

**Awareness and Practice of Gender Responsive Pedagogy  
in Higher Learning Institutions:  
The Case of Sokoine University of Agriculture, Tanzania**

*Judith S. Kahamba,<sup>\*</sup> Fatihya Ally Massawe, PhD<sup>\*\*</sup> & Ernest S. Kira, PhD<sup>\*\*\*</sup>*

**Abstract**

Tanzania is among Sub-Saharan African countries where teachers are conditioned by male-dominated values in their communities. This has been one of the factors perpetuating gender inequality in various levels of education. With the understanding that gender sensitive teaching aims at equally supporting the learning of male and female students, this disparity calls for the promotion and adoption of gender responsiveness teaching practices in higher learning institutions (HLIs) to correct gender bias in the learning process. The argument here is that the teaching and learning environment in higher learning institutions is not only gender-imbalanced but also it is not well known on whether instructors are aware of gender sensitive teaching techniques, and to what extent do they mainstream gender sensitive teaching practices in their daily teaching practises. Thus, this study had two objectives: (a) to assess the level of awareness in gender responsive pedagogy among university instructors; and (b) to determine the extent to which instructors practice gender responsive pedagogy methods in teaching. The study adopted a cross-section survey research design where the data were collected using a questionnaire from a random sample of 83 academic staff. The study adopted descriptive analysis using SPSS Computer Software to analyse the collected data. The findings show that members of academic staff have a partial awareness of gender sensitive teaching practices. Overall, the findings revealed the degree of gender sensitive pedagogical teaching practices to be very low. The paper recommends that universities should continue with awareness campaign and training workshops to academic staff through gender policy implementation committees.

**Key words:** *gender, pedagogy, awareness, learning, practice, institutions, education*

**1. Introduction**

Recently, there has been a broad movement concerned with identifying and advancing the kinds of education, teaching and learning (T/L) policies and practices that ensure sustainable development. It is argued that education for sustainable development should be based on equality and equity principles such as providing students with a fair learning environment that promotes excellence for all people without falling behind because of gender, social status or ethnicity (Concordia University, 2013). Researches show that girls' education is essential in the achievement of quality learning relevant to the 21st century, including girls'

---

<sup>\*</sup>Department of Development Studies, College of Social Sciences and Humanities, Sokoine University of Agriculture: judith.kahamba@suanet.ac.tz

<sup>\*\*</sup>Department of Policy Planning and Management, College of Social Sciences and Humanities, Sokoine University of Agriculture.

<sup>\*\*\*</sup>Department of Education, Solomon Mahlangu College of Science and Education, Sokoine University of Agriculture.

transition to and performance in secondary school and beyond (Sperling & Winthrop, 2016). However, despite of this importance of girl's education, traditional approaches to pedagogy have been criticized for not acknowledging differences among students, including differences based on gender and cultural background (Mossman, 1995).

Teaching approaches have evolved over time since the 1980s with the intention of improving learning outcomes. The evolution of personal teaching approaches identified in the 1980s can be easily explained through the 'transfer' theory, 'shaping' theory, 'travelling' theory, and the 'growing' theory. In the transfer theory of teaching, the subject material is viewed as a commodity to be transferred to students' minds; whilst the shaping theory views students as a clay or wood or metal to be shaped or moulded into a predetermined form. The travelling theory looks at the teaching process of as an act of helping students on a journey through unfamiliar and often tough terrain; whilst the growing theory views teaching as being a matter of encouraging and helping students in their personal growth and development (Fox, 1983; cited in Mossman, 1995). In contrast to the transfer and shaping theories, the travelling and growing theories challenge the idea of objective 'knowledge'. The latter theories are developed in a more critical context in Paulo Freire's 'teaching for liberation' theory, which is a fundamental theory for critical pedagogy (Luke & Gore, 1992).<sup>1</sup> However, these two teaching approaches have been criticized by feminist pedagogues for not seriously questioning how differences (including gender ones) among students may affect experiences, abilities, motives or objectives.

From the late 1990s there has been a concern that the teaching and learning (T/L) science should accommodate various students' needs, interests and experiences; and serve to promote awareness and appreciation of cultures and differences (AAAS, 1998; NSES, 1999). Gender inclusion and gender sensitive teaching as a focus of feminist pedagogy has been regarded as a new way of envisioning the possibilities for T/L. Gender-inclusive pedagogy includes understanding that T/L does not take place in a vacuum: it takes place in a complex context of cultural, economic, political and social events that have their own history and interconnectedness (Barton, 1998). In universities, gender inclusion has been used as a set of working strategically for gender equality by engaging all university instructors into the work for more gender equal and gender sensitive teaching (Kreitz-Sandberg, 2013, 2016). It has further been claimed that teachers and students are gendered subjects and therefore differences among women and men who are teachers and students may resist—or reinforce—power relations both inside and outside the classroom, which eventually affects the learning process (Mossman, 1995).

There are various barriers to girls' education throughout the world, ranging from supply-side constraints to negative social norms. Negative classroom environments—where girls may face violence, exploitation or corporal punishment, insufficient female teachers, etc.—are related to the lack of gender sensitive teaching (Barker, 2012; UNSCO, 2012;

---

<sup>1</sup>The relationship between critical pedagogy and feminist pedagogy is explored in Luke and Gore (1992). According to them, the authors of the essays arrived at their viewpoints on critical pedagogy from their "... positioning, location, and identity as women in education: as women within a patriarchal system of knowledge, scholarship, and pedagogical relations."

UNICEF, 2015). When students and teachers in schools come from a society that propagate gender-biased social and cultural norms, T/L activities in schools are likely to feature the same elements of gender bias.

There have been some efforts in some developed countries to create gender inclusiveness in their teaching. For example, researches in Nordic Countries have argued for the need to include university teachers' perspectives in future strategies for developing gender inclusion in university education (cf. Arreman & Weiner, 2007; Lahelma, 2014; Kreitz-Sandberg, 2013). However, in SSA many teachers are conditioned by male-dominated values in their communities, and as such as employ teaching methods that do not provide equal opportunity to both girls and boys. These methods do not take into account individual needs of learners, especially girls (FAWE, 2009). This is why gender-responsive pedagogy (GRP) was initiated since 2005; and has been introduced in Burkina Faso, Chad, Ethiopia, Gambia, Guinea, Kenya, Malawi, Namibia, Rwanda, Senegal, Tanzania, Uganda and Zambia (FAWE, 2005). GRP refers to a T/L process that pays attention to specific learning needs of girls and boys (Mlama et al., 2005). However, most of GRP initiatives have focused on primary and secondary schools, with less attention on higher education. For the past few decades efforts to reduce gender inequality in access to education in Tanzania have had more success in primary and secondary education than in higher education (Orodho, 2014).

It is a fact that higher learning institutions are not isolated from traditions, culture and social norms that perpetuate gender stereotypes and inequalities, which affect learning by both male and female students. Like any other higher learning institutions in Tanzania, the Sokoine University of Agriculture (SUA) experiences gender inequality in enrolment at all levels: by 2016 female students counted for only 29% of all undergraduate and diploma students (Sokoine University of Agriculture Corporate Strategic Plan (CSP), (2016). The gap in enrolment was coupled with another twin problem of having 80% male academic staff (SUA-CSP, 2016). With the understanding that gender sensitive teaching aims at equally supporting the learning of male and female students, the disparity noted calls for instructors to adopt gender-responsive teaching practices in education so as to correct gender bias in the learning process. The argument put forward here is that the T/L environment in higher learning institutions is not only gender-imbalanced but it is also not well-known whether instructors are aware of gender-responsive teaching techniques, and to what extent do they adopt them to reduce bias in a male dominated learning environment.

Therefore, this paper attempts to establish the awareness level of instructors on GRP, and the extent to which instructors apply gender responsive teaching (GRT) practices by seeking to answer the following research questions: (i) to what extent are instructors at the SUA aware about gender responsive pedagogy; and (ii) to what extent do instructors at the SUA practice gender responsive pedagogy in the teaching and learning process.

## **2. Literature Review**

International organizations—including the UNESCO, World Bank, EU, etc.—have all included gender equality in their higher education policies (Engel & Rutkowski, 2012). Global policy architecture has also emerged to promote gender equality in higher

education (AU, 2003; UNESCO, 2010). The significance of promoting gender equality in higher education is cemented in the observation that higher education provides women with more influential social positions and individual freedom (Skjortnes & Zachariassens, 2010). However, these social positions sit alongside traditional gender and economic expectations from the extended family. For example, a study by Adu-Yeboah and Forde, (2011) in Ghana found that while some married women were allowed to enter higher education by their husbands, they were still expected to perform all their traditional family, household and childcare roles.

Gender-based socio-cultural values in low income countries have partly contributed to unequal women enrolment rates in higher education. For instance, over the period 1990-2012, developed regions, Latin America and the Caribbean and Western Asia expanded tertiary enrolment from 42 to 66 per cent for men, and from 46 to 85 per cent for women. In SSA it only rose from 4 to 10 per cent for men, and from 2 to 6 per cent for women over the same period (UN-DESA, 2015). These inequalities in higher learning institutions call for gender responsiveness, i.e., taking action to correct gender bias so as to ensure gender equity and equality (Mlama et al., 2005).

Instructors are responsible for delivering curriculum, and hence are in charge in choosing the appropriate teaching methods, training materials and other aspects supporting the T/L process. To allow for equitable training outcomes for girls and boys, instructors are expected to adopt gender sensitive pedagogical approaches. Gender responsive pedagogy refers to teaching and learning processes that pay attention to the specific learning needs of girls and boys (Mlama et al, 2005). Therefore, gender responsive pedagogy calls for teachers to take an all-encompassing gender approach in the processes of lesson planning, teaching, classroom management and performance evaluation.

Gender responsive instructors need to support both gender responsive learning environment and curriculum. Gender responsive instructors understand and respond to the specific needs of girls and boys in the teaching and learning processes (ibid.) by being aware of the special needs of girls and boys such as sexual maturation issues, encouraging equal participation and involvement of boys and girls in class activities, and by ensuring equal access to learning materials.

Gender responsive learning environment begins by acknowledging that the planning process should develop strategies about how to best meet the educational and other needs of today's and tomorrow's learners (Becker, 2009; Lan, 2010). Planning is the responsibility of every individual in an institution. For instance, while management may be looking for facilities like sanitation and seating infrastructures for both boys and girls, a classroom instructor should plan for arrangements that give equal opportunities for both boys and girls to participate in the class, and interact with the instructor and other students.

When planning a lesson, a teacher needs to survey all available teaching resources, identify any elements of gender stereotypes and plan for alternatives of gender balance (FAWE, 2006). For instance, if a science textbook portrays only male scientists as inventors, an instructor may include a discussion of female scientists who are/were

inventors. Likewise, teachers need to identify opportunities within lessons for students to control learning so as to provide meaningfulness and relevance, and allow teachers to observe student preferences for learning approaches that emerge from home and cultural influences (Chartock, 2010; Gay, 2002). Such student characteristics manifest if teachers use some teaching methodologies like group work, group discussions, role plays, debates, case studies, explorations and practical work that can be very effective in encouraging student participation, and give both sexes opportunity to participate more actively. This is the reason why Komba (2011) recommended that in practice, instructors should take care that dominant individuals do not side-line less assertive ones in gender responsive pedagogy.

Also, learning activities should be provided in a gender sensitive environment: it is crucial that there be a clear and pervasive message from the instructor that all students are expected to—and are able to—learn and succeed (Gay, 2002; Siedentop & Tannehill, 2000). For instance, when doing a practical science experiment, instructors need to ensure that both girls and boys have a chance and ability to use equipment and chemicals. Instructors should ensure that both girls and boys are given leadership positions and roles when assigning projects, activities or assignments.

In enforcing gender balance in the classroom, instructors' perception about gender is very important because occasionally the language of instruction can express the status of being male or female, and the status of being assertive or submissive (Norton & Toohey, 2004; UNESCO, 2015). This means the language used by the instructor or students can also reinforce gender differences and inequalities by reflecting male dominance, and relegate females to inferior positions. Thus, an instructor should enhance students' performance by using encouraging an inclusive language in the classroom.

When participating in co-curricular or extra-curricular activities, both male and female students should be offered equal opportunities to engage in activities that are both 'traditional' and 'non-traditional' for their gender. When students show a particular interest or ability in an activity, this should be encouraged regardless of gender (ZGF & ZOCS, 2015). For example, if girls show an interest in football, they should not be discouraged to pursue the sport simply because "culturally football is not a game for girls" (Banks & Banks, 2005).

Although the survey of literature in this study has put forth the necessity of gender responsive pedagogy in higher learning institutions, its implementation may need prior exposure, commitment and self-motivation of instructors towards adopting gender responsive pedagogy. This is why the Association for the Development for Education in Africa (ADEA) (2006) stresses that the sensitization of academic staff to the gender dimensions of teaching and learning is an important first step towards the transformation of curricula; including gender responsive content, methodologies and processes. Training needs to go hand in hand with gender responsive guidance and counselling to instructors. It has been observed that gender-sensitive career guidance helps instructors maximize their potential and informs them of opportunities they might not necessarily be aware of in their areas of competence (UNESCO, 2015). However, the training for instructors at

SUA cannot be conducted effectively until the level of their awareness about gender responsive pedagogy is determined, including the extent to which they practice gender responsive pedagogy during teaching and learning, which is the purpose of this study.

### 3. Methodology

This study was conducted at the SUA, which is located in Morogoro Municipality. The university is among the major public universities in Tanzania. The study followed a cross-section survey research design where the data were collected from various randomly selected academic staff.

#### 3.1 Participants in the Research

Questionnaires were distributed to individual instructors who willingly filled them. The instructors were selected randomly and proportionally to capture a representative sample in terms of sex, academic ranks (Professors, Senior lecturers, Lecturers, Assistant lecturers and Tutorial Assistants as shown in Table 1), and the number of instructors available in a department. A total of 83 questionnaires were dully filled and returned; making an approximate response of 15% of all academic staff. Among the respondents, male respondents were more than three-quarters (79.3%), and only 20.7% were female respondents. The percentage of female participants in the study is very close to the overall population of female academic staff at the SUA, who currently consists only 20.78% of the total academic staff. Table 1 shows 36.6% of the participants were Assistant Lectures/Librarian, followed by Lecturers/Librarian (30.5%), and Professors (21.9%). The rest were Tutorial Assistants and Senior Lecturers. With respect to working experience, 45.8% of the respondents had been working at the SUA for more than 10 years, and few had a minimum of 3 working years, which is enough in assessing the knowledge and practice on gender sensitive teaching practices.

Table 1: Respondents' General Information

Characteristics		Frequency (n)	Percent (%)
Sex	Male	65	79.3
	Female	17	20.7
Academic rank	Tutorial Assistant	3	3.7
	Assistant Lecturer/Librarian	30	36.6
	Lecturer/Librarian	25	30.5
	Senior Lecturer	6	7.3
	Professor	18	21.9
Working experience	less than 3 years	6	8.3
	3-6 years	23	32.0
	7 to 10 years	10	13.9
	more than 10 years	33	45.8

In the case of data collection, the questionnaire was designed to capture information into two focus areas: (i) information about respondents' understanding of the concepts and types of gender sensitive teaching methods; and (ii) information on the level of practice of gender sensitive pedagogical methods. This information was captured through an index scale with 20 statements connoting various selected gender sensitive teaching techniques in the learning process. The respondents were required to rank their own rate

of application of various gender sensitive teaching practices in the scale of either extreme negative (--), negative (-), positive (+) or extreme positive (++). Few instructors were selected from various units based on their ranks in the University for in-depth interviews. A checklist was used to collect some in-depth information related to the study.

A pilot study was carried out with different instructors before data collection to determine the reliability of the instruments to be used for data collection. Information obtained from the pilot study helped to identify ambiguities in the questionnaires and modify them to reflect the objectives of the study. The pilot study was conducted twice at an interval of two weeks using the same sample and instrument, which produced two sets of scores to check reliability. These sets of scores were used to calculate the reliability correlation coefficient that determines the stability of the results over a period of time. The reliability coefficient was found to be 0.79, which is above 0.72, a value that a data collection instrument is often considered sufficiently reliable to make decisions about individuals based on their observed scores (Larky & Knight, 2002).

The study adopted descriptive analysis in answering the first question on the understanding of gender responsive pedagogy, and the second research questions on various gender responsive practices known by instructors. In establishing the degree of GRT practices, the responses were assigned weights: extreme negative (--) and negative (-) responses were given a weight of 1 and 2, respectively. Likewise, the weight of 3 and 4 was assigned to + and ++ responses, respectively. Further, a total score from all the 20 statements was computed for each respondent. Respondents were categorized into two groups based on the mean index score. Those who scored below the mean index were considered to have not been practicing gender sensitive teaching, and those scores above the mean index were considered to have been practicing it. The qualitative data collected through in-depth interviews were analysed using content analysis technique, whereby the responses were organized into various themes focusing on key issues related to the research questions.

### **3.2 Ethical Statement**

Before the collection of data, the researchers explained the overall objective of the study while distributing questionnaires and selecting participants for in-depth interviews. It was clearly explained to the participants that their participation in the research was voluntary; and we informed them that they could decide not to fill the questionnaire or leave the interview if they felt uncomfortable. Respondents were also informed that the information collected would be kept confidential, and that their names would not be recorded or disclosed. Respondents were reassured that the information provided would be used only for the study purposes.

## **4. Results and Discussion**

### **4.1 General Understanding of Gender Responsive Pedagogy**

The ability of instructors to adopt and practice gender responsive pedagogy starts with their understanding and knowledge level of the concept itself, and the skills to apply the concept. The study underscored the general understanding of academic staff on gender sensitive teaching by asking respondents to explain their understanding about the concept, and to mention any GRT methods they knew.

4.1.1 Understanding of GRP

The findings in Table 2 show that a majority of the participants were able to provide various meaning of GRT as a concept. Generally, the findings indicate that the instructors partially understood the meaning of the concept as it relates to the meaning of GRT, which entails T/L processes that pay attention to specific learning needs of girls and boys as provided by Mlama et al. (2005), and adopted by this study. From the findings, it is only 32.5% of all instructors (26.8%M and 4.9%F) who were able to give the meaning correctly. About 47% (36.64%M and10.9% F) of all instructors defined GRT as one of the concepts that considers differences among categories of students. It was also found that 8.5% of the male respondents did not know what is GRT all about.

Table 2: Understanding GRT

Responses	Male		Female		%Total
	Frequency	%	Frequency	%	
Consider differences among categories of students	30	36.6	9	10.9	47.0
I don't know	7	8.5	0	0.0	8.5
Teaching which takes consideration of learning requirements of males and females students	22	26.8	4	4.9	32.5
Gender sensitive in classrooms	1	1.2	1	1.2	2.4
Incorporating culture in T/L process	1	1.2	0	0.0	1.2
Gender inclusive teaching	4	4.9	1	1.2	6.0
Teaching that give opportunities and preferences to women	0	0.00	2	2.4	2.4
<b>Total</b>	<b>65</b>	<b>19.34</b>	<b>17</b>	<b>20.7</b>	<b>100.00</b>

The possibility of the majority being able to define the concept can be attributed to the existence of efforts, through the university gender policy implementation committee, in raising awareness on gender issues among staff through workshops on gender mainstreaming in curriculum. This finding was also supported by a key informant who, when asked to provide an opinion on the awareness of GRT by instructors within the university, replied:

*Given the massive efforts done by university for the past 15 years to increase gender awareness, it is obvious that most academic staff know what GRT is.... My worry is on the capacity to apply it in their day to day teaching process (Female key informant).*

Generally, the findings imply that general awareness on gender issues is high among the university staff. However, from these findings, it cannot be generalized that the respondents are practicing GRT.

4.1.2 GRP-Known Methods by Instructors

This study found that 45.16% (33.3%M and11.8% F) of all the instructors considered giving equal opportunities to female and male students in teaching process as one of the gender sensitive teaching approaches (Table 3). In questioning how this was practiced, it was revealed that few staff practice GRT through aspects like having equal number of male and female in whatever assignment given to students, and treating students equally in class.

**Table 3: GRT Methods Known by Instructors**

Responses	Male		Female		%Total
	Frequency	%	Frequency	%	
Equal Opportunity to both female and male students in learning process	31	33.3	11	11.83	45.16
Asking questions to both gender	12	12.9	2	2.15	15.05
Addressing male and female students equally	1	1.1	0.0	0.00	1.08
Mixed setting in seating	7	7.5	1	1.08	8.60
Dividing students in group by equal gender	1	1.1	2	2.15	3.23
Use gender sensitive language	1	1.1	0.0	0.00	1.08
I don't know	20	21.5	4	4.30	25.81
<b>Total</b>	<b>73</b>	<b>78.5</b>	<b>20</b>	<b>21.51</b>	<b>100.00</b>

The data in Table 3 further shows that some instructors (15.05% (12.9% M and & 2.15%F)) cited asking questions to all gender categories as a GRT method of instruction. Other key practical methods and strategies for gender sensitive pedagogy like sitting arrangements, grouping of students, language used in teaching process and ways of giving feedback and dealing with students with special needs were either cited very low, or not cited at all. Generally, the findings revealed that instructors do not know much on specific gender sensitive teaching methods that can be applied to ensure gender equality outcome in learning. This conclusion was also supported by a key informant who reported:

*The challenge I see is on the possibility of instructors knowing exactly gender sensitive methods or techniques which they can use in teaching.... you know gender issues are always very abstract (Male key informant).*

This assertion implies that regardless of the high level of awareness in terms of what gender sensitive teaching mean, instructors fails to identify key practical methods or techniques that can be applied in teaching. A study conducted in Indonesia and Sweden shows that gendered practices in early childhood education are rooted in teachers' implicit gender beliefs that are influenced by larger socio-political discourses, hence suggesting the need to develop explicit gender consciousness before one can deliver a gender conscious pedagogy (Warin & Adriany; 2017). This implies that the application of conscious gender pedagogy will be limited if instructors are not gender conscious. Since the study was done on academic staff who are engaged in teaching, the responses on the known methods lead to the speculation that those are the methods instructors apply in classes. For example, instructors believe that asking question to both boys and girls justify one to be considered as gender sensitive in teaching. Although this is one way of being sensitive by ensuring that even girls who are always reported to be shy in class are involved in learning, this technique is not adequate in itself to make instructors gender-sensitive.

However, the findings further reveal that 25.81% (21.5%M and 4.30%F) of all interviewed instructors admitted that they did not know any gender responsive teaching methods. This may negatively impact the teaching and learning process since they will not be able to mainstream gender sensitive techniques in their teaching. Therefore, it is more likely that this group do not apply any GRT skills in teaching activities, or if they apply them, it is not by design.

**4.2 Practice of Gender Responsive Pedagogical Skills**

The application of GRP requires the use of multiple teaching methods and strategies. This study underscores the extent to which instructors apply gender sensitive practices in the teaching process. Before ranking the staff, the study examined some key gender issues: how instructors handle latecomers in class, and the strategies they use to find out if students have problems in learning.

**4.2.1 Handling Latecomers**

Handling students is one of the classroom management roles of instructors. Findings in Table 4 show the different ways instructors use to handle students who come late in class. University instructors are not trained teachers except for a few who are teaching education-related programs, and had an opportunity to be trained in the same line. It was revealed that 47.0% (39.51%M and 7.41%F) give advice to latecomers to improve their punctuality. This was followed by 16.05% (12.35%M and 3.70%F) who indicated to give warning to students as Table 4 shows.

**Table 4: Handling Latecomers**

Response	Males		Females		%Total
	Frequency	%	Frequency	%	
Give them advice in the class	32	39.51	6	7.41	47.0
I don't allow to enter in the class	10	12.35	0	0.00	12.35
Giving warning	10	12.35	3	3.70	16.05
Forgive them if their reasons are valid	7	8.64	1	1.23	10.0
Introduction of quiz at the end of the lesson makes them punctual	4	4.94	1	1.23	6.17
Ask them to give a reason	2	2.47	2	2.47	5.0
Allow them to join others in class	2	2.47	0	0.00	2.47
Give them chance for consultation	0	0.00	1	1.23	1.23
<b>Total</b>	<b>67</b>	<b>82.72</b>	<b>4</b>	<b>17.28</b>	<b>100.0</b>

It is interesting to note that 12.35% of the instructors who indicated not allowing latecomers to attend their lectures were male. This implies that male instructors are strict than female ones in terms of handling of latecomers. Other instructors indicated to give a quiz at the end of a session when a majority of students are late, a technique that is expected to adjust student's behaviour and build a culture of coming early to classes and also avoiding missing lectures.

The approach used by instructors in handling latecomers can have positive and negative implications to both students and instructors. For example, university examination regulation requires a student to attend not less than 80% of all lectures to be allowed to sit for any examination. This implies that instructors have to enforce a mechanism to make students attend to avoid having unqualified students in times of examinations. On the other hand, university students are mature people who are expected to be able to have self-discipline in planning their lives while at the university. In this case, it is assumed that coming late to class might be associated with some personal problems that students would share with instructors if given the opportunity.

*4.2.2 Strategies Used to Recognize if Students Have Problems in Learning*

Being gender responsive means having the ability to recognize learners' problems and a strategy to help them where possible. In response to the question that required respondents to state the strategies they use in teaching activities to recognize if students had problem in learning, the findings revealed that 30.1% (21%M and 8.6%F) of all the instructors use the method of asking questions to identifying learners' problems in class. This was followed by 19.14% (14.0%M and 5.4%F) who indicated to use the method of student consultation (Table 5).

**Table 5: Strategies Used to Know Students' Learning Problems**

Response	Males		Females		Total%
	Frequency	%	Frequency	%	
Ask questions during teaching	20	21.5	8	8.6	30.1
Make follow up on those with poor performance after assessment results (Test)	10	10.8	2	2.2	12.9
Allow consultation in case of a need for further clarification and support	13	14.0	5	5.4	19.4
Observing their behaviours/participation in class	8	8.6	0	0.0	8.6
By looking at their grades after formal assessments	15	16.1	1	1.1	17.2
Using Class Representatives	3	3.2	3	3.2	6.5
Recap of the previous sessions	1	1.1	0	0.0	1.1
None	3	3.2	1	1.1	4.3
<b>Total</b>	<b>73</b>	<b>78.5</b>	<b>20</b>	<b>21.5</b>	<b>100.0</b>

Other instructors refer to the use of student grades (performance) as a way of assessing learner' problems. However, there was no explanation on what is done after looking at the grades, especially for those with poor grades. Generally, the ways used by the instructors to identify learning problems fall under formative assessment rather than summative one. Formative assessment is useful since it allows interaction between instructors and students, and makes it easier for instructors to identify learning problems and adjust accordingly. It has been acknowledged that teachers using formative assessment approaches and techniques are better prepared to meet diverse students' needs through differentiation and adaptation of teaching to raise levels of student achievement, and achieve a greater equity of student outcomes. The findings reveal that 8.6% of the instructors who indicated to use class behaviour and participation to assess learning problem were male. This implied that female instructors do not put much attention on students' behaviours (OECD/CER, 2008).

*4.2.3 Extent of Application of Gender Sensitive Practices in Teaching Process*

The findings presented in Table 6 reveal some mixed findings in terms of the extent of practicing gender sensitive teaching techniques and approaches. The most cited implemented practices were regular consultation, which was either through class representatives (CRs) (male/female), or rarely with individual students. The implementation of this approach by 82% of all instructors can be attributed to the nature of class size as Table 6 shows.

**Table 6: Extent to Which the Instructors Applied Gender Sensitive Practices in Teaching Process**

<b>Item</b>	<b>n (%)</b>	<b>n (%)</b>	<b>+ n (%)</b>	<b>++n (%)</b>
Written and spoken language I use is either gender neutral or male and female forms	35(42.7%)	25(30.5)	15(18.3)	7(8.5)
Male and female persons appear in the teaching material (photos, examples, pictures) to the same extent	34 (41.5)	26(31.7)	11(13.4)	11(13.4)
Both female and male authors and researchers are considered equally when giving reference to students	62 (75.6)	15(18.3)	4(4.9)	1(1.2)
Equally takes on contributions from male and female students in class	28(34.1)	34(41.5)	11(13.4)	9(11.0)
Giving special attention to students with special needs (Pregnant, disabled, etc.)	40(48.8)	25(30.5)	7(8.5)	10(12.2)
Giving equal chances to males and females students to answer questions in class	26(31.7)	42(51.2)	3(3.7)	11(13.4)
Regular Communication to class through class representative is gender neutral	42(51.2)	25(30.5)	10(12.2)	5(6.1)
I ensure in group task each student takes various and non-stereotypic roles and functions	29(35.4)	43(52.4)	5(6.1)	5(6.1)
Address male and female students equally often and with equally stimulating demands	27(32.9)	28(34.1)	21(25.6)	6(7.3)
Ensure gender Sensitive sitting arrangements in class to encourage active and free interactions	13(15.9)	15(18.3)	29(35.4)	25(30.5)
Giving a room for consultation to both males and female students	12(14.6)	10(12.2)	30(36.6)	30(36.6)
Take initiatives to establish student groups by self to ensure gender representation	15(18.3)	37(45.1)	23(28.0)	7(8.5)
Gives equally intensive and constructive feedback to male and female students	18(22.0)	26(31.7)	27(32.9)	11(13.4)
I do bother evaluating students' performance on various assessment based on gender competence	26(31.7)	25(30.5)	28(34.1)	3(3.7)
Taking trouble to identify challenges facing students with poor performance	50(61.0)	24(29.3)	8 (9.8)	0.0(0.0%)
Device a strategy to support weak students in my course(s)	12(14.6)	41(50.0)	24(29.3)	5(6.1)
Introduce gender sensitive rules to be followed by students during classes	16(19.5)	34(41.5)	26(31.7)	6(7.3)
Prepare advance planning with students on important dates for various learning activities within a semester (dates for tests, assignments etc.)	19(23.2)	13(15.9)	33(40.2)	17(20.7)
Regular consultation with both CRs track class dynamics and problem facing students if any	10(12.2)	5(6.1)	47(57.3)	20(24.4)
I encourage more boys than girls to improve performance since the course I teach suits boys more than girls	70(85.4)	5(6.1)	5(6.1)	2(2.4)
<b>Mean</b>	<b>42.01</b>			

Most instructors teach large classes where tracking or tracing an individual student might be a challenge. The use of male and female class representatives (CRs) helps to identify some students with serious problem and set up a strategy to meet them individually to solve their problems. Since CRs have close interactions with fellow students, they always have some advance information regarding any student with problems.

The data in Table 6 further revealed that 73.2% of the instructors are open for consultations to both male and female students. Given the challenge of teaching large classes, some students fail to grasp some key issues during lecture sessions and feel shy to ask questions during class hours. Since instructors allow students to consult them outside class hours, this creates room for some students with specific learning problems to share their challenges with instructors. Also, given the challenges of financing higher education in Tanzania, students have been going through many financial and social problems that may sometimes affect their learning. In this case, consulting instructors help students share their problems and make instructors aware of the social life their students are leading so as to advise them accordingly.

Moreover, 65.9% of the instructors reported that they observed sitting arrangement as one of the way to ensure gender sensitivity is adhered to. This implies that most instructors are practicing the gender responsive teaching method of mixing both female and male students. Although students are encouraged to mix up in sitting, it is important for instructors to be flexible so as to encourage active and free interactions. Flexibility in sitting is important since some female students would prefer to sit with their fellow female students in some days of the months due to some biological reasons. The findings further revealed that 60.7% of the instructors plan in advance with their students on important dates for various learning activities within a semester (dates for tests and assignments). This is important for students as it enables them plan for various other activities. Failure to give important dates in advance always results in ad-hoc plans that compromise some students' timetables.

Though instructors mentioned the discussed techniques (see Table 6), a number of gender sensitive techniques were not cited to be practiced by most of them. For example, about 90% of the instructors did not take trouble to identify challenges facing students with poor performance; and about 80% did not give special attention to students with special needs, such as pregnant or disabled ones. Also 82.9% did not bother to give equal chances to male and female students to answer questions in class. Similarly, 75.6% respondents did not ensure equal chances were given to male and female students to give their contributions in class. Also, about 88% of the respondents admitted that they did not consider creating group tasks such that each student would take various and non-stereotypic roles and functions. These gender sensitive practices, which are limitedly applied by instructors, have implications in learning outcomes. For example, while it is acknowledged that some female students are shy in class and underrepresented in various group works, encouraging them through asking specific female student to answer questions or be a group chairperson will build confidence and female students' capacity.

Overall, the findings reveal that there was a low application of gender sensitive pedagogical teaching practices because more than half of the respondents (62.2%) did not apply the GRT practices as Fig. 1 shows. The findings imply that a majority of academic staff are not gender sensitive, something that might have implications to students' learning outcomes. This calls for the university managements, through gender policy implementation committees, to continue with awareness campaign on mainstreaming gender on curriculum, and specifically on the teaching component.

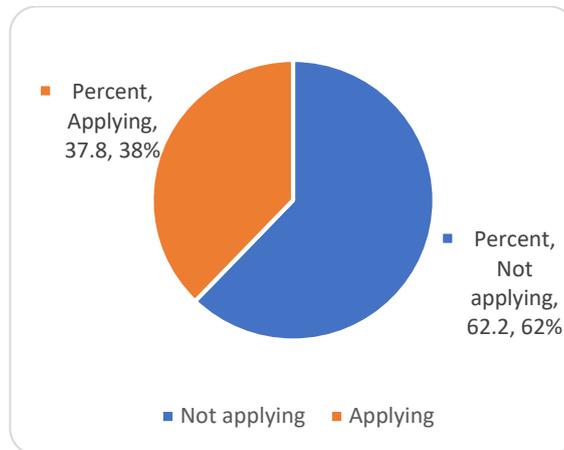


Figure 1: Overall Application of Gender Responsive Pedagogy by Academic Instructors

### 5. Conclusion and Recommendation

This study concludes that the SUA academic staff partly understands the meaning of gender sensitive teaching practices. However, the practical part of applying the practices was found to be very low since. The low application of the gender sensitive teaching techniques can be attributed to the low level of skills on the techniques, which are important in reducing gender bias in teaching. The study recommends the SUA university management to continue with awareness campaign and training workshops to academic's staff on how to apply gender sensitive teaching techniques through its gender policy implementation committee. Although the university has a gender policy, there is a need to develop a gender policy implementation strategy to guide GRT mainstreaming in curriculum and teaching.

### References

- Association for the Development for Education in Africa (ADEA). 2006. Optimizing Learning and Education in Africa – The Language Factor. A Stock-taking Research on Mother Tongue and Bilingual Education in Sub-Saharan Africa. Working Document presented at ADEA Biennial Meeting.
- Barton. A. C. 1998. *Feminist Science Education*. New York: Teachers College Press.
- Adu-Yeboah, C & Forde, L.D. 2011. Returning to Study in Higher Education in Ghana: Experiences of Mature Undergraduate Women. *Research in Comparative and International Education*, 6(4): 400–414.
- American Association for the Advancement of Science (AAAS).1998. *Teacher Education*. New York: Oxford University Press. Retrieved 18<sup>th</sup> January, 2016 from <http://www.project2061.org/publications/bfir/online/Teacher/text.htm>.
- African Union. 2003 (AU). Protocol to the African Charter on Human and People's Rights on the rights of Women in Africa, adopted by the Heads of State of the African Union, Maputo. Retrieved 17<sup>th</sup> January, 2016 from [http://www.achpr.org/english/info/women\\_en.html](http://www.achpr.org/english/info/women_en.html).
- Arreman, I. E. & G. Weiner. 2007. Gender, Research and Change in Teacher Education: A Swedish

- Dimension. *Gender and Education*, 19(3): 317–377. Retrieved 18<sup>th</sup> January, 2016 from <http://www.tandfonline.com/doi/abs/10.1080/09540250701295478>.
- Association of African Universities (AAU). Mainstreaming Gender in Higher Education in Africa. Accra. Retrieved 14<sup>th</sup> September, 2015 from [http://www.ungei.org/resources/files/Toolkit\\_complete.pdf](http://www.ungei.org/resources/files/Toolkit_complete.pdf).
- Banks J. A. & M. Banks C. 2005. *Multicultural Education: Issues and Perspectives* (5th edn.), Hoboken, NJ: John Wiley & Sons.
- Barker, G., R. Vierma, J. Crownover, M. Segundo, V. Fonseca, J. Contreras, B. Heilman, & P. Pawlak. 2012. Boys and Education in the Global South: Emerging Vulnerabilities and New Opportunities for Promoting Changes in Gender Norms. *Journal of Boyhood Studies*, 6(2): 137–150.
- Becker, R. 2009. Gender in Bachelor and Master Courses, University of Dortmund, Dortmund. Retrieved 15<sup>th</sup> April, 2016 from [www.gender-in-gestufte\\_studiengaenge.de/en\\_curricula\\_beispiel.php?gruppe=3&lg=en&curriculum=3](http://www.gender-in-gestufte_studiengaenge.de/en_curricula_beispiel.php?gruppe=3&lg=en&curriculum=3).
- Chartock R. K. 2010. *Strategies and Lessons for Culturally Responsive Teaching: A Primer for K-12 Teachers*. Boston, MA: Pearson.
- Concordia University 2013. What Role Do Teachers Play in the Educational Equity? Retrieved 9<sup>th</sup> August, 2016 from <http://education.cu-portland.edu/blog/ed-leadership/what-role-do-teachers-play-in-the-educational-equity-movement/>.
- United Nations Department of Economic and Social Affairs (UN-DESA). 2015. *The World's Women 2015 Trends and Statistics*. New York: United Nations.
- Engel, L & D. Rutkowski, 2012. *UNESCO Without U.S. Funding? Implications for Education Worldwide*. Bloomington: Center for Evaluation & Education Policy.
- Forum for African Women Educationist (FAWE). 2005. *Gender Responsive Pedagogy: A Teacher's Handbook*. Retrieved 9<sup>th</sup> August, 2016 from [http://www.ungei.org/files/FAWE\\_GRP\\_ENGLISH\\_VERSION.pdf](http://www.ungei.org/files/FAWE_GRP_ENGLISH_VERSION.pdf).
- . 2006. Gender responsive pedagogy. Retrieved 11<sup>th</sup> July, 2016 from [http://www.adeanet.org/adea/biennial-2006/doc/document/B5\\_2\\_fawe\\_en.pdf](http://www.adeanet.org/adea/biennial-2006/doc/document/B5_2_fawe_en.pdf).
- . 2009. Gender-Responsive Pedagogy. Available at <http://www.fawe.org/activities/interventions/GRP/index.php?lang=2&lang=1>.
- . 2016. Gender-Responsive Pedagogy. Retrieved 7<sup>th</sup> May, 2016 from <http://fawe.org/activities/interventions/GRP/index.php>.
- Gay G. 2002. *Culturally Responsive Teaching: Theory, Research and Practice*, New York, NY: Teachers College Press.
- Fox, D. 1983. Personal Theories of Teaching. *Studies in Higher Education*, 151: 151–152.
- Komba, S. 2011. Gender Responsive Pedagogy Lesson Planning. Retrieved 15<sup>th</sup> July, 2016 from <http://www.slideshare.net/sophiakomba/gender-responsive-pedagogy-g-r-p>.
- Kreitz-Sandberg, S., 2016. Improving Pedagogical Practices through Gender Inclusion: Examples from University Programmes for Teachers in Preschools and Extended Education. *International Journal for Research on Extended Education*, 4(2): 71–91.
- Kreitz-Sandberg, S. 2013. Gender Inclusion and Horizontal Gender Segregation: Stakeholders' Strategies and Dilemmas in Swedish Teachers' Education. *Gender and Education*, 25(4): 444–465.
- Iqbal, J. 2015. The Educational Struggle Faced by Girls Around the World. Retrieved 15<sup>th</sup> April, 2016 from <http://www.bbc.com/news/education-33424525>.
- Lahelma, E. 2014. Troubling Discourses on Gender and Education. *Educational Research*, 56(2): 171-183.

- Lan, S. 2010. A Gender Perspective on Educational Facilities. Retrieved 10<sup>th</sup> July, 2016 from <https://www.oecd.org/edu/innovationeducation/centreforeffectivelearningenvironmentscele/45566604.pdf>.
- Larkey, F.R & J. L. Knight. 2002. Test-retest Reliability and the Birkman Method. Accessed on 15<sup>th</sup> July, 2016 from [www.careerlab.com/birkman\\_reliability.pdf](http://www.careerlab.com/birkman_reliability.pdf).
- Luke, C. & J. Gore (eds.). 1992. *Feminisms and Critical Pedagogy*. New York: Routledge.
- Mlama, P., M. Dioum, H. Makoye, L. Murage, M. Wagah, & R. Washika, 2005. *Gender Responsive Pedagogy: A Teacher's Handbook*. Nairobi: Forum for African Women Educationalists (FAWE).
- Mossman, M.J., 1995. Gender Issues in Teaching Methods: Reflections on Shifting the Paradigm. *Legal Education Review* 6(2): 129–152.
- National Sciences Education Standards (NSES). 1999. *National Committee on Science Education Standards and Assessment, National Research Council*. Washington, DC: National Academy Press.
- Norton, B. & K. Toohey (eds.). 2004. *Critical Pedagogies and Language Learning*. Cambridge: Cambridge University Press.
- Organization for Economic Co-Operation and Development (OECD) & Centre for Educational Research and Innovation (CERI). 2008. International Conference “Learning in the 21st Century: Research, Innovation and Policy” 15–16 May 2008, available on <http://www.oecd.org>.
- Orodho, J. A. 2014. Policies on Free Primary and Secondary Education in East Africa: Are Kenya and Tanzania on Course to Attain Education for All (EFA) Goals by 2015 *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 19(1): 11–20.
- Siedentop, D. & D. Tannehill. 2000. *Developing Teaching Skills in Physical Education*. Mountain View, CA: Mayfield.
- Skjortnes, M. & H. H. Zachariassen. 2010. 'Even With Higher Education You Remain a Woman': A Gender Perspective on Higher Education and Social Change in the Toliara Region of Madagascar. *Gender and Education*, 22(2): 193–207.
- Sokoine University of Agriculture (SUA). 2016. A Fourth Five Year Corporate Strategic Plan (2016 - 2021). SUA- Morogoro, Tanzania
- Sperling, G. & R. Winthrop. 2016. *What Works in Girls' Education*. Washington DC: Brookings Institution Press.
- United Nations Education, Scientific and Cultural Organization (UNESCO). 2010. The Missing Link? Rethinking the Internationally Agreed Development Goals beyond 2015. UNESCO Future Forum on Gender Equality. 9-11 September 2010. Athens, Greece.
- . 2015. A Guide for Gender Equality in Teacher Education Policy and Practices. Retrieved 11<sup>th</sup> September, 2016 from <http://unesdoc.unesco.org/images/0023/002316/231646e.pdf>.
- . 2012. Youth and skills: Putting education to work. EFA Global Monitoring Report 2012. Retrieved 16<sup>th</sup> September, 2016 from <http://unesdoc.unesco.org/images/0021/002180/218003e.pdf>.
- United Nations International Children's Fund (UNICEF). 2015. Girls' education and gender equality. Retrieved 15<sup>th</sup> April, 2016 from [http://www.unicef.org/education/bege\\_70640.html](http://www.unicef.org/education/bege_70640.html).
- Warin, J. & V. Adriany. 2017. Gender Flexible Pedagogy in Early Childhood Education. *Journal of Gender Studies*, 26(4): 375–386.
- ZGF & ZOCS. 2015. Promoting the advancement of girls and boys in community schools in Zambia. Retrieved 15<sup>th</sup> July, 2016 from [http://zambiagovernance.org/wp-content/uploads/2014/08/ZOCS\\_Promoting-inclusiveness-in-community\\_schools\\_Toolkit\\_Final.pdf](http://zambiagovernance.org/wp-content/uploads/2014/08/ZOCS_Promoting-inclusiveness-in-community_schools_Toolkit_Final.pdf).