



STUDENTS' AWARENESS OF GENDER – RESPONSIVENESS: BASIS FOR CRAFTING OF CRITERIA FOR INSTRUCTIONAL MATERIALS DEVELOPMENT

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ABSTRACT

The integration of Gender and Development (GAD) policies into education has emphasized the need for gender-responsive instructional materials. However, many educational institutions face challenges in implementing these materials due to resource constraints and limited awareness among both students and educators.

This study examined students' awareness of gender-responsive instructional materials as a foundation for developing criteria for their design and implementation. Specifically, it investigated students' awareness and understanding of these materials, their perceived impact on participation and performance, and the relationship between demographic factors and awareness levels.

The study highlighted the necessity of gender-sensitive pedagogy across all subjects and aims to establish criteria that ensure inclusivity, equity, and effectiveness in instructional materials. Findings from this study will contribute to the development of comprehensive guidelines that support the creation of instructional materials aligned with GAD principles, fostering a more inclusive and equitable learning environment.

The findings of the study revealed that students' have a low level of awareness in both age and sex categories. This led to the direction of putting the education with an emphasis on the use of a gender – responsive instructional materials across disciplines.

With this, the development of a gender – responsive instructional materials shall be enforced following the crafted criteria to ensure alignment with the policies and mandates of the government pertaining to the creation and utilization of the gender – responsive instructional materials.

Keywords: Gender-responsiveness, Inclusivity, Instructional Materials, Gender Awareness, Criteria for IMs Development



INTRODUCTION

The policies on Gender and Development (GAD) has been fully implemented across the world and it does not exempt the academic sector. Massive changes has been brought to the country's educational system. These changes raised many problems, most especially the preparedness of the educational institutions to embrace the policy due to a minimal resource, particularly for gender-based instructional materials. Many students and even some teachers were also not fully aware of the concept of gender-responsive instructional materials including its impact on participation and performance in the teaching-learning process.

One of the most pressing challenges in schools is gender sensitivity issues occurring in the learning materials used in schools. Amerian and Esmaili (2014) pointed out in their study that designing and developing a textbook needs consideration of various factors such as age, ethnicity, class, gender, ability levels, or purposes of the curriculum and the manifestation of sexist language used in the learning materials. The idea of examining any textbook that may give clear idea of how gender stereotypes can be lessened, if not totally eliminated was also pointed out in this study.

The study of Bromley, et.al, Nakagawa and Wotipka (2016) stressed that over the past 50 years, mentions of women and women's rights in textbooks have already increased. However, women remained underrepresented in textbooks and other instructional materials, in many countries, that is, the write up of textbooks and other instructional materials still involve the male gender when using nouns and pronouns in all arguments such as "He", "the fisherman", etc. rather than "He/she", the fisher, to describe the subject in a sentence. It is because the male noun or pronoun as a subject in an argument has been generally regarded as the representation for both to mean male and female.

The study of Bombani (2015) mentioned that learning materials have too often been typical examples of insensitive language use and role modeling. Similarly, Gershuny (2012) argued that textbooks are supposed to instruct some disciplines, but these textbooks, in effect, convey secondary information that is "gender roles and social values". However, the study was focused on identifying gender roles and social values rather than on the development of instructional materials.



In 2009, a study conducted by Z. Ozdilek (2009) proved that the design of instructional materials has a positive impact on low-performing students. Hence, one of the most important steps in teaching is intentionally designing instructional methods and materials that will be suited to the demands of the educational system and the needs and interests of the learners.

As pointed out in the study of Kintanar (2014), some examples of sexism in the English language which were found in the use of pronouns, particularly the pronoun he and of the generic masculine man to denote human beings of both sexes, the use of suffixes such as “ess” for instance in the terms, authoress, poetess, etc. which has the effect of ambiguity and trivialization and the use of names and titles for women that define them not in their own right but about men.

In the US, the Commonwealth of Learning introduced the “Guide to Gender-Responsive Learning Materials Development” in 2019, which aimed at enhancing gender equality considerations in learning materials. The purpose of this tool is to help course writers, curriculum designers and educators who are responsible in leading the educational process toward incorporating gender-responsive curriculum and instruction, particularly along the process of instructional materials development.

In the Philippines, the Commission on Higher Education (CHED) recognizes the crucial role of Gender and Development (GAD) in fostering an inclusive learning environment. CHED Memorandum Order No. 1, series of 2015 (CMO No. 1, s. 2015) emphasizes the importance of integrating GAD principles into educational practices. This policy mandates the development of gender-fair instructional materials to promote equal opportunities for all learners, regardless of their gender identity as exemplified in Part V, Sections 1, 3, 4 and 7 in the CHED Memorandum Order.

In connection with this, the Department of Science and Technology-Science Education Institute (DOST) launched a project on gender-responsive pedagogy for Secondary science education. The project aims to train teachers to become gender-sensitive and responsive in their pedagogy in the teaching-learning process.

However, it should not only be the science subject that needs to apply gender-sensitive pedagogy but also in other fields. Gender-sensitive methods, principles, practices of



instruction and learning needs for gender-sensitive instructional materials is the responsibility of the teachers to identify, analyze, and determine if the instructional materials they are using are gender sensible and sensitive to sexist language so that they are aware of gender equality.

Considering the importance of motivating students to gain interest in the lessons and the advocacy in line with a gender-responsive learning environment, the researcher has decided to determine the students' awareness of gender – responsive instructional materials which shall serve as a basis for the development of a criteria for the development of gender-responsive instructional material.

This study aimed to examine students' awareness of gender-responsive instructional materials and how this awareness can serve as a basis for crafting criteria for instructional materials development.

The recent Mid-Decade Assessment has shown that reaching vulnerable learners and improving the quality of education and learning outcomes are among the greatest remaining challenges on the way towards 'Education for All' (EFA). Part of this challenge is to ensure that the voices of marginalized communities are heard in the dialogue around the provision of relevant and quality education

The concepts and findings from various literatures and studies which the researcher will obtain from books, journals, newspapers, and online resources will prove that there are necessity to employ new teaching methods to fit the nature of the learners and to suit the needs of the society through a valid and reliable instructional material.

With the issue of scarcity of the learning materials, the challenge to develop appropriate instructional materials with the ultimate goal of enhancing student learning rests with teachers.

The immediate concern of this study is to develop a strategy that will help students gain mastery of the lessons while keeping in mind the specific gender roles they have to portray in a particular setting. There are many tested methods for teaching mastery of the subject matter but few are considered reliable.

The study used a descriptive–developmental educational research design which was focused on creating and refining a criteria for the development of instructional materials in the form of a module. It was carried



out in a two-fold manner: the assessment of students' awareness on gender-responsive instructional materials and the crafting of the criteria for the development of gender-responsive instructional materials.

The output of the study was limited to the development of a criteria for the development of a gender - responsive instructional materials based on the developed criteria.

A total of 362 first year students from a total population of 1,038 were taken as the respondents of the study. Table 1 below shows the distribution of respondents according to their age

Table 1: Respondents According to Age and Gender

Age	Gender			Total
	Male	Female	Prefer Not to Tell	
16 – 18	75	100	3	178
19 – 21	33	46	1	80
22 – 24	37	43	2	82
25 – 28	22	0	0	22
TOTAL	167	189	6	362

In terms of age, it can be seen in the table that majority of the respondents fall in the age range of 16 – 18 which constituted a total of 178 or 49.17%. It was followed by those with age from 22 – 24 counting to 82 or 22.65% of the distribution. Third on the rank was those with age ranging from 19 – 21 with a total of 80 or 22% of the total number of respondents while age ranging from 25 – 28 registered the least number of participants with only 22 or 6.01% of the total number of participants.

Also, the table revealed that out of the 362 students, majority were female constituting 189 or 52.21%. There were 167 or 46.13% who were male while there were six (6) students or 1.66% who preferred not to tell their gender preference.

A researcher-made questionnaire was used to gather the needed data to determine the students' awareness of Gender – responsive instructional materials.

To determine the students' level of awareness on the gender – responsive instructional materials, another set of researcher – made questionnaire were used which included three sub – categories related to (1) Awareness and Understanding, (2) Perceived Impact on Participation and (3) Perceived Impact on Performance.

In determining their level of awareness, the scale below was used:



POINT	SCALE RANGE	DESCRIPTION
3	2.34-3.00	Fully Aware
2	1.67-2.33	Slightly Aware
1	1.00-1.66	Not Aware

The findings of this research were based on the assessment of the students' awareness of gender – responsive instructional materials. The results of this study provided enough reason for the crafting of a criteria for the development of a gender – responsive instructional materials which focused on the representation of diverse gender identities, avoidance of gender stereotypes, and promotion of gender equality.

Survey was conducted to determine the students' awareness on gender – responsive instructional materials. The table below shows the gathered data from the responses of the students.

Table 2: Awareness on Gender – Responsive Instructional Materials

	Mean	Description
A. Awareness and Understanding		
1. I am aware of the term "gender - responsive" instructional material	2.13	Slightly Aware
2. I believe that instructional materials can be designed to be inclusive to all gender	2.11	Slightly Aware
3. I have encountered gender - responsive instructional materials in my math classes	2.00	Slightly Aware
Mean	2.08	Slightly Aware
Perceived Impact on Participation		Slightly Aware
1. Gender - responsive instructional materials encourage my participation in classes	2.09	Slightly Aware
2. I feel more comfortable sharing my ideas in when gender - responsive materials are used	2.06	Slightly Aware
3. The use of gender - responsive instructional materials make me more willing to engage with tasks	2.14	Slightly Aware
Mean	2.10	Slightly Aware
Perceived Impact on Performance		Slightly Aware
1. I believe that gender - responsive instructional materials positively influence my academic performance	2.05	Slightly Aware
2. I perform better when the materials are designed to be inclusive of all genders	2.08	Slightly Aware



3. I think that gender - responsive instructional materials help reduce gender stereotypes	2.05	Slightly Aware
Mean	2.06	Slightly Aware
Grand Mean	2.08	Slightly Aware

The table revealed that students have a little knowledge on the gender – responsive instructional materials. This idea led to the understanding of the crafting of a criteria for the development of a gender – responsive instructional materials.

When students were asked about how can gender - responsive instructional materials improved their academic performance, the following were given as their responses:

“It helps me positively improve especially those things I didn't know yet” – AJR (BEEEd).

“The gender - responsive instructional materials helps me improve my thinking skills” – ST (BPEd)

“It can boost the courage of students to participate in class” – MJP (BPEd)

“Ensures that Math and real - life application do not perpetuate gender stereotype” – JLA (BSA)

“Implementing this strategy promotes equity, diversity and inclusivity, enhancing education for all students” – MAA (BSF)

“Gender - responsive teaching materials can encourage male and female learners having gender sensitivity” – JH (BSBA)

“It will definitely improve our performance” – CA (BSHM)

“We can easily understand the topic and the use of gender - responsive materials helps us to improve our knowledge” – BRDC (BSIT)

“It helps eliminate biases among men and women” – JRG (BSABE)

“I think that gender - responsive instructional materials positively influence my performance and can help me gain knowledge” – CA (BTVTEd)

“Gender - responsive instructional materials encourage my participation and make me more willing to engage in my subjects” DC (BSEd)



Table 3: Test of Significant Relationships Between Students' Awareness on Gender – Responsive Instructional Materials and Profile in Terms of Age and Sex

Correlation between Profile and Awareness on Gender – Responsive Instructional Materials			
Profile	Awareness and Understanding	Perceived Impact on Participation	Perceive Impact on Performance
Age	F = 0.468 p = 0.705 <i>Not Statistically Significant</i>	F = 0.493 p = 0.687 <i>Not Statistically Significant</i>	F = 0.293 p = 0.831 <i>Not Statistically Significant</i>
Sex	F = 0.652 p = 0.521 <i>Not Statistically Significant</i>	F = 0.415 p = 0.660 <i>Not Statistically Significant</i>	F = 0.132 p = 0.876 <i>Not Statistically Significant</i>

The table revealed that among all the areas of concern, the result indicated that age and gender does not influence students' awareness of gender-responsive instructional materials. All the respondents across ages and gender, (male, female, as well as those who preferred not to disclose their gender) have similarly low awareness levels, indicating that the issue is not specific to any age and gender but rather a general lack of exposure or emphasis on gender-responsive instructional materials.

The table also showed that age does not significantly correlate with awareness. This means that students of different age groups have similar awareness levels, and age does not appear to be a determining factor in how well students understand or recognize gender-responsive instructional materials.

This further implied that awareness of gender-responsive instructional materials does not increase with age. This could indicate that students are not being exposed to such materials over time or that their awareness is not significantly shaped by age-related experiences in their education.

Since awareness does not increase with age, it also portrayed that older students have not necessarily encountered more gender-responsive instructional materials than younger students, which might indicate a gap in curriculum integration.

Also, since neither age nor sex significantly influences awareness, it can be concluded that students, regardless of their demographic characteristics, have generally low awareness of gender-responsive instructional materials. This generally means that Gender inclusivity in instructional materials is likely not emphasized in current teaching practices and that the



concept of gender-responsive education may not be well integrated in instruction. Hence, there is no natural increase in awareness over time or by gender, reinforcing the need for deliberate educational interventions.

With these results, the study highlights the need for active integration and promotion of gender-responsive instructional materials in education. Hence, a gender-responsive instructional materials will be needed to ensure that gender inclusivity becomes a well-integrated aspect of education.

Therefore, a criteria for the development of gender – responsive instructional materials was crafted and shown below.

The table below presents the proposed Criteria for the Development of Instructional Materials Based on the Students' Awareness of Gender – Responsive Instructional Materials

Table 4: proposed Criteria for the Development of Instructional Materials Based on the Students' Awareness of Gender – Responsive Instructional Materials

Students' Level of Awareness	Criteria
Awareness and Understanding	A. Content, Integration, Language and Interaction 1. The activities in the Instructional Materials include a variety of interactions that promote gender-based learning outcomes. 2. Instructions provide clear student expectations and match course objectives which reflects an absence of gender stereotypes 3. Activities are varied, relevant bias-free and able to attract curiosity of learners 4. The examples are highly relevant and showcasing how contents are applied to experiences of all genders 5. The language is inclusive and avoids gender bias in pronouns and terminologies Activities are highly collaborative and cater to diverse learning styles of learners across all genders B. Objectives 1. Objective/s is/are Specific, Measurable, Attainable, Relevant, Time – Bound (SMART) and is/are free of bias. 2. Each set of specific objectives clearly leads to the achievement of its relevant general objectives. 3. The objective/s is/are met based on the contents C. Sequence and Layout 1. The content has been arranged in logical sequence of learning; the unit forms a series of logical steps in the learning sequence 2. All visual elements are appropriate, bias – free, free of
Perceived Impact on Participation	
Perceived Impact on Performance	



	<p>gender stereotypes and have successfully integrated into the learning sequence</p> <p>3. The layout of the pages is well organized making the IM appear interesting to all genders for easy understanding</p> <p>4. All learning activities have been clearly planned as Input – Process – Output (I – P – O) cycles</p> <p>D. Clarity of Instruction and Assessments</p> <p>1. The assessment/s match/es the learning objectives</p> <p>2. Assessment is fair and unbiased, focusing purely on conceptual and critical understanding</p> <p>3. Clear directions for assessment/s is/are provided and is/are easy to follow</p> <p>4. Rubrics are well – presented for the purpose of assessing/grading outputs</p> <p>E. Veracity of Content and Suitability of Approach</p> <p>1. Each lesson in IM is within the category of the content of the IM as a whole</p> <p>2. Learning activities are gender–responsive and promote active participation and response</p> <p>3. The IM promotes gender – responsiveness and meets a clearly defined need.</p> <p>4. The content of the IM is readable, bias – free and easy for the students to consume and understand</p> <p>5. The content of the IM is well – presented providing adequate scope, range, depth, continuity and evaluation</p>
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The developed criteria in developing gender – responsive instructional materials were subdivided into five sections which are briefly discussed in the table below.

Table 5: Descriptions of the Different Sections of the Developed Criteria in Developing Gender – Responsive Instructional Materials

Section	Brief Description
A. Content Integration, Language, and Interaction	This section emphasizes creating instructional materials that foster inclusive learning experiences and promote equality across genders. Activities should be designed to encourage meaningful interactions and engagement, ensuring that content is free from stereotypes and relevant to learners' diverse backgrounds. Examples and activities should reflect real-life scenarios applicable to all genders, while the language must avoid bias and be inclusive,



	such as using gender-neutral pronouns. Additionally, materials should accommodate diverse learning styles to ensure effective participation by all students.
B. Objectives	The objectives serve as the foundation of instructional materials and should adhere to the SMART (Specific, Measurable, Attainable, Relevant, Time-bound) framework. They must clearly articulate what learners are expected to achieve and ensure that no biases are embedded in their formulation. Specific objectives should logically align with broader general objectives, ensuring continuity. Furthermore, the instructional content must directly support achieving the stated objectives, ensuring relevance and clarity for learners.
C. Sequence and Layout	This section ensures that the instructional material is organized logically, following a progressive sequence of concepts to facilitate easier understanding. Visual elements, such as charts or diagrams, must be inclusive and free of gender stereotypes, enhancing the learning experience for all students. The layout should be visually appealing, with content structured in Input-Process-Output (I-P-O) cycles, presenting concepts, processes, and outcomes in a clear and engaging format.
D. Clarity of Instruction and Assessments	Clarity in instructions and assessments is essential for learners' success. Directions for activities and assessments should be straightforward and easy to follow, avoiding ambiguity. Assessments must align with learning objectives, ensuring fairness and



	focusing on evaluating students' conceptual understanding and critical thinking. Clear rubrics for grading should accompany assessments to provide transparent criteria for evaluating learners' outputs, fostering fairness and inclusivity.
E. Veracity of Content and Suitability of Approach	This section ensures that the instructional material is accurate, inclusive, and aligned with its intended purpose. Lessons must be gender-responsive, fostering active participation and meeting clearly defined needs. The content should be bias-free, accessible, and appropriate for learners, maintaining an adequate balance of scope, depth, and continuity. The instructional approach must resonate with all students, ensuring an equitable and enriching learning experience.

The use of these guidelines and criteria in developing the instructional material will ensure compliance to the mandates or policies for a gender – responsive curriculum and education as stipulated in CMO No. 1, s. 2015 and DepEd Order 32, s. 2017, and the Sustainable Development Goals (SDGs) Number 4.

CONCLUSION

The study pointed out that the students' have a little knowledge of the gender – responsive instructional materials in terms of awareness and understanding, perceived impact on participation, and perceived impact on performance.

The test of significant relationship between students' awareness of gender-responsive instructional materials and demographic profile in terms of age and sex revealed among all the areas of concern, the result indicated that age and gender does not influence students' awareness of gender-responsive instructional materials. With these results, the study highlights the need for active integration and promotion of gender-responsive instructional materials in education. Hence, a gender-responsive instructional materials will be needed to ensure that gender inclusivity becomes a well-integrated aspect of education.



The result of the study led to the crafting of the proposed Criteria for the Development of Instructional Materials Based on the Students' Awareness of Gender – Responsive Instructional Materials. The use of the guidelines and criteria in developing the instructional material ensured compliance to the mandates or policies for a gender – responsive curriculum and education as stipulated in CMO No. 1, s. 2015 and DepEd Order 32, s. 2017, and the Sustainable Development Goals (SDGs) Number 4.

The findings of the study revealed that students' have a low level of awareness in both age and sex categories. This led to the direction of putting the education with an emphasis on the use of a gender – responsive instructional materials across disciplines. With this, the development of a gender – based instructional materials shall be enforced following the crafted criteria to ensure alignment with the policies and mandates of the government pertaining to the creation and utilization of the gender – responsive instructional materials. Align with these findings, the use of the crafted criteria for developing gender – responsive instructional material may also be used in developing other types of instructional materials and in other discipline. Further scrutiny and review of the developed criteria may also be done by experts to determine its effectiveness.

Schools and educators should explicitly introduce gender-responsive instructional materials and ensure their presence in textbooks. Conduct of professional development workshops on gender-responsive teaching strategies should be a priority of educational institutions to ensure increase of awareness of gender to both students and teachers. Student seminars or awareness programs on the importance of gender inclusivity in education shall be done to help increase recognition and understanding of gender-responsive materials.

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