

The Influence of Senior High School Strand and Specialization on College Course Selection

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Abstract—This research explores the impact of high school academic strands and specializations on college courses of graduates from the Moreno Integrated School especially the batch of school year 2022 to 2024. A survey form created using Google Forms was administered to obtain data from respondents to understand their impressions about the compatibility of their Senior High School (SHS) track to the offered college programs. The findings point out that many graduates got the impression that their SHS specialization impacted their college course choice significantly and skills development as well as career advancement were considered key elements. Based on this study, it is therefore important to facilitate the enhancement of career guidance as well as ensure that more credible information is produced and delivered to the SHS to ensure that there is better alignment of the different education levels.

Keywords—senior high school, college course selection, educational tracks, high school curriculum, senior high school strand, specialization

I. INTRODUCTION

The transition from Senior High School to college is a pivotal stage in a student's educational journey. The curricular pathways available during high school—specifically, the chosen strands and specializations—may impact students' course selections in higher education. In the Philippines, the K-12 educational reform introduced various tracks in Senior High School, including Academic, Technical-Vocational, and Arts and Design, aiming to equip students with specific skills or academic foundations tailored to their post-secondary pursuits. Choosing the most suitable education and training becomes easier when individuals, especially those entering high school, have a clear understanding of the career path they aim to follow [1].

This study investigates the influence of Senior High School strands and specializations on college course selection among graduates of Moreno Integrated School from batches 2022 to 2024. By analyzing the alignment

between SHS programs and college courses, this research aims to provide insights into the effectiveness of the K-12 system in connecting secondary and tertiary education. Additionally, it aims to uncover factors influencing students' choices, contributing to the ongoing discussion on improving educational pathways for Filipino learners.

Selecting a career track is a crucial decision that demands careful thought, as it has a profound and lasting influence on an individual's future career. Under the K to 12 program in the Philippines, students must select one of four career tracks before progressing to senior high school [2]. Accordingly, this research focuses on the following key questions:

- (1) What is the demographic profile of the respondents in terms of their Senior High School strand, specialization, and chosen college course?
- (2) How does the Senior High School strand and specialization influence the college course selection of the respondents?
- (3) Is there a significant relationship between the respondents' Senior High School strand, specialization, and college course selection?
- (4) What interventions can be implemented to align the Senior High School track with the college courses selected?

II. METHODOLOGY

This quantitative study used a descriptive-correlational research design to evaluate the effects of the senior high school strand and specialization on college course selection among graduating students at Moreno Integrated School (MIS) from 2022 to 2024. The study sample consisted of student respondents who utilized the internet to access the forms for responding to the questionnaires. Non-random sampling based on convenience and availability constituted the selection criteria for the inclusion of the participants, considering they were readily available. The survey aimed to collect demographic data, including age, gender, and school year, along with

students' opinions on the influence of their chosen specialization in the senior high school and stand on their selected college courses.

The survey questionnaire integrated multiple-choice and Likert scale questions. Aggregated means and standard deviations of the results obtained in the surveyed pool were recorded after scrutinizing the completed papers. The range of results from the survey was ascertained by employing descriptive statistics such as mean and standard deviation, with a review of the frequency and variability distribution of the evaluated parameters. The study used inferential statistics, including Pearson's correlation, to determine the existing relationships between the selected variables. The analysis results will assist education authorities in enhancing Senior High School (SHS) education delivery, thereby impacting students' university course preferences. The researchers ensured the veracity and authenticity of the acquired data by strictly adhering to the research's ethical considerations.

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III. RESULT AND DISCUSSION

The survey conducted among graduates of Moreno Integrated School from batches 2022 to 2024 yielded significant insights into the demographics, strand representation, and perceived influence of SHS strands on college course selection. Using Google Forms for data collection, the study provided a comprehensive overview of the respondents' profiles and perspectives.

A. Demographics

The respondents exhibited a near-equal gender distribution, with females slightly outnumbering males at 50.7% and 48.5%, respectively. In terms of age, the majority (40.3%) were 18 years old, followed by 19-year-olds (30.6%) and 20-year-olds (16.4%). A smaller portion (13.7%) was aged 21 and above, reflecting the diversity in the age range of SHS graduates pursuing college education. Regarding the graduation year, the highest number of respondents were from the 2024 batch (59.7%), followed by 2023 (26.1%) and 2022 (14.2%), as shown in Fig. 1.

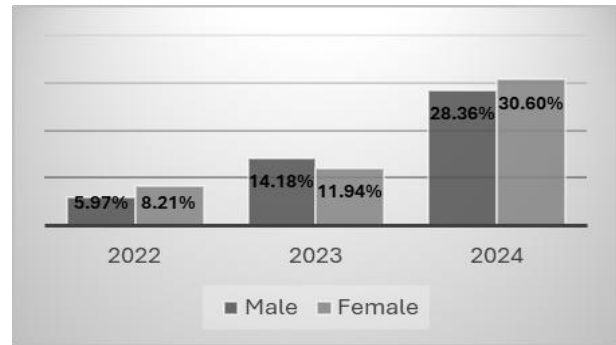


Fig. 1. Respondents gender distribution per school year.

B. Strand Representation

The most represented strand was Humanities and Social Sciences (HUMSS) at 42.5%, indicating its popularity and relevance to the student population. This was followed by the Accountancy, Business, and Management (ABM) strand (16.4%) and the Information and Communications Technology (ICT) specialization within the Technical-Vocational-Livelihood (TVL) track (14.9%). Other strands, including General Academic Strand (GAS), TVL-Home Economics, and TVL-Agricultural Fisheries, had moderate to low representation (Fig. 2).

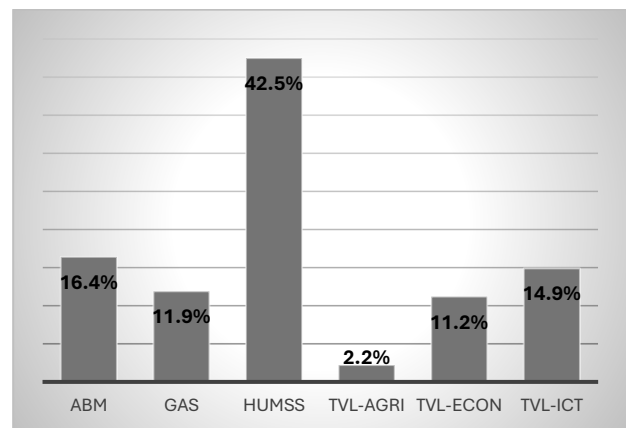


Fig. 2. Respondents senior high school strand.

C. Perceptions of Strand Influence

There is some complex dynamics as far as the role of Senior High School strands on college course selection is concerned. Fig. 3 shows that a good percentage of students are able to take college courses that match their SHS strands, whereas a considerable number fail to. At this, 47% self-report that their college courses are related to their SHS strand course, 22.4% had an indifferent remark, and 30.6% reported that there was no relation.

As demonstrated in Fig. 4, a toppling majority of 51.5% of the respondents agreed or strongly agreed that their SHS strand influenced their choice of college course, with 20.1% disagreeing and 28.4% being neutral on this issue, indicating that to a certain extent, the strand contributes to determining college course.

When asked whether they pursued their college course because it was a continuation of their SHS strand (Fig. 5), only 41.0% agreed, and 34.3% did not give any answer and 24.7% disagreed. This indicates that although there

are students who take a streamline direction of a strand to a college subject, a good number are also venturing into courses not related to the strand.

Although there exist some differences, Fig. 6 indicates that most respondents (56.2%) feel alignment between the SHS strand and the college course is important, whereas only 17.2% of the respondents disagree and 18.7% are neutral, respectively. This emphasizes that even when logical alignment fails to take place students are aware of its possible contribution in making them ready to face higher education and possible career openings.

Broadly, it is evident that decisions are influenced by strand alignment of many students yet there is a significant population that is adaptable and makes decisions based on their interest, opportunities and future career opportunities.

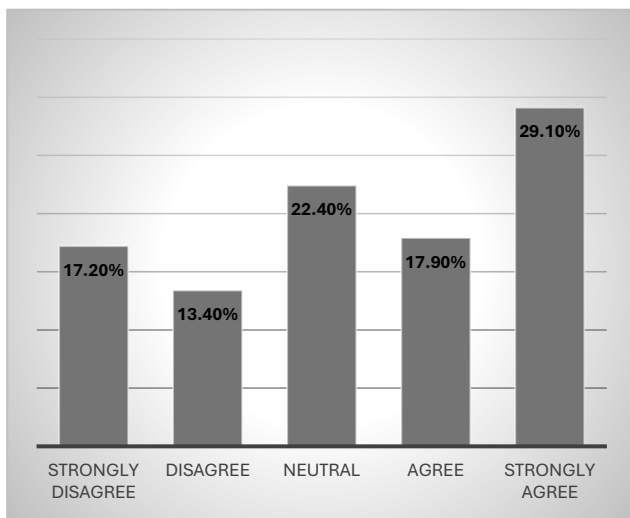


Fig. 3. Responses to the question “Current college course is closely related to your Senior High School strand”.

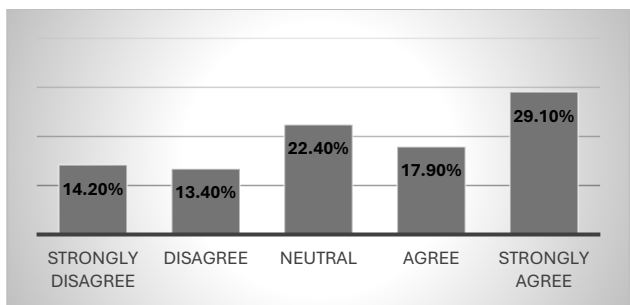


Fig. 4. Responses to the question “Your Senior High School Strand was influential in choosing your college course”.

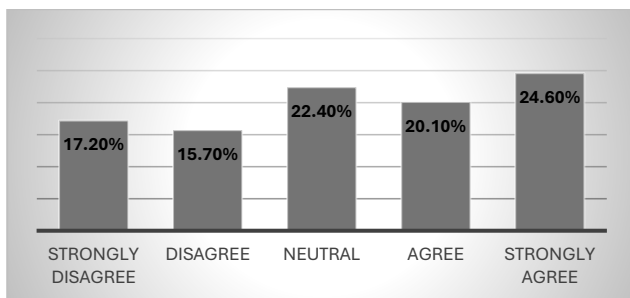


Fig. 5. Responses to the question “You chose your college course because it was a continuation from your Senior High School strand”.

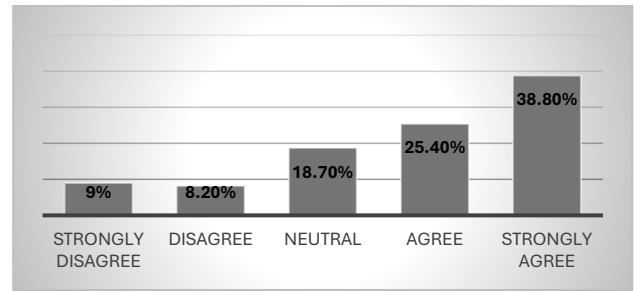


Fig. 6. Responses to the question “Alignment of your Senior High School strand in choosing your college course is important”.

By integrating these practices, educational institutions can bridge the gap between student aspirations and the skills needed to succeed in their chosen careers.

Another study highlights that alignment is often determined by factors such as students’ interests, career aspirations, and practical considerations like employment opportunities. Despite the K-12 program’s goal of aligning education with global standards, many students still choose unrelated college courses, underlining a gap in translating academic preparation into career decisions [3].

In cases of misalignment, the impact on academic performance becomes evident. Research has shown a statistically significant relationship between SHS strands and student performance in aligned college programs. For example, students from non-aligned strands exhibited higher academic deficiencies, with 42% coming from unrelated IT strands. These findings support the importance of aligning SHS and college curricula to mitigate academic [4].

However, some studies suggest that alignment is not the sole factor determining academic success. A study revealed a 64.67% mismatch between SHS strands and tertiary programs, yet many students displayed adequate adjustment and readiness, demonstrating resilience and adaptability [4].

D. Practical Implications

To address misalignment, educational institutions have proposed interventions such as bridging programs. For instance, the “PAGSABOT” program aims to prepare students for the realities of tertiary education by enhancing academic and social readiness, especially for those in misaligned programs [5]. These strategies emphasize the need for flexible pathways and enhanced guidance during the SHS-to-college transition [6].

E. Preparedness and Recommendations

Respondents’ perceptions of preparedness for college align with findings from multiple studies.

Approximately 59% of students agreed or strongly agreed that their SHS strand equipped them well for higher education, reflecting the success of the K-12 system in fostering readiness (Fig. 7). Similarly, 55.3% indicated they would recommend their strand, highlighting its perceived value in guiding future educational pathways (Fig. 8).

A study emphasized the importance of college readiness as a combination of academic, social, and emotional preparedness. It found that students who

perceive their high school education as relevant and rigorous tend to exhibit higher motivation and success in their chosen tertiary courses [7].

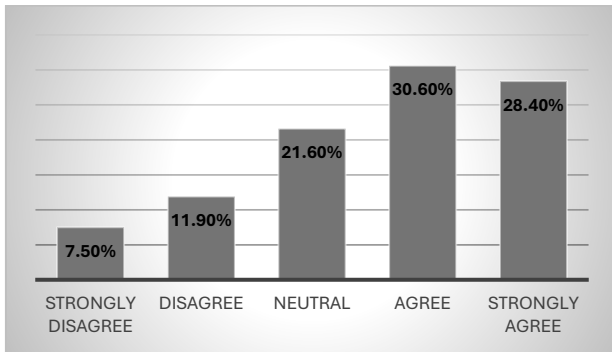


Fig. 7. Responses to the question “You SHS strand prepared you well for your current college course?”.

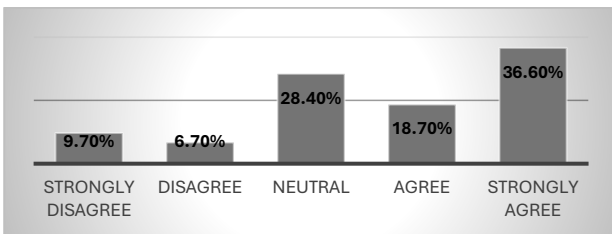


Fig. 8. Responses to the question “Will you recommend your Senior High School strand to others who are interested in pursuing a similar college course?”.

However, readiness is not uniform. Research shows that while many students feel prepared, others enter college lacking the critical thinking and academic skills necessary for success [8]. Strategies such as a career guidance program have been recommended to address this gap [9], providing students with information and guidance on the importance of selecting a career path.

F. Key Influences on Course Selection

Decisions about college course selection are multifaceted, involving both personal and external considerations. According to survey data, skill development (76.9%) and career opportunities (72.4%) are among the most influential factors, underscoring the pragmatic approach many students take in shaping their educational paths (Fig. 9). These factors reflect a growing awareness of the need for employability and practical outcomes in higher education.

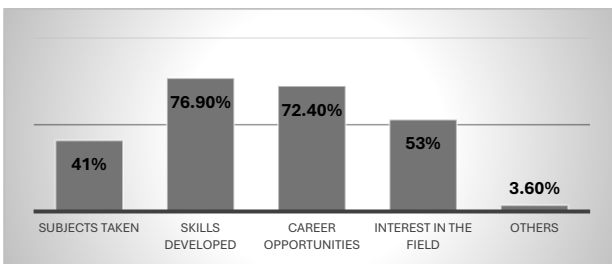


Fig. 9. Responses to the question “Aspects of your Senior High School and that influenced your college course selection?”.

Studies indicate that skill development significantly influences course choices. For example, students pursuing technical or vocational tracks often prioritize courses that promise to enhance specific competencies valued in the job market. Research highlights that students often gravitate toward programs aligned with industries experiencing growth, such as STEM-related fields, due to the perceived job security and financial stability they offer [10].

Similarly, career opportunities are critical drivers. The alignment between course offerings and labor market demands ensures that students feel confident about post-graduation employment prospects. Support for this is, the finding that career guidance programs emphasizing market trends significantly influence students’ course decisions, fostering a strategic approach to higher education.

G. Interest in the Field and SHS Subject Relevance

While practical factors dominate, personal interest also plays a pivotal role, with 53% of respondents citing it as a key motivator (Fig. 9). Intrinsic motivation and passion for a field enhance academic performance and long-term career satisfaction. A study found that students who select courses based on genuine interest exhibit higher engagement and persistence compared to those influenced solely by external factors [11, 12].

Additionally, the influence of SHS subjects, noted by 41% of respondents, highlights the foundational role of prior education (Fig. 9). Alignment between SHS subjects and tertiary courses fosters smoother transitions and better preparation for college-level demands. However, gaps in alignment can hinder performance, necessitating interventions like preparatory courses or academic advising.

These findings underscore the importance of comprehensive career guidance in SHS to help students balance practical considerations with personal passions. Programs like the PAGSABOT bridging initiative aim to prepare students holistically by addressing skill gaps and aligning interests with opportunities in tertiary education [5].

H. Suggested Interventions

To enhance alignment and support for SHS students transitioning to college, respondents recommended better information on college programs during SHS (70.1%), career skill tests (67.2%), and improved curriculum alignment (58.2%) (Fig. 10). These suggestions align with findings from related studies emphasizing the need for strengthened career guidance and curriculum updates to bridge gaps between secondary and tertiary education [3].

I. Strand and Course Alignment

The results demonstrate that while a significant portion of senior high school graduates (38.8%) perceive alignment between their strand and college course as important, gaps remain in actual alignment (Fig. 8). This is consistent with findings from a study that highlight the need for improved curricular alignment to ensure that SHS graduates are well-prepared for their chosen academic and

career paths [3]. The mixed perceptions suggest a disparity in how strands are designed and their practical applications in higher education.

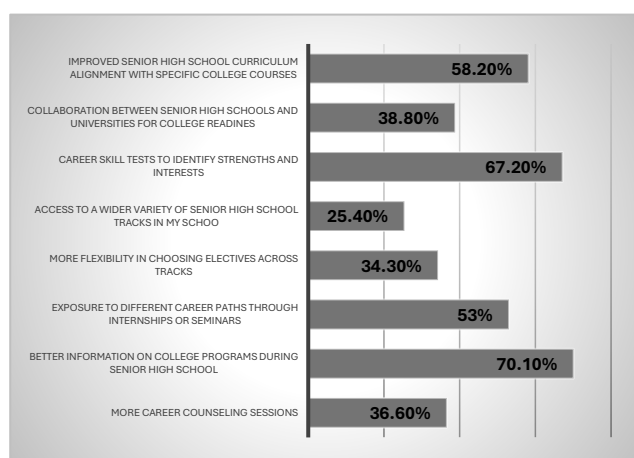


Fig. 10. Responses to the question “What interventions can be given to ensure alignment of Senior High School track and college course taken?”.

J. Preparedness and Strand Relevance

Most respondents (30.6%) felt adequately prepared for college, affirming the effectiveness of SHS strands in developing foundational skills (Fig. 9). However, the neutral responses indicate that some strands may lack specificity or fail to address students’ unique needs. Studies echo this sentiment, emphasizing that while SHS students were generally “most likely ready” for college, there was no significant difference in readiness across strands, implying a need for more strand-specific skill enhancement [13].

K. Key Influences and Suggested Interventions

Skill development and career opportunities remain pivotal in course selection, as students prioritize factors that enhance their preparedness for future careers (Fig. 10). These factors strongly influence decisions regarding educational pathways, focusing on programs that align with academic interests and career aspirations. In line with global best practices, strengthening career counseling and providing clearer program information to support students in making informed decisions. These insights resonate with findings from studies that advocate for improved career guidance, which stresses the need for stronger collaboration between secondary schools and universities to ensure career readiness [14]. Furthermore, a study conducted in Sweden found that young adults consistently expressed a desire for more comprehensive knowledge about the labor market and clearer guidance on educational choices, reflecting a universal need for enhanced career support [15].

By integrating these practices, educational institutions can bridge the gap between student aspirations and the skills needed to succeed in their chosen careers.

IV. CONCLUSION

This study underscores the significant role of SHS strands and specializations in shaping the college course choices of graduates from Moreno Integrated School. The findings reveal that while many students perceive their SHS specialization as influential in their decision-making process, there are notable gaps in the alignment between SHS strands and tertiary education programs. Factors such as skill development, career opportunities, and interest in the field emerged as primary considerations in course selection, highlighting the multifaceted nature of this decision-making process.

Thus while 69 % of the respondents feel prepared for higher education an equal number, have mixed perceptions about the relevance of their strand or the level of preparation they have for the same from the K to 12 curriculum. Recommendations given in the study, such as improved career guidance, dissemination of detailed information on college programs, and conformance of curriculum, stress that to meet the cross–transitional needs effectively and meaningfully, the system requires change.

By filling these gaps, schools can help students prepare for the decision-making process which would include decisions on their curriculum choices and their careers. This study provides useful information to the existing literature concerning the enhancement of educational progression for learners as well as to the existing debate on the need to regularly assess and improve the K to 12 system to help Filipino learners achieve their academic and career aspirations.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Armie Joy A. Abdon designed the research framework, reviewed related literature, and contributed to the interpretation of results; Kenneth A. Armada conducted the survey, gathered responses, and organized the dataset for analysis; Maribeth O. Asis performed statistical analysis, prepared figures and tables, and assisted in writing the Results and Discussion; Shereilyn B. Balada drafted the manuscript, revised sections for journal formatting, and coordinated overall paper submission; all authors read and approved the final version of the manuscript.

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