



## **Students' Perception of the Teaching Profession as Antecedents of Sustainability in Teacher Education**

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### **Abstract**

Sustainability and sustainable development have increasingly become critical issues in teacher education and development. Since sustainable development in education is impossible without the professional competence of teachers, there has been a growing pressure for the reorientation of teacher education all over the world and Kenya in particular. However, the transformations in higher learning in Kenya have not been examined to establish the extent to which sustainability have been integrated. This paper explores students' perception of the teaching profession as an antecedent of sustainability in teacher education in Kenya. The present research was based on the socio-psychological model of sustainable behavior. Ex post facto cross-sectional design was used and purposive sampling methods was used to select four institutions of higher learning in Kenya. A structured self-response questionnaire and interview schedule. Quantitative data was analyzed by use of descriptive and inferential statistics using statistical tools with the aid of the Statistical Package for Social Sciences (SPSS) version 24.0. A sample of 376 respondents filled the questionnaire, resulting in a response rate of 94%. The observed mean age was 22 years with standard deviation of 2.23. Among respondents 216(57.4%) were male while 160(42.6%) were female. Research findings indicate that high 220(59%) percentages of respondents perceived sustainability in teacher education followed by moderate 148(39%) with a combined perception levels of 98%. This presents an implication that the idea of sustainability in teacher education has great potential for future developments in the programme. These study findings present significant implications for teacher preparation strategies for sustainable development in education. The study findings also shed light on the state of preparedness as well as advances made in Kenyan higher education in compliance with global trends in best practices for teacher education in face of sustainable development.

### **Key words**

Sustainable education; teacher preparation; higher learning; 21<sup>st</sup> century skills; transformative pedagogy

### **Introduction**

According to Barth, Michelsen, Rieckmann, and Thomas (2016), teacher education features prominently in recent academic research and publications on Education for Sustainable Development (ESD) in relation to the themes covered in Sustainable Development Goals (SDG) 4.7. In addition, teacher education has increasingly recognized the need to respond to the economic, social, cultural and political challenges taking place globally. For example, the changing cultural composition of many societies has led to many countries including intercultural competencies within their training of teachers (Cushner, 2011, 2012, 2014; Grant, & Portera, 2011). Increased interest in global citizenship and development education has come about as a result of a number of factors, such as, for example, the increasing multicultural nature of societies and the work of international development organisations (Baily, O'Flaherty, & Hogan, 2017; O'Flaherty et al., 2017). Greater importance has been placed on highlighting the



inequalities that exist in the world and the role we all play in causing or preventing such inequalities (Liddy, & Parker Jenkins, 2013). The Sustainable Development Goals decided by the United Nations include a goal centred on learners gaining the necessary knowledge and skills to promote sustainable development (UNESCO, 2015).

Studies from European and US scholars present extrinsic, intrinsic, and altruistic motives for choosing a teaching career (cf. Balyer, & Özcan, 2014; Kyriacou, & Coulthard, 2000; Thomson, Turner, & Nietfeld, 2012; Yüce et al., 2013). Extrinsic motives involve aspects not inherent in the immediate work, such as salary, status, and working conditions. Intrinsic motives encompass inherent aspects, relating to the meaning of teaching and the passion for teaching, subject knowledge and expertise. Altruistic motives entail perceptions of teaching as a valuable and important profession and the desires to support children's development and to make a difference in society. Intrinsic and altruistic reasons seem to be more frequent in what are termed 'developed countries' than in developing countries, where extrinsic reasons are more prominent (Azman, 2013; Watt et al., 2012). Likewise, Klassen et al. (2011), claim that motives for entering teacher education differ based on cultural background and accordingly there is no universal pattern of motives.

### **Objectives**

The research sets out to achieve the following objectives:

1. To assess the perception of the teaching profession across universities in Kenya
2. To establish the influence of demographic characteristics on the perception of the teaching profession across universities in Kenya

### **Literature Review**

Alkhalwaldeh (2017) argued that teacher education for sustainable development is an educational paradigm that considers life-long professional development and learning of teachers as the main hub of teaching practice. Sustainability and sustainable development have recently become widely discussed in the educational arena, in general, and in teacher education and development, in particular. For example, Salite (2015) called for the reorientation of teacher education towards sustainable development. At the heart of the debate on sustainable professional development of teachers, there is the shift from traditional one to more school-based teacher professional development, which the present study attempts to address. Recently, sustainable education and teacher education integration into the wider system of higher education and teacher education milieu have attracted the attention of policy makers, educationists and researchers. Teachers are urged to equip themselves with new skills and high standard professional knowledge to assume new roles and responsibilities in sustainable education in their societies (Kabaday, 2016). Teacher education in the context of sustainable education should abandon conventional teaching models and shift to a transformative model of education to account for the twenty-first-century humanity demands for living sustainably in a globalized world (Bell, 2016). With this new trend in teacher education, teachers are essentially required to exhibit teacher renewal and professionalism.

According to Williamson and McDiarmid (2008), the continuum of teacher learning as well as teacher education turns out to be indispensable in a lifelong learning process, which implies the demand for extended teacher professionalism. This implies that teacher education and learning,



which the present study is premised on, should continue through the whole teacher development and should feature all teacher experiences during career long learning.

Eslamian, Jafari, and Neyestani (2017) claim nowadays-educational systems have an important mission for responding to the needs of different communities. The complex organizational nature of educational centers, accompanied by evolving pedagogies, requires multiple professional development strategies to effectively address needs, respond to emerging trends in teaching and learning and facilitate improvements (Mohammadi,& Moradi, 2017). Sustainable development of education is impossible without the professional competence of teachers. Special attention should also be paid to the training of teachers, youth leaders and other educators (UNESCO, 2005). In this way, the problem of improving the teachers' professional competence is relevant in terms of sustainable development of education (Korsun, 2017), and for educational improvement, teacher professionalism is essential (Reid,& Horváthová, 2016). Yoo (2016) has argued that to ensure sustainable development, educators should focus on studies related to teacher programmes.

Continuous professional development can help teachers not only understand sustainable development concepts and issues but also experience life-long learning, thus becoming responsible mentors for sustainable education. It requires teachers to be learners, researchers, and collaborators, to reflect on their teaching practices and improve professional proficiency (Mohammadi,& Moradi, 2017). Understanding teachers' professional proficiency and their training needs, government and university level policies and directives can provide more targeted in-service courses or workplace learning support for teachers to attain their goals for sustainable development (Kabadayi, 2016).

### **The Concept of Sustainability**

According to Gaudiano, Meira-Carrea and Martínez-Fernández (2015), the incorporation of sustainability into Higher Education institutions is a relatively new process. Its history can be traced back to the foundation of the Environmental Sciences Formation International Center in 1975. Then in 1985, the University and Environment in Latin America and Caribbean Seminary was founded in Bogotá, Colombia. However, despite progress, sustainable development is not yet a finished concept. In the literature, the definition of sustainable development, proposed in 1987 by the Brundtland Report (UNESCO. 2017), is widely accepted: The development that satisfies the needs of the present generation, without compromising the capacity of the future generations to satisfy their own needs. It is a paradigm to think in a future where the environmental, social and economic considerations are balanced in the search of a better life quality.

The sustainable development concept initially had a political connotation. Later, "sustainability" was used in a more critical sense that had been lost over time. Some IES conventionally used either concept, without considering the implications (Gaudiano, Meira-Carrea, & Martínez-Fernández, 2015; Martínez-Fernández,& Gaudiano, 2015). According to Gutiérrez and Martínez (2010), the emphasis was first on the environment, but sustainable development now emphasizes social, economic, political and religious dimensions. As these polysemic concepts of sustainable development and sustainability developed, environmental education emerged as a strategy to understand and address the growing environmental problems.



## **Methodology**

### **Research Design of the Study**

This mixed method study included qualitative and quantitative data. The study was quantitative and utilized an *ex post factocross-sectional* survey design. The purpose of the inferential approach was to provide data from which correlations were computed and the relationship between variables examined. Kothari (2014) suggests the use of *ex post facto* design in studies which the researcher does not manipulate the variables under study which was the case in the present study. The cross-sectional survey design was appropriate for this study because data was collected from a cross section of sampled universities. The study was conducted in selected institutions of higher learning in Nakuru, Laikipia and Kericho Counties in, Kenya. Each county consists of urban and rural regions where a cross-section of both private and public university campuses have been established. With the establishment of a centralized university placement, the population in these institutions are not only cosmopolitan but also represent a cross-section of all communities in Kenya. This significantly enhances the external validity of the study findings. Multi-stage sampling procedure was used to generate a sample of 400 respondents. First, stratified sampling procedure was used to group the target population into two strata based on university ownership. One stratum was public universities (4) and the other private universities (3). Stratification ensured heterogeneity in the final sample since university ownership may present unique characteristics that might have implications on the research findings. In this study the designed the demographic items, sustainable teacher education scale and the sustainable distance learning scale. The reliability of the instrument was measured by Cronbach's alpha, which was found to be .86. This value is above .7, so the questions used in this test can be considered reliable with the sample. The required research authorizations were sought before data collection commences. Data collection in each university took place in the same location to help improve on the rate of return. After the sampling exercise, the data collection exercise began with a brief explanation on the aim of the study followed by distribution of questionnaire. Questionnaires then were distributed to those willing to participate. The exercise was deemed over when all the respondents returned the questionnaires to the researcher.

### **Data Analysis**

Collected data was quantitative and therefore data will be analysed in both descriptive and inferential statistics. Data analysis was done by means of statistical tools with the aid of computer software, the Statistical Package for Social Sciences (SPSS) version 25.0.

### **Ethical Consideration**

Ethical principles are concerned with protecting the rights, dignity, and welfare of research participants (Baker, Pistrang, & Elliott, 2002). The key areas for consideration within this study centred on anonymity, confidentiality, and informed consent, voluntary participation of respondents and data handling and storage. The respondents were required to read the consent forms and acknowledge that they had understand what was involved in the study and that they were willing to participate. The respondents were assured of confidentiality through writing, indicating that the responses or data collected would not be presented in a way that would be identified with any respondent or university.



## Results

A sample of 376 respondents filled the questionnaire, resulting in a response rate of 94%, which was considered good for survey research not only according to Babbie (1995), but also according to the findings of Asch and Colleagues (1997). The observed mean age was 22 years with standard deviation of 2.23. Among respondents 216(57.4%) were male while 160(42.6%) were female. It was also observed that 16(4.3%) of respondents were married, 356(94.7%) ‘Single’, 4(1.1%) neither ‘married’ nor ‘single’, a category designated ‘other’. Data revealed that 118(31.4%) of respondents were public while 258(68.6%) were from private universities. It was observed that 297(79%) were full time mode of study compared to 79(21%) who were enrolled on online and distance learning. Data revealed that 250(66.5%) of the respondents were in second year compared to 67(17.8%) who were in fourth, 35(9.3%) third, 19(5.1%) first while 5(1.3%) belonged to other years of study.

### Perception of Teacher Education

Sustainability in teacher education was made operational by means of 11 items measuring the perceptions of respondents. Each was required to respond to a 5-point Likert scale measuring the level of agreement. The findings are presented in Table 1

Table 1  
Respondents Perception of Teacher Education

	Level of agreement									
	1		2		3		4		5	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Item 1	72	19.1	32	8.5	32	8.5	20	5.3	220	58.5
Item 2	100	26.6	16	4.3	36	9.6	32	8.5	192	51.1
Item 3	192	51.1	16	4.3	32	8.5	24	6.4	112	29.8
Item 4	68	18.1	16	4.3	24	6.4	24	6.4	244	64.9
Item 5	60	16	28	7.4	52	13.8	28	7.4	208	55.3
Item 6	128	34	52	13.8	36	9.6	32	8.5	128	34
Item 7	68	18.1	32	8.5	32	8.5	32	8.5	212	56.4
Item 8	40	10.6	56	14.9	40	10.6	28	7.4	212	56.4
Item 9	52	13.8	20	5.3	40	10.6	32	8.5	232	61.7
Item 10	56	14.9	8	2.1	44	11.7	40	10.6	228	60.6
Item 11	16	4.3	24	6.4	24	6.4	68	18.1	244	64.9

The study findings presented a positive implication for the perception of teacher education as currently constituted in Kenyan teacher preparation institutions. It was observed that high perception index was observed for many items measuring the perception of teacher education. Among sampled respondents, a 220(58.5%) presented an observed agreement level of 5 and 20(5.3%) at level 4 for item 1 which stated that *a career in education was my first choice for university degree*. This is reflective of the findings by Ulrika, Stefan, Lena, and Annbritt (2018) who observed that among students, intrinsic and altruistic motives for choosing a career in education are frequent.



Respondents whose level of agreement with item 2 of the tool (*Given another chance I would still choose a career in education*) ranged above 4 accounted for a total of 151(59.6%) of the total sample. This observation can be linked to the assertion by Ulrika, Stefan, Lena, and Annbritt (2018) as well as Pop and Turner (2009) who observed that the students' own experiences at school form the basis for the expressed feelings concerning teaching and teacher education. This in turn play significant role for the construction of pedagogic identities. A reasonable consequence of the difference between the teacher programmes is that the future upper secondary school teachers will try to recreate their positive experiences to a greater degree while compulsory school student teachers will seek to create a somewhat different school than the one they experienced. Thus, the pedagogic identities of the former group will function retrospectively and conservatively, and the pedagogic identities of the latter group will function progressively and autonomously, in a de-centred manner (Bernstein 2000). This explains the feeling that respondents would still choose the teaching programme had they been given another chance.

Respondents who felt that *teachers should be more appreciated in society* accounted for 24(6.4%) and 244(64.9%) at level 4 and 5 respectively, thus giving a total 71.3% of high level of agreement. Environmental education is an important element of sustainability and a core component in teacher preparation. Respondents who perceived that importance accounted for 236(62.7%) comprising 28(7.4%) and 208(55.3%) at level 4 and 5 respectively, that *environmental education is an essential part of teacher training in our university*. An observed 64.9% of the sample scored high on the perception level of the fact that *all students can succeed in education*. In addition, an observed 63.8% of selected respondents highly agreed with the statement: *I am satisfied with the assessment strategies for educational course at the university*. High perceptions were observed among respondents who felt that *it is easier to get a job with a degree in education* 70.2% at level 4 and 5 respectively. Respondents who registered high levels of agreement with the statement that *Teacher education is relevant for national development* accounted for 71.2%.

Finally, the highest scores were observed for respondents who felt that *Teaching is a comfortable job* where 68(18.1%) presented agreement level 4 and 244(64.9%) were at level 5 giving a combined agreement of 83%. The perception of "comfortable" in the career of teaching was viewed in this study to imply a profession that was comparatively less stressful compared to other prospective careers. This could be attributed in part to school holidays, ample family time, perceived job security, and 'break' times that characterise daily routine. This is supported in research carried out among 157 teacher candidates in Turkey where it was observed that a significant proportion of respondents chose teaching because of the long holidays and comfortable working conditions (Cermik et al. 2010). The findings are also congruent with a study by Gao and Trent (2009) on the motivations of students from Mainland China enrolled in teacher education programs in Hong Kong, where it was established that students' choice of teaching career was based on the perception of the profession as pleasant and devoid of the complexities involved in other disciplines. However, the findings were at variance with the findings in a study by Foley and Murphy (2015) as well as Hassan, Jani, Som, Hamid, and Azzizam (2015) who reported that teaching is a stressful career.

### **Overall Perception of Teacher Education**



A dummy variable that grouped the perception index to *low*, *moderate* and *high* was generated to explore the distribution of overall perception of sustainability in teacher education. Out of the 55 possible points comprising 11 items where each had 5 possible point, the transition points were <18 and >36 for *low* and *high* perception index respectively and *moderate* perception at >18<37. The frequencies for each category were run and the results are presented in Figure 1

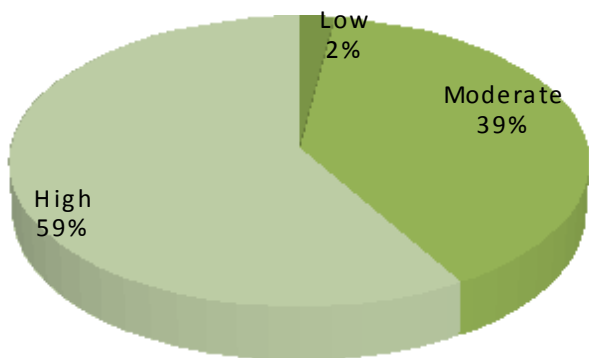


Figure 1: Overall Respondents Perception of Sustainability in Teacher Education (N = 376)

Data presented in Figure 1 indicates that high percentages of respondents perceived sustainability in teacher education clustered around the *high* zone 220(59%) followed by *moderate* 148(39%) and then *low* 8(2%). Combining the *moderate* and *high* perception levels gives a total of 98% of respondents who felt that the mode was viable. This presents an implication that the idea of sustainability in teacher education has great potential for future developments in the programme.

*The Gender Factor in Perception of Teacher Education*

In this study, gender was considered as an important factor in the perception of teacher education. Analyses were therefore grouped according to gender and the findings presented in Table 2.

Table 2

Distribution of Respondents Perception of Teacher Education by Gender

	Male (n = 216)			Female (n = 160)		
	Low	Moderate	High	Low	Moderate	High
Item 1	56(26%)	16(7.4%)	144(76.7%)	48(30%)	16(10%)	96(60%)
Item 2	56(26%)	20(9.3%)	140(64.9%)	60(37.5%)	16(10%)	84(52.5%)
Item 3	104(48.1%)	20(9.3%)	92(42.6%)	104(65%)	12(7.5%)	44(27.5%)
Item 4	48(22.3%)	12(5.6%)	156(72.2%)	36(22.5%)	12(7.5%)	112(70%)
Item 5	44(20.4%)	36(16.7%)	136(63%)	44(27.5%)	16(10%)	100(62.5%)
Item 6	96(44.4%)	20(9.3%)	100(46.3%)	84(52.5%)	16(10%)	60(37.5%)
Item 7	48(22.2%)	28(13%)	140(64.9%)	52(32.5%)	4(2.5%)	104(65%)
Item 8	44(20.4%)	24(11.1%)	148(68.6%)	52(32.5%)	16(10%)	92(57.5%)
Item 9	32(14.8%)	20(9.3%)	164(76%)	40(25%)	20(12.5%)	100(62.5%)
Item 10	28(13%)	12(5.6%)	176(81.5%)	36(22.5%)	32(20%)	92(57.5%)
Item 11	16(7.5%)	16(7.4%)	184(85.2%)	36(22.5%)	12(7.5%)	112(70%)



Data presented on Table 2

### 6.3 Perception of Teacher Education in Relation to Type of University

The researcher set out to explore how respondents' placement influences their perception of teacher education. Placement was operationalized as either public or private universities. Analyses were therefore grouped according to category of university and the findings presented in Table 3.

Table 3  
Distribution of Respondents Perception of Teacher Education by Type of University

	Public (n = 118)			Private (n = 258)		
	Low	Moderate	High	Low	Moderate	High
Item 1	36(30.5%)	15(13%)	67(56.7%)	68(26.3%)	17(6.6%)	173(67.1%)
Item 2	40(33.9%)	11(9.3%)	67(56.8%)	76(29.5%)	25(9.7%)	157(60.9%)
Item 3	62(52.6%)	13(11%)	43(36.4%)	146(56.6%)	19(7.4%)	93(36.1%)
Item 4	28(23.7%)	6(5.1%)	84(71.2%)	56(21.7%)	18(7%)	184(71.3%)
Item 5	28(23.8%)	17(14%)	73(61.8%)	60(23.2%)	35(14%)	163(63.1%)
Item 6	56(47.4%)	11(9.3%)	51(43.2%)	124(48.1%)	25(9.7%)	109(42.3%)
Item 7	34(28.8%)	12(10%)	72(61%)	66(25.5%)	20(7.8%)	172(66.7%)
Item 8	29(24.6%)	16(14%)	73(61.9%)	67(26%)	24(9.3%)	167(64.7%)
Item 9	16(13.6%)	14(12%)	88(74.6%)	56(21.7%)	26(10%)	176(68.2%)
Item 10	23(19.5%)	12(10%)	83(70.4%)	41(15.9%)	32(12%)	185(71.7%)
Item 11	28(23.7%)	6(5.1%)	84(71.2%)	56(21.7%)	18(7%)	184(71.3%)

#### Correlation Matrix for Teacher Education by Demographic Characteristics

A correlation analysis was done for the various demographic variables taken to be key factors in the perception of teacher education. The findings are presented in Table 4

Table 4  
Correlation Matrix for Teacher Education by Demographic Characteristics

		1	2	3	4	5
Gender	Coefficient					
	Sig. (2-tailed)					
Marital Status	Coefficient		-.165**			
	Sig. (2-tailed)		0.001			
Type of University	Coefficient		-0.067	0.007		
	Sig. (2-tailed)		0.194	0.887		
Academic Status	Coefficient		0.058	-.157**	-0.017	
	Sig. (2-tailed)		0.263	0.002	0.743	
Year of Study	Coefficient		-0.1	0.054	-0.079	.110*
	Sig. (2-tailed)		0.053	0.297	0.125	0.034
Perception of Teacher Education	Coefficient		-.190**	-.116*	-0.012	-0.064
	Sig. (2-tailed)		0	0.025	0.823	0.219





Chi-square test of significance for age2 factor in the perception of teacher education yielded  $\chi^2=29.58(df=20)$   $p=0.77$  which was not statistically significant. It was therefore concluded that age does not influence the perception of teacher education and therefore is not an antecedent to sustainability teacher education. However, gender factor yielded  $\chi^2=13.96(df=2)$   $p=0.001$  which was statistically significant. This implied that there was observed significant difference in the perception of teacher education based on gender. Based on these findings, it was inferred that gender was a strong antecedent to sustainability teacher education. Similarly, respondents' year of study yielded  $\chi^2=23.642(df=8)$   $p=0.003$  which was statistically significant, implying that academic level influenced perception making it a strong antecedent to sustainability teacher education. It was observed that, respondents' mode of study (conceptualized as Part-time and Full-time) yielded  $\chi^2=2.156(df=2)$   $p=0.284$  which was not statistically significant, leading to the conclusion that academic mode of study was not an antecedent to sustainability teacher education. Finally, it was observed that type of university yielded  $\chi^2=3.863(df=2)$   $p=0.15$  which was not statistically significant. It was therefore concluded that university placement does not significantly influence the perception of teacher education and therefore is not an antecedent to sustainability teacher education.

## **Conclusion**

The sustainability of teacher education is largely dependent on the social and professional perception of the discipline. These render impetus for choosing the teaching career and preconceptions of profession related to education. This in turn presents significant implications for the sustainability of the profession of teaching. The most important implication of this study is that institutions of higher learning draw their clientele from a cross section of Kenyan society. With a large sample coming from different regions of Kenya, the research findings provide useful insights into the students' perception of teaching as a career which was viewed in this study as a motivation acts as an antecedent of sustainability of teacher education. Second, the study draws attention to variations in the perception of aspects of the teaching profession through a socio-cultural value, which is a key component in career choice and factor in sustainability of education discipline. These values include the social perception of the teaching profession, its conditions as a profession, and the ease of securing a job for graduates of education programme. Understanding these antecedents presents significant implications for teacher educators and curriculum planners to grasp more clearly how public perceptions affect teachers' and prospective teachers' attitudes, and thereby to make teacher training programs more attractive. This would ultimately ensure continuity and sustainability in teacher education, whose consequence would be the achievement of sustainable development in other foci of the SDGs.

## **Recommendations and Areas for Further Study**

First, this was a cross-sectional descriptive survey where the data collection tool was administered at only one point in time. Taking cognizance of the effect of time in shaping of attitudes towards phenomena it is reasonable to suppose that perceptions of teacher education might change during a student's academic progression, and this possibility (along with reasons for any changes) would be worth investigating.

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