

Dominant Skills of K to 12 Graduates in Camarines Sur Polytechnic Colleges: Its Implication for Nursing Educators

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ABSTRACT:

Year 2018 marked the history of Philippine educational system as new generation of nursing students were welcomed in the different higher education institutions. The primary aim of this research was to recognize the dominant skills of K to 12 graduates enrolled at the Camarines Sur Polytechnic Colleges and to identify its implication for nursing educators. The personal profiles considered were academic strand and type of senior high school attended by the respondents. Further, the four integrated 21st century skills in the K to 12 curriculum such as information, media, and technology skills, learning and innovation skills, effective communication skills and life and career skills were identified. A questionnaire survey was administered to all 106 nursing students, who were senior high graduates. Data collected was analyzed using descriptive statistics. Results revealed that majority of the respondents were STEM graduates of private senior high schools. The respondents agreed that all four integrated 21st century skills in the K to 12 curriculum were developed with effective communication skills as considered the most dominant. The result in identifying the dominant skills among the respondents in terms of the four integrated 21st century skills in the K to 12 curriculum has implication for the nursing educators. This research suggests that strategies be utilized incorporating the 21st century skills into everyday instruction.

Keywords: Academic Strand, Strategies, Learning, Communication, Curriculum

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Introduction:

The year 2018 marked a significant milestone in Philippine education as the first graduates of the K to 12 Program entered higher education institutions, including nursing schools. These students, recognized as the pioneer graduates of the enhanced basic education curriculum, underwent comprehensive preparation designed to equip them with competencies for higher education, employment, and entrepreneurship. This study aimed to determine the dominant skills of K to 12 graduates enrolled in the

Bachelor of Science in Nursing program at Camarines Sur Polytechnic Colleges (CSPC) and examine their implications for nursing educators.

The K to 12 Program was institutionalized through Republic Act No. 10533 or the Enhanced Basic Education Act of 2013, which emphasized a collaborative effort among the Department of Education (DepEd), the Commission on Higher Education (CHED), and other sectors to ensure a smooth educational transition. In support of this reform, CHED Memorandum Order No. 1, Series of 2017

provided that beginning Academic Year 2017–2018, all Grade 12 graduates, regardless of their Senior High School (SHS) track or strand—including Academic, Technical-Vocational-Livelihood, Sports, and Arts and Design—were eligible to enter college and could not be denied admission based on their SHS specialization.

Most of these first K to 12 college entrants belong to Generation Z, a cohort characterized by growing up in a highly digital environment. Shatto and Erwin (2017) emphasized that while Generation Z shares similarities with Millennials, they possess distinct characteristics that require educators to integrate technology, adaptive learning strategies, and generationally responsive pedagogy. Likewise, Chicca et al. (2018) noted that Generation Z nursing students present unique learning needs that challenge nurse educators to redesign teaching-learning approaches, while Hampton et al. (2016) highlighted the importance of understanding their educational and workplace expectations to improve learning outcomes.

Generation Z, also referred to as the iGeneration, iGens, Zeds, or Zees, were born in an era where the Internet and digital technology have always been part of everyday life. Smith-Trudeau (2016) described them as learners who comfortably multitask across digital platforms. Similarly, Seemiller and Grace (2015), as cited by Wondergem (2017), observed that Generation Z students tend to rely heavily on technology, expect immediate access to information and feedback, possess shorter attention filters, think non-linearly, and prefer constructing knowledge through active engagement rather than passive instruction.

Recognizing the demands of the 21st century, the Department of Education collaborated with the Assessment, Curriculum and Technology Research Centre (ACTRC) to integrate higher-order skills such as collaboration, flexibility, innovation, and critical thinking into the K to 12 curriculum. As presented during the ACTRC Research Forum (2015), these competencies were

embedded into curriculum standards and national assessments to better prepare graduates for the rapidly changing global environment driven by technological advancement and globalization.

Despite these initiatives, K to 12 graduates are often stereotyped as highly technology-dependent learners with shorter attention spans and preferences for immediate solutions. These characteristics present both opportunities and challenges for nursing educators, particularly in the College of Health Sciences of Camarines Sur Polytechnic Colleges, where faculty members belong to different generational cohorts. To sustain quality nursing education, the College must recognize the dominant skills developed during Senior High School and adopt teaching strategies that engage, motivate, and support this new generation of nursing students. Hence, this study was undertaken.

Methodology:

In this study, the researcher employed the descriptive method. A questionnaire was designed for quantitative data collection, consisting of two (2) sections. The first section sought the respondents' profile in terms of academic strand and type of senior high school attended. The second section consisted of the dominant skills developed among the respondents in terms of the four integrated 21st century skills in the K to 12 curriculum namely: Information, Media, and Technology Skills, Learning and Innovation Skills, Effective Communication Skills and Life and Career Skills. Dominant skills were determined based on the 21st century skills' indicators set by the P21's Framework for 21st Century Learning. (<https://files.eric.ed.gov>)

The questionnaire underwent validation and reliability testing prior to data collection. Total enumeration was employed, involving all 106 pioneer K to 12 nursing students enrolled at the College of Health Sciences. Data were analyzed using frequency, percentage, rank, and weighted mean, with responses interpreted using a 4-point Likert scale.

Scale	Range Value	Verbal Interpretation
4	3.50-4.00	Very Much Evident
3	2.50-3.49	Much Evident
2	1.50-2.49	Fairly Evident
1	1.00-1.49	Not Evident

Results:

This section presents the respondents' profile, their dominant 21st-century skills developed through the K to 12 curriculum, the implications for nursing educators, and proposed strategies for integrating these skills into nursing education at the College of Health Sciences.

A. Profile of the Respondents

The majority of the respondents were graduates of the Science, Technology, Engineering, and Mathematics (STEM) strand (64.15%), followed

by the General Academic Strand (GAS) (23.58%), while only a few came from the HUMSS (5.66%), ABM (3.77%), and TVL (2.83%) strands. In terms of the type of senior high school attended, most respondents graduated from private schools (59.43%), whereas 40.57% came from public schools.

B. Dominant Skills Developed among the Respondents in Terms of the Four Integrated 21st Century Skills in the K to 12 Curriculum

Table 1. Dominant Skills Developed among the Respondents in Terms of the Four Integrated 21st Century Skills in the K to 12 Curriculum

Indicator	Average Weighted Mean	Verbal Interpretation
Learning and Innovative Skills	3.34	Much Evident
Effective Communication Skills	3.39	Much Evident
Information, Media and Technology Skills	3.35	Much Evident
Life and Career Skills	3.37	Much Evident

Learning & Innovation Skills

Learning and Innovation Skills were much evident, with an overall weighted mean of 3.34. The highest-rated indicators were reflecting critically on learning experiences and processes and assuming shared responsibility for collaborative work (WM = 3.44), followed by elaborating, refining, analyzing, and evaluating ideas (WM = 3.42). Meanwhile, the lowest-rated indicator was solving unfamiliar problems using conventional and innovative approaches (WM = 3.15), although it remained much evident. Overall, the findings suggest that the respondents possess strong learning and innovation skills,

particularly in reflective thinking and collaboration, while problem-solving in unfamiliar situations remains an area for further development.

Effective Communication Skills

Effective Communication Skills were evident, with an overall weighted mean of 3.39 (Much Evident). The highest-rated indicators were actively listening to others (WM = 3.55), knowing when to listen and when to speak (WM = 3.54), and effectively conveying and receiving messages through various communication platforms (WM = 3.51), all interpreted as Strongly Agree. In contrast, engaging in honest and productive

conversations (WM = 3.16) and entering into dialogue with people holding opposing views (WM = 3.20) received the lowest ratings, although both remained within the Agree category. Overall, the findings indicate that the respondents possess strong communication skills, particularly in active listening and interpersonal interaction.

Information, Media & Technology Skills

Information, Media, and Technology Skills were evident, with an overall weighted mean of 3.35 (Much Evident). The highest-rated indicators were using technology for everyday tasks (WM = 3.47), using older communication technologies such as telephones, radios, and televisions (WM = 3.46), and using technology to research, organize, evaluate, and communicate information (WM = 3.45). In contrast, the lowest-rated indicator was applying an understanding of the ethical and legal issues surrounding the access and use of information technologies (WM = 3.20). Overall, the findings indicate that the respondents are proficient in utilizing information, media, and technology, while further emphasis should be placed on the ethical and legal aspects of information technology use.

Life & Career Skills

Life and Career Skills were evident, with an overall weighted mean of 3.37 (Much Evident). The highest-rated indicator was respecting cultural differences and working effectively with people from diverse social and cultural backgrounds (WM = 3.52, Strongly Agree), followed by collaborating effectively with teams (WM = 3.49) and conducting oneself professionally with proper etiquette (WM = 3.47).

Conversely, utilizing time and managing workload efficiently (WM = 3.24) and working effectively amid ambiguity and changing priorities (WM = 3.28) received the lowest ratings. Overall, the findings indicate that the respondents possess strong life and career skills, particularly in professionalism, teamwork, and cultural competence, while time management and adaptability remain areas for further development.

C. Implications for the Nursing Educators of the Four Integrated 21st Century Skills in the K to 12 Curriculum

The findings indicate that identifying nursing students' dominant 21st-century skills enables nurse educators to develop more learner-centered instructional strategies. Greater emphasis should be placed on strengthening learning and innovation skills, particularly critical thinking and problem-solving, while reinforcing effective communication, life and career skills, and the ethical use of information and communication technologies for safe nursing practice.

Discussion:

Although the STEM strand is the recommended preparatory track for the Bachelor of Science in Nursing, the College of Health Sciences also admits graduates from other Senior High School tracks and strands in accordance with CHED Memorandum Order No. 1, Series of 2017, which allows HEIs to admit qualified Grade 12 graduates subject to their admission requirements. The data further revealed that most respondents attended private senior high schools, possibly due to the wider range of tracks and strands they offer compared to public senior high schools.

The findings further indicate that the respondents possess well-developed 21st-century skills across the four domains of the K to 12 curriculum, with all dimensions receiving favorable mean ratings. Learning and Innovation Skills emerged as a notable strength, suggesting that the respondents have developed critical thinking, collaboration, and problem-solving abilities that are essential for evidence-based nursing practice. This supports Papathanasiou et al. (2014), who emphasized that critical thinking is fundamental to safe and competent nursing care.

Similarly, the respondents demonstrated strong Effective Communication Skills, highlighting their ability to communicate, listen actively, and build interpersonal relationships. These competencies are indispensable in promoting therapeutic communication, teamwork, and

patient-centered care, consistent with Steckler's (2012) assertion that effective communication is a core competency in nursing.

The respondents also exhibited proficiency in Information, Media, and Technology Skills, reflecting their readiness to utilize digital technologies while maintaining familiarity with traditional communication media. This adaptability is advantageous in contemporary healthcare settings, where technology plays an increasingly significant role in clinical practice, education, and information management.

Finally, the respondents demonstrated positive Life and Career Skills, particularly in respecting cultural diversity, collaborating with others, and practicing professionalism. These findings suggest that the K to 12 curriculum has contributed to the development of interpersonal and ethical competencies required in nursing. As emphasized by Buvaneswari et al. (2017), life skills foster competence and resilience, qualities that are indispensable for future nursing professionals. Overall, the findings underscore the need for nursing educators to sustain and further strengthen these competencies through learner-centered, technology-enhanced, and competency-based instructional strategies.

Conclusion:

In conclusion, awareness of nursing students' dominant 21st-century skills enables nurse educators to design learner-centered and competency-based teaching strategies. While effective communication emerged as the strongest competency and should be reinforced through interactive learning activities, greater emphasis should be placed on enhancing learning

and innovation skills, particularly problem-solving in unfamiliar situations. Nursing educators are likewise encouraged to employ diverse instructional strategies that promote flexibility, adaptability, and lifelong learning among nursing students.

Recommendations:

Based on the findings of the study, the following recommendations are proposed:

1. The College of Health Sciences should continue providing support programs for nursing students from different Senior High School strands to ensure academic readiness and success.
2. Nursing educators should reinforce Learning and Innovation Skills, particularly critical thinking and problem-solving, while sustaining students' strong Effective Communication Skills through active and collaborative learning strategies.
3. Nursing educators should integrate 21st-century skills into classroom and clinical instruction by utilizing technology-enhanced, learner-centered, and competency-based teaching approaches.

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