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GENDER RESPONSIVENESS IN THE CURRICULUM AND ITS RELATIONSHIP AND INFLUENCE TO STUDENTS' LEARNING BEHAVIORS

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ABSTRACT

This research evaluated the teachers and students' perception of gender responsiveness in the curriculum in Lipa City Colleges (LCC), and examined how the responsiveness to gender of the instructional materials, learning activities, and teacher-student interactions within the classroom relate to and influence the relationship of important learning behaviors such as student motivation and participation. By understanding the interactions within this dynamic system of perceptions and behaviors, the study aimed to provide empirical support in developing strategies and interventions, necessary to address institution-specific concerns and needs in terms of providing gender-equitable approach to learning. Utilizing a quantitative, survey-correlational research design, data were collected from randomly-selected faculty members (*n*=58) and students (*n*=690) from the eight college departments of Lipa City Colleges, using both self-constructed and adapted measures. Analyses of the collected and tabulated data were done using the SPSS, including PROCESS Regression Analyses, a macro-program created by Hayes (2016).

Results showed that teachers and students in LCC perceive that the curriculum, particularly in terms of instructional materials, learning activities, and teacher-student interactions, is gender-responsive. However, gender responsiveness in the curriculum remains to be a concern for the institution, as evidenced by the considerable disagreement between the perception of teachers and the students. Male students are at a more disadvantaged position compared with their female counterparts. It was also revealed that gender responsiveness has both motivational and engaging value. Meaning, good perceptions of gender responsiveness in the curriculum are generally associated with higher motivation, and with increased participation and decreased disengagement in learning experiences. Gender responsiveness in the curriculum mostly influence, through a moderating role, negative learning behaviors. However, the levels of gender responsiveness must be at above average level to be able to affect how student motivation predicts participation to learning experiences.

Several implications were derived from these findings, and recommendations were made such as further research, inclusion gender-related strategies in teacher-training, and involvement of all stakeholders in the planning and implementation of gender-responsive enhancement programs in the curriculum.

Keywords: Gender responsiveness, curriculum, learning, student motivation, student participation

INTRODUCTION

Education is a basic human right (UNESCO, 2015)—and in the past years, international down to local organizations have exerted efforts to ensure that both men and women are provided not only with equal access to learning opportunities but also of fair treatment in the learning process. The World Declaration on 'Education for All' (EFA) in 1990, the Millennium Development Goals (MDGs) in 2000, and the UNESCO's Medium-Term Strategy for 2014–2021, have identified gender equality as one of the global priorities and shall remain to be a central issue in the global post-2015 education agenda.

Since gender equality has become a priority on international development programs, many countries have adopted mainstreaming gender in their national policies. *Gender mainstreaming* is a global strategy for promoting gender equality by assessing the implications for women and men of any legislation, policy, or program. Although this applies to many aspects of the contemporary society, the educational system is seen to best address gender inequality in the social systems because it is in school that a gender-sensitive generation is honed. When men and women receive equal access to learning opportunities and are treated fairly, students can develop their potential, feel empowered to achieve their dreams, and contribute to and benefit from social, cultural, political and economic development as equals (UNESCO, 2015). More so, many UNESCO member states have identified 'teachers' as central to education quality and gender equality because of the role they play in the transmission of values, knowledge, and the development of human potential and skills.

As a response to this international directive, the Philippine government has mandated the educational sector to mainstream gender in all public and private educational institutions nationwide through the Department of Education (DepEd) Order No. 27, s. 2013, and the Commission on Higher Education (CHED) Memorandum Order (CMO) No. 01, s. 2015. Using the Philippine Constitution (1987), Magna Carta of Women Act (2009) and the Philippine Plan for Gender-Responsive Development 1995-2025 (PPGRD) as the backbone to this mandate, schools are now directed to adopt gender-responsive policies, plans, programs, and strategies. The DepEd Order emphasized the need to protect and promote the right of every Filipino student to quality and equitable basic education where children learn in a gender-sensitive, safe, and motivating environment. On the other hand, the CHED CMO identifies four main areas of higher educational institutions (HEIs) that should be gender responsive: (1) administration, (2) curriculum, (3) research, and (4) extension programs. CHED requires that there should be gender-responsive curricular programs that prevent all forms of gender-based discrimination, promote gender equality, and use gender-inclusive language. In research, priority areas must be defined and gender-specific researches should be included.

Since progress has already been made in mainstreaming gender into the educational sector, the challenge now is in transforming institutional culture and practices that would adhere to this strategy. The initial approach that could be done is to conduct gender-responsive research that may be used to explore and understand any equality issues that has developed and/or currently existing in the institutions and to examine its relationship to important academic outcomes. For example, the Department of Education indicated that issues such as gender biases and stereotypes remain, and are still embedded in the curricula, instructional methods, and materials and learning media. Schools in most cases reinforce the existing gender ideology, stereotypes, norms and expectations everywhere.

Given these challenges in the academe, we also acknowledge that teachers hold a very critical role in the formation and acquisition of gender-related ideas, beliefs, and thought patterns among young people. Therefore, to be able to guarantee equal help to students in creating and achieving their goals, faculty members must be very knowledgeable of existing gender issues, and of their own gender responsiveness. Because teachers serve as role models for their students, their integration of the experiences and needs of both female and male students into all educational practices will enable students to challenge commonly-held gender stereotypes and prejudice, and to overcome traditional gender relations through education. And since the school is a microcosm of the larger society, it is our hope that whatever is learned in the institution would then transcend to students' membership in the community.

In Lipa City Colleges (LCC), several gender and development programs are beginning to be introduced to the academic community in the form of faculty training and student seminars. However, similar to many HEIs which simply comply with the government mandate of mainstreaming gender issues, the institution remains to be unaware of existing gender-related concerns in school, which may be addressed or targeted by gender and development programs. As mentioned, the current direction of the educational sector is towards examining institutional culture and practices, therefore adapting an institution-specific approach of mainstreaming gender issues. Up to date, there has been no research in the institution that would address this pressing need.

Because the primary role of the school is to instill learning and assist students into achieving important academic goals, it may also be necessary that HEIs examine how gender responsiveness in the curriculum influence learning behaviors of students. It has already been evidenced in the literature that gender bias influences academic achievement, participation, and other educational and psychological outcomes (Skelton et al., 2009; Legewiea and DiPretea, 2012; Bassi, Blumberg, & Mateo Diaz, 2016; Lavy & Sand, 2015; Wiseman, 2009; Scantlebury, 2009; Mulvey, 2009).

Taking these altogether, this study evaluated teachers and students' perception of gender responsiveness in the curriculum in Lipa City Colleges (LCC), and how the responsiveness to gender of the instructional materials, learning activities, and relations within the classroom relate to important learning behaviors such as student motivation and participation. By understanding the interactions within this dynamic system of perceptions and behaviors, the institution may develop initiatives, strategies, interventions, and programs that utilize gender-equitable approach to learning based on empirical data collected and organized through research. Through this, the school community would create a rippling effect that goes beyond its walls—that is promoting gender equality and contributing to the national and international efforts of ensuring full and equal participation in education for all.

METHODOLOGY

The research was a quantitative research that utilized the survey-correlational method. Data needed for the study was collected through a formal, objective, and systematic process of quantifying information, and was evaluated using computer-programmed statistical analyses. The respondents of the study were teachers (*n*=58), male students (*n*=315), and female students (*n*=375) from the eight (8) college departments of Lipa City Colleges, Academic Year 2016-2017. Stratified random sampling was used to specifically identify the number of subjects in the department who would accomplish the survey instruments. The study made use of self-constructed measure of gender responsiveness and adapted questionnaires to measure student motivation and participation, namely the MUSIC © Model of Academic Motivation Inventory (Jones, 2009) and the Engagement vs. Disaffection with Learning (EvsD; Connell & Wellborn, 1991), respectively. Enrolment data was obtained from the Registrar's Office and the roster of faculty members was requested from the Human Resources Department to compute for the appropriate size of the representative sample. Formal approval of the administration of survey questionnaires was sought from the college deans through the Vice President for Academic Affairs. Upon approval, subjects selected using stratified random sampling accomplished the research questionnaires. No compensation was given for participation. Retrieved data were computer-tallied and analyzed using SPSS.

RESULTS AND DISCUSSIONS

TABLE 1
LEVEL OF GENDER RESPONSIVENESS IN THE CURRICULUM

Components and Indicators	Teachers (*n*=58)			Male Students (*n*=315)			Female Students (*n*=375)		
	M	*SD*	*VI*	*M*	*SD*	*VI*	*M*	*SD*	*VI*
Instructional Materials	**5.04**	**.61**	**H**	**3.76**	**.91**	**SH**	**3.74**	**.91**	**SH**
1. Gender inclusivity in written materials	5.36	1.51	VH	3.84	1.35	SH	4.14	1.44	SH
2. Equal gender representations in examples used	5.38	1.27	VH	3.60	1.20	SH	3.69	1.29	SH
3. Promotion of positive sex roles in lecture notes	5.14	.96	H	3.78	1.39	SH	3.98	1.31	SH
4. Equal presentations of contributions to society	5.09	.88	H	3.92	1.27	SH	3.73	1.38	SH
5. Use of neutral terms in role representations	4.86	.89	H	2.98	1.39	SL	3.31	1.31	SL
6. Equality in the extent of graphic representations	5.14	.71	H	4.02	1.28	SH	3.63	1.28	SH
7. Use of non-stereotypic graphical presentations	5.19	.78	H	4.17	1.29	SH	4.30	1.26	H
8. Non-bias in the order of presentation of gender	4.83	.78	H	3.76	1.43	SH	3.51	1.45	SL
9. Avoidance of stereotypic labels	4.84	.93	H	4.01	1.28	SH	4.12	1.21	SH
10. Avoidance of use of gender-specific pronouns	4.53	1.08	H	3.55	1.62	SH	3.02	1.54	SL
Learning Activities	**5.46**	**.47**	**VH**	**4.01**	**1.00**	**SH**	**4.43**	**1.00**	**H**
1. Use of activities promoting gender collaboration	5.34	.69	VH	3.89	1.30	SH	3.94	1.43	SH
2. Use of equal instructional time	5.53	.50	VH	4.32	1.35	SH	4.72	1.26	H
3. Extent of addressing students in the classroom	4.15	1.31	SH	4.43	1.30	H	4.39	1.31	H
4. Giving equally challenging and stimulating questions	4.10	1.36	SH	4.20	1.28	SH	4.26	1.32	SH
5. Giving equal waiting time in response to questions	5.53	.54	VH	4.05	1.37	SH	4.33	1.39	SH
6. Equal contributions to classroom activities	5.47	.57	VH	4.08	1.35	SH	4.47	1.23	H
7. Equal opportunities for classroom engagement	5.52	.50	VH	4.24	1.39	SH	4.73	1.36	H
8. Assignment of non-stereotypic roles in group work	5.43	.53	VH	3.61	1.32	SH	4.33	1.24	SH
9. Giving equally negative comments	5.33	.69	VH	3.73	1.42	SH	4.76	1.23	H
10. Giving equally intensive and constructive	5.43	.53	V	3.89	1.34	SH	4.4	1.28	H

feedback			H				1		
Teacher-Student Interactions	**5.44**	**.60**	**VH**	**4.20**	**1.06**	**SH**	**4.79**	**.97**	**H**
1. Giving attention	5.50	.76	VH	4.06	1.30	SH	4.53	1.19	H
2. Providing encouragement	5.62	.62	VH	4.08	1.28	SH	4.55	1.30	H
3. Giving praises	5.50	.73	VH	4.16	1.35	SH	4.64	1.20	H
4. Reliance to activities outside the classroom	5.14	.93	H	4.05	1.32	SH	4.60	1.26	H
5. Not ignoring students because of gender	5.63	.62	VH	5.86	1.35	VH	5.39	1.04	VH
6. Sensitivity in stating gender-related jokes	5.29	.97	VH	3.85	1.40	SH	4.56	1.20	H
7. Conversing to both genders	5.59	.62	VH	4.13	1.35	SH	4.74	1.15	H
8. Not giving priority to a particular gender	5.40	.84	VH	4.32	1.44	SH	4.97	1.18	H
9. Equal concern to both genders	5.48	.78	VH	4.25	1.36	SH	5.05	1.13	H
10. Informal engagement (e.g., chatting) with students	5.28	.77	VH	4.27	1.37	SH	4.84	1.19	H
Overall Gender Responsiveness	**5.31**	**.46**	**VH**	**3.99**	**.89**	**SH**	**4.32**	**.84**	**SH**

Legend for Verbal Interpretation (VI): VH – Very High (5.20-6)
H – High (4.36-5.19) SH – Slightly High (3.52-4.35)

The previous table shows the level of gender responsiveness in the three areas of the curriculum namely 1) instructional materials, 2) learning activities, and 3) teacher-student interactions as assessed by the three groups of respondents. In terms of Instructional Materials, teachers (*n*=58) perceived high gender responsiveness (*M*=5.04; *SD*=.61). They reported that both genders are equally represented in examples they use (Item 2; *M*=5.36, *SD*=1.27) and both appear equally in written materials utilized in their class (Item 1; *M*=5.36, *SD*=1.51). On the other hand, male students (*n*=315) perceived instructional materials to be slightly high in the level of gender responsiveness (*M*=3.76, *SD*=.91), highlighting equality (Item 5; *M*=4.02, *SD*=1.28) and the use of non-stereotypic graphical representations in materials used in class (Item 6; *M*=4.17, *SD*=1.29). Likewise, their female counterparts (*n*=375) also reported gender responsiveness in the instructional materials as slightly high (*M*=3.74, *SD*=.91), pointing to gender inclusivity in instructional materials (Item 1; *M*=4.14, *SD*=1.44) and the non-stereotypic use of graphical representations (Item 6; *M*=4.30, *SD*=1.26). However, both male and female students perceived that instructional materials are slightly low in gender responsiveness when it comes to the use of neutral terms in role representations (*M*=2.98, *SD*=1.39; *M*=3.31,

SD=1.31, respectively). Female students also reported that there may have been bias in terms of the order of presentation of genders (Item 8; *M*=3.51, *SD*=1.45) and the persistent use of gender specific (usually masculine) pronouns (Item 10; *M*=3.02, *SD*=1.54).

In terms of learning activities, teachers (*n*=58) reported gender responsiveness to be very high (*M*=5.46, *SD*=.47), emphasizing fairness in the allotment of instructional time for both genders (Item 2; *M*=5.53, *SD*=.50) and the equal amount of 'waiting time' given to them in responding to questions during class (Item 5; *M*=5.53, *SD*=.50). However, their inclinations to give equally challenging and stimulating questions (Item 4; *M*=4.10, *SD*=1.36) and the equal extent of addressing students of both gender in the classroom (Item 3; *M*=4.15, *SD*=1.31) remain only to be slightly high. On the other hand, male students (*n*=315) perceived gender responsiveness in learning activities as slightly high (*M*=4.01, *SD*=1.00), particularly in the extent of addressing students of both genders equally (Item 3; *M*=4.43, *SD*=1.30). Female students (*n*=375) rated gender responsiveness in learning activities as high (*M*=4.43, *SD*=1.00) highlighting their experience on receiving equally negative feedback as their male counterparts (Item 9; *M*=4.76, *SD*=1.23) and the equal opportunities given to them for classroom engagement (Item 7; *M*=4.73, *SD*=1.36). Both genders agreed though, that in terms of using activities that promote gender collaboration (instead of gender competition), responsiveness to gender remain to be only slightly high (*M*=3.89, *SD*=1.30; *M*=3.94, *SD*=1.93; for males and females, respectively).

Teachers (*n*=58) perceived informal interactions to be very high in gender responsiveness (*M*=5.44, *SD*=.60), reporting that they do not ignore students because of their gender (Item 5; *M*=5.63, *SD*=.62), and they are able to give equal attention (Item 1; *M*=5.50, *SD*=.76), encouragement, (Item 2; *M*=5.62, *SD*=.62) and praises (Item 3; *M*=5.50, *SD*=.73) to their students, and both groups of students have affirmed that indeed, they were not being ignored because of their gender (*M*=5.86, *SD*=1.35; *M*=5.39, *SD*=1.04; for males and females, respectively). In particular, males (*n*=315) reported gender sensitivity in teacher-student interactions as slightly high (*M*=4.20, *SD*=1.06), the lowest mark be in their experiences with gender-related jokes (Item 6; *M*=3.85, *SD*=1.40). Females (*n*=375) perceived gender responsiveness to be high (*M*=4.79, *SD*=.97) in all areas of informal teacher-student interactions.

The mean scores for each aspect of the curriculum were combined to obtain an overall gender responsiveness score for each group of respondents. Teachers (*n*=58) reported very high gender responsiveness in the curriculum (*M*=5.31, *SD*=.46) while the overall scores for both male (*n*=315) and female (*n*=375) students were slightly high (*M*=3.99, *SD*=.89; *M*=4.32, *SD*=.84; respectively).

TABLE 2
COMPONENTS OF STUDENT MOTIVATION AS ASSESSED BY THE MUSIC © MODEL OF ACADEMIC MOTIVATION INVENTORY (JONES, 2009)

Components and Indicators	Male Students (*n*=315)			Female Students (*n*=375)		
	M	*SD*	*VI*	*M*	*SD*	*VI*
Empowerment	**4.79**	**.73**	**H**	**4.82**	**.64**	**H**
2. I had the opportunity to decide for myself how to meet the course goals.	4.87	.98	H	4.84	.82	H
8. I had the freedom to complete the coursework my own way.	4.79	1.00	H	4.86	.89	H
12. I had options in how to achieve the goals of the course.	4.82	.96	H	4.95	.81	H
17. I had control over how I learned the course content.	4.68	.97	H	4.66	.82	H
26. I had flexibility in what I was allowed to do in this course.	4.81	1.03	H	4.81	.87	H
Usefulness	**4.95**	**.75**	**H**	**5.07**	**.69**	**H**
3. In general, the coursework was useful to me.	4.90	.90	H	5.02	.82	H
5. The coursework was beneficial to me.	4.84	1.00	H	4.96	.86	H
19. I found the coursework to be relevant to my future.	4.99	.89	H	4.92	.94	H
21. I will be able to use the knowledge I gained in this course.	4.95	.93	H	5.13	.83	H
23. The knowledge I gained in this course is important for my future.	5.08	.97	H	5.30	.81	VH
Success	**4.73**	**.78**	**H**	**4.77**	**.71**	**H**
7. I was confident that I could succeed in the coursework.	4.83	.95	H	4.96	.85	H
10. I felt that I could be successful in meeting the academic challenges in this course.	4.71	.94	H	4.73	.86	H
14. I was capable of getting a high grade in this course.	4.63	1.03	H	4.63	.82	H
18. Throughout the course, I felt that I could be successful on the coursework.	4.75	1.02	H	4.78	.93	H
Interest	**4.73**	**.75**	**H**	**4.77**	**.66**	**H**
1. The coursework held my attention.	4.71	.97	H	4.83	.82	H
6. The instructional methods used in this course held my attention.	4.69	1.03	H	4.78	.84	H
9. I enjoyed the instructional methods used in this course.	4.71	1.06	H	4.68	.89	H
11. The instructional methods engaged me in the course.	4.78	.79	H	4.73	.89	H
13. I enjoyed completing the coursework.	4.81	.99	H	4.86	.91	H
15. The coursework was interesting to me.	4.83	1.04	H	4.71	.89	H
Caring	**4.81**	**.79**	**H**	**4.86**	**.67**	**H**
4. The instructor was available to answer my questions about the coursework.	4.67	.98	H	4.75	.90	H
16. The instructor was willing to assist me if I needed help in the course.	4.75	1.08	H	4.81	.93	H
20. The instructor cared about how well I did in this course.	4.86	.91	H	4.76	.89	H
22. The instructor was respectful of me.	4.98	.99	H	5.08	.82	H
24. The instructor was friendly.	4.96	1.03	H	5.03	.87	H
25. I believe that the instructor cared about my feelings.	4.71	1.09	H	4.73	.88	H

Legend for Verbal Interpretation (VI):
VH – Very High (5.20-6) H – High (4.36-5.19) SH – Slightly High (3.52-4.35)
VL – Very Low (1-1.83) L – Low (1.84-2.67) SL – Slightly Low (2.68-3.51)

The table shows the reported levels of academic motivation by male (*n*=315) and female (*n*=375) students of LCC. The MUSIC Model of Academic Motivation identified five components that are keys to motivating students in the classroom, namely 1) empowerment, 2) usefulness, 3) success, 4) interest, and 5) caring. One major advantage of examining motivation in educational contexts using this paradigm is that this model cuts across many different motivation theories, pulling together motivation concepts which can easily be comprehended and be directly utilized by educators. It can be observed that both male and female students of LCC reported high motivation in all of these components.

In terms of empowerment, the high rating (*M*=4.79, *SD*=.73) of male students (*n*=315) comes from having options to achieve the goals set in their courses (Item 12; *M*=4.82, *SD*=.96) and the opportunity to decide for themselves how to accomplish these goals (Item 2; *M*=4.87, *SD*=.98). Likewise, female students (*n*=375) are also highly empowered (*M*=4.82, *SD*=.64) as they were also given options to carry out their goals (Item 12; *M*=4.95, *SD*=.81), allowing them to feel a sense of freedom to complete academic obligations in their own way (Item 8; *M*=4.86, *SD*=.89). Male students (*n*=315) are also highly motivated (*M*=4.95, *SD*=.75) because they find their coursework important for their future and that the knowledge they gain in classes are useful to them. Similarly, female students (*n*=375) are also highly motivated as they see exceedingly the relevance of their classroom experiences (Item 23; *M*=5.30, *SD*=.81) and its usefulness when they soon enter the field of professional work (Item 21; *M*=5.13, *SD*=.83).

Moreover, students of both genders (*n*=690) perceived that their high level of motivation (*M*=5.30, *SD*=.81; *M*=5.30, *SD*=.81; for males and females, respectively) comes from the confidence that they could succeed in the coursework (Item 7; *M*=4.83, *SD*=.95; *M*=4.96, *SD*=.85; for males and females, respectively) and this is sustained although out the duration of the course (Item 18; *M*=4.75, *SD*=1.02; *M*=4.78, *SD*=.93; for males and females, respectively). Also, students of both genders (*n*=690) are highly interested in their classes (*M*=4.73, *SD*=.75; *M*=4.77, *SD*=.66; for males and females, respectively), as it holds their attention (Item 1; *M*=4.83, *SD*=.82; for females), and they enjoy completing the requirements in their coursework (Item 13; *M*=4.81, *SD*=.99; *M*=4.86, *SD*=.91; for males and females, respectively) because of engaging instructional methods used (Item 9; *M*=4.71, *SD*=1.06; for males). Finally, students of both genders (*n*=690) are highly motivated (*M*=4.81, *SD*=.79; *M*=4.86, *SD*=.67; for males and females, respectively) because of the care they feel from their teachers, reporting that their instructors were both respectful (Item 22; *M*=4.98, *SD*=.99; *M*=5.08, *SD*=.82; for males and females, respectively) and friendly (Item 24; *M*=4.96, *SD*=1.03; *M*=5.03, *SD*=.87; for males and females, respectively) to them.

TABLE 3
STUDENTS' PARTICIPATION AS ASSESSED BY THE ENGAGEMENT VS. DISAFFECTION WITH LEARNING (EVSD; CONNELL & WELLBORN, 1991)

Components and Indicators	Male Students (*n*=315)			Female Students (*n*=375)		
	M	*SD*	VI	*M*	*SD*	VI
Behavioral Engagement	**5.03**	**.83**	**H**	**4.94**	**.74**	**H**
1. I try hard to do well in school.	5.16	.95	H	5.09	.91	H
2. In class, I work as hard as I can.	5.06	.95	H	5.13	.84	H
3. When I'm in class, I participate in class discussions.	4.91	1.02	H	4.61	.98	H
4. I pay attention in class.	5.00	1.00	H	4.97	.96	H
5. When I'm in class, I listen very carefully.	5.03	.98	H	4.92	.92	H
Emotional Engagement	**4.84**	**.74**	**H**	**4.90**	**.79**	**H**
6. When I'm in class, I feel good.	4.89	1.08	H	4.70	.94	H
7. When we work on something in class, I feel interested.	4.83	1.07	H	4.84	.97	H
8. Class is fun.	4.97	1.00	H	4.69	.97	H
9. I enjoy learning new things in class.	5.22	.93	VH	5.22	.88	VH
10. When we work on something in class, I get involved.	4.75	.93	H	4.83	.99	H
Behavioral Disengagement	**3.91**	**1.14**	**SH**	**3.61**	**.99**	**SH**
11. When I'm in class, I just act like I'm working.	4.40	1.42	H	4.08	1.27	SH
12. I don't try very hard at school.	3.41	1.62	SL	3.13	1.49	SL
13. In class, I do just enough to get by.	3.97	1.33	SH	3.65	1.39	SH
14. When I'm in class, I think about other things.	4.00	1.47	SH	3.56	1.28	SH
15. When I'm in class, my mind wanders.	3.76	1.41	SH	4.62	1.25	H
Emotional Disengagement	**3.57**	**1.22**	**SH**	**3.39**	**.99**	**SL**
16. When I'm in class, I feel bored.	3.37	1.52	SH	3.20	1.16	SL
17. When we start something new in class, I feel nervous.	3.99	1.44	SH	3.95	1.32	SH
18. When we work on something in class, I feel discouraged.	3.43	1.50	SH	3.03	1.30	SL
19. Class is not all that fun for me.	3.05	1.61	SL	2.72	1.36	SL
20. When I can't answer a question, I feel frustrated.	3.97	1.63	SH	4.05	1.38	SH

Legend for Verbal Interpretation (VI): VH – Very High (5.20-6) H – High (4.36-5.19) SH – Slightly High (3.52-4.35) VL – Very Low (1-1.83) L – Low (1.84-2.67) SL – Slightly Low (2.68-3.51)

The level of student participation was measured to be able to determine the extent by which LCC students engage and/or disengage themselves in learning activities. Later on, the information shall be useful in understanding how dimensions of student motivation presented earlier were translated to actual action through their participation or non-participation in classroom experiences. As presented in the table above, participation is evaluated in terms of both behavioural (observable actions) and emotional (affective states) components of engagement. This framework is useful as it acknowledged the

dynamicity in which two or more affective states may occur concurrently, or the possibility that discrepancy may exist between emotions held and behavioural actions involved.

Male and female students (*n*=690) both reported high behavioural engagement (*M*=5.03, *SD*=.83; *M*=4.94, *SD*=.74; for males and females, respectively), as they try to do well in school (Item 1; *M*=5.16, *SD*=.95; *M*=5.09, *SD*=.91; for males and females, respectively) and work as hard as they could in class (Item 2; *M*=5.06, *SD*=.95; *M*=5.13, *SD*=.84; for males and females, respectively). Likewise, emotional engagement is also high for both genders (*M*=4.84, *SD*=.74; *M*=4.90, *SD*=.79; for males and females, respectively), indicating that they enjoy learning new things in class (Item 9; *M*=5.22, *SD*=.93; *M*=5.22, *SD*=.88; for males and females, respectively). Specifically, male students (*n*=315) highlighted that class is generally fun (Item 8; *M*=4.97, *SD*=1.00) while female students (*n*=375) emphasized their interest towards learning activities in the classroom (Item 8; *M*=4.84, *SD*=.97). Despite high action-oriented engagement, both genders remained to indicate slightly high behavioural disengagement (*M*=3.91, *SD*=1.14; *M*=3.61, *SD*=.99; for males and females, respectively), in the form of merely acting-out (Item 11; *M*=4.40, *SD*=1.42; *M*=4.08, *SD*=1.27; for males and females, respectively or ruminating while in class (Item 14; *M*=4.00, *SD*=1.47 for males; Item 15; *M*=4.62, *SD*=1.25 for females). On the other hand, emotional disengagement for male students (*n*=315) is likewise slightly high (*M*=3.57, *SD*=1.22) evident in their anxiety when starting out a new learning activity (*M*=3.99, *SD*=1.44) and the frustration felt whenever they were not able to answer a question raised by the instructors (*M*=3.97, *SD*=1.63). Their female counterparts (*n*=315) reported a slightly low emotional disengagement (*M*=3.39, *SD*=.99). They may also feel anxious and frustrated like male students, however they tend to be less discouraged (Item 18; *M*=3.03, *SD*=.33) and remain to see the class as fun (Item 19; *M*=2.72, *SD*=.36).

TABLE 4
ANALYSIS OF VARIANCE (ANOVA) ON THE GENDER RESPONSIVENESS IN THE CURRICULUM AS PERCEIVED BY MALE AND FEMALE STUDENTS AND THE TEACHERS

Curriculum Areas	Teachers (*n*=58)		Male Students (*n*=315)		Female Students (*n*=375)		*F* (2,745)	*P*
	M	*SD*	*M*	*SD*	*M*	*SD*		
Instructional Materials	5.04_a	.61	3.76_b	.91	3.74_b	.91	56.24***	.000
Learning Activities	5.46_a	.47	4.01_b	1.00	4.43_c	1.00	58.08***	.000
Teacher-Student Interactions	5.44_a	.60	4.20_b	1.06	4.79_c	.97	53.81***	.000
Overall Gender Responsiveness	**5.31_a**	**.46**	**3.99_b**	**.89**	**4.32_c**	**.84**	**62.83*** **	**.000**

***significant at p<.001. Means with differing subscripts within rows are significantly different at p<.001 based on Fisher's LSD post hoc paired comparisons.

The table shows the analysis conducted to test for the differences in the perception of gender responsiveness in the three areas of the curriculum, as perceived by the teachers and the male and female students. Analysis revealed that differences in the overall gender responsiveness are very highly significant, F (2,745) = 62.83, p<.001. Results of Fischer's LSD post-hoc analysis further showed that teachers' perception of overall gender responsiveness (M=5.31, SD=.46) is higher compared to the students, while male students reported significantly lower overall gender responsiveness (M=3.99, SD=.89) than their female counterparts (M=4.32, SD=.84).

In terms of instructional materials, differences in perception between groups are very highly significant, F (2,745) = 56.24, p<.001. Male (M=3.76, SD=.91) and female (M=3.74, SD=.91) students did not vary in their perception of gender responsiveness in instructional materials used in class, but their scores were significantly lower than their teacher's perception of gender responsiveness (M=5.04, SD=.61). The perception of gender responsiveness in learning activities between the three groups is likewise very highly significant, F (2,745) = 58.08, p<.001, with teachers reporting significantly higher responsiveness (M=5.46, SD=.47) than the students. Male students, however, perceived significantly lower gender responsiveness (M=4.01, SD=1.00) in this area compared to their female counterparts (M=4.43, SD=1.00). Finally, the three groups also differed significantly in terms of teacher-student interactions F (2,745) = 53.81, p<.001. Male students (M=4.20, SD=1.06) perceived gender responsiveness significantly lower than female students (M=4.79, SD=.97), while teachers reported higher gender responsiveness in this area (M=5.31, SD=.46).

TABLE 5
CORRELATIONAL ANALYSIS BETWEEN PERCEIVED GENDER RESPONSIVENESS IN THE CURRICULUM AND THE DIMENSIONS OF STUDENT MOTIVATION AND PARTICIPATION (N=690)

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Instructional Materials													
2. Learning Activities	.65**												
3. Teacher-Student Interactions	.52**	.82**											
4. Overall Gender Responsiveness	.81**	.94**	.90**										
5. Empowerment	.12**	.21**	.24**	.22**									
6. Usefulness	.17**	.28**	.30**	.29**	.77**								
7. Success	.10**	.21**	.24**	.21**	.80**	.73**							
8. Interest	.12**	.20**	.23**	.21**	.80**	.74**	.78**						
9. Caring	.12**	.25**	.30**	.26**	.77**	.81**	.74**	.72**					
10. Behavioral Engagement	.11**	.12**	.12**	.13**	.46**	.44**	.46**	.50**	.46**				
11. Emotional Engagement	.04	.10**	.15**	.11**	.50**	.41**	.49**	.51**	.52**	.76**			
12. Behavioral Disengagement	-.13**	-.22**	-.20**	-.21**	-.01	-.07	-.03	-.03	-.04	.02	.12**		
13. Emotional Disengagement	-.13**	-.30**	-.29**	-.28**	-.10	-.10*	-.12**	-.08*	-.11**	-.08*	-.09*	.60**	

** significant at p<.01; * significant at p<.05

The table above shows the relationship of perceived gender responsiveness in the three areas of the curriculum and the different dimensions of student motivation and participation. Results revealed that overall gender responsiveness is very highly correlated with the components of student motivation (Empowerment, r=.22, p<.01; Usefulness,r=.29, p<.01; Success, r=.21, p<.01; Interest, r=.21, p<.01; and Caring, r=.21, p<.01), as well as the specific areas of instructional materials, learning activities, and teacher-student interactions to these components of motivation. Furthermore, analysis revealed that the overall gender responsiveness in the curriculum correlates significantly with the different aspects of student participation (Behavioral Engagement, r=.13, p<.01; Emotional Engagement, r=.11, p<.01; Behavioral Disengagement, r=-.21, p<.01; and Emotional Disengagement, r=-.28, p<.01) and all its areas except for gender

responsiveness in instructional materials that did not correlate significantly with emotional engagement (r=.04, p>.05).

Moreover, analysis was also conducted to test for the relationship of student motivation to student participation. This examination is necessary to understand how motivation (as a drive coming from interaction of both internal and external factors) is associated to the extent of behavioral and affective engagement that students show in the classroom. Results showed that all dimensions of motivation correlate significantly with behavioral engagement (Empowerment, r=.46, p<.01; Usefulness, r=.44, p<.01; Success, r=.46, p<.01; Interest, r=.50, p<.01; and Caring, r=.46, p<.01) and emotional engagement (Empowerment, r=.50, p<.01; Usefulness, r=.41, p<.01; Success, r=.49, p<.01; Interest, r=.51, p<.01; and Caring, r=.52, p<.01). Emotional disengagement showed significant correlation with most dimensions of student motivation (Usefulness, r=-.10, p<.05; Success, r=-.12, p<.01; Interest, r=-.08, p<.05; and Caring, r=-.11, p<.01) except for Empowerment (r=-.10, p>.05). However, it had been evident from the analysis that no dimension of student motivation correlated significantly with behavioral disengagement.

TABLE 6
SUMMARY OF INTERACTION EFFECTS USING PROCESS REGRESSION ANALYSIS (HAYES, 2016) ON THE INFLUENCE OF GENDER RESPONSIVENESS TO THE PREDICTIVE RELATIONSHIP BETWEEN THE COMPONENTS OF STUDENT MOTIVATION AND DIMENSIONS OF STUDENT ENGAGEMENT

Interactions	β	p	95% CI	
Outcome: Behavioral Engagement				
Empowerment X Gender Responsiveness	.05	.16	-.02	.13
Usefulness X Gender Responsiveness	.02	.63	-.05	.09
Success X Gender Responsiveness	.08*	.01	.02	.15
Interest X Gender Responsiveness	.07*	.04	.00	.14
Caring X Gender Responsiveness	.02	.50	-.05	.09
Outcome: Emotional Engagement				
Empowerment X Gender Responsiveness	.11**	<.001	.03	.18
Usefulness X Gender Responsiveness	.02	.50	-.05	.10
Success X Gender Responsiveness	.08*	.01	.02	.15
Interest X Gender Responsiveness	.10**	<.001	.04	.17
Caring X Gender Responsiveness	.07*	.05	.00	.13
Outcome: Behavioral Disengagement				
Empowerment X Gender Responsiveness	-.24**	<.001	-.35	-.13
Usefulness X Gender Responsiveness	-.26**	<.001	-.36	-.13
Success X Gender Responsiveness	-.21**	<.001	-.31	-.11
Interest X Gender Responsiveness	-.27**	<.001	-.37	-.16
Caring X Gender Responsiveness	-.26**	<.001	-.36	-.15
Outcome: Emotional Disengagement				
Empowerment X Gender Responsiveness	-.22**	<.001	-.33	-.10
Usefulness X Gender Responsiveness	-.17**	<.001	-.28	-.06
Success X Gender Responsiveness	-.20**	<.001	-.30	-.10
Interest X Gender Responsiveness	-.25**	<.001	-.36	-.15
Caring X Gender Responsiveness	-.21**	<.001	-.31	-.10

The previous table summarizes the results of multiple analyses done to test for the moderating effects of gender responsiveness to the predictive relationship of the components of student motivation to the extent of student participation through behavioural and emotional engagement and disengagement, using PROCESS Regression Analysis by Hayes (2006). Generally, it can be gleaned from these results that gender responsiveness mostly moderates the predictive relationship of all the components of motivation to both behavioural disengagement (Empowerment, β =-.24, p<.001; Usefulness, β =-.26, p<.001; Success, β =-.21, p<.001; Interest, β =-.27, p<.001; Caring, β =-.26, p<.001) and emotional disengagement (Empowerment, β =-.22, p<.001; Usefulness, β =-.17, p<.001; Success, β =-.20, p<.001; Interest, β =-.25, p<.001; Caring, β =-.21, p<.001) of students. Gender responsiveness also moderated the relationship of Empowerment (β =.11, p<.001), Success (β =.8, p<.001), Interest (β =.10, p<.001), and Caring (β =.07, p=.05) to emotional engagement; and of Success (β =.08. p<.05) and Interest (β =.07. p<.05) to behavioural engagement.

In general, these results suggest that gender responsiveness in the curriculum indeed provides context as to how student motivation may be translated to actual participation or engagement in the classroom. In relation to the assumptions put forwarded in the Equity Theory by Adams (Schniederjans, Schniederjans, & Levy, 2012), perception of gender responsiveness (or otherwise, inequity) may create 'tension' which has properties of driving a person to either reduce or eliminate it. It appears from the results that the extent of perceived responsiveness or equality allows students to modify their level of engagement as a response to the tension created. The trend of the results suggests that gender responsiveness strengthens the relationship between motivation and behavioral and emotional engagement; such that, low motivation translates to notably lower student engagement when gender responsiveness is low. Conversely, low motivation translates to higher engagement when gender responsiveness is high. It must be noted, however, that this moderating influence is more dominant in negative learning behaviors (all dimensions being marked as significant), with gender responsiveness inversing the relationship between motivation and disengagement. Meaning, gender responsiveness impact more demotivation and disengagement, and appears to have a "curing" effect to these learning behaviors. For example, higher levels of motivation would translate to significantly lower behavioral/emotional disengagement when gender responsiveness is high; on the other hand, if the gender responsiveness is low, high levels of motivation would translate to notably higher behavioral/emotional disengagement. This implies that gender responsiveness in the curriculum may not always aid in strengthening positive learning behaviors, but has the capacity to influence or impact demotivation and disengagement.

6. Implications to Curriculum Enhancement in Promotion of Gender Responsiveness

Using the data which were collected, tallied, and analyzed through extensive statistical procedures, the following implications may be considered by school administrators in designing and implementing enhancement programs that aim to further develop gender responsiveness in the curriculum, and ultimately, to influence student participation in their learning experiences. These implications are summarized in the table below.

TABLE 7
SUMMARY OF IMPLICATIONS TO CURRICULUM ENHANCEMENT PROGRAMS DERIVED FROM RESEARCH FINDINGS

Areas of Research Inquiry	Summary of Research Findings	Implications to Curriculum Enhancement Programs
Gender Responsiveness in Instructional Materials	• Students' perception of gender responsiveness in the curriculum in terms of instructional materials remain to be only slightly high	Programs may highlight the enhancement of the following: • improvement on the use of gender neutral terms (e.g., *chairperson* instead of *chairman*, *humanity* instead of *mankind*, etc.) • challenging bias in the order of gender presentations (e.g., instead of always saying *men and women*, it may be *women and men; gentlemen and ladies* instead of the more common *ladies and gentlemen,* etc.) • avoiding the use of masculine pronouns when the gender of a person is unknown (use of the pronouns *'him/his'* remain to be very common)
Gender Responsiveness in Learning Activities	• Students' perception of gender responsiveness in the curriculum in terms of learning activities remain to be only slightly high for males while already high for females	Programs may highlight the enhancement of the following: • employing learning activities that highlight gender collaboration rather than competition (the more common *boys vs. girls*) • assignment of non-stereotypic roles in group work (e.g. of stereotypic roles: *women as secretaries*; *men as runners*, etc.) • ensuring that teachers allot equal instructional time and equally challenging and stimulating questions to students of both genders (more particularly for male students)
Gender Responsiveness in Teacher-Student Interactions	• Students' perception of gender responsiveness in the curriculum in terms of learning activities remain to be only slightly high for males while already high for females	Programs may highlight the enhancement of the following: • avoiding the use of gender-related jokes • relying to both genders for activities outside the classroom • giving equal attention, encouragement/praises for students of both genders

Differences in the Perception of Gender Responsiveness	• Discrepancy between teachers' and students' perception of the gender responsiveness in instructional materials, learning activities and teacher-student interactions • Discrepancy between male students' and female students' perception of the gender responsiveness in learning activities and teacher-student interactions	• Gender and Development seminars/workshops for teachers must increase awareness of their own gender biases through self-analysis/inspection and must be guided on how those personal biases may be addressed • Further examine through guided group discussions among teachers the possible reasons on why male students may be feeling disadvantaged in terms of learning activities and student-interactions compared to their female counterparts
Relationship of Gender Responsiveness to Student Motivation	• Gender responsiveness is positively and very highly correlated with all the components of student motivation	• Highlight the motivational function of gender responsiveness in seminars/workshops for teachers
Relationship of Gender Responsiveness to Student Participation	• Gender responsiveness is positively and very highly correlated with all the components of student participation, except for gender responsiveness in instructional materials to emotional engagement	• Highlight the engagement function of gender responsiveness in seminars/workshops for teachers
Moderating Effect of Gender Responsiveness in the Relationship Between Student Motivation and Participation	• Gender responsiveness mostly influence negative learning behaviors (such as behavioural and emotional disengagement) • Gender responsiveness must be at above average level to be able to take influence or affect how motivation predicts participation	• Teachers may be trained to make gender responsiveness in the curriculum more explicit to students who appear to have low motivation and are less engaged in the learning experience, since it appeared that they are the most effective targets who will benefit more from a gender-responsive approach • Despite the already high levels of gender responsiveness in the curriculum as reported by both teachers and students, enhancement is still necessary to make gender responsiveness even higher, to be able to fully harness its moderating role in student motivation and participation.

Although gender responsiveness in the curriculum is rated generally high by both teachers and students, the significant discrepancies in their perceptions signify that there remains to be areas which could be further improved and enhanced. The findings of the study suggest that in terms of instructional materials, curriculum enhancement should focus on improving the use of gender neutral terms, avoiding common use of masculine pronouns, and challenging biases in the order of gender presentations. In terms of learning activities and interactions, enhancement must focus on encouraging teachers to employ more learning activities that promote gender collaboration, challenge the

assignment of stereotypic roles in group work, and ensure that students (especially men) receive equal instructional time and are asked equally challenging and stimulating questions. Further, gender-related jokes must be avoided and equal reliance and attention must be given to both genders. It has been agreed in the literature that professional development training for teachers must provide them with strategies to change their attitude and classroom practices, and to build on this knowledge acquired from trainings to implement changes in the classroom. Because previous studies have indicated that teacher training programs especially for novice teachers provide very little if any preparation relative to gender equity, LCC may integrate the program as part of the in-service teacher training of faculty members.

In this training, the institution must also be able to discuss, through guided group discussions involving administrators, teachers, and student representatives, the findings and implications listed herein and to collaborate on a further plan of action to take for the benefit of all stakeholders.

CONCLUSIONS

1. Teachers and LCC students perceive that the curriculum, particularly in terms of instructional materials, learning activities, and teacher-student interactions, is generally gender-responsive.

2. LCC students are motivated, empowered to meet goals and be successful, finds that their learning experiences are useful and interesting, and that instructors care for them. Likewise, LCC students are highly participative to learning experiences, despite occasional 'acting-out' or ruminating in classes.

3. Gender responsiveness in the curriculum remains to be a concern, as evidenced by the considerable disagreement between the perception of teachers and the students. Male students are at a more disadvantaged position compared with their female counterparts.

4. Gender responsiveness has both motivational and engaging value. Good perceptions of gender responsiveness in the curriculum are generally associated with higher motivation, and with increased participation and decreased disengagement in learning experiences.

5. Gender responsiveness in the curriculum mostly influence, through a moderating role, negative learning behaviors. However, the levels of gender responsiveness must be at above average level to be able to influence how student motivation predicts participation to learning experiences.

6. Gender-related seminar workshops for teachers must allow them to do self-reflection which would make them aware of their gender-biased practices, and be provided with strategies necessary to modify these practices. Infusing gender

responsiveness in the curriculum must also be maximized as well as differentiated, so that students with low levels of motivation and engagement can benefit more from its impact.

RECOMMENDATIONS

1. Further research may want to shift attention to extra-curricular activities, auxiliary services present in the school, and other social encounters in the campus which may be contributory to one's overall academic experience. Gender responsiveness may also be explored in terms of its relationship to other essential student outcomes other than those related to learning.

2. Identification of best practices that establish and maintain good student motivation in school may be included as a standard agendum in departmental meetings, or school-wide faculty conferences and assemblies. Further investigation may be conducted to ascertain and address the possible reasons for students' demotivation and concurrent disengagement.

3. Planning of gender-responsive enhancement programs in the curriculum must ensure the participation of student representatives to ascertain through guided group discussions the actual issues concerning both genders, especially that of the male students. They must be given an active role at the planning phase of enhancement programs to ensure that activities relating to gender responsiveness directly address their needs and concerns.

4. Teachers must be made more aware of the perceived benefits of gender responsiveness by highlighting the its motivating and engaging role in the objectives and purpose of gender and development programs implemented in school.

5. Gender responsiveness training can be incorporated to the existing New Employees On-Board (NEO) seminar for newly hired teachers, and to in-service teacher trainings provided for faculty members to ensure consistent and continuous implementation. The goal would be not only to maintain the already high levels of gender responsiveness in the curriculum, but more so, to elevate it even higher so that its influence as a moderator to student motivation and participation is maximized.

6. Suggestions for curriculum enhancement programs may be implemented and a follow-up research may be conducted to examine its incremental effect to the perception of gender responsiveness in the curriculum and to students' learning behaviors.

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ANALYSIS OF THE FACTORS AFFECTING THE NATIONAL ACHIEVEMENT TEST (NAT) PERFORMANCE OF SCHOOLS IN ARALING PANLIPUNAN

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ABSTRACT

This study analyzed the factors affecting the NAT performance of schools in Araling Panlipunan of Grade 10 students and Araling Panlipunan teachers in eight selected Public Secondary Schools in the Division of Lipa City. The researcher wanted to know the factors that may affect the National Achievement Test performance of the respondents in terms of student-related factors such as study habits, interest in the subject and technology and teacher-related factors such as personality traits, teaching skills and instructional materials. It is an attempt to find out if there are significant relationship between the factors and the NAT performance of the respondents.

The study adopted a descriptive method of research design. Quantitative approach of data collection was employed. A total of 358 respondents constituted the sample of the study. These included 16 teachers in Araling Panlipunan and 342 students from the eight selected schools in the Division of Lipa City. The researcher used the validated survey questionnaire consists of students' interest in Araling Panlipunan, their study habits and their attitude towards the use of technology. Another set of survey questionnaires consists of teachers' attitude towards personality traits, teaching skills and instructional materials.

Through survey questionnaire, the study dealt with the relationship of the student-related and teacher-related factors to the NAT performance of schools in the Division of Lipa City. It involves selected students and teachers of Rizal National High School, Bolbok National High School, Lodlod National High School, Fernando Airbase National High School, Pinagtongulan National High School, Anilao National High School, Lipa City National High School, and Lipa Science National High School respectively.

Study habits, interest in the subject and teaching skills are said to have a direct relationship to the NAT performance of schools in Araling Panlipunan. It means that the more a value of independent variables increase, the more it is likely to cause favorable results. Meanwhile, other related factors do not affect the NAT performance of schools in Araling Panlipunan.

Based on the summary of the findings, the participants' schools did not perform well in the 2012-2015 National Achievement Test (NAT). Most of them are placed in the bottom half of the rankings and did not meet the passing rate of 75%.

Keywords: National Achievement Test, performance, Araling Panlipunan