07 congruently said 'professionalism' was one of five most important teaching competencies. "It sets ground for teaching stroke learning. It's also like our guide line for teaching and learning. So it serves as a guide line" (FGD_2014_11).

Professionalism was regularly linked to the training of teachers. Most teachers told researchers of teachers who are employed without having undergone teaching training. The implication hereof appeared to be that professionalism is lost.

Outcome focused. 'Outcome focused' was mentioned in all but two HTIs and less than half of FGDs. Delivering what you are supposed to deliver as a teacher seemed very important to head teachers. "Subjects they perform. They bring good results. Their subjects excel. (...) So I see that this one, this one is a good teacher" (HT_2014_02).

Though most head teachers pointed out it is important to evaluate the results of learners and make sure they are up to the expected level, none of them mentioned 'outcome focused' as one of five most important competencies. While realising results was important to Kenyan head teachers and teachers, other aspects or competencies seem more important. Two such competencies are 'taking the initiative' or 'vision'.

Taking the initiative. Realising results was important to head teachers. If a school is performing well – its performance measured by its class eight's mean score - more children are admitted to the school. However, it was not just the mean score that head teachers were concerned about. "[If] we just follow the government time, it might not be possible for us to do what we would want to do. (...) For one to succeed one has to move an *extra* [emphasis added] mile. (...) More than the ordinary" (HT_2014_01).

Coverage of the syllabus enables teachers to ensure student performance. However, to succeed when faced with a lack of resources and facilities, it is important to have a good team of

teachers. This includes motivated teachers who make sacrifices and are willing to 'move an extra mile.' However, teacher motivation itself seems dependent on having access to facilities.

Vision. In FGDs, teachers did not emphasise the need to 'move an extra mile.' Teachers experience a lot of pressure and face a lot of challenges due to lack of materials and facilities. Henceforth, participants may not have felt it is within their power to do more than they are already doing. However, in half of the FGDs teachers agreed that 'vision' is one of five most important competencies for a teacher.

Teachers explained what they felt 'vision' entails. "You have a vision as a teacher it enables you to teach the learners on how to think beyond the time. Beyond the present, think about their future within career buildings" (FGD_2014_10). Firstly, teacher' vision is important to help learners think about the future. Secondly, vision is important to enable teachers to achieve goals and long term objectives. Aside from attaining goals, like head teachers mentioned as part of 'taking the initiative', they indicated that they want to move above and beyond these goals by breaking records and enabling pupils to attain dreams.

Entrepreneurship. The only competency that was not mentioned once in any of the eighteen interviews is entrepreneurship. Similarly, quantitative findings indicate teachers reported their lowest scores on 'entrepreneurship'; they reported an average score of 3.59/5.00 points on both the pretest and the posttest.

Ability to learn and self-reflection. Through quantitative data-analysis, it was established that the 32 participants included in the change analysis reported such high scores on 'ability to learn and self-reflection' on the posttest that it became one of the five highest scored competencies. On average, teachers awarded themselves 4.25/5.00 points on this competency at the posttest. In qualitative interviews, 'ability to learn and self-reflection' was described eleven times in eight out of eighteen interviews. Aspects such as self-assessment and readiness to learn were mentioned.

Other. Several descriptions of important teacher' competencies given by teachers and head teachers could not be coded at the competency level. They did not fit descriptions given in the questionnaire. Such descriptions included trained teacher, all-round teacher, handle all classes/subjects, and academic background.

Intervention domain.

Working together. Six of nine head teachers identified 'working together' as one of five most important competencies. Similarly, in five of nine FGDs 'team work' was said to be one of five most important competencies. In working together, sharing of ideas, and consultation appeared to be very important. Someone's weakness is someone else's strength. By sharing

knowledge and ideas, a team of teachers can complement one another's teaching.

Cooperation between teachers is important, as well as cooperation between teachers and the administration (e.g., with head teacher). The idea that an uncooperative teacher is a not so good teacher or that being uncooperative can have a negative impact on education, was recognised in other FGDs too.

"Education is a triangle: teachers, parents, pupils" (HT_2014_08). In observations, this triangle was seen hanging off the deputy head teacher's office door, printed on an A4 paper. Relationships between all those involved in education seemed to be key.

Monitoring of progress. 'Monitoring the progress' was understood as the assessment of learner progress and coverage of the school syllabus. As discussed previously, being a good teacher includes more than just delivering and achieving a good mean score. Monitoring of progress appeared to be considered to be more important than the final result itself; it was talked of almost twice more often than 'outcome focused.'

Another very important aspect, specifically to head teachers, was the supervision of teachers. A good teacher is self-motivated and does not need to be pushed or reminded by the school administration that one should be doing one's work. Contrastingly, only one group of teachers mentioned a good teacher is a teacher who need not be supervised.

It was evident how important teachers found learner involvement in education. One teacher posed the following question. "Is it the teacher to make the targets? (...) I think it's their own, to make their own target. After, as you you're a teacher, you have to monitor" (FGD_2014_16). Learner involvement and participation was linked to learner-centred teaching.

Didactic skills. The idea that learner-centred education is desirable was widely supported by teachers. In every FGD, teachers pointed out the significance of child-centred teaching. "That is: the child should participate fully. Which is in the discussion, the child should be involved in the discussions" (FGD 2014 10).

All three schools not participating in WTP 2014, literally mentioned the benefit of child-centred teaching. This was discussed with a lesser frequency by other schools. Recurring topics for all schools were the use of various teaching methods and improvisation with teaching-learning materials. 'Didactic skills' were much more frequently discussed by teachers than by head teachers. Half of the head teachers who did speak of didactic skills (n=4) were head teachers from non-participating WTP 2014 schools (n=2).

Both head teachers and teachers identified a deficit in availability of materials. In order to make up for this lack, it was said that good teachers should be creative and make their own teaching-learning materials. Not only should teachers create these materials where possible, but

also should they provide those that are not used. This means a teacher should be a facilitator. "Facilitator in this case is you provide materials to be used during the lesson" (FGD 2014 14).

Innovativeness. All but one group of teachers described innovativeness as a competency belonging to a good teacher. Very often, innovativeness was directly linked to creativeness. Some teachers went as far as stating the two are inseparable. Contrary to aforementioned descriptions of 'didactic skills', various groups of teachers felt the production of teaching-learning materials is part of being innovative. "So if you become very creative and innovative, you're able to come with some teaching aids just from the local environment" (FGD_2014_14).

Furthermore, interviewees linked 'innovativeness' to being conservative and not being dynamic. A head teacher explained how a lack of innovativeness negatively influences education. This head teacher was the only head teacher who named 'innovativeness' as one of the five most important competencies. He and his team both felt being innovative and dynamic is integral to being a good teacher. Three other teams of teachers felt 'innovativeness' is crucial in good teaching. Being adamant is widely viewed as a characteristic of a not so good teacher.

Networking. One of the lowest scored competencies was 'networking.' 31 participants valued 'networking' with an average score of 3.65/5.00 points. With some participants scoring 1 out of 5. In interviews, participants discussed 'networking' less frequently than they did other competencies. The topic was brought up thirteen times in total. One FGD (FGD_2014_16) seemed particularly concerned with 'networking', describing the competency five times and putting it forward as one of their five most important competencies. One head teacher also indicated that networking was one of five most important competencies (HT_2014_04).

Personal domain.

Loyalty. The reason as to why 'loyalty' is the most discussed competency of all, is that teachers and head teachers alike emphasised the importance of time management/punctuality and following of/sticking to the syllabus. Both of which have been labeled 'loyalty.'

According to its definition loyalty includes 'sticking to the school policy and decisions made by the management and acting accordingly.' This means that working according to the syllabus and punctuality were considered to be decisions made by management that are to be followed up by teachers. Interviewed teachers and head teachers further indicated that not so good teachers are those teachers who are absent from school, therefore can neither perform duties nor cover the syllabus. This was seen as a serious threat to quality education.

One head teacher linked teacher motivation to teacher loyalty. "Others who are there because of money, they'll always be troubling the office with permission. (...) They want to be *out* [emphasis added] of the school as many times as possible" (HT 2014 05). He continued by

describing a school can have push and pull factors, something underlined by other teachers who indicated that teacher motivation is linked to access to facilities.

Attending to duties at the right time (punctuality) was said to be paramount in effective teaching. So was making sure you stick to the time appointed to you and your lesson (time management). Sometimes both aspects appeared to be viewed interchangeably.

Role model. This competency was added to the questionnaire as a result of study 1. In all FGDs and six HTIs (head) teachers spoke of the meaning of 'role model'. Key to 'role model' is leading by example through your behaviour and the way you present yourself. Considering the latter, 'role model' seemed to overlap with 'representativeness.'

Teachers and head teachers discussed positive and negative aspects of role modelling. Teachers can be good role models by showing learners to be hard working. They can set the wrong example by coming to school drunk or looking shabby. Key to role modelling is emulation of a teacher's behaviour by pupils.

Empathy. The only competency named in all of the interviews is 'empathy.' Looking at the most important competencies identified in HTIs and FGDs 'empathy' was identified four times in total. Kenyan teachers and head teachers also spoke of the need for guidance & counselling. Guidance and counselling has been labelled 'coaching' and 'empathy' because teachers explained how showing children they care is related to stimulating these children to reflect on themselves and reach their goals.

Pivotal to becoming a teacher is having a love for (working with) children, according to teachers and head teachers. A good teacher-learner relationship is at the centre of this. A teacher should be warm, friendly, and close to his or her learners, encourage them and show them he or she cares. Ignorance can lead teachers to not understand their learners and teachers can even demoralise students by being too harsh or not recognising their efforts. Being too harsh on learners was said to include insulting, scaring, and beating pupils.

Dealing with differences. Another competency that teachers spoke of much more frequently than head teachers is 'dealing with differences.' All statements regarding the inclusion of all different types of learners (e.g., those with learning difficulties or disabilities) were labeled 'dealing with differences'; on a number of occasions labels seemed to be interrelated with 'pedagogic skills.' A second important aspect of 'dealing with differences' is that aside from paying attention to slow learners, talented learners should also be considered.

Even though class sizes are generally (too) large in Kenya, teachers stressed the need

for paying individual attention to learners. In most FGDs this competency was brought up when teachers spoke of not so good teachers. One teacher described how she believes not taking time with learners and impatience with learners leads to corporal punishment.

Leadership. Leadership was labeled a total of seven times in HTIs and FGDs. Though this competency was mentioned relatively infrequently, two head teachers indicated that leadership is one of five most important competencies. One head teacher mentioned that of all the problems his school was facing, "poor leadership" may have been one. In FGDs, teachers explained that a teacher has to be a manager and a leader, linking leadership to classroom supervision and monitoring. Quantitative results showed that leadership was one of five lowest valued competencies at the pretest with an average score of 3.66/5.00 points.

Other. Recurring examples of competencies related to the personal domain include honest, careless, humor, enthusiasm, and attitudes of teachers.

Motivation. Teachers and head teachers explained how vital teacher motivation is to education. Teacher motivation was directly linked to quality of teachers, student performance, and quality education. Teacher motivation is influenced by access to resources. In Kajiado County, teachers are oftentimes discouraged by a lack of housing. When housing is not in place, teachers are less motivated and will henceforth influence quality education negatively.

There was said to be a variety of teacher motivations, including getting a salary, it being a job opportunity, love of children, call for God, it being a passion, et cetera. Oftentimes, head teachers and teachers would state that those teaching for the sake of a salary or job opportunity were likely to be not so good teachers. Teachers who are passionate about teaching and love children, were said to be better teachers. Many interviewed teachers and head teachers said that the 'best' type of motivation comes from within. Intrinsic motivation was linked to good teaching; not so good teachers were said to have extrinsic motivation.

Description self-efficacy. As this topic was not discussed in interviews researchers decided to leave it out of qualitative and quantitative analyses.

Achievability. Head teachers indicated that Kenyan teachers can develop any of the 33 competencies described in the questionnaire. "There is nothing that is impossible (HT_2014_09)." Teachers can develop these competencies when they are motivated and have a good attitude. Being trained was also described as an important factor.

Other. In many FGDs, teachers described the importance of 'knowing your learners'. This was explained to include knowing what your learners need, what they can handle and what their strengths and weaknesses are.

Another important aspect which was mentioned and which was not included in the

"List of Competencies", is discipline. In five FGDs, discipline was explained as corrections made to pupils' bad behaviour and disciplined behaviour which should be portrayed by teachers and head teachers. Teachers said corrections made to pupils' indiscipline include the use of caning. Caning was seen as something which has a negative impact on learners, but was viewed positively as a teaching attribute. The disciplining of learners helps change behaviour and achieve goals. Through observations in schools it was verified that caning was still used as a form of disciplining by a number of schools.

Objective three: world teacher programme.

Intercultural knowledge exchange programmes. Head teachers described the sharing of ideas in intercultural knowledge exchange programmes as being challenging and motivating. Schools adopted new ideas, although some had been difficult to put into practice.

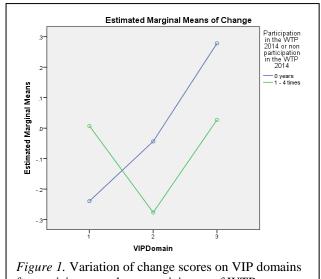
World Teacher Programme. Head teachers mentioned that ideas discussed in WTP were not new to teachers; these same ideas had been taught in college. By participating in WTP, teachers learnt how to put these methods into practice. Where head teachers reported teaching behaviour had changed, researchers were interested to know whether teachers would report similar changes in self-perceived competence. Researchers first found that WTP participants (M = 5.71, SD = 3.83) significantly differed from non-participants (M = 2.25, SD = 1.39) on 'teaching experience at current school' (t(30) = -2,48, p = .017).

Total scores. By adding scores of all 33 competencies up, total scores were calculated for pretest and posttest. The 32 pretest-posttest participants reported an average total score of 130.41/165.00 on the pretest. On the posttest, an average total score of 132.59/165.00 points was reported. This means the average competency score was 3.95/5.00 points for the pretest and 4.01/5.00 for the posttest. The difference between pretest and posttest was insignificant.

Additional tests were carried out to identify if demographic variables could help explain outcomes. A significant negative change was found for males (t(13) = -2.55, p = .024). Significant effects were found for neither 'WTP participation' nor 'teaching experience at current school - categories'. In HTIs head teachers indicated that the number of years spent at a school, influences teaching competence. "According to me, a teacher must stay in a place at least for three or four years. It will make them a better teacher because they will understand now, the weak areas in those school" (HT_2014_05). All of the other (categories of) demographic variables did not have a significant impact on change.

VIP domains. Looking at each VIP domains separately, the pretest-posttest change was non-significant. However, males (t(13) = -2.39, p = .033) did show significant differences on the intervention domain. WTP participation did not affect these outcomes.

Additional tests measured whether variation in scores on VIP domains differed significantly for different demographic variables. Taking into account WTP participation, these scores were nonsignificant. Figure 1 shows that scores of WTP participants did not change for the 'professional knowledge' and 'personal' domains. However, scores on 'intervention' did change. For non-WTP participants, this change showed a different trend. They (only



for participants and non-participants of WTP

just) scored lower on the 'professional knowledge' and the 'intervention' domain; higher scores were seen on the 'personal' domain.

Subdomains. The pretest and posttest scores did not change significantly for any of the independent subdomains. However, results showed that demographic variables influence this correlation. The number of times a teacher participated in WTP influenced the change seen on the subdomain level. Teachers who participated in WTP three times scored significantly lower on the subdomains 'professional knowledge' (t(7) = -3.64, p = .008) and 'recertification' (t(7) = -3.64, p = .008) and 'recertification' (t(7) = -3.64, p = .008) 2.80, p = .026). Teachers who participated in WTP four times showed significantly lower scores on 'interpersonal competence' (t(2) = -5.20, p = .035). The variation in change scores on subdomains between groups of teachers who had taken part in WTP a different number of times differed significantly (F(13.03) = 2.16, p = .018). Differences in variation in scores on subdomains were not been found when comparing WTP participants and non-participants.

WTP participation*WTP school 2014 did not have an effect on subdomain level change. In FGDs, teachers of schools which were not visited by WTP in 2014 discussed methods central to WTP more literally than teachers of schools that did participate in 2014. Additional tests showed significantly lower scores for teachers with less than 5.5 years of teaching experience at their current school on the subdomain 'professional knowledge' on the posttest (t(10) = -2.78, p= .020, MD = -.455). The variation in change scores on subdomains was significantly different between these groups (F(2.91) = 4.17, p = .009).

Competencies. Teachers felt significantly less competent on 'professionalism' (t(30) = -3.03, p = .005), 'representativeness' (t(31) = -2.27, p = .030), and 'monitoring of progress' (t(31)= -2.35, p = .025) on the posttest. The highest change scores were found for 'ability to learn and

self-reflection', 'organisational skills', 'ICT-skills', 'context focused', 'policy development', and 'taking the initiative'. These scores are shown in Table 5.

Table 5

Descriptives 32 Participants Change Analysis; Highest Change Scores on Competencies

Competency	N	Minimum	Maximum	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Ability to learn and self- reflection	32	-1	3	.31	.998	1.771	31	.086
Organisational skills	32	-1	3	.25	.950	1.488	31	.147
ICT-skills	32	-1	4	.25	1.016	1.392	31	.714
Context focused	32	-3	3	.22	1.338	.925	31	.362
Policy development	31	-1	3	.13	.957	.751	30	.459
Taking the initiative	31	-3	3	.13	1.565	.459	30	.650

Note. * p < .05. ** p < .01.

The lowest change scores were found for 'professionalism', 'monitoring of progress', 'focusing on quality', 'inspire', 'ability to cope with stress', 'representativeness', and 'dealing with differences' as described in further detail in Table 6.

Table 6

Descriptives 32 Participants Change Analysis; Lowest Change Scores on Competencies

Competency	N	Minimum	Maximum	Mean	Std. Deviation	T	df	Sig. (2-tailed)
Professionalism	31	-2	2	48	.890	-3.028	30	.005**
Monitoring of progress	32	-2	1	34	.827	-2.350	31	.025*
Focusing on quality	32	-3	1	28	.924	-1.722	31	.095
Inspire	32	-2	2	28	.924	-1.722	31	.095
Ability to cope with stress	32	-3	2	25	.916	-1.544	31	.133
Representativeness	32	-1	1	25	.622	-2.273	31	.030*
Dealing with differences	32	-2	2	25	.984	-1.438	31	.161

Note. * p < .05. ** p < .01.

At the competency level WTP participants scored significantly higher on 'ability to learn and self-reflection' (t(23) = 2.30, p = .031) and significantly lower on 'professionalism' (t(22) = -2.71, p = .013) on the posttest. Head teachers also provided insight into the change in competencies they saw in their teachers after participation in WTP. Teachers adopted some of the WTP values. These included team teaching, child-centred teaching, and preparing of lessons by providing teaching-learning materials. Team work entailed sharing of ideas and helping each other through peer teaching to make up for a colleague's weaknesses in teaching. 'Team work' as described by head teachers was very similar to 'working together' as described in the questionnaire. Quantitative findings did not indicate a change on 'working together' for WTP participants (t(23) = -1.16, p = .260).

Head teachers also stated that teaching had become more child-centred after WTP and that teachers made more use of teaching-learning material. Children were more involved in lessons, which motivated them. Child-centred teaching was believed to make teachers better teachers. Lesson preparation by teachers had been enhanced by WTP. 'Child-centred teaching' and making use of 'teaching-learning materials' were both labelled as 'didactic skills'. WTP participants did not show significant change with regards to this competency.

Discussion

Employing two studies, the general aim of this research was to gain insight into the meaning of teaching competence in Kenya and possible changes in self-perceived competencies of teachers as a result of participation in WTP.

First, researchers concentrated on putting forth an instrument later for use. The translation and adaptation of the teaching competence questionnaire (Edukans, 2012b) was successfully carried out. Kenyan educational experts agreed that all of the 32 competencies of the self-assessment competence questionnaire were universal to education (etic). The most important addition was the inclusion of the competency 'role model'. Similar to what literature outlines (Calvert & Muchira-Tirima, 2013; Harden & Crosby, 2000; Onderi & Croll, 2009), research findings indicate that being a good example has a powerful influence on pupils' values, attitudes, opinions, behaviour and future career choices. Role modelling was mentioned often in both HTIs and FGDs. Other adjustments were made to the length and content of the questionnaire, resulting in a shorter version with more questions aimed at gathering qualitative information.

Insights gained in both studies provided insight into what Kenyan education professionals felt were important teaching competencies for good teachers. International literature (Barber, & Mourshed, 2007; Goodwin, 2010; Hamano, 2011), Edukans, and participants of the current research agree that quality education depends on the availability of quality teachers. Interviewees voiced that quality teachers are trained, governmental teachers who have the skills to nurture students. This is in agreement with the assertion that teaching requires qualification and experience in order to have good results (Birgen, 2005 cited in Absiye, 2013; Odhiambo, 2008). Findings from international (Tschannen-Moran & Johnson, 2011) and Kenyan (Absiye, 2013; Odhiambo, 2008; Yara, 2010) research also acknowledges participants notions that availability of facilities and staff, teaching aids, and governmental support influence pupil performance.

Furthermore, interviewees mentioned the importance of relationships with stakeholders and their active participation in education; alongside pupils and teachers, the community and parents should be actively involved. This is in line with international and recent Kenyan literature (Absiye, 2013; Kimu, 2012; Larocque et al., 2011). Since head teachers were more

extensively asked who and what needs to be present in order for quality education to be achieved, it is unsurprising that especially HTIs confirmed researchers' expectations. Most interviewees proposed that all five Star-school pillars (Edukans, 2011; Edukans, 2012b) need to be in place for quality education to be achieved; their active involvement is key (1).

Looking at quality or 'good' teachers more closely, teachers and head teachers gave descriptions that included both etic and emic aspects. Early on, it was concluded that all 32 competencies which previously made up the questionnaire were universal and thus etic. Many competencies were quoted frequently, including 'role model', 'empathy', 'didactic skills', 'innovativeness', 'professionalism', 'working systematically', and 'vision'. Though discussed frequently, many differences in competency descriptions were found. 'Loyalty' was mentioned most frequently of all 33 competencies. Hardly ever did descriptions labelled loyalty include the word 'loyal' or match the questionnaire description. Descriptions most frequently included 'punctuality', 'time management', and 'following the syllabus.' This suggests that interviewee' descriptions included emic aspects. The earlier addition of the emic competency 'role model' was verified as interviewee' descriptions of good teachers included 'role model'. Other emic competencies mentioned were 'discipline' and 'knowing your learners'. Cross-cultural research into the etic aspect of 'role model', 'discipline', and 'knowing your learners' will permit a cross-cultural comparison and is recommended.

Competency descriptions given by interviewees offer further research leads; differences in these descriptions and questionnaire descriptions, uncovered a more profound issue. Findings show a lot of overlap between competencies. Not only does this mean that the content of descriptions does not fit Kenyan teachers' perceptions of competencies, but also does it point towards issues with the way competencies are matched to VIP domains (Van Gennip & Vrieze, 2008). Head teacher and teacher descriptions of 'professionalism' included aspects of 'loyalty' and 'working systematically', which are part of all three different domains (Klarenbeek & Beekwilder, 2012). This has ramifications for analyses looking at differences between domains, since findings suggest that Kenyan educational professionals may feel that the content of domains is different to what is currently presumed.

Further findings indicate that head teachers mentioned a number of competencies matching leadership skills (Ibrahim, 2011) more often than did teachers. These included 'maintaining relationships with parents/guardians', 'networking', and 'monitoring of progress'. The above affirmed expectation (2), showing that competencies matching public relations skills were mentioned more frequently by head teachers with ratios of 2:1 and 7:1.

Head teacher' views were not necessarily shared by other school members. Looking at which five teaching competencies HTIs and FGDs put forth as being most important only two school teams agreed on three out of five most important competencies. Four school teams named no equivalent competencies at all. These findings imply that some WTP' schools' staff and administration do not have a common vision. This threatens quality education (Mwangi, 2013) and could be an indication of a lack of internal communication. It may also indicate a lack of effective leadership, as suggested in one HTI and mentioned by several teachers.

As expected, the relation between teacher motivation and teacher competence was underlined by Kenyan educationalists. Good teachers were said to be passionate teachers who like their jobs and love children. Similar to prior research' findings (Absiye, 2013; Bennell, 2004; UNESCO, 2005; Selemani-Meke, 2013), interviewees pointed out that teacher motivation depends on availability of resources such as housing and salary. Interviewed head teachers, in line with prior research' findings (Bennell, 2004; Bennell & Akyeampong, 2007; Maina, 2013; Mwangi 2013), stated that a lack of recognition from the school management can discourage teachers and thereby influence quality education negatively.

Aside from exploring the meaning of competence, this study sought to clarify whether Kenyan teachers participating in WTP showed changes in self-perceived competence as a result of WTP. Findings point towards an affirmative answer. It was established that WTP participants showed a significant positive change on 'ability to learn and self-reflection' and a negative change on 'professionalism.' Head teachers familiar with WTP consistently stated that the programme has brought change to their school; they noted increased use of 'team work', 'child-centred teaching', and 'teaching-learning materials'. Many of the topics most frequently discussed in interviews were topics that WTP drew from extensively during workshop days. Two different conclusions can be drawn:

With the posttest and the FGDs having taken place so shortly after the WTP visit, it is plausible that teachers chose to speak of those topics they knew are central to WTP. Both researchers are from a Western setting. In Kajiado County, seldom do Westerners visit interior areas or schools. It is therewith highly likely that the researcher-participant interaction suffered from social desirability bias (Berry, Poortinga, Breugelmans, Chasiotis, & Sam, 2011; He & Van de Vijver, 2012). An alternative explanation could be that WTP participants have in fact internalised ideas put forth in WTP. Interviews seem to affirm this. Head teachers and teachers from schools not taking part in WTP 2014 mentioned the importance of child-centred education more often than other teachers. Since these schools had not been visited by WTP since 2013, this seems to indicate that these teachers have either internalised WTP' values or, like Edukans, want

to move towards more child-centred education. This is reflected in teacher statements which call for a change of curriculum and educational policies in Kenya. This sentiment is voiced by teachers nationwide (Akyeampong et al., 2013; Goodwin, 2010; Pontefract & Hardman, 2005; Wanzare, 2002).

As expected this research's analyses indicated a non-significantly negative difference at the overall competency level. This may be explained by the relative short interval between the departure of WTP 2014 and the posttest. Teachers may have needed time to implement the didactical methods they had reacquaintanced with through WTP. This difficult process (Veenman et al., 2001) may have resulted in lower posttest scores. Conform expectations, a difference in scores on the intervention domain was found. It was, however, insignificantly negative (4). The only significantly negative change was found for 'professionalism'. This competency is part of the professional knowledge domain; no change was expected to occur on this domain. Interview descriptions of 'professionalism' are interchangeable with those of 'working systematically'; the latter is part of both the knowledge and the intervention domain. This broader view on professionalism is consistent with other documented views of Kenyan educationalists (Calvert & Muchira-Tirima, 2013). Participants' different understanding of 'professionalism' could explain the significance seen on the competency level and intervention domain, rather than on the professional knowledge domain. Further research is needed to establish Kenyan teacher's understanding of competencies.

It is widely recognised that behavioural change starts with reflection (Thoonen et al., 2011). Teachers showed increased 'ability to learn and self-reflection' which may be an indication of growing self-awareness of a teacher's strengths and weaknesses. This may lead to more intrinsic motivation, which helps to develop oneself as a teacher (Klarenbeek & Beekwilder, 2012; Korthagen, 2004). This together with a dismay of the current Kenyan curriculum deemed too teacher-centred by teachers could lead to the adoption of different, more learner-centred didactical methods. As shown by Hardman and colleagues (2009) critical self-reflection trainings could lead to a change in pedagogical practices and ultimately more child-centred teaching. It seems like this is happening in Kajiado, Kenya.

Interestingly, while most differences in scores were seen on the intervention domain, almost all of the most frequently named competencies were part of the personal domain. 'Role model', 'loyalty', and 'empathy' were labeled close to 200 times in eighteen interviews. It may be concluded that personal competencies are valued most by teaching professionals, as has been found in prior Kenyan research (Onderi & Croll, 2009). However, interpretations of the number of times items were mentioned have to be made with caution because – despite efforts made to

engage all FGD participants in discussions – it is unclear whether all FGD participants agreed with each and every statement made by individual teachers.

Though statistical analyses showed differences in scores, most could not identify significantly changed scores. Teachers who participated in WTP a different amount of times, showed significantly different change scores on some subdomains. WTP participants who had joined thrice, scored significantly lower on 'professional knowledge' and 'recertification' subdomains; those who had joined four times scored significantly lower on 'interpersonal competence'. This is contrary to the expectation that teachers who had participated more often would show higher scores. Teachers who took part in WTP most frequently may experience more disappointment than those who took part less frequently, because Kenyan education continues to adopt teacher-centred teaching methods (Absiye, 2013). Teachers expressed that child-centred teaching is impossible as long as the teacher-pupil ratio remains as high as it is today. It is said to demoralise teachers and affects their self-perceived competence (Burney & Widener, 2007; Gorozidis & Papioannou, 2014; Mwangi, 2013; Thoonen et al., 2011).

Looking at WTP schools participating in WTP 2014, teachers did not show significant differences at the total competence, domain or subdomain level. Since earlier qualitative findings showed non-WTP 2014 participants discussed the importance of child-centred teaching much more frequently than non-participants, this may indicate that non-participants value these methods more but did not experience growth in use thereof.

For 'teaching experience at current school – categories' and 'teaching experience at current school – less than 5.5 years' significant differences were found at the subdomain level. Also, significant variation in change scores was found. The category of teachers, who had been teaching at their current school for less than 5.5 years, showed significantly lower change scores than other categories of teaching experience. Importantly, head teachers consistently stated that there is a need for teachers to remain at a school for at least three years so as to improve the quality of education. Governmental policies expecting teachers to change schools every few years could therewith disallow schools – especially in interior areas like Kajiado County – to achieve quality education (Wanzare, 2002). Though teaching experience at current school had a positive effect on self-perceived competence, this was not the case for participation in WTP 2014 and taking part multiple times in WTP (5). Surprisingly, males scored significantly lower at the total competence level and on the intervention domain, which is contrary to earlier findings (Onderi & Croll, 2009). None of the other demographic variables explained significant change scores. Findings have to be interpreted with caution due to the small sample size and unexpected directions of found correlations (Field, 2009).

Concluding, this research tried to gain insight into the meaning of teaching competence in Kenya while employing a practice-based method to evaluate WTP in Kajiado. Findings suggest that teaching competence has both etic and more culturally specific emic aspects. The relationship with all stakeholders is crucial in establishing quality education in Kenya. The influence of availability of resources should not be overlooked. Good teachers are motivated individuals, whose training and personal competencies are all-important. It is evident that teachers and head teachers spoke fondly of children. Like Edukans, they felt that currently Kenyan educational is not optimal. Using what they learnt through WTP, in essence a form and opportunity for professional development, teachers stressed the educational importance of child-centred learning and the use of various teaching methods that are relevant in a context where teachers are challenged by a lack of resources on a day-to-day-basis.

Kenyan research has called on international research to look at self-perceived competence of teachers, as this is key to generating quality teachers (Onderi & Croll, 2009; Tschannen-Moran & Hoy, 2001). The current research answered to that need. As intended, the studies collected valuable data and insights into the meaning of competence. These insights will contribute to the development of a culturally relevant instrument measuring Kenyan teachers' (self-perceived) competence. Simultaneously, it served as a practice-based evaluation of an educational intervention developed by Edukans. It shows that WTP is valued by Kenyan teachers and head teachers and that Edukans' Star-school concept is gaining foothold in the rural setting of Kajiado County. Moreover, gathered statements indicate that teachers emphasised the importance of child-centred education and were also using more child-centred teaching methods, which has been one of WTP' main objectives from its onset. While researchers are left to conclude that teaching competencies seem to have changed as a result of WTP (2014), effects could not be measured. It is questionable whether findings can be generalised due to a lack of internal and external validity of the used quantitative measure.

Limitations

Throughout the research, questions were raised about the foundation of the used instrumentation. From the beginning, the foundation of the self-assesment competence questionnaire as developed by Edukans seemed questionable at best. Reason being that no internal documentation showed substantiating explanations as to why which competencies were placed under which subdomains or domains. Looking at how individual competencies were placed into the VIP model designed by Van Gennip & Vrieze (2008) (see Appendix B), a number of problems can be identified. Firstly, more than half of competencies are part of more than one domain and subdomain; meaning that when scores are compared at the domain or

subdomain level, scores are partially derived from identical competencies. This seems problematic, as it makes domains interdependent and poses a serious threat to both internal and external validity of an instrument (Baarda, 2010; Field, 2009). Because little or nothing is known about the psychometric properties of the instrument (Van Gennip & Vrieze, 2008), future research should look into this to justify continued use of the instrument. By employing qualitative measures alongside the questionnaire, researchers tried to establish triangulation (Landsheer, 'T Hart, De Goede, & Van Dijk, 2010). This enabled researchers to look at observed change resulting from WTP. The inconsistency across data sources should not be viewed as a weakening of evidence, but rather as an opportunity to uncover deeper meaning (Guion, Diehl, & McDonald, 2011; Patton, 2002).

Additional methodological issues include the lack of a control group and a baseline measurement prior to the start of WTP. Therefore, conclusions drawn cannot be compared to initial levels of self-perceived competence of teachers in Kajiado. For this reason no effect of WTP could be measured (Field, 2009). The current research did however employ comparison groups to allow for comparative measurements between WTP and non-WTP participants.

Researchers were unable to get hold of all participants. This was a result of indirect contact about teacher participation with head teachers and lack of documentation indicating who have taken part in WTP when. This has had a negative impact on the size of the change measure sample and external validity of findings. By not solely relying on head teacher statements and asking other teachers who WTP participants were, researchers successfully managed to make up for some of the loss of participants. Moreover, the employed statistical analyses are generally used for larger samples. Alternatively, researchers could have opted to use the Wilcoxon Signed rank test which is less sensitive to extremities (Baarda, 2010). Using this test may have resulted in more significant changes.

Due to a limited period of time spent in Kajiado and having to interrupt the research due to school holidays, researchers were unable to plan a significant length of time between pretest-intervention-posttest measurements. A longer interval between the intervention and posttest measurement may have resulted in different findings.

It also seems highly likely that bias has occurred as a result of intercultural interaction (Berry et al., 2011; He & Van de Vijver, 2012). As the researchers associated with and operated from Dupoto-e-Maa' headquarters, a partner organisation of and funded by Edukans, it is likely that teachers associated the researchers with their donors and may well have given what they thought of as being desirable answers. Despite these associations, researchers remained objective and emphasised that they were independently looking into Kenyan education as part of their

master degree. More so, bias was avoided by visiting schools up to five times; familiarising with schools, pupils, staff, and head teachers.

This research also failed to look into several important factors, which competence depends on according to literature. These include school climate, peer support and leadership (Tschannen-Moran & Johnson, 2011). Researchers did not ask after the relationship and communication between school management and teachers. Studies indicate that transformational leadership influences teacher behaviour (Bennell, 2004; Bennell & Akyeampong, 2007) and depends on self-efficacy beliefs of head teachers. Self-perceived competence of head teachers was, however, not measured. Head teachers did, however, feel comfortable enough to criticise their own leadership in talking to the researchers. This is a sign of a fruitful researcher-head teacher relationship and has generated valuable insights that can be used to guide future research.

Lastly, as the current research opted to look into self-perceived competence, no verifiable behavioural measurements were made (Landsheer et al., 2010). This means that teacher statements indicating increased use of child-centred methods in classrooms cannot be verified. Therefore, findings must be interpreted with caution and cannot be generalised to actual behaviour. Researchers tried to make up for this by asking head teachers whether they had observed any change in teaching behaviour as a result of WTP. Though incorporation of teachers own views disallows researchers to make statements about actual behaviour, it offers a new perspective on teacher effectiveness research (Onderi & Croll, 2009).

Implications

First and foremost, researchers strongly recommend a revision of the Teaching Competence Questionnaire (Edukans, 2014b). At this moment in time, reported findings are devalued because findings cannot be designated to one single domain or subdomain. This means that any comparison of (sub)domains focuses more on competencies not allocated to more than one (sub)domain and distracts from those competencies with more than one (sub)domain assigned to them.

A revision of the questionnaire can be done in a number of ways. One option would be to start from scratch, disregarding the VIP model. This would be advisable for use of the questionnaire in Kenya. Using a bottom-up approach, competencies as identified by locals can be measured and influences of resources that are ever present in Western contexts but are lacking in the Kenyan context can be taken into account. Another possibility is the adoption of a measure used in prior Kenyan research such as that used by Onderi and Croll (2009).

However, if use of the existing questionnaire is preferable – for example for reasons of

cross-cultural comparison – the questionnaire will need to be revised and further adaptations will need to be made. The current studies can serve as a starting point. Descriptions of competencies need to include technical terms specific to the Kenyan context rather than those belonging to a more Western context.

Now that Edukans is planning to move WTP to another region, it seems desirable to make sure a baseline measurement is carried out in the region that will be targeted next. This will be an asset to future effect studies looking at the programme. If efforts were increased to document WTP participation and keep track of contact details of (former) participants, with the help of the partner organisation in the new area, a larger research sample could be put together. This will inevitably generate more reliable findings.

The effect of WTP and other knowledge exchange programmes can be enlarged by not only investing in teachers, but also increasing head teacher involvement. By making WTP school leader more integral in the regular WTP, Edukans can assist in development of head teachers' leadership skills. In 2014, prevailing international research on head teacher' leadership underlines the need for professional development opportunities of head teachers, which are insufficiently available in Kenya (Eacott & Asuga, 2014; Webber, Mentz, Scott, Okoko, & Scott, 2014) It notes that if significant attention does not go out to the preparation and development of head teachers, governmental initiatives focusing on establishing quality education are deemed to fail (Eacott & Asuga, 2014). Professional development initiatives should focus on enhancing transformational leadership and increasing communication between head teachers and teachers to establish a common vision (Mwangi, 2013; Thoonen et al., 2011). The evaluative instrument known as the quick scan, currently used as part of WTP XL, could be integrated in WTP so as to help head teachers monitor their teachers. In-school evaluation by head teachers has been shown to positively impact school performance (Barber & Mourshed, 2007). Involvement of the community in the quick scan – for example members of parent committees - is recommended as teachers and head teacher point out that community and parental support is crucial in facilitating quality education.

By involving head teachers and the community, imparted teaching methods and made improvements will become more sustainable. Engaging teacher training colleges will also help create lasting effects. As mentioned before, child-centred teaching methods are taught in college but not implemented. By realising its use, pre-service teachers will enhance their competencies and will spread their knowledge.

Most importantly, head teachers spoke openly about the hardships their schools are faced with due to government policies expecting teachers to transfer every few years. Edukans could

opt to lobby with local County government officials through partner organisations. Dupoto-e-Maa' education officers strongly recommended this as local governments could potentially allow WTP schools to remain with their teachers, rather than promoting them to better positions and thus transfer them. This would enable schools to remain with teachers for a longer period of time, allowing them to familiarise more with their school's strengths and weaknesses, helping them become quality teachers. This will ultimately benefit the sustainability of WTP and contribute to quality of education in Kenya.

References

- Absiye, H. A. (2013). An analysis of the quality of free primary education in Garissa municipality of Garissa county, Kenya (Unpublished master's thesis). Kenyatta University, Nairobi, Kenya.
- Abubakar, A. (in press). Equivalence and transfer problems in cross-cultural research. In N. J. Smelser & P. B. Baltes (Eds.) *International Encyclopedia of the Social & Behavioral Sciences*. Retrieved from preprint archive.
- Akyeampong, K., Lussier, K., Pryor, J., & Westbrook, J. (2013). Improving teaching and learning of basic maths and reading in Africa: Does teacher preparation count?

 International Journal of Educational Development, 33, 272-282.

 doi:10.1016/j.ijedudev.2012.09.0D06
- Ansell, N. (2005). Children, youth and development. London: Routledge.
- Baar, P. L. M. (2002). Cursushandleiding training kwalitatieve analyse voor pedagogen.

 Utrecht: Universiteit Utrecht.
- Baarda, B. (2010). Research: This is it! Guidelines for setting up, doing and evaluating quantitative and qualitative research (1st ed.). Groningen, Houten: Noordhoff Uitgevers B.V.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Barber, M., & Mourshed, M. (2007). *How the world's best-performing school systems come out on top*. Retrieved from McKinsey&Company website: http://mckinseyonsociety.com/how-the-worlds-best-performing-schools-come-out-on-top/
- Bennell, P. (2004). *Teacher motivation and incentives in Sub-Saharan Africa and Asia*.

 Brighton: Knowledge and Skills for Development.

- Bennell, P., & Akyeampong, K. (2007). *Teacher motivation in Sub-Saharian Africa and Asia*(DFID Report 71). Retrieved from Department for International Development, Central Research Department website: http://r4d.dfid.gov.uk/pdf/outputs/policystrategy/researchingtheissuesno71.pdf
- Berry, J.W., Poortinga, Y.H., Breugelmans, S.M., Chasiotis, A., & Sam, D.L., (2011). *Cross-cultural psychology: Reseach and applications* (3rd ed.). Cambridge: Cambridge University Press.
- Burney, L., & Widener, S. K. (2007). Strategic performance measurement systems, job-relevant information, and managerial behavioral responses: Role stress and performance.

 *Behavioral Research in Accounting, 19, 43-69. doi:10.2308/bria.2007.19.1.43
- Calvert, M., & Muchira-Tirima, K. (2013). Making sense of professionalism and being a professional in a Kenyan higher education context. *Journal of Education for Teaching*, 39, 370-382. doi:10.1080/02607476.2013.802159
- Chielens, M. (2010). The future of the World Teacher Project: Policy advisory paper to improve efficiency and effectiveness in the education activities of Edukans (Unpublished master's thesis). Radboud University Nijmegen, Nijmegen. Retrieved from: Edukans database.
- Daamen, W. (2013). Wat werkt bij het implementeren van jeugdinterventies. Retrieved from Nederlands Jeugd Instituut website: http://www.nji.nl/nl/Wat-werkt-bij-het-implementeren-van-jeugdinterventies.pdf
- Duffin, L. C., French, B. F., & Patrick, H. (2012). The teachers' sense of efficacy scale:

 Confirming the factor structure with beginning pre-service teachers. *Teaching and Teacher Education*, 28, 827-834. doi:10.1016/j.tate.2012.03.004
- Dupoto-e-Maa (2014). Dupoto-e-Maa. Retrieved June 20, 2014 from http://dupoto.org/
- Eacott, S., & Asuga, G. N. (2014). School leadership preparation and development in Africa:

 A critical insight. *Educational Management Administration & Leadership*, 42, 1-16.

- doi:10.1177/1741143214523013
- Edukans (2011). STAR-school as an approach to quality improvement for basic education.

 Unpublished document. Retrieved from Edukans database.
- Edukans (2012a). *Evaluatie enquête werelddocent*. Unpublished questionnaire. Retrieved from Edukans database.
- Edukans (2012b). *Teaching and learning: A vision on education and development*. Unpublished document. Retrieved from Edukans database.
- Edukans (2014a). *Reader World Teachers Program 2014*. Unpublished document. Retrieved from Edukans database.
- Edukans (2014b). *Teaching Competence Questionnaire*. Unpublished questionnaire. Retrieved from Edukans database.
- Edukans (2014c). Werelddocent schoolleider. Retrieved June, 20 from http://werelddocent .edukans.nl/wat-is-werelddocent/werelddocent-schoolleider/
- Edukans (2014d). *Werelddocent XL*. Retrieved June, 20 from http://werelddocent. edukans.nl/wat-is-werelddocent/werelddocent-xl/
- Field, A. (2009). Discovering statistics using SPSS. Thousand Oaks: Sage Publications.
- Goodwin, A. L. (2010). Globalization and the preparation of quality teachers: Rethinking knowledge domains for teaching. *Teaching Education*, *21*, 19-32. doi:10.1080/10476210903466901
- Gorozidis, G., & Papaioannou, A.G. (2014). Teachers' motivation to participate in training and to implement innovations. *Teaching and Teacher Education*, *39*, 1-11. doi:10.1016/j.tate.2013.12.001
- Guion, L. A., Diehl, D. C., & McDonald, D. (2011). *Triangulation: Establishing the validity of qualitative*. (FCS6014). Retrieved from Department of Family, Youth and Community

- Services, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida website: http://edis.ifas.ufl.edu/pdffiles/fy/fy39400.pdf
- Hamano, T. (2011). The education policy agenda and education research in Africa: Concerning mainly primary education. *Proceedings*, *13*, 13-18. Retrieved from http://teapot.lib.ocha.ac.jp/ocha/bitstream/10083/51419/1/Proceedings13_02Hamano.pdf
- Harden, R. M., & Crosby, J. (2000). AMEE guide no 20: The good teacher is more than a lecturer the twelve roles of the teacher. *Medical Teacher*, 22, 334-347. doi:10.1080/014215900409429
- Hardman, F., Abd-Kadir, J., Agg, C., Migwi, J., Ndambuku, J., & Smith, F. (2009). Changing pedagogical practice in Kenyan primary schools: The impact of school-based training.

 Comparatice Education, 45, 65-86. doi:10.1080/03050060802661402
- Hardman, F., Ackers, J., Abrishamian, N., & O'Sullivan, M., (2011). Developing a systemic approach to teacher education in sub-Saharan Africa: Emerging lessons from Kenya,
 Tanzania and Uganda. Compare: A Journal of Comparative and International Education,
 41, 669-683. doi:10.1080/03057925.2011.581014
- He, J., & Van de Vijver, F. (2012). Bias and equivalence in cross-cultural research. *Online Readings in Psychology and Culture*, 2, 1-19. doi:10.9707/2307-0919.1111
- Henson, K.T. (2003). Foundations for learner-centered education: A knowledge base. *Education*, 124, 5-16. Retrieved from http://www.citadel.edu/education/images/files/syllabi/foundations_for_learner.doc
- Hughes, A., Galbraith, D., & White, D. (2011). Perceived competence: A common core for self-efficacy and self-concept? *Journal of Personality Assessment*, 93, 278-289. doi:10.1080/00223891.2011.559390

- Ibrahim, N., (2011). Preparation and development of public secondary schools principals in Kenya. *International Journal of Humanities and Social Science*, 1, 291-301. Retrieved from: http://ijhssnet.com/journals/Vol._1_No._9_Special_Issue_July_2011/33.pdf
- Kimu, A. M. (2012). *Parent involvement in public primary schools in Kenya*. (Unpublished doctoral dissertation). University of South Africa; South Africa. Retrieved from Unisa Institutional Repository, Pretoria, South Africa.
- Klarenbeek, M. & Beekwilder, C. (2012). *Betere docent door internationalisering*. Utrecht: COLUU Universiteit Utrecht.
- Korthagen, F. A. J. (2004). In search of the essence of a good teacher: Towards a more holistic approach in teacher education. *Teaching and Teacher Education*, 20, 77-97. doi:10.1016/j.tate.2003.10.002
- Landsheer, H., 'T Hart, H., De Goede, M., & Van Dijk, J. (2010). *Praktijkgestuurd onderzoek: Methoden van praktijkonderzoek*. Groningen, Houten: Noordhoff Uitgevers B.V.
- Larocque, M., Kleiman, I., & Darling, S. M. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure*, *55*, 115-122. doi:10.1080/10459880903472876
- Machen, S. M., Wilson, J. D., & Notar, C. E. (2005). Parental involvement in the classroom.

 *Journal of Instructional Psychology, 32, 13-16. Retrieved from http://web.a.ebscohost

 .com.proxy.library.uu.nl/ehost/pdfviewer/pdfviewer?sid=6b74239b-7275-4f0c-b28a
 b90ff008cc25%40sessionmgr4003&vid=2&hid=4101
- Maina, J. K. (2013) Influence of head teachers' administrative strategies on teachers' motivation in public secondary schools in Kieni East district, Kenya (Unpublished master's thesis).Retrieved from University of Nairobi Digital Repository, Nairobi. (T08:44:18Z)

- Mwangi, J.W. (2013). Effects of leadership styles on teachers' job performance and satisfaction:

 A case of public secondary schools in Nakuru County, Kenya (Unpublished master's thesis). Kenyatta University, Nairobi.
- Miller, G., & Elman, E. (2013). Improving the quality of education: Kenya's next challenge.

 *Geography, 98, 24-32. Retrieved from http://www.geography.org.uk/Journals/download

 *asp?articleID=1053
- Ndeto, M. D., & Bwisa, H. M. (2013). Factors influencing teachers' active involvement in continuous professional development: A survey in Trans Nzoia West District, Kenya.

 *International Journal of Academic Research in Business and Social Sciences, 3, 224-235. Retrieved from: http://www.hrmars.com/admin/pics/1818.pdf
- Odhiambo, G. (2008). Elusive search for quality education: The case of quality assurance and teacher accountability. *International Journal of Educational Management*, 22, 417-431. doi:10.1108/09513540810883159
- Oketch, M., & Somerset, A. (2010). Free Primary Education and After in Kenya: Enrolment impact, quality effects, and the transition to secondary school (CREATE Research Monograph 37). Retrieved from Consortium for Research on Educational Access,

 Transitions and Equity website: http://www.create-rpc.org/pdf_documents/PTA37.pdf
- Onderi, H., & Croll, P. (2009). Teacher self-perceptions of effectiveness: A study in a district of kenya. *Educational Research*, *51*, 97-107. doi:10.1080/00131880802704798
- Onguko, B. B. N. (2012). *Teachers' professional development in a challenging educational*context a study of actual practice in rural western Kenya (Doctoral dissertation).

 Retrieved from: http://theses.ucalgary.ca/bitstream/11023/131/2/ucalgary_2012

 onguko brown.pdf

- O'Sullivan, M. (2004). The reconceptualisation of learner-centred approaches: A Namibian case study. *International Journal of Educational Development*, 24, 585-602. doi:10.1016/S0738-0593(03)00018-X
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks: Sage Publications.
- Pontefract, C., & Hardman, F. (2005). The discourse of classroom interaction in Kenyan primary schools. *Comparative Education*, *41*, 87-106. doi:10.1080/03050060500073264
- Selemani-Meke, E. (2013). Teacher motivation and implementation of continuing professional development programmes in Malawi. *Anthropologist*, *15*, 107-115. Retrieved from http://www.krepublishers.com/02-Journals/T-Anth/Anth-15-0-000-13-Web/Anth-15-1-000-2013-Abst-PDF/T-ANTH-15-1-107-13-767-Selemani-Meke-E/T-ANTH-15-1-107-13-767-Selemani-Meke-E-Tx[11].pmd.pdf
- Thoonen, E. E. J., Sleegers, P. J. C., Oort, F. J., Peetsma, T. T. D., & Geijsel, F. P. (2011).

 How to improve teaching practices: The role of teacher motivation, organizational factors, and leadership practices. *Educational Administration Quarterly*, 47, 496-536. doi:10.1177/0013161X11400185
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*, 783-805.
- Tschannen-Moran, M., & Johnson, D. (2011). Exploring literary teachers' self-efficacy beliefs:

 Potential sources at play. *Teaching and Teacher Education*, 27, 751-761.

 doi:10.1016/j.tate.2010.12.005
- Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202-248. doi:10.3102/00346543068002202

- United Nations Educational, Scientific, and Cultural Organization. (2005). Understanding education quality. In UNESCO, *Education for all: The qualitative imperative*. Retrieved from: http://www.unesco.org/education/gmr_download/chapter1.pdf
- United Nations Educational, Scientific, and Cultural Organization. (2014). *Demographic and socio-economic MetaData: Demographic indicators*. Retrieved July 20, 2014 from: http://data.uis.unesco.org/#
- Van Gennip, H., & Vrieze, G. (2008). Wat is de ideale leraar? Studie naar vakkennis, interventie en persoon. Nijmegen: ITS Radboud Universiteit Nijmegen
- Van Dinteren, H., Huisman, F., & Buissink (2010) Elke dag een Werelddocent. Heerlen: Loyalis.
- Van Monsjou, F. A., & Metsemakers, P. M. (2012). "Reminding me every time to keep on moving". Evaluation study on the design, implementation and outcomes of the World Teacher Program in Kenya (Unpublished master's thesis). Utrecht University, Utrecht.
- Vavrus, F., Thomas, M., & Bartlett, L. (2011). Ensuring quality by attending to inquiry:

 Learner-centered pedagogy in sub-Saharan Africa (Fundamentals of Teacher Education

 Development, Report 4). Retrieved from United Nations, Scientific and Cultural

 Organisation website: http://unesdoc.unesco.org/images/0021/002160/216063e.pdf
- Veenman, S., Denessen, E., Gerrits, J., & Kenter, J. (2001). Evaluation of a coaching programme for cooperating teachers. *Educational Studies*, 27, 317-340. doi:10.1080/03055690120076592
- Wanzare, Z. O. (2002). Rethinking teacher evaluation in the third world: The case of Kenya. *Educational Management & Administration*, 30, 213-229. doi:10.1177/02611X0203 0002511
- Warrington, M., & Kiragu, S. (2012). "It makes more sense to educate a boy": Girls 'against the odds' in Kajiado, Kenya. *International Journal of Educational Development, 32*, 301-309. doi:10.1016/j.ijedudev.2011.05.004

- Webber, C. F., Mentz, K., Scott, S., Okoko, J. M., & Scott, D. (2014). Principal preparation in Kenya, South Africa, and Canada. *Journal of Organizational Change Management*, 27, 499-519. doi:10.1108/JOCM-07-2013-0125
- Weimer, M., (2013). Learner-centered Teaching: Five Key Changes to Practice (2th ed.)

 [Google Books version]. Retrieved from: http://books.google.nl/books?hl=en&lr=&id

 =zFl5ItJKCWcC&oi=fnd&pg=PP2&dq=Weimer,+M+2013&ots=JA-S5jeMPH&sig

 =3MiG2b44dlWIMraeQz-ZVBSGxF0&redir_esc=y#v=onepage&q&f=false
- Yara, P. O. (2010) Teaching/learning resources and academic performance in mathematics in secondary schools in bondo district of kenya. *Asian Social Science*, 6, 126 132. doi:10.5539/ass.v6n12p126

Appendix B VIP Model

Professional knowledge	Intervention	Person
Educational level of the teacher	Didactical competence	Pedagogical skills
Entrepreneurship	Coaching	Empathy
Professionalism	Empathy	Maintain relationships with
Taking the initiative	Representativeness	parents/guardians
	Focusing on quality	Context focused
	Organisational skills	
	Group management	
	Didactic skills	
	Dealing with differences	
	Outcome focused	
	Innovativeness	
	Policy development	
Subject control	Pedagogical competence	Motivation
Working systematically	Coaching	Taking the initiative
Ability to learn and self-reflection	Organisational skills	
Outcome focused	Pedagogic skills	
	Maintain relationships with	
	parents/guardians	
Recertification (professionalism)	Organisational competence	Interpersonal competence
Professionalism	Working systematically	Internal communication
ICT skills	Ability to make decisions	Working together
Entrepreneurship	Monitoring of progress	Empathy
Taking the initiative	Focusing on quality	Loyalty
	Networking	Dealing with differences
	Taking the initiative	Context focused
		Inspire
		Role model
Reflective and developmental	Interpersonal competence	Personal characteristics/traits
competence (continuous process)		(biography) and development
Ability to learn and self-reflection	Internal communication	Ability to learn and self-reflection
Vision	Working together	Ability to cope with stress
Innovativeness	Empathy	Focusing on quality
	Guidance	Leadership
	Coaching	Dealing with differences
	Dealing with differences	Vision
	Inspire	
	Role model	

Appendix D

Objectives and Codes of Head Teacher Interviews and Focus Group Discussions

Objective 1 – Quality Education

The first objective aims to map out the views on quality education of Kenyan head teachers and teachers. It looks into the feasibility of quality education in Kenya and aspects core to its achievability.

- 1.1 Ways of improving; goals and outcomes
- 1.2 Resources: physical facilities, monetary funds, school items, staff
- 1.3 Involved stakeholders: role pupils, role parents/community, role government, role NGOs
- 1.4 Role head teacher
- 1.5 Relationships between stakeholders
- 1.6 Feasibility
- 1.7 Other

Objective 2 – Teaching Competencies

The second objective aims to explore which teaching competencies are important in Kenyan education. It again explores the feasibility of teaching competencies in a Kenyan context.

2.1 VIP competencies: Professional knowledge domain

Entrepreneurship

Professionalism

Taking the initiative

Working systematically

Ability to learn and self-reflection

Outcome focused

ICT skills

Entrepreneurship

Vision

Innovativeness

2.2 VIP competencies: Intervention domain

Coaching

Empathy

Representativeness

Focusing on quality

Organisational skills

Group management

Didactic skills

Dealing with differences

Outcome focused

Innovativeness

Policy development

Pedagogic skills

Maintain relationships with parents/guardians

Working systematically

Ability to make decisions

Monitoring of progress

Networking

Taking the initiative

Internal communication

Working together

Guidance

Inspire

Role model

2.3 VIP competencies: Personal domain

Empathy

Maintain relationships with parents/guardians

Context focused

Taking the initiative

Internal communication

Working together

Loyalty

Dealing with differences

Inspire

Role model

Ability to learn and self-reflection

Ability to cope with stress

Focusing on quality

Leadership

Vision

- 2.4 Motivation
- 2.5 Description self-efficacy
- 2.6 Achievability (competencies)
- 2.7 Other

Objective 3 – World Teacher Programme

The third and final objective looks to gain insight into head teacher' views on intercultural exchange programmes, more specifically the World Teacher Programme. In what way has it influenced the school or teachers, if any?

- 3.1 View on intercultural exchange programmes
- 3.2 Opinion on and contribution WTP