

Gender and Development Practices, Challenges and Prospects of Engineering Department of State University

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Abstract: *The key to achieving development is promoting gender equality in and through education. This study determined the level of Gender and Development (GAD) implementation practices, challenges, and prospects of engineering faculty of the State University. This study further determined the level of GAD implementation practices in terms of Planning, Budgeting, Policy Formulation, Training, Accountable Persons, Evaluation and Monitoring Tools, Women's Roles and Needs, Sexual Harassment Prevention, and Partnerships, and the level of gender responsiveness of the engineering faculty. The study further determined the relationship between GAD implementation practices and gender responsiveness. Descriptive correlation research design was employed involving 58 engineering faculty from four State University and Colleges of the Caraga Region as the participants employing a stratified proportionate sampling. It was found out that engineering faculty displays gender responsiveness, frequently implemented GAD practices. Results revealed that there was a significant relationship between gender responsiveness and the level of GAD implementation practices. The study revealed to enhance the GAD implementation particularly in budgeting, planning, and evaluation and monitoring. It is recommended to ensure that school administrators involve and empower all faculty members in policy making, budgeting, monitoring, and evaluation and to impose the creation of GAD Agenda to achieve gender equality.*

Keywords: *gender responsive, Gender and Development, implementation, practices*

1. INTRODUCTION

The key to achieving development is promoting gender equality in and through education, including higher education. Researchers studied gender equality and gender-based inequality to improve women chances in higher education academic careers (Silander et al., 2022; Rouhanizadeh & Kermanshachi, 2021). According to Kurchenko, Kolomiyets-Ludwig & Ilnytsky (2022), women empowerment is very important for sustainable development of higher education. Despite these numerous studies, there still exist several challenges in the implementation of GAD in higher education worldwide.

Gender responsive refers to activities, policies, and programs design and implementation addressing the various situations, roles, needs, and interests of men, women, girls, and boys and that avoid discrimination based on gender or gender-related issues. Gender responsiveness advances gender equality when bias and inequity are addressed. Hernandez and Cudiamat (2018) reiterate that gender-responsive approach is still important. The classroom should incorporate a teaching strategy that promotes gender equality and helps students perform better academically.

The Philippines is a State Party to the United Nations (UN) Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and is thus obligated to pursue and implement gender equality (CHED Memorandum Order No. 1, s. 2015). Gender equality is mandated by Philippine laws, namely: the 1987 Philippine Constitution, Article II, Section 14; the Women in Development and Nation Building Act or Republic Act No. 7192; and the Magna Carta of

Women (MCW) or Republic Act No. 9710. More, specifically, the MCW Implementing Rules and Regulations (IRR) of 2010, mandates the Commission on Higher Education to develop, promote, implement, and strengthen GAD in the Philippine higher education institutions (CHED Memorandum Order No. 1, s. 2015). Currently, several Filipino researchers focused their studies on GAD implementation in higher education, such as: Ballado, Perez & Aquino (2022); Villegas, Dacullo & Simbahon (2022). Ballado, Perez & Aquino (2022) found that higher education is still challenged by assumptions and stereotypes about gender, such as ability in engineering based on gender.

The Commission on Higher Education (CHED) and other academic institutions play a vital role in addressing gender inequality in the nation. It should provide institutional support for academics of both sexes, making gender equality a key component of its strategies. State University and Colleges (SUCs) have established their mechanisms in compliance to CMO 1, s. 2015. Hence, this study was conducted to find out how well and how far these SUCs have gone in the GAD implementation. This is to determine the level of Gender and Development implementation practices of the engineering faculty.

2. THEORETICAL FRAMEWORK

The study is primarily anchored on the concept of Social Cognitive Theory of Gender Development and Differentiation of Kay Bussey and Albert Bandura (1999) which states that human differentiation based on gender is a fundamental phenomenon that affects virtually every aspect

of people’s daily life. The Social Cognitive Theory emphasizes that educational attainment facilitates positive interactions and social well-being (Eramudugolla et al., 2022). Some researchers also demonstrated how knowledge sharing positively impacts gender equality (Elomäki, Mustosmäki, & Sandberg, 2021; Elomäki, 2021).

3. OBJECTIVES OF THE STUDY

This study determined the level of Gender and Development (GAD) implementation practices, challenges and prospects among engineering faculty of SUCs in the Caraga Region, Philippines.

Specifically, it sought to answer the following questions:

1. What is the level of Gender responsiveness of engineering faculty, in terms of its learners, facilitating and learning, courses and learning materials and faculty and management?
2. What is the level of GAD Implementation practices, challenges and prospects faced, in terms of planning, budgeting, policy formulation, training, accountable persons, evaluation and monitoring tools, women’s roles and needs, sexual harassment prevention, and partnerships?
3. Is there a significant relationship between the level of GAD Implementation practices and gender responsiveness of engineering faculty?

4. RESEARCH METHODOLOGY

This study was conducted in four selected State University and Colleges in the Caraga Region. The descriptive-correlation analysis utilizing the survey technique was used. The study used stratified proportionate random sampling in selecting participants that involved 58 engineering faculty of the four selected SUCs of the Caraga Region. A Researcher-made instrument with crafted areas was designed to gather the necessary data. It was submitted to the GAD specialists for content validation. Upon approval of the campus Director, it was piloted to 30 faculty at the department who were excluded as participants of the study. Their responses were collected and submitted to the statistician. It has a reliability index of .987 which made the research instrument valid and reliable. During the data gatherings questionnaires were personally distributed to the participants. Then, the data was collected, tabulated, and submitted to the statistician for analysis and interpretation. Weighted mean was used to determine the level of GAD implementation practices, challenges and prospects and the level of gender responsiveness. Pearson product-moment correlation coefficient was used to determine the relationship between GAD implementation practices and gender responsiveness.

5. RESULTS AND DISCUSSION

Table 1 presents the summary of the area of the level of gender responsiveness of the engineering faculty. It can be gleaned in table 1 that among the four areas, Learners

garnered the highest weighted mean (4.32) and least weighted mean in Facilitating and Learning (3.79).

Table 1. Summary of area of the level of gender responsiveness of the engineering faculty

Area	Weighted Mean	Adjective Description
1. Learners	4.32	Display of gender responsiveness
2. Facility and Learning Environments	3.79	Display of gender responsiveness
3. Courses and learning materials	3.91	Display of gender responsiveness
4. Faculty and management	4.13	Display of gender responsiveness
Average Weighted Mean	4.04	Display of gender responsiveness

Legend: 4.50 – 5.00 – Highly display of gender responsiveness; 3.50 – 4.49 – Display of gender responsiveness; 2.50 – 3.49 – Quite a display of gender responsiveness; 1.50 – 2.49 – Almost no display of gender responsiveness; 1.00 – 1.49 - No display of gender responsiveness

The average weighted mean of 4.04 with adjective description of Display of gender responsiveness. This result implies that all students regardless of sex, ethnicity, religion and age are allowed to enroll in any engineering degree. Engineering faculty facilitate gender-based violence reports and provide guidance and mentoring to all students. However, studies also show that facilities like availability of lactation room for lactating students and faculty members, availability of private rooms where students can freely express or report incidences of gender-based violence and availability of prayer rooms for all religions be given consideration to be gender-responsive institution.

Table 2 presents the summary of the level of GAD implementation practices of engineering faculty. It can be gleaned in table 2 that among the nine areas, the highest weighted mean is Accountable Persons (4.10) and the least weighted mean is Planning (3.90).

Table 2. Summary of areas of the level of GAD implementation practices of the engineering faculty

Areas	Weighted Mean	Adjective Description
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1. Planning	3.90	Frequently
2. Budgeting	3.91	Frequently
3. Policy Formulation	3.97	Frequently
4. Trainings	4.01	Frequently
5. Accountable Persons	4.10	Frequently
6. Evaluation and Monitoring Tools	3.95	Frequently
7. Women's Roles and Needs	4.06	Frequently
8. Sexual Harassment Prevention	4.09	Frequently
9. Partnerships	3.91	Frequently
Average Weighted Mean	3.99	Frequently

Legend: 4.50 – 5.00 – Always; 3.50 – 4.49 – Frequently; 2.50 – 3.49 – Sometimes; 1.50 – 2.49 – Seldom; 1.00 – 1.49 – Never

The GAD implementation practices of engineering faculty have an average weighted mean of (3.99) with an adjective description of Frequently. This result tells that accountable person like GAD Focal Point System (GFPS) are established in the four SUC's, with the support of top management in the implementation of gender mainstreaming activities, plans and projects. However, there is a need to enhance the conduct of gender analysis and use of such in the development and ensure the formulation and adaptation of a long-term strategic plan or GAD agenda.

Table 3. Correlation analysis on the level of GAD implementation practices and the gender responsiveness

Variables	r-value	P-value	Interpretation	Decision
GAD Implementation Practices and Gender Responsiveness	.544	.000	Significant	Reject Ho

Level of significance at 0.05

It can be gleaned in table 3 that GAD implementation practices in terms of planning; budgeting; policy formulation; training; accountable persons; evaluation and monitoring

tools; women's roles and needs; sexual harassment prevention; and partnerships has a significant correlation ($r = 0.544$, $p = 0.000$) to gender responsiveness of the engineering faculty. Thus, at a level of significance of 0.05, the null hypothesis is rejected. There is a significant relationship between GAD implementation practices and gender responsiveness of engineering faculty.

5. CONCLUSION AND RECOMMENDATIONS

1. Projects and activities in education that are gender-responsive and encourage greater access to and completion of high-quality education for both women and men have multiplier effects. The relationship between GAD implementation practices and gender responsiveness suggests that enhancing GAD implementation also enhances gender responsiveness among engineering faculty. Since gender responsiveness predicts the implementation of GAD practices of engineering faculty did not entirely produce the desired results to gender equality as not all engineering faculty implemented the policy especially in the classroom setting. Based on the study's findings, it is recommended that level of GAD implementation in the engineering departments, hence, additional programs, project, and activities specifically dedicated to gender responsiveness would ultimately increase GAD implementation. Higher Education Institutions need to develop provisions of GAD-related training, most specifically about gender responsiveness. Future studies would be helpful, especially in assessing the effectiveness of gender sensitivity and responsiveness training to the improvement of GAD implementation in engineering departments.

6. ACKNOWLEDGEMENT

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