#### **ORIGINAL PAPER**



# Indigenous knowledge practices for sustainable lifelong education in pastoralist communities of Kenya

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# Abstract

Despite setting high hopes on education, very few pastoral nomad children in Kenya transition from primary education to secondary education. This article argues that the national Kenyan compulsory formal curriculum fails to accommodate the needs of pastoralist communities. Literacy rates are particularly low among the Turkana people, pastoralist nomads who live in the Northwest of Kenya. Low literacy has resulted in an acute shortage of local teachers, a state of affairs which exacerbates the situation. Nomadic communities like the Turkana people rarely attract national discussions on education curriculum even as their children continue to perform poorly on national examinations. The author of this article demonstrates the importance of integrating Indigenous knowledge and mother-tongue instruction in the curriculum for pastoralist schools. Based on his own research in Turkana County, he identifies two main problems besides the shortage of teachers, namely the inappropriateness of the materials used for instruction, which do not reflect the pastoralist children's local Indigenous culture and everyday environment; and the failure to use Turkana mother tongue in early childhood education, which would support children's literacy development, and thus serve to improve literacy rates in the community as a whole. The author presents a family literacy project he was involved in which has made a promising start in addressing these two issues. Stories were collected from parents and elders and made into storybooks, thereby creating tailormade, meaningful instruction materials. The author expresses his hope that this article will stimulate critical discussions in Kenya which will respect the participation of pastoralist nomadic communities in making decisions about education policy.

**Keywords** Indigenous education  $\cdot$  Indigenous knowledge  $\cdot$  Early childhood education  $\cdot$  Family literacy  $\cdot$  Turkana language  $\cdot$  Mother tongue  $\cdot$  Language of instruction

# Résumé

Pratiques liées au savoir autochtone dans une éducation durable tout au long de la vie pour les communautés nomades du Kenya – Malgré de grands espoirs placés

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dans l'éducation, très peu d'enfants nomades pastoraux au Kenya passent de l'enseignement primaire à l'enseignement secondaire. Cet article soutient que le programme d'études national officiel obligatoire du Kenya ne répond pas aux besoins des communautés pastorales. Les taux d'alphabétisme sont particulièrement bas chez les Turkana, éleveurs nomades qui vivent dans le nord-ouest du Kenya. Ce faible niveau d'alphabétisme a entraîné une grave pénurie d'enseignants locaux, ce qui aggrave la situation. Les communautés nomades comme le peuple Turkana suscitent rarement des discussions nationales sur les programmes d'enseignement, même si leurs enfants continuent d'afficher de faibles résultats aux examens nationaux. L'auteur de cet article démontre l'importance d'intégrer le savoir autochtone et l'enseignement en langue maternelle dans les programmes scolaires des écoles pastorales. Sur la base de ses propres recherches dans le comté de Turkana, il identifie deux problèmes principaux, outre la pénurie d'enseignants, à savoir l'inadéquation du matériel utilisé pour l'enseignement, qui ne reflète pas la culture indigène locale et l'environnement quotidien des enfants des communautés pastorales, et le fait que la langue maternelle turkana ne soit pas utilisée dans l'enseignement préscolaire, alors qu'il favoriserait le développement du savoir des enfants et permettrait d'améliorer les taux d'alphabétisme dans la communauté tout entière. L'auteur présente un projet d'alphabétisation familiale auquel il a participé et qui a pris un départ prometteur pour aborder ces deux questions. Des histoires ont été collectées auprès des parents et des aînés et transformées en recueils d'histoires, ce qui a permis de créer du matériel d'enseignement sur mesure et pertinent. L'auteur espère que cet article stimulera des discussions critiques au Kenya qui respecteront le fait que les communautés nomades pastorales doivent prendre part à la prise de décisions en matière de politique éducative.

# Introduction

Despite various reform efforts of the postcolonial administration in Kenya,<sup>1</sup> the state education curriculum has largely continued to be a product of British colonial education (Dyer 2006; Krätli 2001a, b; Ngugi wa Thiong'o 2009; Ntarangwi 2004). Maintenance of a curriculum embedded in Western ideology in Kenya's national school system has significantly affected access to both quality and relevant education, especially in culturally traditional and economically marginalised nomadic pastoralist communities (Dyer 2006; Krätli 2001a, b; Ng'asike 2011a, 2014). Among these communities are the Turkana, a nomadic people who live in a county of the same name in the semi-arid northwest of Kenya.<sup>2</sup> From early childhood, children from Turkana nomadic communities struggle to go through an education system based on Western European ideology. They are expected to join and pass through formal academic education despite the fact that their traditional communities

<sup>&</sup>lt;sup>1</sup> Kenya became independent on 12 December 1963, and was declared a republic on 12 December 1964.

<sup>&</sup>lt;sup>2</sup> According to the current *Constitution* (RoK 2010), Kenya is administratively divided into 47 counties. Turkana is the 23rd County.

survive by harnessing their traditional Indigenous knowledge to everyday subsistence (Ng'asike and Swadener 2015). Although the fourth United Nations Sustainable Development Goal (SDG 4), which pledges to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for *all*" (UN DESA 2015; emphasis added) applies to Turkana people just as much as to anyone else, questions of quality and relevance remain unanswered as the status quo prevails in formal Kenyan state education (Dyer 2006; Krätli 2001a, b). UNESCO's most recent Global Education Monitoring Report, entitled *Migration, displacement and education: Building bridges, not walls*, states in Chapter 2 "Internal migration":

The education needs of nomads and pastoralists are not served by traditional school systems whose curricula and schedules do not fit their way of life (UNESCO 2018, p. 12).

Though Kenya is among the "many countries with significant nomadic or pastoralist populations [which] have dedicated government departments, commissions or councils, such as ... the National Council for Nomadic Education in Kenya" (ibid., p. 24), limited resources somewhat thwart the implementation of the *Policy Framework for Nomadic Education in Kenya* (MoEST 2010), revised in March 2015 (MoEST 2015).<sup>3</sup>

In this article, my aim is to provide arguments which demonstrate the importance of integrating Indigenous knowledge and mother-tongue instruction in the curriculum for pastoralist schools in Kenya. Focusing on the Turkana people, I begin by providing some background information on their history, their culture, and their socio-economic and educational marginalisation. I argue that the role still played by Western colonisers today in influencing education in Kenya fails to accommodate the needs of pastoralist communities. In the section that follows, I report on my own research in pastoralist schools in Turkana County. Two main problems were identified: (1) the inappropriateness of the materials used for instruction, which are incongruent with the pastoralist children's local Indigenous cultures and everyday environment; and (2) a failure to use Turkana mother tongue in classroom instruction, which would serve as a bridge to children's literacy development, and thus to improving literacy rates in the community as a whole. Finally, I discuss the value of Turkana mother-tongue stories as a strategy for improving literacy instruction in schools in Turkana County. The article concludes by pointing out the value of local knowledge in developing an interest in and improving access to education in pastoralist communities.

<sup>&</sup>lt;sup>3</sup> The National Council for Nomadic Education in Kenya (NACONEK) is a semi-autonomous government agency established in 2015. "The Council's mandate is to steer and coordinate efforts towards quality education for all in nomadic communities" (MoEST 2015, Foreword).

#### Historical and cultural background of the Turkana people

It is thought that the Turkana people moved to their present area in the Northwest of Kenya from northeastern Uganda about two centuries ago. Their language is Turkana, an Eastern Nilotic language, and to this day, the Turkana continue to practise a nomadic pastoralist lifestyle. Their livestock include camels, zebu, donkeys and goats, which they move from one grazing area to the next. For their own nutrition, the Turkana people rely on their animals for milk, meat and blood; they gather wild fruit and honey; they hunt; and some of them fish. They also trade for maize, beans, other vegetables and tea etc. Their traditional crafts include basket-weaving, beadwork (especially necklaces and bracelets), metalwork, wood-carving and stone-carving. Their dwellings can easily be dismantled when they move to the next grazing area.

Nomadism is a strategy that Turkana pastoralist herdsmen and women use to figure out opportunities for survival in the harsh desert terrain that characterises the ecosystem of their environment (Dyer 2006). Through nomadism, the Turkana are able to harness the intergenerational knowledge of the ecological terrain of their land to the sustainable use of resources, carefully observing and interpreting natural changes around them. By predicting climate changes, the nomad pastoralists are able to move to safer grazing areas for their livestock during unfavourable weather conditions. In Kenya, the Turkana occupy the northwestern region, which borders on Uganda, Sudan and Ethiopia. One important landmark in the area is Lake Turkana, which is one of the major natural resources the community depends on for fishing and watering their livestock.

Colonial history indicates that the Turkana people were one of the few tribes in East Africa that actively resisted British rule. As a result of their resistance, the British colonial administration isolated the Turkana people from interacting with the rest of the Kenyan tribes using a law referred to as the *Closed Districts Ordinance Act* (BCGoK 1902).<sup>4</sup> It stipulated that anyone wanting to enter the Turkana district had to acquire a permit issued by the colonial Government administration. This colonial law, which was in place until 1902, had long-term effects; it resulted in the postcolonial marginalisation and isolation of the Turkana tribe from state resources beyond 1963 (the year of Kenya's independence) and has been one of the major factors leading to the current state of poverty in the area.

Some historians in Kenya (e.g., Ogot and Ochieng' 1995; Turton 1970) argue that the colonialists, even as they left Kenya, were careful to advise subsequent African governments to be cautious about giving autonomy and empowerment to Turkana people, as they were likely to challenge the administration of any government.

The Turkana people were also excluded from development aid by Christian missionaries, who had been actively engaged in other parts of Kenya, improving and providing education and health care since the 1840s. It was not until 1956 that the African Inland Mission (AIM), a Protestant group, opened the first mission station

<sup>&</sup>lt;sup>4</sup> Before the current constitution (RoK 2010) came into force, Kenya was administratively divided into 8 provinces, which were subdivided into 69 districts.

at Lokori in the southern part of Turkana County, while Catholic missionaries did not gain access to the district until 1961.

It is a known fact that the arrival of missionaries in sedentary communities in Kenya positively impacted the growth of education. For example, the best schools referred to today as *national* schools, universities and colleges were established within the communities that were first in contact with the missionaries. This structure has nurtured leaders who are now the political elite who determine the provision of education in the country (Alwy and Schech 2004; Mulongo 2013). The regions in Kenya that have consistently produced presidents and high-profile politicians are the regions that control government resources and have access to the best educational institutions and resources (Alwy and Schech 2004).

Pastoralist communities such as the Turkana have only benefited from missionary engagement since the mid-20th century. Today, church-led humanitarian organisations continue to be the backbone of socio-economic development in pastoralist areas, which have the poorest form of education characterised by a lack of teachers, poor infrastructure, lack of textbooks, and contextually inappropriate learning materials (Alwy and Schech 2004; Dyer 2006; Krätli 2001a, b; Mulongo 2013).

Moving across the land from pasture to pasture with their nomadic families, Turkana children attend either school centres (with boarding facilities) or mobile schools. Kenya currently has approximately over 25,000 early childhood development centres (ECDCs) (Ng'asike 2018), which cater for children up to the age of six in preparation for primary school entry. It is estimated that close to 606 of these centres are located in Turkana County (these are estimates from the Turkana County Department of Education, since there are inadequate empirical data on early childhood education in Turkana). According to the Turkana County Department of Education, there are over 65,000 children in ECDCs. In Turkana County, there are over 400 primary schools with slightly over 150,000 children enrolled in Standards 1–8 (Turkana County Department of Education 2018). Early childhood education enrolment numbers in marginalised pastoralist communities have hardly attained 20 per cent of the national enrolment rates, which stand at slightly over 70 per cent (Ng'asike 2018).

As for mobile schools, according to Margaret Ngugi,

Kenya has about ninety mobile schools funded by the World Bank and Arid Lands Resource Management Project (ALRMP) in ASAL [Arid and Semi-Arid Lands] areas scattered in ten districts [*sic*] which include: Turkana, Wajir, Marsabit, Tana, Samburu and Ijara among others ... Some of them are however managed by church bodies and the Ministry of education through Free Primary Education policy (Ngugi 2016, p. 23).

Education in Kenya is free (free according to government policy, but in practice families have to meet various kinds of levies) and compulsory from age 6 to age 17. Children start primary school (Standards 1 to 8) at age 6, and progress to secondary school at age 12 (day secondary school is free, but in practice secondary boarding schools which are costly have become the norm in Kenyan education). Meeting the requirements of formal education for Turkana children is a challenge, not just in terms of the above-mentioned lack of teachers and inappropriateness of materials: In Turkana County, Kenya, mobile schools [have proven to be] highly dependent on availability of water and food, with attendance dropping significantly when these could not be ensured (UNESCO 2018, p. 24; referring to Ngugi 2016).

However, the reality is that mobile education is not a significant form of education, because formal education in Kenya is highly examination-based, which does not favour a mobile schools arrangement. The research on which this article is based did not involve mobile schools.

# Socio-economic and educational marginalisation of Turkana nomad pastoralists

The Turkana people embrace formal education even though their nomad pastoralist cultural lifestyle continues to be the main architect of their survival. The irony is that the situation of underdevelopment which the Turkana people find themselves in today is erroneously described by the political elite in Kenya as a creation of the people themselves. Under the influence of their colonial masters, who are back in Kenya today, operating as multinational investment corporations (such as the World Bank, the International Monetary Fund and others), the political elite blame the Turkana community for being indifferent to modernity and for choosing to remain faithful to their allegedly "backward" nomadic pastoralist cultural traditions. This attitude of the elite of Kenya is gaining support in the minds of the neoliberals and multinational agencies who equally view the Turkana as victims of their own resistance to colonial emasculation.

As the Turkana people struggle within globalisation forces of modernisation, poverty remains a challenge:

There is about 4 times the share of poor people in Turkana County (87.5 percent) as there is in Nairobi (21.8 percent) (KNBIS and SID 2013, p. vi).

Poverty is measured by estimating the consumption expenditure of a family household. For example, poverty statistics in Kenya indicate that between one quarter and half of the population earns less than 1 USD each day (KNBS and SID 2013). In Turkana County, 8 out of every 10 people live in poverty (ibid.). It is estimated that in Turkana County, 87.5 per cent of the population live below the poverty line, a figure which is four times that of Nairobi, which has the lowest poverty at 21.8 per cent (ibid.). Poverty is also characterised by a lack of access to basic quality services such as health care, education, clean water and sanitation.

Turkana households are especially vulnerable to climatic, economic and social fluctuations, which are frequent occurrences in Kenya. With consecutive droughts impacting on the desert terrains, compounded by the effects of economic marginalisation by the postcolonial administration of Kenya, the Turkana people are suffering an even greater effect of poverty. Indigenous knowledge practices like nomadism and leadership of the elders that originally enabled the community to strategise and survive the early stages of climate change are no longer viable. In the face of

increasingly extreme and abnormal weather conditions, communities become dependent on Western science for weather interpretations. The challenge is that government scientists do not live with the people, since they are only occasional visitors to the pastoralist communities. The scientists operate from Nairobi (the capital city) or at administrative county headquarters miles away, and their modes of communication such as media (radios, newspapers, TV, etc.) are not accessible to the traditional communities, the majority of whom are not literate. Consequently, the scientific information may take several months to reach the communities, making the pastoralist people very vulnerable. By contrast, local knowledge depends on the elders who are always with the people to give advice and ensure that communities respond quickly and take action when threatened by natural occurrences such as drought. As government efforts to mitigate droughts and other disasters become inadequate, frequent droughts have subjected children and families to perpetual hunger, forcing them to depend on humanitarian organisations to provide relief food supplies.

Reliance on Indigenous knowledge systems (IKSs) is not only specific to the Turkana nomads. Subsistence farmers all over Africa rely on Indigenous knowledge to determine the appropriate time for growing certain crops in a particular farming season (Eromose and Danny 2017). A study conducted in the Delta State of Nigeria found that

being misled by an inaccurate scientific forecast, and the inability to comprehend how anthropogenic activities contribute to climate change, among others, have contributed to the farmer's *[sic]* continued reliance on IKS (Eromose and Danny 2017, p. 1).

However, there are scientific concerns that Indigenous knowledge practices will become unreliable for predicting future weather events accurately (ibid.). This has led to fear among governments that overreliance on Indigenous knowledge systems might compromise the farmers' ability to secure their livelihoods.

The elders' role in Turkana communities is also being challenged by the compulsory formal school system, which does not provide any scope for inclusion of the graduates' – and the dropouts' – traditional pastoralist lifestyles of their African families. While Turkana students struggle to master the formal curriculum, the elders describe the youth who emerge from formal education as spoilt, and thus they attract the curse of their families (Marianna 2010). Thus, the school system creates youth who find themselves alienated from their parents. These youth develop a negative attitude towards the lifestyles of the elders and parents. The effect is that the disconnect between the available formal education curriculum and the lives of the pastoralist families leads to situations where respect for Indigenous knowledge loses credibility among the educated elite.

As a result of educational marginalisation (and of language of instruction practices; an issue I will return to later in this article), the current national data on literacy indicate that rates are particularly low among Turkana people. According to the National Bureau of Statistics, only 18.2 per cent were literate in 2013 (KNBS and SID 2013), and up to 93 per cent of Turkana people in some regions of the county have no secondary education (KNBS and SID 2013). The share of residents with secondary education or higher in Nairobi (50.8 percent) is 15.4 times more than that of Turkana County (3.3 percent) and 2.2 times more than that of an average Kenyan. Conversely, those living in Turkana County are seven times less likely to have any secondary education compared to an average Kenyan ... Turkana County has the highest proportion of the population with no education (82.1 percent). This is seven times less than the lowest-ranked county, Nairobi ... (ibid., p. vii).

Low literacy rates in Turkana County have also resulted in an acute shortage of local teachers.

# Failure of Kenyan state education to accommodate the needs of pastoralist children

Everyday home surroundings of pastoralist children are characterised by *kraals*<sup>5</sup> for goats, camels, donkeys and cattle. The family huts are built with simple sticks that are curved to form dome-shaped structures. The huts may be covered with cow skins to shelter the family from rain during wet seasons, but for most of the year, Turkana landscape is a dry, hot desert terrain with scant vegetation. Droughts are frequent due to low rainfall patterns.

Turkana children are familiar with their desert environment characterised by livestock herding, a skill they have already acquired some experience in when they start school. When they enter so-called modern classrooms, they are confronted with images that represent oppression of their cultural life experiences. Images in their textbooks depict the world of those who are associated with development. Lessons feature typical examples of modern agriculture and complex urban infrastructure or sophisticated telecommunications installations etc., that the nomadic children find no attachment to, as they represent a different culture. Moreover, textbooks showcase Kenya as a green country with productive agricultural lands; children are depicted in school uniforms with plaited hair and in black leather shoes. Schools appear to be built from concrete and iron sheets with well-maintained green grass compounds. Science illustrations are of modern telecommunications infrastructure, and school laboratories are pictured with modern scientific equipment and materials. Crops such as cotton, tea, maize, coffee, sugar cane, pyrethrum and others are well-illustrated, with discussions about the types of ecosystems best suited for each crop. Roads in the textbooks are all-weather tarmac ones, and railway infrastructure is assumed to be common knowledge.

Thus, school settings in current Kenyan standard formal education represent a different world view from that of the nomadic pastoralist children. Modern class-rooms undermine the unique cultural experiences of these children and reflect a persistent colonisation of the mind (Ngugi wa Thiong'o 1986). Nomadic pastoralist Indigenous cultural knowledge seems to be targeted for extermination,

<sup>&</sup>lt;sup>5</sup> Kraal is the Afrikaans/Dutch word for corral, a fenced-in enclosure for cattle, sheep etc.

beginning from early childhood education (Nsamenang and Tchombe 2011), as the school curriculum fails to demonstrate the diverse nature of Kenyan society. Research has shown that daily cultural activities, which might appear primitive to uninformed outsiders, are in fact socially meaningful practices whereby African children learn academic concepts (Jegede 1994). This argument draws support from research on *funds of knowledge* (Moll et al. 2005),<sup>6</sup> theorising household practices, cultural tools and family survival practices. These were found to be critical in supporting language, literacy and numeracy skills at the family level (Moll et al. 2005). By contrast, the misconception that traditional cultural practices are "barbaric" and that they do not contribute to knowledge acquisition in modern schools has resulted in the loss of cultural capital in children's education (Krätli 2001a, b). Despite the evidence of high dropout rates, government schools continue to subject children to memorising facts they do not comprehend and cannot apply to their everyday lives or their immediate world. Education is often still a vessel of perpetuating Western colonisation and Christianisation of African people (Cunningham 2008).

#### Inappropriate instruction materials

In Kenyan pastoralist communities, schools are simply recipients of textbook materials written in Nairobi by authors who have neither experienced cultures of other communities nor an understanding of the local knowledges embedded in other places (or if they do, they do not feature this in the books). During my research in 2013, investigating early childhood education in Turkana communities, I came across a caregiver reading a story about a mango tree (Ng'asike 2014). As I listened to the story, I was curious why the caregiver chose this story, which seemed as unfamiliar to the children as it was to the caregiver (teacher) herself. This curiosity prompted me to ask her whether she had ever seen a mango tree. She acknowledged that she had never seen either a mango tree or its fruit. Since mangos are not grown in a desert terrain such as Turkana County, the children struggled to understand the story. When reading occurs in an unfamiliar context, both the caregiver and the children simply parrot and rote-memorise the content, specifically the names of events or objects in the story. In this kind of practice, teachers teach for the sake of covering the syllabus and not for the intellectual transformation of the children. Thus the instructional materials become vehicles of passive transmission of Western values (Dyer 2006; Krätli 2001a, b).

<sup>&</sup>lt;sup>6</sup> The "funds of knowledge" concept provides a framework for teachers' recognition of children's everyday household resources of the kind that families use for their livelihood. Examples are utensils, artefacts, farm materials, food stuffs and all forms of cultural resources surrounding pastoralist households. Teachers use these household funds of knowledge to open up lesson planning to include a wider learning environment beyond what is stipulated in the prescribed standard curriculum.

#### The language issue

Apart from being subjected to unfamiliar content in formal education, pastoralist children are also expected to learn through English – a language they do not understand. According to chapter two, section seven of the *Constitution of Kenya*,

- (1) The national language of the Republic is Kiswahili.
- (2) The official languages of the Republic are Kiswahili and English.
- (3) The State shall
  - (a) promote and protect the diversity of language of the people of Kenya; and
  - (b) promote the development and use of *indigenous languages*, Kenyan Sign language, Braille and other communication formats and technologies accessible to persons with disabilities (RoK 2010; emphasis added).

In chapter four of the *Constitution*, the Bill of Rights, section 44 on language and culture stipulates that

- (1) Every person has the right to use the language, and to participate in the cultural life, of the person's choice.
- (2) A person belonging to a cultural or linguistic community has the right, with other members of that community
  - (a) to enjoy the person's culture and use the person's language; or
  - (b) to form, join and maintain cultural and linguistic associations and other organs of civil society.
- (3) A person shall not compel another person to perform, observe or undergo any cultural practice or rite (RoK 2010).

While the government's language of instruction (LOI) policy recognises the mother tongue as LOI in lower primary and early childhood education centres (MoEST 2005; Cunningham 2008; Ng'asike 2011b), a child speaking his or her mother tongue in school is likely to be reprimanded (or even punished), with teachers regarding this practice as a perpetuation of tribalism and backwardness (Ng'asike 2011b). It would therefore appear that mother-tongue teaching is merely a rhetorical policy statement without practical reality.

In Kenyan pastoralist communities, children hardly understand English or even Kiswahili, which leads to miscommunication in classroom instruction. Pastoralist children struggle to understand academic concepts presented in languages they cannot comprehend (Ng'asike 2011b). This is exacerbated by teachers' inability to adopt flexible learning strategies like *code-switching*<sup>7</sup> as children fail to engage in

<sup>&</sup>lt;sup>7</sup> The term "code-switching" refers to switching from one language to another, sometimes in the middle of a conversation. In this context, a teacher might choose to code-switch from English to the local

classroom discourse (Cunningham 2008). To avoid embarrassment, many children remain silent for long hours in school because they are afraid to speak in English, in case they make a mistake (Cunningham 2008; Ng'asike 2011b). Many teachers in fact experience similar pressure from the demands of the system, because like the children, the teachers are learners who are not proficient in the English language.

#### Education research in Turkana nomad pastoralist schools

In this section, I will endeavour to give a narrative of the research work I carried out in schools in Turkana County over the past ten years. I first encountered pastoralist students' desire to integrate their own cultural knowledge in classroom instruction during a physics lesson I was teaching early in my career on the topic: "pressure on a surface area". In the lesson, students (who were secondary school beginners aged 14–15 years) argued that camels' hooves exert less pressure on a surface than hooves of donkeys and goats. When a student gave these examples, in class, I was not sure whether to accept this answer or not, yet the student's argument made sense. The challenge I was facing was that it was not usual to incorporate local cultural knowledge in classroom teaching, as this was not considered scientifically appropriate. The science curriculum represented Western thinking. Science materials were purchased from suppliers in Nairobi over one thousand miles away. Several years later, when I began my scholarly work in early childhood education, and became interested in children's play activities, I came across Turkana children engaging in their sociodramatic play with camels' dung as their herds.

In 2007, I went to the United States (US) to study for my PhD in Curriculum and Instruction at Arizona State University. As an Indigenous educator, having taught in Turkana County and worked as a practitioner in early childhood education for close to thirty years, my encounter with Indigenous colleagues in the US opened my mind to the injustices of the formal education curriculum in Turkana County. In Kenya, it was not possible to meet colleagues who were interested in discussions related to valuing Indigenous knowledge practices in education, and to accepting the Indigenous African view of interpreting the world as valid knowledge. My interaction with professors and colleagues at Arizona State University opened up my view of education in ways that encouraged me to respect my own cultural knowledge as well as Indigenous knowledge valued by other cultures. This article is one among many I have since written to privilege the knowledge and expertise of the Indigenous Turkana people, who survive through pastoralism and practise nomadic lifestyles as a strategy for adjusting to environmental fluctuations.

The findings reported in this article are drawn from my research work in Turkana County, beginning with my doctoral work in 2007–2010 and followed by a recent

Footnote 7 (continued)

language if s/he realises the students do not understand the lesson in English. In the same way, children also code-switch, usually to their native language, when they experience difficulty in speaking English or Kiswahili words.

study I conducted while carrying out literacy improvement research in 2016 and 2017. The PhD project (Ng'asike 2010) was an ethnographic field study which investigated how Indigenous knowledge and cultural practices and lifestyles inform curriculum and instruction in early childhood classrooms. Methodologically, this research was contextualised in the funds of knowledge framework (Moll et al. 2005), using ethnographic inquiry (Maanen 1988; Thomas 1993; McCabe 2004; Kouritzin 1999; Li 2002; McCarty 2002; Mendoza-Denton 2008; Malinowski 1922; Wolcott 1988)<sup>8</sup> and decolonising and defamiliarising research (Kaomea 2003; Mutua and Swadener 2004, 2007; Smith 1999).<sup>9</sup> Being fluent in Turkana enabled me to interview elders (both males and females) in two communities. I observed their Indigenous knowledge practices, their cultural practices and their crafts in their homes and the community. I also observed the children while they were performing family responsibilities at their homesteads and when they spent time in their natural playgrounds. In addition, I visited two schools to observe formal early childhood development centre (ECDC)based curriculum and instruction activities. The research findings showed that while there is a link between local Indigenous knowledge and formal school curriculum concepts, teachers make no attempt to use local knowledge to create relevance in the contents of the curriculum they were teaching the children.

In the more recent study I carried out in 2016 and early 2017 with support from the South African Institute of Distance Education (SAIDE) in partnership with the *African Storybook* project, I documented and developed a repertoire of Turkana cultural stories in mother tongue. The objectives of the research were:

- to explore Indigenous knowledge of the Turkana community as narrated in their folklore and oral storytelling traditions;
- to publish these stories in print and electronically as curriculum reading resources for early literacy development in primary and early childhood classes;
- to link schools to the communities through the parents' participation as storytellers;
- and thus improve literacy levels of parents and communities.

Evidence has shown that supporting children's reading in the mother tongue also inspires their parents to learn to read and participate in adult literacy (Ouane and Glanz 2011).

I worked with 6 teachers and 24 children during the study, collecting stories from the families and from elders in four communities. I organised workshops with teachers and elders where seven selected stories were analysed, edited and prepared for publishing in simple storybooks. To make the stories accessible to a wider readership, the stories were also translated into English and Kiswahili (Fig. 1). In collaboration

<sup>&</sup>lt;sup>8</sup> "Ethnographic inquiry", in this context, refers to the use of ethnographic research to uncover social injustices of formal education in marginalised communities that have traditionally maintained their cultural lifestyles. The inquiry argues that there is potential in all cultures.

<sup>&</sup>lt;sup>9</sup> "Decolonising and defamiliarising research" refers to a departure from traditional research methodologies based on Western ideology, drawing instead on a theoretical framework that is grounded on Indigenous ways of thinking and traditional beliefs about the nature of knowledge.

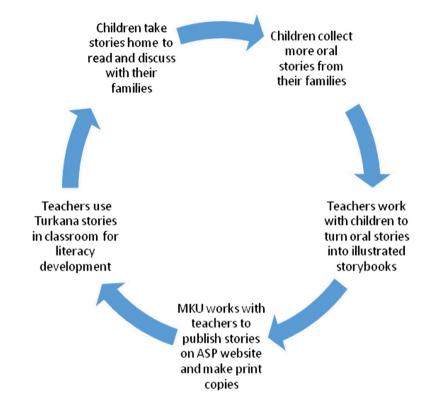


Fig. 1 Research steps and the cycle of learning leading to the production of Turkana mother-tongue storybooks. *Note* ASP=African Storybook project; MKU=Mount Kenya University

with the *African Storybook* project (ASP), they will be published online in a printable format.<sup>10</sup> The published stories were piloted by children in six selected primary schools to supplement national curriculum instructional materials designed for early childhood and lower primary levels. The study used combined *exploratory* and *longitudinal* designs (Compton-Lilly 2014)<sup>11</sup> to enable both the collection of stories and follow-up of the performance of the children engaged in the project.

With the collaboration of teachers, children, parents and elders, stories were collected from the community using audio recorders, mobile phones and other resources. The rationale to design this study as a community-based *participatory* 

<sup>&</sup>lt;sup>10</sup> During the period of the study, I was tasked to collect at least 25 stories, seven of which were selected for publication. As part of the ongoing activities of the project, the stories will be reviewed by stakeholders in Turkana County prior to being uploaded to the *African Storybook* website. To see a few examples from other African regions, visit the *African Storybook* website at https://africanstorybook.org/ [accessed 20 December 2018]. The project as a whole is an initiative of Saide, a registered non-profit organisation governed by a Trust and based in Johannesburg. The first four years of the project (2013 to 2016) were funded by a UK-based funder, Comic Relief.

<sup>&</sup>lt;sup>11</sup> An "exploratory" research design is used to investigate a phenomenon on which little research has been done yet. A "longitudinal" research design aims to identify changes over time.



**Fig. 2** Sharing mother-tongue stories with children in a Turkana ECDC "classroom". *Note:* I asked for this photo to be taken with permission of the two teachers and the children during my research work with the *African Storybook* project (ASP). The female teacher is the preschool teacher; the male teacher standing is the Head teacher; I am seated on the bench

*action research*,<sup>12</sup> with parents and elders playing a full part in the research and as educators of children, proved to be a very effective approach. Both the researcher (myself) and the teachers learned from the children's parents. As already demonstrated in other studies (Chansa-Kabali and Westerholm 2014; Liu and Fisher 2010; Norton-Meier and Drake 2010; Ngwaru 2014; Ojanen et al. 2015), the parents' participation created in them an urgency and interest in reading. Once the process has been initiated, it becomes self-perpetuating: The children learn more about their culture as they use the parents' information to improve the authenticity of the stories. The parents also then naturally start telling more stories, which the children audio tape and take back to school (Fig. 2). The children worked with their teachers to turn the parents' narratives into storybooks, which they can now bring home to read to their parents, and the cycle of learning between the parents and the children continues to develop. In this approach, the strategy was to involve the community in story-telling and in enriching the children's cultural knowledge.

In areas like Turkana County, where low literacy is common among the parents, and where there is an acute shortage of reading materials at the family level, children will continue to lag behind in developing literacy skills (Chansa-Kabali and Westerholm 2014) unless efforts are made to create and provide appropriate and relevant reading matter. Access to print materials to support children's literacy development

<sup>&</sup>lt;sup>12</sup> "Participatory action research" (PAR) refers to involving community members both in identifying local problems and in finding solutions for these.

is non-existent in Turkana County, and the seven storybooks produced in the course of my recent study are only a very small beginning to address this lack.

Nomadic communities like the Turkana people rarely attract national discussions on education curriculum even as their children continue to perform poorly on national examinations. One key area of education which is critical for enhancing school performance in Turkana County is when and how children learn English, which they need for examination and educational progress in Kenya – but, as I argue, only *after* they have been allowed to become firmly literate in their own language at the beginning of their formal educational career.

# Ongoing British colonial influence in the language of instruction in Kenyan education

At independence, Kenyans aimed to create an education system that would accommodate high levels of cultural and linguistic diversity, reflecting the needs of the 42 counties' ethnic/linguistic groups (MoEST 2005; Cunningham 2008). The curriculum was expected to undergo revision to include Kenyan history and geography, depicted in locally produced teaching materials. However, the only accomplishment was replacing pictures in textbooks with images of black children bearing African names (Cunningham 2008). Cultural symbols were merely tokenistic and typically mentioned only in isolation as enrichment of the Western curriculum that still dominates classroom content, which is still dominated by the English language.

Kenyan political elites, who were in close contact with European settlers at independence, were socialised to believe that good education could only be achieved if their children learned and spoke English (Ngugi wa Thiong'o 1986). As a result, the English language is still used in classroom instruction all over Kenya, irrespective of the grade level and the ability of the children to comprehend content in English. Research has shown that 77 per cent of the parents in Kenya prefer their children to be taught early reading skills in English (Puhakka et al. 2015). The same study also established that 41 per cent of the parents were against their children being taught early reading skills in Indigenous languages. The demand by parents and elite in Kenya to privilege English over mother-tongue instruction has exerted pressure on the teachers to teach through the English language from early grade levels, even as teachers themselves lack appropriate skills for English language instruction. Parents in Kenya are aware that students' performance on national examinations determines the success of their children and their path to progress in the national education system. Consequently, the perception is that the only hope for success in education rests upon children mastering the skills of the English language in oral and written forms.

There appears to be a general lack of scientific knowledge on language acquisition in teacher education in Kenya, which has promoted misconceptions on issues of language of instruction. The attitudes of Kenya's political elite towards local languages, coupled with teachers' lack of conceptual understanding of the theories of language acquisition (Ojanen et al. 2015), have hindered the implementation of a language policy that recognises the use of local languages in literacy development

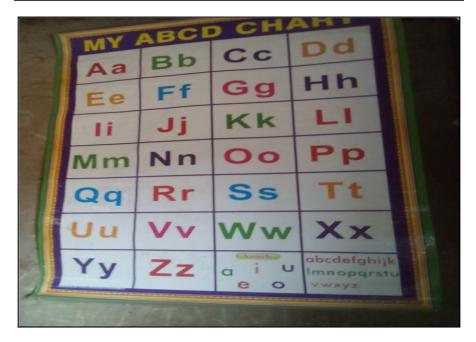


Fig. 3 This is a typical example for the types of materials that currently dominate early childhood learning in nomadic cultures *Photo* Author

(Kwena et al. 2014). Even with ample evidence supporting the critical role of the mother tongue in becoming literate, teachers continue to privilege the English language in teaching African children to read and write (Ball 2011; Ojanen et al. 2015). It does not help matters that parents all over Africa, not just in Kenya (Puhakka et al. 2015), but also in Uganda, Zimbabwe etc., show a positive attitude towards English as the language of instruction beginning in the early years of their children's education (Ndamba 2008).

Some African countries do have mother-tongue LOI policies in place, but these are not necessarily embraced by parents. Studies conducted in former colonies, such as, for example, Cameroon (Moore 1999), Kenya (Bunyi 1999) and Mozambique (Benson 2000); French, English and Portuguese colonies respectively, demonstrate both the benefits of mother-tongue instruction and the challenges and obstacles of implementing language policies that are in favour of home languages in education. These studies report that in countries where education policy requires that children start school in the mother tongue, their parents fear that their children will lag behind children in urban contexts who start school in the colonial language. Especially in former British colonies, African parents' support for English stems from the idea that the child who speaks English early will understand the subject matter better (Kioko et al. 2008). As a result, parents argue that English LOI should be introduced early in the curriculum, so that learners' successful performance in examination in guaranteed.

However, children in rural areas especially come to schools fluent in their mother tongue, a language and a cultural capital which should be exploited to build a firm



Fig. 4 This is the family context of a pastoralist environment, where children's everyday life activities are based on livestock herding *Photo* Author

foundation of learning in both academic subjects and in the acquisition of a second language. African researchers argue that the mother tongues in Africa need to be revitalised and used in all spheres of life, because they are

our languages, our culture, our gift and pillar for Africa's development. Africa must use her diverse tongues to tell her story to the world (Kioko et al. 2008, p. 9).

Besides the language issue, the current state of affairs is that formal instruction in pastoralist schools is still based on materials created and purchased elsewhere (Fig. 3), irrespective of the learning environment they are actually being used in. The perception that written symbols (also, for example, on blackboards) can replace concrete materials in schools continues to perpetuate abstract deductive rote memorisation of meaningless information. By contrast, if the literacy materials for classroom instruction were derived from the everyday life of Turkana pastoralist children, e.g. basket making, or animal herding (as shown in Fig. 4), learning would be more meaningful and less stressful for them. At school age, these children are already knowledgeable on all matters pertaining to their cultural environment. Literacy instruction based on their Indigenous practices would make much more sense for them than Kenya's current national curriculum delivery.

Turkana title	Kiswahili title	English title	
Ekilam Aito	Hatari wa kutoeshimu mama aliye Kuzaa	The danger of abandoning a mother	
Ebele Ebu Along'or	Fisi na tamaa wake	Greedy hyena	
Ikoku nia Ayauni Ekisil	Mtoto wa Amani	The child as peacemaker	
Ekerikan	Mwindaji	The hunter	
Nyo Kolong Ayauni Anam Turkan	Mwanzo wa Lake Turkana	The origin of Lake Turkana	
Ajokis Eng'ol	Umuhimu wa miti wa mkoma	Benefits of palm tree	
Namur Tung'a	Majiwe watu	Stone people	

Table 1 The seven storybooks created during the project

# Improving literacy through mother-tongue stories in Turkana County

In Kenya, the government, through the Ministry of Education, takes full oversight of the curriculum. The content of the curriculum is decided in Nairobi and applies to all Kenyan communities. In some communities, this kind of universal curriculum creates a lack of culturally appropriate learning materials. As a result, the role of communities in education is not taken into account, a failure which has largely contributed to the poor state of education in Turkana County. While a learning environment can be a tree shade or a makeshift structure, the materials for learning should be relevant, meaningful and drawn from Indigenous knowledge practices. The current situation is exacerbated by a shortage of teachers and the fact that education officials (e.g. quality assurance officers and administrators) are not usually from the local communities.

The research study I carried out in 2016/2017 with funding support from SAIDE, a partner of the *African Storybook* project, focused on the use of local curricular materials in four rural early childhood centres. The study established that the textbooks in use remained scripted to ensure mastery of academic skills through rote memorisation with no relevance to local cultures. In my on-site observations, I found that boredom was common as Turkana children repeatedly went through a routine of scripted curriculum materials featuring nothing recognisable for them to relate to, and the result was low literacy and a lack of interest in reading, which I attributed to a lack of authentic reading materials developed from the local context.

Prompted by this research, I initiated a project on curriculum innovation using mother tongue stories to spark interest in reading. Reading materials drawn from the local culture in the form of storybooks written in the Turkana mother tongue enable children to read stories that remind them of their cultural values and beliefs as told through the folktale narratives by their elders. The stories collected during the project were creative imaginations of the cultural heritage and Indigenous knowledge of the land as told in the form of myths or as means to educate the young; embedding values that build a cohesive community and relationships with neighbours. In addition, the participating children were involved in narrating their Indigenous stories in Turkana and in figuring out how to write these stories down.<sup>13</sup> The stories were published as easy-to-read short storybooks which were used as class readers during mother-tongue lessons (see Table 1).

However, my project encountered some resistance from teachers and education officials who did not believe that local culture could contribute to the Turkana children's education. Some of their key misconceptions included the following:

- The perception that speaking your mother tongue in school promotes tribalism.
- The belief held by teachers that if children speak their mother tongue, their ability to learn English will diminish.
- Curricular emphasis on examination performance suppresses any effort to introduce innovations in learning, such as using local knowledge practices.
- According to the teachers, the mother tongue is not one of the "important" subjects of the curriculum.
- Teachers are afraid to teach through the mother tongue, because they may face disciplinary action.
- The English language is associated with "good education" and with success in examinations.

Ironically, the mother-tongue storybooks which emerged from the project were the only reading materials the children expressed an interest in reading after school. Even though English, and to some extent Kiswahili, are both core curriculum subjects in the Kenyan education system, extracurricular reading materials for children are scarce even in these two languages. Since examination performance is everything that defines a child's education, any additional materials to enrich the curriculum are considered a waste of learning time. Teachers try their best to maximise exam preparation during learning time by focusing on teaching contents they consider relevant for exams. This trend has been transferred to early childhood education, with drills and rote memorisation of academic content starting early in preschool.

The findings from the preliminary research phase and the subsequent piloting project corroborate research into the effects of mother tongue education conducted in other African countries (Alidou and Brock-Utne 2011; Brock-Utne and Alidou 2011; Ouane and Glanz 2011), namely that children do well academically when they are taught in their mother tongue alongside the second language. This research observed that children have high self-esteem, confidence and eagerness to explore academic tasks when taught in their mother tongue. Evidence has shown that it takes at least six to eight years to learn a second language before it can be used as a medium of instruction (Heugh 2011). A child cannot confidently engage in school tasks if s/he is beginning to learn a new language as a subject and already expected to use the same language as a medium of instruction. Learning will be beneficial if the first language is maintained in classroom learning for at least 12 years,

<sup>&</sup>lt;sup>13</sup> Although there are some printed books in Ngaturkana (the Turkana language), such as dictionaries and a Turkana translation of the Bible produced by missionaries based on the Latin alphabet, the Turkana people have yet to reach a consensus on their language alphabet.

Table 2         Time allocation for	First year	National language (90%)	French (10%)
languages of instruction in bilingual schools in Burkina	Second year	National language (80%)	French (20%)
Faso	Third year	National language (50%)	French (50%)
	Fourth year	National language (20%)	French (80%)
	Fifth year	National language (10%)	French (90%)
	Source Alidou	and Brock-Utne (2011, p.	168; referring to

 Table 3
 Time allocated to teaching national languages and French in bilingual experimental schools in Mali

Ouédraogo 2002, p. 14)

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
National lan- guage (NL)	100%	75%	25%	25%	50%	50%
French	0%	25%	75%	75%	50%	50%

Source Alidou and Brock-Utne (2011, p. 167, referring to Traoré 2001)

Table 4Comparison of pupils'performance at the end offormal basic education in Mali	Year	National language + French schools (Bilingual)	French-based schools (Monolin- gual)
	1994	56.52%	40.62%
	1995	37.64%	42.34%
	1996	75.75%	54.26%
	1997	50%	36.89%
	1998	71.95%	48.30%
	1999	78.75%	49.13%
	2000	68.57%	52.34%

Source Brock-Utne and Alidou (2011, p. 197, referring to Traoré 2001, p. 24)

while the second language is only introduced as one subject for its own sake (ibid.). This will ensure successful use of the second language in the mastery of academic subjects later on in a pupil's educational pathway. In South Africa, a study carried out in schools of first-language speakers of Afrikaans showed that when eight years of mother-tongue education are maintained in classroom teaching, there is an increase in pass rates in examination performance (ibid.). Bilingual education studies in Ethiopia, Mali, Mozambique and Burkina Faso (Heugh et al. 2007; Traoré, 2001; Benson 2000; Ouédraogo 2002). have demonstrated that the longer the children keep their mother tongue as the language of instruction in education, the higher their grades of academic achievement. For example, in bilingual education in Burkina Faso, the time allocated for languages of instruction decreased over time for the national language, while simultaneously increasing for French (Table 2).

In Table 2, the use of mother tongue (first language) decreases as children progress to higher grades, while the use of a second language increases in time. Hassana Alidou and Birgit Brock-Utne add that "The results of the … achievement tests showed that [these] pupils performed better than pupils attending monolingual schools where the language of instruction is French" (Alidou and Brock-Utne 2011, p. 169, referring to Ouédraogo 2002). This outcome demonstrates the importance of the mother tongue in laying the foundation for learning in the early years of the child's education. The same results were observed in a study in Mali, as shown in Table 3.

Also in Mali, a comparison between bilingual and monolingual schools programmes showed that schools teaching in mother tongue alongside French outperformed French-only schools in basic education examination results (see Table 4).

It can be observed that there is a significant achievement in learners when their first language is part of the medium of instruction. In Kenya, where English is still the dominant instructional language, achievement in national examinations is reflected in the results of the monolingual programme.

Research has shown that teaching children reading fluency early in primary education can also contribute to literacy development in adults (i.e. the pupils' parents), especially in countries where school dropout rates are high (Abadzi 2004). As a result, reading at home is critical in supporting literacy in communities (Ngwaru 2014). In addition, research is emphatic that children should master reading in their home language *before* they begin reading in the second language (Norton-Meier and Drake 2010). The benefits in academic achievement of mother-tongue education contradict many Kenyan teachers' (and parents') perceptions that mastery of the English language should be emphasised for the purpose of enhancing children's academic performance and skills (Ball 2011; Wolff 2011).

The 2015 Global Monitoring Report, entitled *Education for All 2000–2015: Achievements and Challenges* (UNESCO 2015), argued that language is critical to the quality of teaching and learning. The report stated that both a lack of textbooks and a shortage of trained teachers using the languages were among the biggest obstacles to using local languages in the classroom (ibid.). Four years into the United Nations' current development agenda,<sup>14</sup> investment into extracurricular materials, such as storybooks and other reading materials to enhance learning beyond classroom instruction, is still non-existent in many rural schools. Only core textbooks, which have to be shared among several children and are dominated by content from cultures outside Turkana County, are found in most schools operating in the area. In addition, these textbooks are examination-oriented, as they focus on the syllabus objectives narrowed down to subject content. Thus, Turkana children hardly have extra reading materials for practising reading skills and vocabulary

<sup>&</sup>lt;sup>14</sup> The Millennium Development Agenda (2000–2015) with its 8 goals, the second of which was to "achieve universal primary education", is succeeded by the Sustainable Development Agenda (2015–2030). The fourth of the 17 Sustainable Development Goals (SDGs) takes the previous agenda's target further in aiming to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (UN DESA 2015).

acquisition. Furthermore, libraries are hard to find in rural schools, and this also negatively affects children's motivation to learn how read in the English language.

At the same time, reading materials in local languages that are contextually relevant for meaningful learning are entirely absent from schools in marginalised rural nomadic communities. The findings presented in this article show that Englishlanguage instruction predominates and prevails over instruction in Indigenous local languages. Furthermore, even where teachers desire to instruct in the Indigenous language, they face parental opposition and a number of other challenges, including a lack of instructional material and teacher training. The challenge we have in Kenya is that while parents – like all parents – are seriously concerned about their children's performance in national examinations, they believe that being taught in English from the early years of education is likely to help their children do well in school. Faced with the reality that national examinations are to be done in the English language, parents feel they have no choice but to insist that their children must master the English language as soon as they start school.

However, there is ample evidence that when their home language is different from the language of instruction, it is likely that children have lower levels of attainment and achievement in national examinations, in addition to experiencing higher dropout rates (Kioko et al. 2014). The Kenya National Examination Council (KNEC) results have revealed that 52 per cent of Standard 3 pupils cannot read properly and as many as 60 per cent of them have repeated a class by the time they reach Standard 3 (Kioko et al. 2014). Children in rural areas of Kenya who are exposed to little or no English outside the school setting experience the highest levels of examination failures and school dropout. Like all other rural areas in Kenya, Turkana County has high school dropout rates. It is unreasonable to expect children to perform well in examinations written and read in English, a foreign language that both the teachers and the children struggle to master in the schools. Reading and writing skills cut across all subjects, and when children do not acquire these skills, the result is poor mastery of academic concepts as well, which then contributes to poor performance and lack of interest in school matters.

Surveys carried out by KNEC demonstrate that regions of Kenya like Nyanza Province, Eastern, Western and Coast<sup>15</sup> have the highest repeat rates at 69, 67, 60 and 58 per cent respectively (Kioko et al. 2014). When children start school early in a language that is not their home language, learning is likely to be teacher-centred, which reinforces passiveness and silence in classrooms. This thwarts free expression, creativity and thus contributes to suppressing children's potential and ability for problem-solving and experiential learning through trial-and-error (ibid.).

Allowing children to develop their literacy skills and fostering an eagerness to learn in their mother tongue in school will help bring up people who are skilled, creative, and able to solve problems. Building up community capacities using this approach is critical for the acceleration of development in Africa. Research has shown that learning in one's mother tongue is considerably more effective than learning through a second

<sup>&</sup>lt;sup>15</sup> These are the names of former provinces. As mentioned earlier, Kenya administratively reorganised its 8 provinces into 47 counties in 2010 (RoK 2010).

Kiswahili classrooms	English classrooms
No chorus answers. Children were confident when answering questions in their native language	Chorus teaching or "safe talk" was common in English classrooms
Concepts of science were explained clearly using Kiswahili words	Students did not understand English vocabulary/ words
Teachers learned from student's examples from their culture	Students were passive and hardly asked questions
Students brought their own experiences in learn- ing. They challenged their answers, were critical and lively and asked many questions. They built on each other's answers	Students felt humiliated saying words they did not understand. They read the answers secretly from the textbooks
Creativity was heightened. Students gave original answers not necessarily from the textbooks	Students learned to memorise or refer to answers in the textbooks
Students were very active, asked questions and were eager to answer the teacher's questions	Students were afraid to speak in class. Students were punished when they made mistakes. They learned through punishment

 Table 5
 Comparison of English and Kiswahili classrooms in Tanzanian schools

Compiled from Brock-Utne (2007)

language. For example, a research study carried out in Nigeria showed that primary school children taught in Yoruba performed better than children who were taught through the English language in all subjects (Vawda and Patrinos 1999). The value of home-language instruction in Tanzania was also reported in an observation of teachers teaching science in secondary schools in English and in Kiswahili (Brock-Utne 2007) (Table 5).

A longitudinal study by Teresa McCarty (2009) carried out in American Indian schools reported that children who learned to read first in Navajo outperformed students in English programmes in academic achievement. In addition, Navajo students exhibited more self-confidence and pride in school. Similar findings are reported from classrooms in schools in Mozambique, establishing that teachers teaching in a foreign language spoke for over 90 per cent of class time, while students sat silently, presumably learning through osmosis while mechanically copying down notes (Benson 2000).

# Conclusion

In this article, I have elaborated on the incongruence that exists between local cultures and Western education, particularly with regard to examination-oriented curricula and their impact on diverse and endangered cultures and languages like the Turkana culture and language. I have demonstrated the dominance of the English language in the Kenyan curriculum and in Kenyan classroom instruction. I have complemented my own research findings with studies in many other African countries to explain how the introduction of locally based instructional mother-tongue materials can provide alternatives that may counter educational apathy and bolster student interest in schooling. In Turkana County as well as in other parts of Kenya, English-language instruction has become a driver of education to the extent that every parent aspires for their children to speak English as early as in preschool, and without equal regard for local knowledge and languages. Although ample research evidence emphasises the importance of mastery of the mother tongue *before* the child starts learning a second language (Norton-Meier and Drake 2010), this is still often ignored by teachers and/or policymakers, either because of their lack of educational, scientific and sociolinguistic knowledge, or perhaps because of the persistent influence of European colonial education.

This article points out gaps in the education policy implementation in Kenya, especially with respect to the role of local knowledge and native languages in curriculum and instruction implemented in pastoralist schools. My hope is that this article will stimulate critical discussions in Kenya that will respect the participation of pastoralist nomadic communities in decisions about education policy affecting the content of the curriculum designed for the purpose of impacting a wider inclusivity of the diversity of Kenyan people.

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